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THE CHOWKHAMBA SANSKRIT STUDIES
VOL. LXXXIV

ELEMENTS OF THE
COMPARATIVE GRAMMAR
OF THE
INDO-GERMANIC LANGUAGES

A CONCISE EXPOSITION
OF THE HISTORY
OF SANSKRIT, OLD IRANIAN (AVESTIC AND OLD PERSIAN), OLD ARMENIAN, OLD GREEK, LATIN, UMBRIAN-SAMNITIC, OLD IRISH, GOThic, OLD HIGH GERMAN, LITHUANIAN AND OLD BULGARIAN

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VOLUME I
INTRODUCTION AND PHONOLOGY.
TRANSLATED FROM THE GERMAN
BY
JOSEPH WRIGHT, PH. D.

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PUBLISHER'S NOTE

Elements of the Comparative Grammar of the Indo-Germanic Languages had been a pioneer work in the field of Comparative Philology, and even today remains unsurpassed by any other work, either in its magnitude or in exhaustiveness.

The author has incorporated almost all the contemporary material on the subject representing all the parties among the different methods and schools of Linguistic Science. At the same time, he has not confined himself to merely stating the contemporary conclusions seemingly certain to stand for all future time. Instead, he has spoken of many problems that are still unsolved in order to give the reader not only a survey of what has been already accomplished, but also to give a glimpse of the work that still remains to be done. This was indispensable in view of the position in which the science of the Indo-Germanic languages at the time stood. Thanks to the discovery of many fresh sources of information, and still more, to the fertile combination which the recent researches have brought about between minute investigation on the one hand and the philosophy of languages on the other, new problems to be solved have of late arisen on all sides, and that in such numbers that many decades of work will still be needed to master them. Had the author silently passed over all such unsettled questions in the history of the Indo-Germanic languages the picture of the whole subject which he has tried to draw would have been marred by many grievous blanks. But thanks to the sincerity of his purpose and his erudition, no such problem remains unsolved or unnoticed. Wherever he is not sure of the solutions, he has not merely marked the phenomenon in question as unexplained, but often hazarded a conjecture, at all events, in something like the direction in which the solution of the riddle is to be sought. The conjectures, he however has admitted, should always be regarded only as challenges to more minute investigation,
As regards to the arrangement of the material the scheme followed is to let the different branches of Languages and the separate Languages appear each as a unit complete in itself on the common background of the Indo-Germanic primitive community, yet in such a way that each single phenomenon appears separated as little as possible from the kindred examples in other languages.

Such an important and pioneer work, which remained out-of-print for so many years, is now being reprinted by us even at great risk of investment, solely with the hope and confidence that we are thus rendering a valuable service to the students and scholars of Philology, who had been long deprived of a work containing a systematic and scientific study of languages based on firm and rigid principles.

Publishers
PREFACE TO THE ORIGINAL EDITION

Those who have impartially followed the development of comparative philology in the last twenty years will be aware of the great progress it has made in the interval. In both the scope and the nature of its work it has shewn all the elasticity and creative vigour of a science that is still young in spite of its seventy years. That its diverse and scattered details need to be once again brought together under one systematic arrangement will hardly be doubted by any competent judge. The first edition of Schleicher's excellent Compendium appeared in 1861, and was since twice published in a revised form by the author, the second time shortly before his death. When it was edited finally in 1876 with very few changes indeed, the two editors were already of opinion that it required complete remodelling (see the preface p. IX). Thus I feel sure that the 'Elements', the first volume of which is now before the reader, meets a real need.

Time and competent criticism will decide whether it has solved the problem in any degree satisfactorily and whether it can claim to be of the same service to our science and its students as was Schleicher's book in its time. My task was attended by all manner of difficulties and I am fully conscious that in some respects it is inadequately discharged. I trust nevertheless that the result may be of some service, at least for the present.

I take this opportunity of drawing especial attention to one or two points in the plan and execution of my work.

It was not my object to collect all the various views, often widely divergent, which have been from time to time put forward by authorities, on questions relating to the history of the Indo-Germanic languages. As a rule I give only the views that I consider right or at least probable, after submitting them to repeated tests. A mere regard to the size of the book necessitated this course. The most important authorities will be found summarily enumerated in the introduction and at the beginning of the separate sections. To mention in each case who has treated the subject, and who was the first author of the view I have accepted, seemed to me unnecessary to the purpose of the book, and excluded by the small space at my disposal. I took what was good wherever I was sure I had found it; all parties among the different methods and schools of linguistic science are fairly represented in these pages. Hence though I may per-
haps have overlooked much that is useful, I still hope that approximately at any rate I have attained the aim I had set before me: to exhibit the present state of our knowledge in a concise form, giving prominence to all the more important points.

At the same time I have not confined myself to stating such results as seem certain to stand for all future time. I have spoken of many problems that are still unsolved, in order to give the reader not only a survey of what has been already accomplished, but also a glimpse of the work that still remains to be done. This was indispensable in view of the position in which the science of the Indg. languages at present stands. Thanks to the discovery of many fresh sources of information, and still more, I think, to the fertile combination, which the past ten years have brought about between minute investigation on the one hand and the philosophy of language on the other (the character of which I have endeavoured to sketch in my essay, ‘Zum heutigen Stand der Sprachwissenschaft’ p. 33 ff.), now problems to be solved have of late arisen on all sides, and that in such numbers that many decades of work will still be needed to master them, so far as we can reckon that they are to be solved at all. 1) Had I silently passed over all such unsettled questions in the history of the Indg. languages, the picture of the whole subject which I tried to draw would have been marred by many grievous blanks. But further I hoped to incite the reader to independent investigation, by referring to much that has not yet passed the stage of problem and hypothesis. In doing so I have taken care that what is uncertain should not preponderate over what is certain, and should everywhere be clearly distinguished from it. And if, instead of merely marking the phenomenon in question as unexplained, I have often hazarded a conjecture, at all events in something like the direction in which the solution of the riddle is to be sought, despite those who resent every ‘probably’ or ‘perhaps’ in scientific works, I may quote Goethe’s words: ‘The opinions you venture, are like the pawns you move forward on the chess-board; they may be taken, but they have introduced a game that will be won’. The conjectures I have admitted into this book should always be regarded only as challenges to more minute investigation.

As regards the arrangement of the material my aim is to let the different branches of language and the separate languages appear each as a unit complete in itself on the common background of the Indo-Germanic primitive community, yet in such a way that each single phenomenon appears separated as little as possible from the kindred examples in other languages. My method of exposition takes about the middle course between that of Bopp’s Comparative Grammar on the one hand, which may

1) As regards exceptions and irregularities it has now become the effort of all scholars to aim at seeking for the reason of the exception, not occasionally only, but in every case, and systematically, and we consider our duty to science undischarged until we have found the answer to the ‘why’. How many phenomena of language, which once were thought perfectly clear, so that a final judgment could be pronounced upon them, have by this means become unanswered problems!
be described as a connected picture sinking what belongs to the separate languages in the Indo-Germanic whole, and that of Schleicher's Compendium, on the other, which does little more than string together a number of separate grammars. It seeks to unite the excellences of both. This of course could not be done without some sacrifice of system. In the phonology I was obliged to add a series of chapters on combinatory sound-change after tracing the development of the primitive Indo-Germanic sounds one by one. Here I have had now and then to repeat in sum what had already been mentioned or to expand and supplement what before had been merely hinted at. I prefer to submit to this incongruity of arrangement, which Schleicher has avoided, than to disregard consciously the considerable didactic advantage that it affords; and in this point at least I hope to have on my side the academical teachers who lecture on comparative grammar.

In the transcription I have been as far as possible conservative. The reader will easily perceive why I was obliged to discard one or two symbols widely in use, e. g. the representation of the Sanskrit palatal and cerebral sibilants by φ and δ (or sā). I ought perhaps in general to have paid even more attention than I have done to the rule that the same sound in different languages should be represented by the same sign: e. g. Av. ङ, not य, on account of the Germanic (Ang.) ð; Gothic æ, not r, on account of the Old High German æ. And in several other points the notation might certainly be improved, at least if it be thought desirable to sacrifice what is widely or universally in use in favour of less usual methods. As regards the Aryan languages and Armenian especially, I gladly take this opportunity of expressing a wish, which, I think, most Indo-Germanic scholars share with me, that the Congress of Oriental scholars 1) should sanction by its authority as soon as it is practicable to do so, some suitable system of transcription for these languages, which should have regard to the needs both of special philologists and of comparative scholars, so that the vagaries of the prevailing usage in the matter may be at last brought within bounds. That the question of transcription is not yet ready for a final settlement is no valid objection.

My work has been least independent in dealing with the phonology of Iranian and Armenian. Here I could generally connect it very closely with the excellent works of Bartholomae and HübSchmann, especially with the former's Handbook of the Old Iranian Dialects, and the latter's Armenian Studies. I have only deviated in a very few points from HübSchmann's treatment of the history of the Armenian sounds. In the Celtic branch many will look for a more detailed account of the British dialects. I fully admit that comparative philology must devote more attention to these dialects than has hitherto been the case. But my knowledge in this department is too small for me to venture to set any

1) The attempt made in the fifth Congress (see 'Verhandlungen des fünften internationalen Orientalisten-Congresses', Berlin 1881, p. 89) has unfortunately led to no result.
dialect of the British group side by side with Irish. It was my intention
two years ago to make myself so far familiar with Cymric as to be able
to treat the chief features at least of this language along with the rest.
My removal to Freiburg however at that time cut me off almost entirely from
all Keltological literature, and I was thus obliged to abandon my design. As
regards Irish also the want of a library① sufficiently furnished with philo-
lological literature caused me difficulties in many ways. I am hence all
the more thankful to Prof. Thurneysen of Jena [now in Freiburg], who
not only sent me information on many points of Keltic philology, but also
at my request undertook the trouble of revising the proof-sheets relating
to Keltic. Both have been a help to my work in many details, in far
more places than has been indicated by a reference to his name. In particular
it was such help only that made it possible in all cases to distinguish the
British forms correctly according to dialect and period. It may also be
remarked that almost all the addenda relating to Keltic p. 565 f. [now
incorporated with the text of this translation] were due to communications
from Thurneysen. If I add lastly that my treatment of some of the phe-
nomena of Keltic philology is not in harmony with the views of this
scholar. it is in order to prevent misunderstanding, that he may not in
any way be made responsible for mistakes that might be found in the
Keltic parts of this book. I have to thank Dr. Holthausen of Heidel-
berg [now in Hallo] for some notices relating to Germanic, which he
placed at my disposal after an inspection of several proof- and the finally
revised sheets and of which I have for the most part made use.

I have not been able consistently to take account of the scientific
literature which has appeared this year. I especially lament that the sec-
ond edition of G. Meyer's Greek Grammar, Braune's Old High German
Grammar and the second edition of Leskien's Hand-book of the Old
Bulgarian Language did not appear until after my printing had begun.

To facilitate reference, I shall add an index of words at the end of
the whole work.
Its continuation and conclusion shall follow as quickly as time and
strength permit.

Freiburg i. B., July 1886.

KARL BRUGMANN.

① It is only since the founding of the chair for comparative philo-

logy that the University library here has systematically purchased works

on this subject (apart of course from the classical languages and Ger-

manic), so that the necessary material can only be procured very gradually.
TRANSLATOR'S PREFACE.

When Prof. Brugmann and Mr. Trübner proposed to me, two years ago, while I was still a student in Heidelberg, that I should translate the 'Grundriss der vergleichenden Grammatik der indo-germanischen Sprachen' into English as soon as it appeared, I gladly accepted the proposal, in the hope that I should thus be rendering valuable service both to English and American students of philology, especially to the former who would otherwise very possibly, if they did not happen to know German, have to remain an indefinite length of time without being able to enter into a systematic and scientific study of languages, based on firm and rigid principles.

If the work of translating the original has taken me longer than I at first anticipated it would, this is almost entirely due to the poverty-stricken state of our language as regards current philological technical terms. Some of the terms employed by me, e.g. slurred and broken accent, intersomalal, initiality, strong-grade etc., will no doubt sound strange at first reading. But those, who have either been trained at a German university or are familiar with German philological literature, will readily confess how difficult it sometimes is to find a very exact and appropriate English equivalent for many of the German grammatical technicalities. Time will of course show whether I have in each case hit upon the best term, but I have everywhere tried rather to represent as exactly as I could the meaning of the author than to produce an elegant English paraphrase, which could preserve neither the brevity nor the rigidly scientific form of the original.

Last spring Prof. Brugmann gave me in Leipzig a list of corrections, consisting partly of misprints not given at the end of the original work, and partly of a few slight mistakes which were mentioned in the reviews of the work. These as also the corrections and emendations at the end of the German edition have been worked into the body of the translation. I also received from the author a short time ago one or two other corrections of the original which will be found at the end of the present edition.
At the end of the volume will be found a short list of those abbreviations which would be likely to cause the reader any difficulty.

In conclusion I have to express my sincere gratitude to Prof. Brugmann and Mr. P. Giles, Fellow of Gonville and Caius College Cambridge, for the great assistance they have rendered me by helping in the reading of the proof-sheets.

J. WRIGHT.

London, November 29, 1887.
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### ADDITIONS AND CORRECTIONS

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INTRODUCTION.


§ 1. The science of the Indg. languages forms, like Indg. Mythology, a section of Indg. 'Philology', i.e. of that science, which has to investigate the intellectual development of the Indg. peoples from the time before their separation up to the present day. Its method accordingly is historical and its task is to investigate the whole development of the Indg. languages from the time when they were still one language down to the present day. Its unity is in no sense broken by the results furnished by the specialists in Sanskrit, Ancient and Modern Greek, Latin and the Romance languages, Keltic etc., for the sciences of the Indian languages, of Ancient and Mod. Greek etc. are integral components of the grand whole formed by that of the Indo-Germanic.

It is true that the so called comparative science of language has hitherto been almost exclusively confined to the older periods of the Indg. languages, but this is due to the division of labour which was involved in the method by which alone progress could be made, as well as to the limitations of human strength. Probably the same division of labour will still be necessary, but it implies no real opposition between the different parts of the science.
Compare the author's inaugural address 'Sprachwissenschaft und Philologie' (in his 'Zum heutigen Stand der Sprachwissenschaft', Strassburg 1885, p. 3 ff.).

§ 2. We are not at present in a position to determine finally what was the primitive home of the Indg. tribes. Only so much is clear, that these tribes in pre-historic times must have been far less widely diffused than they were at the beginning of the historic era. It was formerly usual to place this primitive home somewhere in Asia, whereas at present scholars lean rather to the opinion that the Asiatic members of the stock passed over from Europe. Cp. O. Schrader 'Sprachvergleichung und Urgeschichte', Jena 1883, p. 442 ff.

§ 3. It is impossible to suppose that a language should have gone through a long course of development, and be spoken by a people of any considerable numbers, without a certain amount of dialectical variation; and hence we cannot look upon the speech of the Indogermans, even while they still occupied a comparatively small territory and maintained a fairly close degree of intercourse with one another, as bearing in any strict sense, a uniform character. Local differences had no doubt already arisen, though actual instances of this have hardly as yet been established with perfect certainty. One such I have maintained, though only as a conjecture, in §§ 380, 417. In historical times there appear a multitude of dialects, diverging in a greater or less degree, the whole field of which can hardly be included in any one survey. We may take for granted that the differentiation of dialects about the year 2000 B. C. had gone so far, that a number of communities existed side by side, which could no longer, or only with difficulty understand one another. The historic record of the various individual developments begins at very different periods. E. g. the Indian development is known to us from about the year 1500 B. C. onwards, the Latin from about 300 B. C., the Irish since the eighth century of the Christian era (with the exception of the Ogam inscriptions, cp. § 9), and the Lithuanian from the middle of the sixteenth century.
§ 3. Eight Indg. dialect-groups (branches of language).

A number of separate developments, which sprung from the primitive Indg. language, have perished without leaving any traces of their existence. Of others we have only very scanty fragments left, on which it is scarcely, if at all, possible to found a grammar, as of Phrygian, Macedonian, Messapian, Gallic, and Burgundian. The remainder have come down to us with a more abundant supply of material.

The dialects belonging to this last class, are arranged into eight groups (branches of language): 1. Aryan, 2. Armenian, 3. Greek, 4. Albanian, 5. Italic, 6. Keltic, 7. Germanic, 8. Baltic-Slavonic. Each group is distinguished by the fact that its individual members show in common a considerable number of changes in sound, inflexion, syntax and vocabulary; e. g. the shifting of the prim. Indg. explosives, discussed in § 527 ff. (what is known as the first sound-shifting), is one of the numerous characteristics of the close relation existing between the Germanic dialects.

Of the dialects, which have come down to us only in scanty fragments, there are a certain number which can be assigned with certainty to one or other of these eight groups, e. g. the Burgundian to the Germanic, and the Gallic to the Keltic group, whilst others, e. g. the Macedonian, seem to belong to none of them.

It is in itself very possible that some of these eight chief members stand to each other in a closer relationship, and form a single group historically distinct from the rest. All attempts, however, to establish such a closer relationship, have hitherto proved futile. The Italo-Keltic hypothesis has perhaps the best prospect of attaining a greater degree of probability in the future.

schr. für allg. Sprachwissenschaft I 226 ff.

§ 4. (1) The Aryan branch consists of the Indian and
Iranian groups.

The oldest and most archaic dialect of the Indian group
is the language of the Veda, the oldest portions of which (the
hymns of the Rigveda) possibly go back as far as 1500 B.C. 1).

Next comes Sanskrit in the stricter sense of the word (also called
classical Sanskrit), the continuation of a dialect now lost, which
existed side by side with the Vedic and differed but slightly
from it in the formation of its sounds and inflexions. It became
separated from the popular development as the literary language,
and was stereotyped in a fixed and purely artificial form. The
vulgar language, called Prākrit, as early as the third century B.C.
differed very materially from Sanskrit and at that time was
divided into at least three chief dialects. Through the influence
of Buddhism, Prākrit was also raised to a literary language
(Pāli). From the popular dialects of Prākrit have descended
the numerous modern Indian languages and dialects, Hindi
(Hindustani), Bengali, Urdu, Maharatti, Gujarati, Sindhi, Punjabi
and others.

In this work we shall only deal with the Vedic language
and classical Sankrit.

Cp. Bo pp Kritische Grammatik der Sanskrita-Sprache in
kürzerer Fassung, Edif. 3., Berlin 1863. Benf oy Vollständige
Grammatik der Sanskritsprache, Leipzig 1852. The same Author's
Kurze Sanskrit-Grammatik, Leipzig 1855. Whitney Sanskrit
Grammar, Leipzig 1879 (with supplement I, Grammatisches aus
dem Mahabharata, by A. Holtzmann, 1884; supplement II,
The roots, verb-forms, and primary derivatives of the Sanskrit
language, by Whitney, 1885).

The oldest recorded dialects of the Iranian group are
Old Persian (West Iranian), the language of the Persian

1) Cp. A. Kaegi Der Rigveda, die älteste Literatur der Inder,
cuneiform inscriptions dating from about 520 to 350 B.C., and Avestic, also called Zend and Old Bactrian (East Iranian), the language of the Avesta, the sacred book of the Zoroastrians, which has come down to us with corruptions of many kinds, deviating considerably from its original form. The various portions of the work were composed at very different periods ¹). Some parts of the Avesta, including 17 hymns (gāpā f.), are written in a peculiar dialect, which is more archaic than the language of the other parts, and as distinct from which the latter is called Later Avestic or Zend in the stricter sense. Not one of the Modern Iranian languages is a direct continuation of Old Persian or Avestic. The Modern Persian dialects (Gilani etc.), Kurdish and probably also Ossetian (spoken in the neighbourhood of the Caucasus) are more closely related to the former, and the language of Afghanistan (Paštu) to the latter.

We shall only deal with the two Old Iranian languages.


§ 5. (2) Armenian, which de Lagarde and Friedr. Müller assigned to the Iranian group, but Hübschmann (Kuhn's Ztschr. XXIII 5 ff., 400 ff.) has proved to be an independent member of the Indg. family of languages, is known to us since the fifth century of our era. The literary language (O.Armenian), which had then become fixed, remained in this usage without any material changes down to modern times, and is separated by a great interval from the modern dialects. Historical investigations have hitherto been almost exclusively confined to O.Armenian. The term Armenian will always be used in the sense of O.Armenian.


¹ On the difficult question as to the age of the Avesta cp. Eduard Meyer Geschichte des Alterthums I (1884) p. 501 ff.
§ 6. (3) Greek had strongly marked variations in different localities long before Homer’s time and in the historic era appears split up into numerous dialects.

These may be classified in the following manner: 1. Ionic-Attic, a. The district of Ionia, b. Attica. 2. Doric, a. Laconia with Tarentum and Heraclea, b. Messenia, c. Argolis and Aegina, d. Corinth with Corecyra, e. Megara with Byzantium, f. the Peloponncean colonies of Sicily, g. Crete, h. Thera and Melos together with Cyrene, i. Rhodes with Gela and Acragas, k. the other Dor. islands in the Aegean, as Carpathus, Astypalaea etc. 3. North West Greek, a. Phocis, b. Locris, c. Aetolia, d. Acarnania, e. Phthiotis and the district of the Aenianes, f. Epirus, g. probably also Achaia. 4. Aeolic, a. Lesbos and Aeolian Asia Minor, b. North Thessaly, c. Boeotia. 5. Elean (belonging to North West Greek?). 6. Arcadian-Cyprian\(^1\). 7. Pamphylian.

These dialects are found in their purest form on inscriptions. The literary language, especially that of the poets, is in many respects artificially constructed; even the language of the Homeric poems is in great measure an artificial dialect.

Towards the end of the fifth century B.C. there was formed on the basis of the Attic dialect a literary language common to all Greeks, which almost entirely excluded the use of the other dialects from the later prose literature of antiquity. Hence it is that we have to gather our knowledge of most of the non-Attic local dialects either entirely, or almost entirely, from inscriptions.

The language of mediæval Greek literature is an artificial mixture of ancient Greek with forms of the then spoken popular language in varying degrees of modification. Modern Greek

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\(^1\) Collitz (Die Verwandtschaftsverhältnisse der griech. Dialekte 1885) places this dialect in close relation with Aeolic and puts forward the hypothesis that “the Thessalian dialect in point of language forms the transition-stage from Boeotian to Lesbian, from Lesbian to Cyprian-Arcadian and from Cyprian-Arcadian to Boeotian” (p. 9).

exhibits a rich development of dialects; as yet little has been done towards fixing the historical relation of the separate dialects to ancient Greek. 1)

We shall confine our attention to the development of the O.Gr. dialects.


§ 7. (4) Albanian, the language of ancient Illyria, has only been known to us from monuments of any extent since the seventeenth century. The historical treatment of this language, which is beset with manifold difficulties — the greatest of which lies in clearly separating pure Albanian words from those borrowed from the Greek, Latin, Romance, Slavonic and Turkish languages —, is still in its infancy.

Cp. Gustav Moyer Albanische Studien, Wien I 1883, II 1884 (in which the whole of the older literature has been collected together) and 'Der Einfluss des Lateinischen auf die alban. Formenlehre' in the Miscellanea di Filologia, dedicata alla memoria dei professori Caix e Canello p. 103 ff. 2).

We shall only take this language into account in discussing

1) Considerations introductory to the study of the relation of Middle and Modern Greek to O.Greek and the researches on the subject are given by Krumbacher Beiträge zu einer Geschichte der griech. Sprache, in Kuhn's Ztschr. XXVII 481 ff.

2) The treatise of the same scholar 'Über Sprache und Literatur der Albanesen' in his 'Essays und Studien zur Sprachgeschichte und Volkskunde', Berlin 1885, p. 49 ff. is strongly to be recommended as an introduction to this subject.
the development of the Indg. palatal and guttural explosives § 411 and § 458—460.

§ 8. (5) The Italic branch consists of Latin on the one hand and of the Umbrian-Samnitic dialects on the other.

Latin, with which the little known dialect of Falerii was closely related, is known to us from about 300 B.C. onwards. So long as the language was confined to Latium, there existed no dialectical differences of any importance. The contrast between the popular and the literary language, which had already arisen at the beginning of the archaic period of literature (from Livius Andronicus to Cicero), became still sharper in the classical period, and the further development of the former is almost entirely lost to our observation until the Middle Ages, when the popular Latin of the various provinces of the Roman empire meets us in a form more or less changed and with a rich development of dialects (Romance languages: Portuguese, Spanish, Catalanian, Provençal, French, Italian, Raetoromanić and Roumanian).

We shall only consider the development of the Latin of antiquity.


The Umbrian-Samnitic dialects are known to a certain extent through inscriptions, which for the most part belong to the last centuries before our era, and through words quoted by Roman writers. We are best acquainted with Umbrian (Bréal Les tables Eugubines, Paris 1875, Bücheler Umbrica, Bonn 1883) and Oscan (Zvetaieff Syllogo inscriptionum Oscarum, Peters burg-Leipzig 1878). Of the Volscian, Picentine, Sabine,

Aequiculan, Vestinian, Marsian, Pelignian and Marrucinian dialects we have only very scanty remains (Zvotaeieff Inscriptiones Italiae Mediae dialecticae, Leipzig 1884). All these dialects were forced into the background at an early period by the intrusion of Latin. The Sabines, who received citizenship in 267 B. C., seem to have been the first to become romanised. The slowest to give way was Oscan, which in the mountains did not perhaps become fully extinct for centuries after the Christian era.


§ 9. (6) The Keltic languages fall into three groups: Gallic, Britannic and Gaelic.

We know something of Gallic through Keltic names and words quoted by Greek and Latin authors, through inscriptions and coins. But the interpretation of the forms, mostly proper names, is in most cases so uncertain that from these remains linguistic research has hitherto gained comparatively little.

Britannic broke up into Cymric (or Welsh), Cornish and Bas Breton (or Armorican); the connexion between the last two is especially close. We are acquainted with Cymric and Bas Breton from the eighth or ninth century onward, at first through glosses; the oldest records of Cornish are somewhat later. The last named dialect became extinct at the end of the eighteenth or beginning of the nineteenth century, both the others are still living.

Irish-Gaelic, Scotch-Gaelic (which is also known as Gaelic in the stricter sense), and Manx (spoken in the Isle of Man) form the Gaelic division. All three of these are still living. The first two languages seem hardly to have differed from each other in the ninth century. The oldest monuments are the O.Gaelic Ogam inscriptions (Ogam is the native name for the

1) The first two languages have often been classed together as a special group, but without sufficient reason. See Thurneysen Kelto-romanisches 1884 p. 7 ff.
Gaelic runes), which possibly date as far back as about 500 A.D. The literary record of Irish begins in the eighth century, at first with glosses, and then from the year 1100 onward we have many extensive manuscripts which contain sagas, ecclesiastical literature etc. Scotch-Gaelic literature begins somewhat later than that of Irish and in the older period is closely connected with Irish. Manx is only known to us during the last few centuries 1).

We shall consider chiefly Old Irish.


§ 10. (7) The Germanic branch is divided into Gothic, Norse, and West Germanic.

Gothic, the most archaic language of the Germanic group, is chiefly accessible to us through the biblical translation of the West Gothic bishop Ulfilas (311–381 A.D.). The language perished with the Gothic nation. (The East Goths, who dwelt in the Crimea, retained their language down to modern times; but of this branch of Gothic we possess only a few isolated words.)

Norse (or Scandinavian), which in certain special points closely coincides with Gothic2) and is therefore by some writers classed together with it as East Germanic as opposed to West Germanic, down to the Viking period (800–1000 A.D.) was practically a single language, but later on became broken up into four languages, Icelandic and Norwegian (West Norse) on the one hand, Swedish and Danish (East Norse) on the other. The earliest records are runic inscriptions, the oldest of which

1) Windsch's article «Keltische Sprachen» in Erb's und Gruber's A. Enzykl. d. W. u. K. second section, XXXV p. 132 ff., serves as a good introduction to the Keltic languages generally, the monuments of these languages and Keltological literature.

2) The most important of these coincidences are Goth. adj = O.Icel. ygg from ð (§ 142) and Goth. gge = O.Icel. ggr from ygr (§ 179). Cp. Braune in Paul-Braune's Beitr. IX 546 ff.
appear to belong to the fifth century. By O.Norse was, in former times, generally understood O.West Norse only; the term is now more properly applied to the whole development of the Scandinavian languages up to the sixteenth century.

The oldest representatives of West-Germanic are Anglo-Saxon, the continuation of which is Mod.English; O.Frisian; O.Saxon, now Low German; O.Low Franconian, now Dutch, Flemish, and the language of the German Lower Franconia; and O.High German, the present Upper- und Middle German dialects. The oldest records of these languages date from the eighth or ninth century, the oldest O.HG. record belonging to about the period 740–745; but with Frisian we are acquainted only since the fourteenth century.

We shall limit ourselves chiefly to Gothic and Old Iligh German.


§ 11. (7) The Baltic-Slavonic branch. The Baltic division consists of Prussian, Lithuanian, and Lettic. The former died out in the seventeenth century and we only possess very few imperfectly recorded specimens dating from the fifteenth and
sixteenth centuries. The two latter are still living and their oldest records belong to the sixteenth century.

We confine ourselves chiefly to Lithuanian.


The Slavonic languages fall into a South-Eastern and a Western group. To the former belong Russian (a. Great Russian and White Russian, b. Little Russian), Bulgarian and Illyrian (a. Servian and Croatian, b. Slovenian), to the latter Czech (Czech in the stricter sense, Moravian and Slovakian), Sorabian or Wendish (Upper and Lower Sorabian) and Lechish (Polish and Polabian or Elbe-Slavonian). All these languages, with the exception of Polabian, are still living. The most archaic, and for Indg. grammar the most important, is the language in which the Slavonic apostles Cyril and Methodius (ninth century) wrote. In our investigations we accordingly consider this language of the first importance. It is called O.Slovenian by Miklosich, but by Schleicher, Schaffarik and others with more justness O.Bulgarian. It became the ecclesiastical language of the Greek church, and that form of it, which was modified through the influence of other Slavonic languages, especially of Russian, is generally known by the name of Church Slavonic.


§ 12. In accordance with what has been said in §§ 4—11, we shall speak exclusively or at all events especially of the oldest periods of those languages whose developments are
known to us through records extending over a great length of time. The term 'science of the Indg. languages', as has been already stated in § 1, does not demand such a restriction. This division of labour is wholly due to the course which the science has hitherto taken, and is fully justified by the present state of the science. Bopp in his Vergleichende Grammatik (3 vols., edit. 3, Berlin 1868—1871) and Schleicher in his Compendium der vergleichenden Grammatik der indogermanischen Sprachen (edit. 4, Weimar 1876) also limit themselves similarly as we have done.

When we speak of primitive Indg. forms; of prim. Ar.; of prim. Gr. or of prim. Ital. etc., we generally mean those forms which were in use towards the close of the primitive period of these languages. But we also often mean such forms as belonged to an earlier period of this stage, and which had already undergone a change towards its termination. For instance, we therefore speak equally well of prim. Germ. *fnogō and of prim. Germ. *fārā (Goth. fālu, s. § 214), of prim. Gr. *νορα and prim. Gr. *νονα (Att. noea, s. § 490), as of Lat. sequuntur and Lat. secuntur (§ 431). Forms, put down by us as prim. Ind., prim. Ar. etc., are therefore not to be indiscriminately regarded as belonging to the same period. Again, if we, for example, uniformly write ⟨χ⟩, not ⟨h⟩, in prim. Germ. forms where we put ⟨h⟩ for Gothic words, it must not be implied that ⟨χ⟩ had not in certain cases already become ⟨h⟩ in prim. Germanic (cp. § 529).

ON THE STRUCTURE OF THE INDO-GERMANIC LANGUAGES IN GENERAL. ROOT AND SUFFIXES. 1)

§ 13. The Indg. languages belong to the inflexional class. The inflexion of words has not existed from the very beginning, but has been gradually developed and perfected.

We have to presuppose a period in which suffixal elements were not yet attached to words. The word-forms of this period are called roots, and the space of time prior to inflexion, is called the root-period. It dates much further back than that stage of development whose word-forms we are able to deduce by a comparison of the separate Indg. groups of languages. This stage is usually simply called the Indg. parent-language.

What we understand by word-formation and inflexion arose by composition, that is, by the following process: a group of words which formed a syntactical complex was fused into a unity, in which the whole was in some way isolated in relation to its elements\(^1\). This word-fusion from the beginning onwards occurred in the same way, just as afterwards, in the age of separate languages (partly even in historical periods) the final members of compounds became suffixes, e. g. Goth -h in mik (Mod. HIG. mich) from prehistoric *me ge (cp. Gr. ἱερ 'beside ἵει'), French -ment in siérement from fera mente, MHG. and Mod.HIG. -heit in scharheit, originally meaning 'schöne Beschaffenheit' (beautiful state or condition), where heit is still an independent word in MHG. and OIHG., Mod.Irish -mhar in buadhmhar 'victorious' = O.Ir. már mór Cymr. mawr 'magnus' (Zimmer Kelt. Studien II p. 22 ff). The formation of suffixes is not a work which belongs to any special prehistoric period and which was concluded at any definite point of time. But when once this process had begun, it was performed anew through all periods of the history of the Indg. languages and will probably also be repeated again in the future, so long as our languages continue to develop.

\(^1\) "With respect both to meaning and form either the whole may pass through a development in which the separate parts do not participate when used independently, or vice versa the separate parts may pass through a development in which the whole does not participate, or it may happen that the separate parts cease to be employed independently, while they are preserved in combination, or lastly the mode of combination may vanish from living use and only remain preserved in certain set forms". Paul in the above work p. 165.
Suffixes are divided into word-forming suffixes or inflectional suffixes in the stricter sense, to which on the one hand belong case endings (e.g. *-m in Indg. *ekyom = Lat. equom, Skr. āścam), and on the other, personal endings (e.g. *-mi in Indg. *ēmi = Gr.  ἡμι, Skr. ēmi), and stem-forming suffixes (e.g. *-ter- in Indg. *petěres = Gr. πατέρς, Skr. pitarus, -śko- in Indg. *guśkōnti = Gr. πάτωντι, Skr. gauchanti). It is impossible to draw a sharp line between the two species of suffixes, since many an element, which was originally only stem-forming, has come to be treated on the same level with word-forming suffixes. Cp. e.g. Lat. legimini, whose final part mini, felt by the Romans as a personal ending (like -unn etc.), contains the stem-forming suffix -men- (cp. Gr. λεγόμενον); properly legimini estis = λεγόμενοι εστε.

The derivation as well as the original value of those suffixal elements, which in the Indg. prim. period were already no longer felt to be the members of a compositum, is for the most part very doubtful. Of the conjectures which have been put forth regarding these suffixes, there are only a few to which one can allow a certain amount of probability. To these belongs especially the hypothesis, that a part of the personal endings were originally independent substantival pronouns, cp. the -m of the I. sg. impf. Indg. *ēbherom (Skr. ēbharam, Gr. ἐπιχεω) with the pronominal stem *-me (Lat. mē, Goth. mi-k).

There are in the Indg. languages many words of which we can not prove that they either contain or ever did contain a suffix. These, therefore, apparently represent the form they had in the pro-inflexional period, e.g. Gr. με, Goth. mi(-k) cpf. *me: Skr. mē, Gr. με, Lat. mē(-dīnis), O.Ir. mē nō, OHG. mō no, Lit. mē(-gē) 'now'. In other cases, root-words had disappeared in those compositions which we call inflected words. We must guard against fancying that, towards the close of the primitive period, or even later, elements like es, which we abstract as root from such forms as Indog. *ēsti, (Gr. ἵστη, Skr. āsti), had an independent existence and a meaning without any definite syntactical relation.
§ 14. According to the analogy of such forms as Fr. vis-
à-vis, rouge-gorge, it has become usual to indicate component
parts of inflected words by hyphens, e. g. Gr. εἰ-μι, πα-τέρ-ες,
It is thus intended to give a clear idea as to what parts of an
inflected word once had an independent existence.

With regard to this mode of proceeding the following
remarks are to be made.

1. We have seen in § 13, that as the first foundations of
derivation and inflexion were laid by the fusion of independent
elements, so this process has been continually repeated up to
the present time. But the great majority of inflexional forms
do not directly depend upon it. No sooner did the first
inflexional compounds make their appearance, than they served as
the models upon which other words were formed after their ana-
logy, just in the same manner as most of the Mod. HG. com-
posita in -keit, -bur, -lich etc. can no longer be conceived as
proper syntactical compounds, but only as imitations of model
forms, made at an earlier period. Composita, the formation of
which we are able to trace in the younger stages of the separate
languages, often exhibit manifold shiftings and deviations. The
reason of these latter is, that all feeling for the mode of com-
position of the model forms became extinct. Thus, for instance,
according to the analogy of Mid.HG. miltekeit from miltec-keit
(ep. miltec-lich) etc. have arised such forms as Mod.HG. frönnig-
keit, citelkeit etc., by the abstraction of a suffix -keit. Such
shiftings may also have taken place in the oldest stages of the
inflexional period, so that, strictly speaking, we are never sure
in the case of a suffix which has come down to us from the
Indg. parent language, whether it ever existed as an independent
word exactly in the same shape as we extract it from the body
of a word, or whether it originally consisted of elements which
passed into this shape by regular phonetic changes.

2. It very frequently happens, that two or more suffixes
become fused into a unity in those periods of a language which
we are able to control. E. g. Mod.HG. -ner in bild-ner, harf-ner
etc. is due to the -ner in such forms as gärtn-er (Mid. HG. garten-aere), which is a derivative of garten; Gr. -aivov in xero-
aivov, λεύκ-aivov etc. to the -aivov in such forms as τεκταλβω
from *τεκταλβω (to τεκτων). In like manner many of the prim.
Indog. suffixes, which we are wont to regard as a unity, e. g.
the -ter- in *po-tér-es (Gr. παρ' ης), may have been fused together
out of several suffixal elements. Our inability to analyse a prim.
Indg. element proves nothing for its primitive unity.

3. It is theoretically correct when we say that the root of a word is found after we have removed all formative syllables
from it. But in the first place we do not know what shape
Indg. words had towards the end of the root-period, and this
applies especially to the fact that we are unable to say whether
the language at this stage possessed only monosyllabic words,
or only words of more than one syllable, or both categories.
Secondly the analysis of elements, which were directly annexed
to the ends of roots, is of a most doubtful nature. And lastly
we are unable to determine what phonetic changes inflexional
compounds had undergone from the beginning up to the dis-
solution of the primitive community. Hence it must not be
supposed that the roots, which we in ordinary practice abstract
from words, are at all to be relied upon as representing the
word-forms of the root-period. We are utterly unable to deter-
mine e. g. whether the complex *anο- in Gr. ἀφε-μο-ζ, Lat.
ani-mu-s, Skr. 3. sg. áni-ti 'breathes' (op. § 110) represents a
unitary word of the root-period, or whether it is to be resolved
into *an-ο-, that is, whether -o- was a suffix, and thus originally
an independent element.

Such being the state of things, we shall retain the terms
'root' and 'suffix' in this work for such parts of a word as seq-
and -e, -taj in Indg. *ségetaj (Skr. सडत, Gr. εσταυ). We do
not however assert that the elements, to which we give these
names, ever existed as independent words. We merely indicate
by means of hyphens (1) what was probably felt at any parti-
cular period as the nucleus (so to speak) of a whole system of
word-forms (seq-), and (2) what was regarded as the formative

Brugmann, Elements.
element (-e- and -tai in *sẹq-e-tai, *bhēydh-e-tai, *bhēr-e-tai etc.), shared in common by a greater or less number of different words. The elements -e- and -o- in cases as Gr. ἔπι-e-tai (Indg. *sẹq-e-) and fut. ἐπιөω ἐπῳ from *ῃπο-e-ọ (Indg. *tener-o-, cp. Skr. fut. tan-i-ṣydm) may nevertheless originally have been parts of roots (dissyllabic root-words); but on account of forms like πενθεται, ἐρεται, ἔγεται and νεμίω, φθερεω, βαλεω on the one hand and of forms like ἔφομαι and τελω (from *妘θω, §§ 131. 618) on the other, it becomes highly probable that they simply were for the perception of language (sprachempfindung) that which grammarians call "suffix" ¹).

¹) A certain analysis of forms takes place in the formation of associated concepts which refer to the system of word-formation and inflexion, whereby categories arise which are analogous to the grammatical notions of root, stem, and suffix. But it must always be borne in mind, firstly, that the mind remains entirely unconscious of these categories as such; secondly that they have nothing to do with the original mode of the formation of words, but purely accommodate themselves to the sound-series (Lautreihe) which regularly goes through a number of forms in the language for the time being, so that e.g. in Mod. Germ. tag-, hirt- appear as nominal stems, trug- and brenn- as verbal and present stems, trug- and brenn- as the preterite stems of tragen and brennen; thirdly that the elements arising from analysis are never felt as something entitled to an independent existence, but only as something which is possible in certain modes of combination". Paul Principien p. 64.
§ 15. By a comparison of the eight Indo-Germanic dialects (§ 3) we are in a position to arrive at the number and nature of the sounds possessed by the Indg. parent language. These were as follow:

Vowels. In the function of sonants: i i, u u, e e, o o, a a, e. In the function of consonants: i, u.

Nasals. In the function of consonants: w (velar), n (palatal), m (dental), m (labial). In the function of sonants: w, n, m, n, m.

Liquids. In the function of consonants: r, l. In the function of sonants: r, l.

Explosives:

\[\begin{align*}
p & b & ph & bh \text{ (labial).} \\
t & d & th & dh \text{ (dental).} \\
k & g & kh & gh \text{ (palatal).} \\
g & g & qh & gh \text{ (velar).}
\end{align*}\]

To these is probably further to be added the spiritus lenis, a laryngeal explosive, e. g. Indg. *d̂sti 'is', Gr. ἐς. In the following paragraphs we shall indicate this sound only in Greek words.

Spirants: s, z, j, v.
Phonetic Elucidations

§ 16. 1. Voiced and voiceless sounds. Speech-sounds are produced by the breath, expelled from the lungs, undergoing a checking which gives rise to an acoustic effect. This checking takes place partly in the larynx, partly in the organs above the larynx (mouth, or nose), and partly in both at the same time. When the checking in the larynx takes place in such a manner that the vocal cords (which in a state of rest are far apart) are so far brought together as to come into (rhythmical) vibration, a musical clang arises which is called voice. All sounds, which are spoken with voice, are called voiced, and all those without voice voiceless. In the Indg. prim. language the vowels, nasals, liquids, of the explosives the mediae $b$, $d$, $g$, $g$ and the mediae aspirate $bh$, $dh$, $gh$, $gh$, and the spirants $z$, $j$, $v$ were voiced; on the other hand the tenues $p$, $t$, $k$, $g$ and the tenues aspirate $ph$, $th$, $kh$, $gh$ and the spirant $s$ were voiceless.

The voiceless vowels (the $h$-sounds), nasals and liquids

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2) It is not without considerable justification that the expression 'speech-sound' ('Sprachlaut') has of late been found fault with, so far as it is used to express the smallest elements of language in general, because among the so called explosives there are moments of perfect absence of sound which are also to be taken into consideration. And these moments form an element of a syllable just as much as the moments of sound, while in the analysis of a syllable they can no more be left out of consideration than the pauses in music can be regarded as not existing. Cp. § 320. If in this work we have not attached that amount of importance to the latest principles of phonetics — viz. that in the classification of speech-elements, their genesis, not their acoustic effect, should form the chief principle — which some phoneticians might wish to see, it is out of consideration that we do not yet possess a system and terminology, based on these views, which might be applied without considerable difficulties to the historical results of the science of languages.


in the course of the individual developments were added to the respective voiced sounds of the primitive period.

§ 17. 2. Sonorous sounds and noised sounds. The mouth and nose on the one hand, serve to modify the clangs formed in the larynx, on the other hand 'noises', which are independent of the activity of the larynx, can be produced in these organs through the current of breath undergoing a checking and friction. In uttering \( t, s \), e. g. a noise is made on the inner side of the upper teeth, or on their sockets. Voice and noise formed in the mouth and nose (Ansatzrohrgeräusch) can be combined, e. g. in \( d \) and \( z \) (Fr. zéro, Russ. золото 'gold'). Those sounds, which are formed with noise, whether they be voiceless or voiced, are called noised sounds, whereas those, in which the formation of voice takes place in the larynx, while the mouth and nose merely serve as resonance chambers, are called sonorous sounds. The Indg. explosives and spirants were noised sounds, and the Indg. vowels and nasals, sonorous sounds. The \( r \)- and \( l \)-sounds were and are in the historic periods of the Indg. languages partly sonorous and partly spirantal in their formation. And it is not improbable, that the spirantal pronunciation, where it occurs in historic times, had everywhere first come into being during the course of the separate history of the respective Indg. languages.

§ 18. 3. Sonants and Consonants. Every syllable contains one sound, which is either alone or at least principally the bearer of the accent, e. g. the bearers of this accent in the word höfl-ning are o and u. Such sounds are called sonants. The other elements of a syllable are to a certain extent only adjuncts to the sonant which forms the nucleus of the syllable, and are therefore called consonants. Every syllable must contain one sonant and can contain only one, whereas it can have several consonants (Mod. German strümphen) or none at all (Lat. imperative \( \\text{t}^{1} \)). One set of sounds can be used both as sonants and as consonants, especially the vowels —

1) By this classification we omit to take account of the spiritus lenis, which strictly speaking ought to be reckoned among the consonants.
amongst these particularly i, u —, the nasals and liquids; we write these sounds i u y, r etc. when used as sonants, and i, y, n, r etc. when used as consonants. Cp. Mod. German Á-sién beside Á-sjén (in poets); Lat. á-guám beside á-cú-ám, stín-gyó beside úr-gú-ó; English ré-př-zí-těz-ší (representation); Mod. Germ. rěch-ně beside rěch-tít (rechnet), gě-nůg (genug), hán-dlé beside hán-dĕ, gě-rá-dé (gerade); Czech kýt (krt 'mole'), vík (vlk 'wolf'); Skr. pi-trá (pitřá, instr. sg. of pitár- 'father') beside pi-tř-šú (pitršu, loc. pl. of the same word)\(^1\); in Slovakian stfn, stín (srna 'roe'), včná (volná 'wave').

In our representation of pre-historic forms we consequently mark i and u also as consonants when they form the second component of a diphthong, e. g. Indg. 3. sg. *éiti = Gr. εἶτι Skr. éti, *bhëydhetai = Gr. νεώθεται Skr. bódhatē. The vowels i and u had here the same function as e. g. r in the 3. sg. *bhërti from rt. bher- 'bear' (Skr. bhárti, Lat. fert) and u in the 3. sg. *bhëbhëndë from rt. bhëndh- 'bind' (Skr. babánta, Goth. band). Cp. § 308.

Rem. A few phonetic elucidations on the explosives and spirants will be found in § 320 ff. and § 354.

On the pronunciation of the letters.

§ 19. The various Indg. languages and dialects were and still are written in various alphabets by the respective peoples and their subdivisions. Sometimes different kinds of alphabets were even employed in different districts lying within the sphere of the same dialect, or also in the same district for different purposes, e. g. in Oscean (inscriptions in the Oscean-Samnitic, Latin, and Greek alphabets) and in Servian (the Cyrillic alphabet is employed by the followers of the Greek Church, and the Latin by the Roman catholics). It also frequently happened that one alphabet was permanently given up in favour of another, cp.

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\(^1\) Skr. pitřá stands in the same relation to pitršu as háneā i. e. háŋā doec to hánušu (stem hánu- 'jaw-bone') and as ávyā i. e. ávā does to ávšu (stem ávi- 'sheep').
e. g. the change from the runic to the Latin alphabet among the Germanic races.

It has become usual in works on Indg. grammar to employ native characters only in the case of Greek, Latin, and those younger developments which were and still are written in the Latin alphabet, but for the rest to make use of a transcription, based on the Latin alphabet. Now the Latin system of letters is insufficient for the transliteration of most foreign alphabets, and when this is the case, it is usual either to add a diacritic sign to the Latin letter, or to borrow a letter from other known alphabets.

The exposition of the history of the various sounds will furnish further information as to the living value of the letters. With regard to the transcription which we have adopted for the various languages, we simply make such observations here as will enable the reader to pronounce the words correctly or at least approximately so; in the case of dead languages it is, of course, often impossible to determine precisely the value of a letter.

§ 20. Sanskrit. The alphabet is as follows:

\[
\begin{align*}
\text{a} & \text{ā} i \text{ī} u \text{ū} ā \text{ā} \text{r} \text{r} \text{̌r} \text{̌} \text{ā} \text{ī} \text{ō} \text{ō} \text{u} \text{ū} \text{ḥ} \text{ḥ} \text{k} \text{kh} \text{g} \text{gh} \text{̌c} \text{ch} \text{j} \text{jh} \\
\text{n} & \text{ṅ} \text{ṭ} \text{ṭh} \text{d} \text{ḍh} \text{ṇ} \text{ṭ} \text{ṭh} \text{d} \text{ḍh} \text{n} \text{p} \text{ph} \text{b} \text{bh} \text{m} \text{y} \text{r} \text{l} \text{v} \text{ś} \text{s} \text{ḥ}.
\end{align*}
\]

\text{j}, \text{ḍ}, \text{ḥ} are sonants (s. § 18). \text{ṛ}, \text{ṝ} like consonantal \text{r} are cerebral (cp. \text{ṭ}, \text{ṭh} etc. below), i. e. similar to English \text{r}; \text{ḷ} and \text{l} are dental.

\text{ḥ} (visarga) is our spiritus asper.

We indicate the nasal pronunciation of the sonants by \text{ṛ}, e. g. \text{ṛś-ś} 'thread, beam of light', acc. \text{suddikṣaṁ-sam 'suaviorem'}; \text{ṛ,ṝ} = nasalised \text{ṛ}, \text{ṝ}, e. g. in \text{ṛṣṭṝ-ti 'he shatters', niṛṣ- DataTypes 'viros-que'}.

The voiceless aspirate explosives \text{kʰ}, \text{cʰ}, \text{ṭh}, \text{ṭh}, \text{pʰ} and the voiced aspirate explosives \text{gʰ}, \text{jʰ}, \text{ḍh}, \text{ḍh}, \text{bʰ} are to be pronounced as explosives followed by an \text{ḥ}, but cp. however Whitney's Skr. Gram. § 37.

The palatals \text{c}, \text{cʰ}, \text{j}, \text{jʰ} are generally pronounced as (compound) \text{ṭṣ}-sounds, e. g. the initial sounds of \text{ca 'and'} and \text{jāna-s creature} like the initial sounds of Italian \text{cento} and \text{gente} or those
of English church and judge. But they were simple sounds, similar to Mod.HG. k and g before palatal vowels, e.g. in kind, gift.

The cerebrals (cuminals) t, th, ð, ðh are uttered with the tip of the tongue turned up and drawn back into the dome of the palate.

ɔ is the guttural, ù the palatal, and ʊ the cerebral nasal.

y = ɨ, v = ʉ or spirantal v, z. §§ 18. 127. 161.

s is like Mod.HG. dental s, cp. āsti and Mod.HG. ist. On the other hand š and ʂ are sh-sounds; š is the palatal and ʂ the cerebral sh-sound; š is thus the softened š (sz) found in Slavonic and Lithuanian.

h is pronounced like our spiritus asper; it was however a voiced sound, the character of which is doubtful, cp. Whitney’s Skr. Gram. § 65.

§ 21. Iranian.

1. Avestic.

The vowels are: a i u e ə o

a i u e ə o ã ã.

e, ə represent the open and ə, ɵ the close e-vowel, ã a dull ã sound approaching to ə. q is the nasal vowel of a and ã (§ 200). ɨ = ɨ or spirantal, v = ʉ or spirantal ( §§ 18. 127. 161).

Diphthongs: ae öi, ao öu, āi āu. ae, ao may be pronounced like the ai, au in the Middle German pronunciation of kaiser, haus etc. (cp. Boot. ae and Ion. ao § 96, Lat. ae § 97).

Liquid: r. Nasals: ɔ guttural, ü is palatalised n (§ 200), n dental, m labial; the value of ɔ and ü is doubtful (§ 558, 3).

Explosives: k c t p, g j d b. c and j are like Skr. c and j (§ 20).

Spirants: x = Mod. HG. ch in dach, to which the corresponding voiced sound is γ. ɣ, a palatalised sound, seems to have been similar to the Mod.HG. ch in ich. s = our voiceless s in nest, z = Fr. z. ʃ = Mod. Gr. θ and our th in thin, ð = Mod. Gr. ð and our th in then. f, v = our f, v. ʃ is our sh, ʒ the corresponding voiced sound = Fr. j. ʒ = Skr. ʃ. The pronunciation of ʃ, ʒ, ð cannot be more exactly defined.
§ 21—22. Old Persian and Armenian pronunciation.

*h* is our spiritus asper (not = Skr. *h*).

2. Old Persian.

Vowels. *a* i *u*, *a* *i* *a*. *y* = ɨ or spirantal (§ 127), *v* = *u* or spirantal (§ 161). *y* and *v* were not pronounced in words ending in -iy, iy, -uv, -av. Final *h* is to be pronounced as -hi.

Diphthongs: ai au, ai āu.

 Liquids: *r*, *l*.

Nasals: *n*, *m*.

Explosives: *k* c *t* *p*, *g* j *d* *b* as in Avestic. *d* had also the value of *d* (§ 402).

Spirants: *z*, *s*, *ž*, *f*, *š* as in Avestic. The value of *š* is not clear (§ 261)

*h* = Av. *h*.

Difficulties are caused by iy, uv, iy, āv, which in certain special cases represent *y* and *v*, cp. §§ 125. 159. 558, 3.

Rem. The peculiar character of Old Persian cuneiform letters makes it, in some respects, difficult to decipher the words rightly. A syllable consisting of a consonant and a short vowel (*a*, *i*, *u*) was represented by one sign (*dَا*, *dِ", *dَا"*). Medially and finally the letters *a*, *i*, *u*, which initially expressed both *a*, *i*, *u* and also *ā*, *i*, *ū*, were added to the corresponding sign to express length of vowel, e. g. *dَا + a = dā*, *dِ + i = ɨ* *dِ* + *i* = *di*. A consonant which was not followed by a vowel, was also always represented by a syllabic sign, e. g. *pَا + a + *rَا + *sَا + *mَا = pārəm* (acc. sg. *'a Persian*). Consequently in order to express a final consonant + *a*, an extra letter *a* was added at the end. Therefore, e. g. *-mَا* + *a* (*-mā*) might mean both *-mā* and *-ma*. The letters *i*, *u* were usually added again to the signs for consonant + *i*, or *u*, so that e. g. *vَ + i* + *sَا + mَا* may be read either as *vūsəm* or *vīsəm* and thus we are not able to make a clear distinction between *i*, *u* and *i*, *ū*. Cp. Bartholomae Handbuch p. 5 f. § 21 rem. 1. § 24 rem. 1.

§ 22. Armenian1).

Vowels. *a*, *u*, *i*, o ɵ, e ē. *ɛ* is an indefinite vowel somewhat resembling German ŏ. Pronounce *y*, *v* as ɨ, ʉ (§ 18).

Diphthongs: *eَا*, *aِ", *oِ", *aَا", *iَا*.

 Liquids: *r*, ɬ; *l*, ɬ. The difference in the pronunciation has not been determined. Nasals: *n*, *m*.

---

1) In the transcription of this language we entirely follow Hübischmann. Cp. his treatise *Die Umschreibung der iranischen Sprachen und des Armenischen* (1882) p. 31 ff.
Explosives: \( k \), \( t \), \( p \), \( g \), \( d \), \( b \). \( k \), \( t \), \( p \) are aspirate tenues.

The Affricatae \( \varphi \), \( \varphi \), \( \partial \) may be pronounced as \( t\hat{s} \), \( t\hat{h} \), \( d\hat{s} \), \( t\hat{s} \), \( t\hat{h} \), \( d\hat{s} \).

Spirants. \( x \) is a deep guttural \( c h \) like the \( ch \) in Scot. \( L\). \( c \) and \( z \), the latter = Fr. \( x \). \( \dot{\imath} \) and \( \ddot{\imath} \), the former a voiceless, the latter a voiced \( sh \)-sound.

\( h \) = our spiritus asper.

§ 23. Umbrian-Samnitic. The monuments of this dialect-group are almost exclusively inscriptions, which are written partly in the native, partly in the Latin and also occasionally in the Greek alphabet. We reproduce the native writing by spaced Roman type, whereas those words which have come down to us written in the Latin alphabet are printed in italics.

The Umbrian native alphabet does not possess any special letters for \( o \), \( g \) and \( d \), but represents them by \( u \), \( k \) and \( t \).

The \( c \), in monuments written in Latin characters, must always be pronounced as \( k \).

The sibilant (§§ 387, 502), which arose from \( k \) before palatal vowels and which we represent by \( s \) and \( \check{s} \) (\( s \)), may be pronounced like Skr. \( \check{s} \). The precise pronunciation of this sound, given by \( d \) in the native alphabet, and by \( S \) (or \( S \)) in the Latin, is not known.

The modification of \( d \) (§ 369), which on the tables written in Latin is represented by \( rs \), and also occasionally simply by \( r \) or \( s \), has the sign \( q \) in the native alphabet. It was probably a strongly spirantal \( sh \)-kind of \( r \), similar to Czech \( r \). We transcribe this Umbrian symbol with \( r \), and it may be pronounced like Czech \( r \).

Pronounce \( z \) as \( ts \).

\( h \) occurs in both kinds of writing as sign of vowel lengthening, e. g. kumna\( k \)kle read kumn\( k \)kle, spah\( m \)nu read sp\( m \)nu. On tables written in Latin this sign also appears between a double vowel which in itself already indicates vowel length, e. g. spah\( m \)nu beside spah\( m \)nu.

1) More will be found on the pronunciation of these sounds in Hübenschmann's work quoted above p. 35 rem. 3.
\[ \text{§ 23–24. Old Irish pronunciation.} \]

Oscan \( i \) is a close \( e \), in the function both of a sonant, e. g. ʻst ʻestʻ, and a consonant, e. g. in the diphthong \( a\acute{i} \); \( u \) is a close \( o \).

Pronounce \( z \) as \( ts \), e. g. húrz, az, keenzstur (\( \text{nzs = ntss, cf. kvaissstur} \)), Vezkei. But \( z \) is a voiced \( s \) (Fr. \( z \)), e. g. egma\( z \)um.

In Umbrian-Samnitic we uniformly omit the mark of length over vowels. We write e. g. \( m\text{at\text{er}} \) 'matris', although \( a \) was undoubtedly spoken (§ 105). This plan has been adopted because the cases are too numerous in which the quantity of the vowel can not be determined with certainty.

\[ \text{§ 24. Old Irish writing, a variety of Latin, presents many diphthongs and triphthongs which were in reality only monophthongs and diphthongs. E. g. the } i \text{ in } \text{eich} \, \text{of} \, \text{a horse} \text{ and in } \text{tuai\text{th}} \, \text{to the people} \text{ only marks the } i \text{-timbre of the following consonant. Hence some write } e\acute{\text{ch}} \, \text{tuai\text{th}}. \, \text{S. } \text{§ 640.} \]

\( c \) is everywhere to be pronounced as \( k \). On the pronunciation of \( c \) and \( t \) compare moreover § 212 rem. and §§ 513, 658.

\( \text{ch, th, ph denote the guttural, interdental, labial voiceless spirants (} \chi, \bar{b}, f, \text{), s. } \text{§ 514. } \text{th occasionally also stands for the voiced interdental spirant } \acute{\text{d. }} \text{g, } \acute{\text{d}}, \text{ } \acute{\text{b}} \text{ are both voiced mediae (§ 519) and voiced spirants } \grave{\text{z}}, \acute{\text{d}}, \acute{\text{b}} (\text{§ 522}), \text{g and } \acute{\text{d}} \text{ are even also used for the voiceless spirants } \chi \text{ and } \bar{b} (\text{§ 514). In Middle Irish } \text{gh, dh, bh took the place of } g, d, b \text{ as signs for the voiced spirants; after the manner of Modern Irish, we pronounce } \text{gh} \text{ and } \text{dh} \text{ before or after a palatal vowel like our } y \text{ and before or after other vowels as } \acute{\text{z.}} \]

\( s \) is \( h \). \( f \) is silent. \( mh \) is a nasalised labial spirant.

\[ \text{Rem. In the Britanni\text{c} dialects } \eta \text{ has the sound of } \acute{\text{n}, in the greater part of Wales that of } i. \text{ So far as Cymric is specially concerned, it may be remarked that } y \text{ denotes partly a vowel, similar to that in the English word } \text{fur, and partly } = \text{ Cymr. } u; \eta \text{ is partly a sonantal vowel } \eta \text{ and partly } y; \text{ ch, th, } \text{j} (\text{ph}) \text{ are voiceless, and } dd, f \text{ voiced spirants; } \eta, n, \text{ r, t are voiced, } mh, nh, rh, lh \text{ voiceless. These values apply in the first instance to the living language only.} \]
§ 25. Gothic.

At is a short open e, and au9 a short open o. On the other hand ã and ãu are to be pronounced as diphthongs. Antevocalic aI and au9 (e.g. saian and stana) were probably the long vowels to aI and au9, i.e. open ė and open ō (§§ 142, 179). Gothic writing leaves both aI, aII, aI and au9, au9, au9 undistinguished.

ei = ě, ē and ō were close. v = u, j = i (§ 18).

The guttural nasal (w) was generally (after the analogy of Greek) expressed by g before homorganic explosives, e.g. luggs ‘long’, drigkan ‘to drink’, seldom by gg (driggkan) or n (bringan ‘to bring’).

q (e.g. riqis ‘darkness’) = Lat. qu.

d initially and medially after u, l, r, z was a voiced explosive, whereas medially after vowels it was the interdental spirant d. h initially and medially after consonants was a voiced explosive, whereas medially after vowels it was the labial spirant b. A corresponding difference is also to be assumed for g. S. §§ 530, 538 and ep. also §§ 531, 539.

b is a voiceless interdental, f a bilabial spirant, z = Fr. z.

Pronounce initial h before vowels (e.g. haban ‘to have’) like our spiritus asper, in other cases (e.g. hldifs ‘loaf, bread’, rathts ‘right’, tânh ‘I lead’) it is a spirant like German ch.

§ 26. Lithuanian.

Vowels: a e i u, a ë y ñ, à o. e and ë are to be pronounced very open. y = ě. ê and o are very close and always long (hence we omit the sign of vowel length). The vowels q q i y do not differ in pronunciation from a e i u; initially and medially they are always to be pronounced long, finally they are partly long, partly short. The little hook under a vowel indicates that the vowel was originally followed by a nasal, this sign has therefore only an etymological value (§ 218).

Diphthongs: aI eI au, aI eI an, uI oI õ a. The o in oI is to be pronounced long; this diphthong occurs in locatives as toi (from the feminine pronominal stem to-‘this’), where it is usually
written -øj (toj). Pronounce ę as ęą with a very open ą or as ęq. Pronounce ą as ąą with a very open ą or as ąų.

When the accent is on a short vowel, it is represented by e. g. plktas ‘bad’. In cases where and are placed over simple vowels to indicate the accent, these vowels are always to be read long, e. g. värpa ‘ear of corn’, gēras ‘good’. In like manner ąį, ąų, ėį are also to be read as ġį, ġų, ėį. More will be found on the accent signs and in § 691. ąj is to be pronounced as ą, and ą as a spirant (English v) 1).

Liquids: r, l. On the difference between l and l see 'Palatalisation of Consonants' below.

Nasals: n, m. n is to be pronounced as ą (guttural nasal) before k and g, e. g. in ranką 'hand'.

Explosives: k t p (voiceless), g d b (voiced).

Spirants: s, z (= Fr. z), sz (= our sh), ẓ (voiceless sh, Fr. j).

c = ts, cz = English tsh.

Palatalisation of Consonants. All consonants (with the exception of ąj) are liable to palatalisation. This uniformly takes place before palatal vowels (e, ė, i, y): the t, n, r, ę in svėte, kūne, mūre, bėrze (voc. sg. of the stems svėta- ‘world’, kūna- ‘body’, mūra- ‘wall’, bėrza- ‘birch’) are therefore not to be pronounced the same as in svėtas, kūnas, mūras, bėrzas (nom. sg. of the same stems). When palatalised pronunciation takes place before non-palatal vowels, it is indicated by an ą placed after the consonant, but this ą must neither be read as syllabic i nor as į, e. g. kiaulié ‘pig’, piówian ‘I cut’ (past t.), piáusiu ‘I shall cut’, nėsziu ‘I shall carry’. We express the non-palatalised l by l; it is the 'guttural' l, which in those districts bordering on Poland, has a great resemblance to Polish ł, and often sounds like ą, s. § 280. ł is the palatalised liquid; we therefore write galą ‘I can’, not galiih 2).

---

1) This fixing of the pronunciation of ą is on the authority of Schleicher, who had Prussian Lithuanian in mind. It is pronounced ą in one part of Russian Lithuania.

2) In this mode of writing we have followed Juszkiewicz.
§ 27. Old Church Slavonic (Old Bulgarian).

\( a \), \( o \), \( i \), \( u \), \( ù \), \( y \), \( ě \). \( e \) and \( o \) are open. Pronounce \( ě \) as a very close \( ě \); \( ù \) somewhat the same as the \( u \) in English but; \( ě \) as \( ě \); \( y \) as \( ù \). On the quantity of \( a \), \( i \), \( u \), \( y \), \( ě \) cp. § 615. \( ě \) and \( ù \) are nasal vowels, the former = Fr. \( in \), the latter = Fr. \( on \). \( j = j \), \( v = ù \) or spirantal (§ 186).

\( ch \) like German \( ch \) in \( ach \), \( š \) like English \( sh \), \( ě \) like Fr. \( j \),

\( z \) like Fr. \( z \).

\( e = ts \), \( ě = tšh \) (Lith. \( cz \)).

Rem. We use \( µ, ν \) to denote the prim. Baltic-Slavonic representation of Indg. \( v, ĭ \). See §§ 248, 302. Pronounce the \( ĭ \) as a sound lying between \( i \) and \( œ \).

HISTORY OF THE SEPARATE PRIMITIVE INDO-GERMANIC SOUNDS 1).

THE VOWELS 2).

A. THE VOWELS AS SONANTS.

§ 28. The Indo-Germanic parent-language had \( ě \), \( u \), \( ù \), \( e \), \( ě \), \( o \), \( Ď \), \( a \), \( ě \), \( ŏ \).

\( e \), \( o \) (both long and short) were probably pronounced open. Hence some scholars write them \( ě \), \( ê \). On the representation

1) Cp. § 599.

§ 28. Table of vowels.

of these vowels cp. the Author in Curtius' Stud. IX 367, Morph. Unt. II p. III, Kuhn's Ztschr. XXVII 201 ff.

The value of ε cannot be more precisely defined. It may be pronounced as ā, that is, an a somewhat approaching the sound of e.

The regular representation of these prim. Indg. vowels in the individual developments is as follows:

<table>
<thead>
<tr>
<th>Idg.</th>
<th>Ar.</th>
<th>Arm.</th>
<th>Greek</th>
<th>Lat. (in accented syllables)</th>
<th>O. Irish (in accented syllables)</th>
<th>Teutonic</th>
<th>Baltic-Slavonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>i</td>
<td>i</td>
<td>i</td>
<td>i, e</td>
<td>i, e</td>
<td>i</td>
<td>i</td>
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§ 31. Armenian e-lič 'he left': Gr. έλημ, from rt. lejg. e-git 'he found' (g from y, § 162): Skr. ávid-a-t, from rt. yeid-. tiv 'day': Skr. instr. divā 'by day'. Stem eri- 'three' = Indg. *tri- (for the initial forms cp. §§ 263. 483), instr. eri-ve: cp. Skr. tri-bhīṣ.

i, except in final syllables, disappeared e. g. 'gt-anem 'I find', d'Ane-m 'I leave'. Cp. § 632.

§ 32. Greek. níb-i-ova 'to obey': Lat. fid-ēs, from rt. bhejd-. a-st'uo' (from *dēr-, § 166) in di-g, di-novz: Skr. dvi-, Lat. bi-, Ags. tvī-, OHG. zwi-, Indg. *dži- ēni 'on': Skr. āpi.
The $e$ in Elean πόλεο (≈ Att. πόλις) beside πόλυν and in Thessal. κρούνην (inf., cp. Lesb. κρόνην, Att. κρόνειν), ὑβρίστας (≈ Att. ὑβριστής) seems to have arisen through the proximity of the $o$.


Already at an early period Lat. $i$ had a tendency towards $e$ close (open $i$ or $i$ pingue), hence e. g. the spelling tempes-tabus (C. L. 32) for tempes-tati-bus (cp. Skr. ariṣṭātati-bhyas dat., abl. pl. of ariṣṭātati- ‘unimpairedness”). This was especially so before vowels (where $i$ had partly arisen from $j$, see § 135), hence the inscriptionsal forms fileai, Oveo for filiai, Ovio. This intermediate sound was also represented by $e$, e. g. fileai.

e purum arose from $i$:


Rem. 1. On the other hand the $e$ in the suffix of the acc. case sing. of ei-stems as īgnem (Skr. āgni-m, Lith. įgnį), mortem (Skr. mṛṭi-m, O.Bulg. съ-ми), facēm (cp. facili-a), was borrowed from such forms as ped-em (-em = Indg. -os, §§ 224, 228), as siti-m, parti-m etc. show. The $e$ in īn-dex, īn-dex beside -dīc-is etc. (from rt. dejk- ‘direct’, Skr. diś- ‘order, direction’, Gr. δεξ-θ) and the $e$ in comēs by the side of comitiā etc. (stem com-i-tē ‘accompanying’, from rt. ej- ‘go’) has also probably arisen through the influence of analogy; cp. opī-ōx beside faciō, super-iōs beside status etc.

The combination -ri-, between consonants in unaccented syllables (according to the principle of accentuation in primitive Latin, § 680), became $r$, which passed into er. in-certu-s fr. *in-

\textsuperscript{3} Brugmann, Elements.
cri-to-s = Gr. ἀ-κρω-ς, sē-cernō fr. *sē-crinō. abs-tergō fr. *abs-trigō (cp. Gr. ἔρθω); later also uncompounded cernō, tergō, cp. § 65 rem. 2. In the same manner, perhaps, also arose the forms cōn-testor testor testamentu-m (test- from *terst-, cp. § 269) beside Osc. trīsta amentud abl. 'testamento'. The process was the same as that whereby *ἄγρο-ς (Gr. ἄγρο-) became *agrs *agers and lastly ager (§ 623 rem. 1. 655, 9). This process may be dated back to the Italic primitive period. Cp. also § 633.

Rem. 2. ācri-bus ācri-tās etc. are new forms, made by analogy.

The orthographical fluctuation in Umbrian between i and e, as neut. piē-rē pirs-e, peī-rē pers-e 'quid, quodcunque'; imper. aha-triburatu, ah-trepurātu 'abs-trippodato'; acc. sing. of eis-tems in -i-m and -e-m, and the Oscan representation of this sound in its native alphabet by ī, e. g. pīd 'quid', slagi-m acc. sing. of the stem slagi- 'locus', show that i was pronounced open in both dialects.


Cp. also Gall. Ambi-gaturus (Liv.), Ἀμφυδοαυόλ (Ptol.): Gr. ἄμπι; Gall. tri- 'three' in tri-garanus, O.Ir. dat. pl. tri-b 'tribus'.

i became e (by assimilation), when an a or o stood in the following syllable e. g. fer nom. sg. fr. original *yiño-s, feda feda gen. sg. to fid

In syllables with secondary accent i, so far as it did not entirely disappear (§§ 634. 657), became an irrational vowel, whose quality regulated itself after the timbre of the following consonants. E. g. beside the simple fiss stood the compound cūbus 'conscientia' fr. *cōn-f(i)uss, that is, the u-timbre of the ss (presupposed through the older form *mēssu-s) had caused the preceding irrational vowel to become u in the compound, whilst it left the accented i in the simple fiss unchanged. The u in fiss beside fiss merely indicates the u-timbre of the ss
§ 35. Germanic. Goth. viduvō OHG. wittuca OS.
widowā Ags. videve 'widow': Skr. vidhāva-, Lat. vidua, O.Ir.
feā, O.Bulg. vidova. Pret. 1. pers. pl. Goth. bitum OHG.
bizzum O.Icel. bitom 'we bit': Skr. bi-bhidimā, Lat. fidimus. Goth.
fiskā OHG. and OS. fisk O.Icel. fiskr 'fish': Lat. piscis. Pronom-
inal stem hi- 'this', Goth. dat. sing. hi-mma 'hui' adv. hi-drē
'huc', Engl. hither: Lat. ci- in ci-ter ci-trā, Lith. sēl-s O.Bulg. st
hie' (§ 84. rem. 1), Indg. *ki-.

In Gothic i, before h and r, became ai, that is, open e.
mathstus 'dung': OHG. mist 'dung', Ags. mist 'misty vapour',
Skr. mih- Gr. μίαζη O.Bulg. migla Lith. miglė 'fog'. vair
(pl. varūs) 'man': Lat. vir, O.Ir. fer, Indg. *ui-ro-s.

In High German, the Indg. and Prim. Germanic i became
through the influence of a following a, e or o (cp. Irish). OHG.
wehsal 'change': Dutch wissel O.Icel. víxl 'change', Prim. Germ.
stem *wixla-, Lat. vic- vicēs 'change', Gr. ἥεικα 'yield'.
lecchen 'to lick': Ags. hiccean 'to lick', Gr. ἱχρείω 'I lick'. wer
'man': Goth. wair. wessa 'I knew': Goth. visso 'I knew', pret. of
OHG. viszan Goth. vitan 'to know'. To this rule there are a
number of exceptions of which some are difficult to explain.
It may be assumed that they have arisen through form-
association, e.g. in -zigan 'pulled together' by the side of pret.
pl. zigum opt. zigif from rt. *dejk- 'show', and in wissa (= wessa)
by the side of wissum, wissi. 'Cp. Paul's article in Paul and
Braune's Beitr. VI 82 ff.

Rem. Some scholars assume that i, already in Prim. Germanic,
passed into e through the influence of an a or o of the following syllable,
es. g. in OHG. wehsal. The difficulties, however, opposed to this theory
seem to me greater than those presented by the hypothesis given above.

piklā 'pitch': Lat. pic, Gr. πίξου (from *πιξα, § 439) 'pitch'.
Lith. limpū (pret. limpūt) 'I stick' (intr.), O.Bulg. pri-linca from
*limnā (§ 545) 'I stick to, remain hanging': Skr. limpāti 'he
smears', Gr. λίμνη (neut.) 'fat'. Lith. deszinč 'right hand',
O.Bulg. desimē 'dexter': Skr. dākṣiṇa- 'dexter'. Lith. tri-sē,
O.Bulg. trē-chē: Skr. tri-ṣū, Gr. τρεῖ-al, loc. pl. from tri- 'three'.
In one portion of the Lithuanian dialects i is at the present day pronounced very open; hence such frequent spellings as lepau lepo = lipaũ lipo 1. and 3. pers. sing. pret. of limpũ.

Slavonic ŭ must, already in prim. Slav., have been a reduced sound, with a quality approaching e.

In Modern Slavonic developments ŭ became a full vowel in closed syllables (such syllables often arose through the falling out of an i or u in the following syllable), Russ. e, Serv. a: e. g. Russ. deh Serv. dan = O.Bulg. dũŭ 'day'; Russ. cest Serv. čest = O.Bulg. čestĭ 'honour'. On the other hand final ŭ as a sonantal vowel disappeared in every case; e. g. Russ. Serv. dan = O.Bulg. da-mĭ Lith. dâ'-mi 'I give' (Balt.-Slav. original form *dŏdmi from rt. dŏ-; Gr. ðŏdŏµa, § 547). Medial ŭ also, as a rule, disappeared in open syllables, e. g. Russ. vdoŭa = O.Bulg. vdoŭa 'widow'; Serv. dne = O.Bulg. din-e gen. sing. of din- 'day'. All these modifications can be traced as far back as the period of Old Church Slavonic. On the one hand they follow from such double spellings as trečhŭ tricħhŭ, paţenĭ paţînī (instr. sing.), paťechŭ paťičhŭ loc. pl. from paći 'way', denĭ dinĭ 'day', vesi vîsî 'entire', levî livî 'lion'—these forms can only be understood by assuming that the final -ŭ and -i were no longer syllabic (because e did not become ŭ e. g. in paţimi Instr. pl.) 1) — on the other hand from such double spellings as vesi vîsi gen. 'vici' (cp. Skr. viṣ- 'clan'), peati pîsati 'to write' (cp. Skr. piṣ- 'adorn', rt. pej̣- 'cut, cut out'). The same laws hold for ŭ in the combinations ŭn, ŭm, ŭr from Indg. ŭn, ŭm, ŭr (§§ 252. 305). E. g. pres. O.Bulg. mînq 'I press, tread under foot': Lith. minu 'I tread', original form *myn-ŭ, rt. men-; thence Russ. mnu. O.Bulg. timnica 'prison' from timnũ 'dark', adj. to tîma 'darkness' from *tym-ŭ rt. tem-; thence Russ. and also already O.Bulg. temnica. O.Bulg. tirq 'tero' original form *tyr-ŭm, thence Russ. tru. The analogous treatment of ū § 52 may also be compared with these modifications of ŭ.

1) Cp. also such spellings as leqûko (i. e. leqko) for leqûko 'leve, facile' (§ 52).
§ 36—37. Primitive Indg. i.

Γ before j became i in the period of Old Church Slavonic. *prija-zvi* and *prija-zvi* 'love, 'good will': Skr. pṛiyā- 'dear', Goth. frijōn 'to love', Indg. adj. *prijo- 'dear'. Gen. pl. trījī and trījī: Lith. trijū 'trium'. i in the combination -ij- from Indg. -ei- (§ 68) underwent the same treatment, e. g. vičq and viča = Lith. vejū 'I turn, wind', Skr. vāyāni, Indg. *vējū. The change of ā to y before j went parallel to this modification, e. g. dobrājī and dobrjī 'the good man' (§ 84)

Rem. In the Zographos gospel ā frequently is found for i before non-palatal vowels; e. g. vičaiva 'widow'. Cp. § 232 rem. and § 305 rem.

Indg. i.


Nominal suffix-form Indg. -ī: Skr. nāpti-ś 'daughter, grand-daughter', vidāśi 'dviśi', Lat. vic-tr-i-c-s, Goth. frijōndī 'female-friend' from prim. Germanic *frijōnd-i (§ 660, 2), Lith. villusi O.Bulg. viličūši from prim. Baltic-Slav. *vilkusē (§§ 303, 664), fem. particip. pret. act. of Lith. velkū O.Bulg. vīkā 'I draw, pull' (rt. yelq-). Nominal suffix -ino-, forming adjectives denoting origin or material: Lat. haed-īnu-s, Goth. gāite-eins 'kid's', Lat. su-īnu-s, O.Bulg. sv-īnu 'pig's', Goth. sv-ein (neut.) 'a pig' (cp. gaitein neut. 'a young he-goat'), Gr. xorax-ino-ς 'a young raven'. Indg. -i the ending of the Nom. Acc. dual of ei-stems: Skr. pāti to nom. sing. pāti-ś 'master', O.Ir. fāith (original form *yāti) to nom. sing. fāith (original form *yāti-s) 'poet', Lith. nakti O.Bulg. nošči (prim. Baltic-Slav. *nokti, § 664, 3) to nom. sing. Lith. nakti-s O.Bulg. nošči 'night'. Weak form of the optative suffix -i: Skr. deviś-i-mahi 1. pers. pl. Mid. of devīś-mi 'I hate', Gr. eideūs from *eideo-ι-μευ to ἔδει 'I knew' from *ye-deio-α, Lat. s-i-mus, Goth. vil-ī-mus,
OHG. I. pers. pl. s-t-m s-t-n ‘we may be’ = Lat. stimus, O.Bulg. jad-i-nii from jad- (ēd-) ‘eat’ (§ 76), cp. Lat. ed-i-mus.

Rem. Of all the prim. Indg. vowels i is the one which has been least changed in the development of the separate languages.


§ 41. Italic. Lat. viro-s, Osc. bivus nom. pl. ‘vivi’. Lat in-clī-nō, ac-clī-ní-s: Gr. κλῆ-νη κλῆ-ν-ς, Skr. abhi-sṛ-nā-ti ‘leads on, unites with’. Lat. s-t-mus, Umbr. 2. pers. sing. sir ‘sis’, Osc. fęac-ı-d ‘fecerit’ opt. of redupl. perf. (cp. Skr. 3. pers. sing. opt. pf. mid. va-vṛ-t-ı-tā from vart- ‘roll, turn’); the -ı-(r-) in the Umbr. and Osc. forms, as well as in Lat. sim sis (O.Lat. sīm sīs), has been taken over from the 1. and 2. pers. pl. Osc. li-mu ‘famem’: Gr. λί-μο-ς.

In Latin ei was also written for this i, e.g. veivos, faxseis. It was not, however, pronounced as a diphthong, but as a long (probably open) i. The old diphthong ei in deicō (cp. dei-k-x-w-μi), feidō (cp. neitho) etc. had become i, but the spelling ei for this i was still retained. At this period the sign ei began to be used for the old i which had fallen together with e (cp. also the late Greek spelling ei for original i, as poleiτης). Cf. § 65.
The i in the Umbr. and Osc. words *sir* and *bivus*, *limus*, (quoted above) is to be pronounced long. This quantity can be directly proved in Umbr. *persnihimu* *persninihu*, i. e. *persnīmu* (§ 23) 'preamino', depon. 3. sing. imper. from a verbal stem *persnī*, cp. Lat. *finīre*. It also follows from the spelling *ei* (on tables in Latin alphabet) in *seii* beside *sir si* = Lat. *sīs*, in *veiro* beside *vīro* 'vīros' (cp. Skr. *vīrā-s* § 38), probably also in *pers-ei* beside *pers-i* 'quid', the ending of which was a demonstrative particle corresponding to the -t in Gr. *eītow-t*. This spelling *ei* is to be put on a like footing with the *ei* in Lat. *veivos* and similar forms (see above), and points to an open pronunciation of the i. The same quality of the i-sound follows for Oscan from *fusīd* 'foret, esset' (opt. of the s-aorist, cp. Skr. 3. sing. mid. *mu-s-i-tā* from *man- 'think*'), assuming that the vowel in the end syllable had not been shortened and then become i.

§ 42. Old Irish. *li* Cymr. *liw* 'color, splendor': Lat. *livor*. It is less certain that the i in *crīthid* 'emax' = Indg. *i*: Skr. *krī-ṇā-ti* 'buys'.

For the treatment of i in unaccented syllables see §§ 613. 634. 657, 2. 6.


It must be observed that *ei* in Goth. always signifies the monophthong i (§ 25).


Observe that y is the Lith. symbol. for i (§ 26).

Weak nominal suffixes Indg. -u-, -tu-, -nu-: Skr. śvad-u-ś, Gr. ῥῦδυ-ς 'sweet', Lat. fruc-tu-s, O.Ir. fiuss fiss 'knowledge' from *mi-su-s, Goth. su-nus Lith. sū-nū-s O.Bulg. sy-nū (from *sy-nū-s, § 665, 4) 'son'. Weak form of the suffix of the pf. part. act. Indg. -us-: Skr. vid-nī-ḥi Gr. ἴδων from *fīōν-να (§ 131) fem. 'knowing', Goth. bēr-us-þus 'parents' (properly 'those who have brought forth'), Lith. vilk-us-į O.Bulg. vlūk-uši fem., to Lith. velkū O.Bulg. vlēka 'I draw'.


In Sanskrit rū before a following u seems to have passed into ū (dissimilation). Present stem śrū- (‘hear’) from *śru-nu-, cp. Avest. 2. pers. sing. opt. srnū-ya (Skr. śṛṇy-yaś), O.Ir. 1. pers. sing. pres. čn-mi-m, rt. čle-. bhr-kuṭi-s 'distortion of the eye-brows' beside bhrū-bhanaga-s bhrū-bhanaga-s the same. Cp. Osthoff Morph. Unt. IV. 215 f.

§ 47. Armenian. dustr 'daughter': Skr. duhitār- Gr. θυγάτηρ Goth. daughtar (§ 51) Lith. duktė O.Bulg. dūsti 'daughter'. surb 'clean': Skr. subhrā-s 'clear, bright'. nu 'daughter-in-law': Skr. śnuṣā Gr. νυ-ς OHG. snur O.Bulg. snūcha 'daughter-in-law'.
§ 47-49. Indg. u in Greek and Italic.

In Greek, μυρός 'celebrated': Skr. śru-tā-s 'heard, celebrated', Lat. in-clu-tus, O.Ir. cloth from *clu-to-s (§ 50) 'celebrated', OHG. Huđ-rich Huđ-olf Huđ-hari (§ 51). ινηπ ινερ 'over': Skr. upātri 'above, over', Lat. s-uper, Goth. ufar 'over'. Weak present suffix -μυ in τα-νυ-τω: Skr. ta-nu-tē, from root ten- 'stretch', Lat. mi-nu-tē.

In prim. Gr. and probably also for some time after the introduction of the letter Y, u was spoken by all Greeks. At an early period one part of the dialects changed u into ι which in the Christian era was further changed into ι. Another part, the Boeotians, Laconians, and probably also the Arcadian, Cyprians, Pamphylians, Chalcidians and Lesbians, retained μ until far into historical times, e. g. Βοετ. λυγερός (ού = ι) = Att. λυγερός. Meanwhile the vowel u in Boeot. underwent a modification which cannot be precisely defined, after r, θ, δ, ν, λ, as is seen by the spelling iνον instead of ου, e. g. Ηελευθερος = Att. Ηελευθερος; cp. Osc. ιν = u § 49.

The spiritus asper in ινον (Skr. uḍān- 'water'), ινο ινερ (Skr. ṛpa ṛpari) etc. seems to point to a transition from initial μ to ιυ in prim. Greek. Cp. ιμερος: Skr. yuṁera-. It is not improbable that v became ι through the dissimilating influence of a following ι, as πινερός from *πυ-νυ-τός, Skr. pu-nd-mi 'I clean, clear up'.

§ 49. Italic. Lat. rubro- (nom. ruber) Umbr. rufro- 'red': Skr. rudhirā-s Gr. ῥυήρος Ο.Βulg. rūdri 'red'. Lat. duō Umbr. neut. tuva 'two': Skr. vod. duća Gr. δύο 'two'. Osc. pu-klo-Pelig. Mars. pu-cl- 'son' Lat. pu-tu-s 'boy': Skr. pu-trā-s 'son'.

In Latin, before labials and perhaps also before l, a frequent sound, lying between u and i, made its appearance for Indg. u. libet, older lubet: Skr. lubh 'to feel a strong desire'. fimu-s fimu-m, probably related to Gr. θυ-μον. limpa (limpidus), older form
umpa to Osc. Diumpa's 'Nymphis', prim. Italic *dumpa-1). The relation between silua silua and Gr. ἱλή is uncertain (ep. Osthoff Morph. Unt. IV 158 f., W. Meyer Kuhn's Ztschr. XXVIII 163 f.). This i occurs especially often for the -u- of -u-(ey)-stems, e.g. lacr-ima, older form lacru-ma, laci-bus fucti-bus fucti-vagus manifestus beside lacu-bus manu-festus. Compare the change of a to the same u: i-sound (§ 97) in unaccented syllables before the same consonants.

Rem. It has been conjectured (Osthoff in the above named work pages 125, 158) that the i in libet, finua, limpa, silua arose from u phonetically only in unaccented syllables, in such combinations as qui libet, conlibet, in fumo (ep. Hic from *in sloco). But should not the historical relation of loebertatem leiber to Osc. Luvfreis 'Liberi' Falisc. lomferta 'liberta' be such that in Lat. *loyb- (= prim. Italic *lyob-§ 65 page 52) the consonantal u before b underwent precisely the same change as the sonantal u of libet, so that *loyb first became *loyb, then loyb, and lastly lib-? In that case the change of libet (with u in the chief accented syllable) to libet could scarcely be questioned. For the change of loeb- to lib- ep. § 81 rem. 2. I cannot resolve to separate Lat. liber liberta from Osc. Luvfreis and Falisc. loferta, although I do not fail to recognise the overwhelming difficulties which present themselves (s. Danielsson in Pauli's Ital. Stud. 4, 156 ff.).

The spelling with o shows that u in Umbr. had, in certain cases or everywhere, an open sound: sopam 'suppam, supinam', somo summum', trio 'tribum'. For Umbr. i- from iu- see § 133.

In Osc., u after æ, æ, u, s underwent a change which was represented by iu. Diumpa's 'Nymphis', Lat. lumpa (see above); eitiuvam beside eituan'pecuniam' (suffix -u(μ)a-). tiurri'turrim' (a borrowed word?). Niumsieis Niumsphic gen. 'Numisii', to Lat. numeru-s. Sinttiis 'Suttius'. Cp. Beot. iou = ov § 48.


1) The spellings of the Lat. word as lumpya, limpha, lympha are due to the supposed derivation from νυμφή, which even gave rise to nymphaicus (Lowe Archiv. f. Lat. Lexikogr. I 25).

*u* became Ṡ through the assimilating influence of *a* or o in the following syllable (cp. the similar change of i to e § 34). cloth from *clu-to-s*: Gr. *κλόν* etc. (§ 48). srotho srotha gen. of *sruth.* bond *brun* 'solea' fr. *bundo-s*: Lat. *fundo-s* Skr. *budh-ná-s* 'bottom' (§ 469, 8). Compare West Germanic and Norse o from *u* § 51.

*u* became o in monosyllabic words. *nu no* = Skr. *nū* etc. (§ 45). *su-so* 'well' = Skr. *su-*. *du-do* 'bad' = Skr. *duṣ*- Gr. *ἀρ*—Goth. *tuz*. In this case too it is probable that the change from *u* to o was caused by the vowels of the following syllables.

For the fate of *u* in other than chief accented syllables cp. §§ 634, 657.


Rem. Some scholars look upon this uumlaut also as prim. Germ. (cp. § 35 rem.).

on sour milk', O.Bulg. mîчâ 'moss': Lat. mus-su-s, OHG. mos '(prim. Germ. stem *musa-) 'moss'. Lith. sūnū-s O.Bulg. sy-nū 'son': Skr. sū-mū-ś 'son'.

In some Lith. dialects n is pronounced very open, so that it can be regarded as a closed o, e.g. sukâ įsiko (1. and 3. pers. sing. pret. of sukâ 'I turn') appear as sūkâ, sūkā.

Slavonic ū must, already in prim. Slav., have been a reduced sound, approaching the quality of o.

ū, in Modern Slavonic developments, became a full vowel in closed syllables (such syllables often arose through the falling out of an ы or у in the following syllable), Russ. o, Serv. a, e.g. Russ. son Serv. san = O.Bulg. sūnū from *sūynū (§ 545) 'sleep': Gr. ὑπνός; Russ. doč = O.Bulg. dūšti 'daughter': Lith. dukū. On the other hand final ū disappeared, e.g. Russ. syn O.Bulg. synū, loc. pl. Russ. rybach Serv. ribah = O.Bulg. rybachū (from ryba- fem. 'fish'), cp. Skr. loc. pl. āśvā-su (from āśvā- 'mare'). Medial ū also, as a rule, disappeared in open syllables, e.g. Russ. Serv. sna = O.Bulg. sūna (gen. sing. of sūnū), Russ. spat = O.Bulg. sūpati 'to sleep', legka = O.Bulg. līgūka nom. fem. of līgū-kī 'easy' (further formation of an old ū-stem by means of the suffix -ko-). All these modifications can be traced as far back as the period of old Church Slavonic. On the one hand they follow from such double spellings as krovī krūvī 'blood', domochī domūchū (loc. pl. from the stem domū- 'house' = Lat. domu-); these forms can only be understood by assuming that the final ы and у were no longer syllabic; on the other hand from such double spellings as rekšū rekšu dat. sing. of the stem rekše-, that is, *rek-ūš-jo- according to §§ 84 and 147 (part. pf. act. of rekš 'I say'), legūko beside līgūko neut. to līgūkti. With these modifications of ū, compare the parallel treatment of ы § 36.

Prim. Slav. ū became ḳ (cp. į from ы § 60 and ĭe from ıо § 84). O.Bulg. ḳvā 'I chew' from *zjūvā: OHG. chiuwu (§§ 143. 147). igo 'yoke' from *jūgo (§ 145) and this fr. *jiugo: Skr. yugā-m, Lat. jūgā-m.
Rem. In the Zographos gospel τὰ for ἃ occurs occasionally before palatal vowels, e.g. βοῦτί = βοῦτί 'to wake', δᾶνυ m., but δῑδε fem. neutr. 'two'.

§ 53. Indg. *dhā-mo-s 'ebullition, smoke': Skr. dhūmā-s, Gr. θυμό-ς ('courage, passion'), Lat. fānu-s, Lith. pl. dūmait, O.Bulg. dymā. Indg. *bhū-, weak form of the rt. bheg- 'be, become' (§ 312): Skr. bhū-tā- 'become, been' ábhā-tam 'ye two were' bhū-tī-ḥ 'good condition, well-being', Gr. φύ-ραλυ 'a planted place' 2. pers. du. ἐφύ-ρω, Lith. inf. bū-ti O.Bulg. by-ti 'to be'. Indg. *mūs- 'mouse': Skr. mūṣ-, Gr. μῦς, Lat. mūs mār-is; OHG. mūs and O.Bulg. myši fr. *mychī (§ 588, 2), that is, originally *mūs-i-s, show the change of the monosyllabic stem into the ἐ-declension

Indg. -ā as ending of the nom. acc. du. of eu-stems: Skr. sānā O.Bulg. syny from Indg. stem *sū-ney-*sū-nu- 'son', Lith. žmogū fr. *žmogū (§ 664, 3) to žmogū-s 'man', O.Ir. mug fr. *mogū (§ 657, 2) from stem mogu- 'servant'.


§ 56. Greek. ὀφρύς ὀφρῶν 'eye-brow': Skr. bhrā-ḥ O.Icel. brūn Ags. brū 'eye-brow'. bōv-le-tō- 'the time for unyoking oxen': Lat. so-lū-tus, O.Icel. lūdr 'bruised, crushed, deafened,
tired out" (cp. λῖτο γουναρα). στι-</p><p>-λο-ς 'pillar': Skr. sthū-rā-sūhū-lā- 'coarse, thick, massive'.

The change from ā to ė went parallel with that of u to ū (§ 48). The dialects, which retained ū, retained also ā: Bœot. Ἐὐ-θοῦσος = Att. Ἐὐ-θεύς, Lac. μουακάμα (which according to Hesychius means λαλεῖ) = Att. *μυκάζε..

It is doubtful whether ē became i through the dissimilating influence of a following v (cp. § 48). φι-ρυ (neut.) 'twig, sprout' has been brought together with Skr. gerund bhū-tv-ā and Lat. fu-tu-ē. It may, however, be connected with Lat. frīō and O.Ir. biu 'fio, sum', the original form of which was *bhū-ūō (§§ 170. 175). It is still more uncertain whether Ἐθύ-ς has come from *Ἑθυ-ς (Osthoff Morph. Unt. IV 188 ff.).


It is quite possible that in Umbr. the ē in pir (nūq) beside abl. pure Osc. purasīā (loc. sing. of the stem purasīā- 'igniare'), in sim (Gr. ἱν, Lat. suem) and sīf (acc. pl.) beside suīrum sorsum 'suillum', and in frīf acc. pl. fruges', represents an older ā which may have been pronounced ē. (cp. O.Bulg. y fr. ā beside ū fr. u, §§ 52. 60.). It is however impossible to form a correct judgment owing to the quantities not being marked, and the scantiness of the material. Cp. Osthoff Morph. Unt. IV 16, Zur Gesch. d. Perf. 432.


For such forms as acc. sing. rūn beside nom. sing. rūn see § 640.

For ā in unaccented syllables cp. §§ 613. 634. 657.
§ 59. Germanic. In Goth., where u and û in the native alphabet were not kept apart, û can scarcely ever be established without the help of the other languages. Goth. fûsl OHG. Ags. fûl O.Icel. fôll 'foul': Lith. pl. pûlei 'matter', Gr. νῦθω 'I make to rot, putrefy', Lat. pâs pûris 'matter, spittle' pâ-teô 'I smell bad, stink'. Goth. rûms OHG. O.Sax. m. rûn, O.Icel. neut. rûm 'room, open place', from the same root as Lat. rûs rûris 'open field, country', Avest. ravan- 'free'. OHG. útar Ags. úder 'udder': Skr. údhar 'udder'. OHG. hlût Ags. O.Sax. hlud 'loud' from rt. kley- 'hear': cp. Gr. imperative κλα-τε, O.Bulg. sly-štati 'to hear', sly-tije neut. 'call, name'.

§ 60. Baltic-Slavonic. Lith. tûla-s adj. 'so many a', originally a substantive denoting 'a mass', O.Bulg. tylû 'nape', originally 'intumescence': Skr. tûla- neut. 'panicle, tuft, cotton', Gr. ῥῆλη 'a swelling or lump, callosity', from rt. teî- 'tumere'. Lith. sûra-s 'saline', O.Bulg. syrû 'raw': OHG. sàr O.Icel. sàrr 'sour, bitter'. Lith. jûs 'ye': Avest. yâs yâzûm 'ye'. O.Bulg. svëkry 'mother-in-law': Skr. svâbrâ-ô 'mother-in-law'.

The change of û to y belonged to the prim. Slav. period. Prim Slav. ji became jî (cp. jî from jû § 52). O.Bulg. šiti fr. *sjiti (§ 147), and this fr. *siyti : Lith. siûti 'to sew', Skr. syûti-ô fem. 'sewing, sack'. Compare also kraji instr. pl. of krafi 'edge' but raby instr. pl. of rabû 'servant'.

Indg. e.

§ 61. Indg. pres. stem *bhero- *bhere- 'bear': Skr. bhârâmi, Arm. beremī, Gr. qëwâw, Lat. ferō, O.Ir. berim, Goth. baîra, O.Bulg. berq. Indg. *ês-ti 'is': Skr. âstî, Gr. εστι, Lat. est, O.Ir. is (proclitic), Goth. ist, Lith. esti (now archaic), O.Bulg. jesî. Indg. e in the root syllable of neuters in -es-, e.g. Indg. *rëgos 'vapour, darkness': Skr. râjas, Arm. erek, Gr. ῥηός, Goth. riqiz-a-; Indg. *nêbhos, 'cloud, atmosphere': Skr. nâbhas, Gr. νῆφος, Lith. débes-l-s (the origin of the d- instead of n- is not clear), O.Bulg. nebo, comp. also with l-suffix Gr. νεφίλη Lat. nebula O.Ir. nell (prim. kelt. stem *nêblo-, § 526) OHG. nebûl 'cloud, fog'. Indg. *qe 'and': Skr. ca, Gr. ῥε, Lat. que. Augment
of the past tenses of the Indicative (originally an independent particle) Indg. ė: 3. pers. sing. Skr. ā-dyākat Gr. ἐ-δοεῖς (rt. derk- 'see'), Arm. e-lič Gr. ἐ-λίπει (rt. leig- 'leave'), Goth. i-ddja Skr. ā-yat 'he went' (for Goth. āddj see § 142).


Indg. tautosyllabic ė i 1). Skr. (ved.) bhēdāmi 'I cleave', Goth. beita 'I bite', original form *bhējādō; Arm. ližem Gr. λέξω 'I lick', original form *lējgho; Lat. sitiō Gr. πείθω, orig. form *bēgđhō; O.Ir. tiagim 'I go', Gr. στείχω 'I go', Goth. steiga 'I climb', orig. form *stebijhō; Lith. geidziū 'I have a desire' for older *geidu = O.Bulg. ẑidq 'I wait, expect', orig. form *ghējdhō. Indg. *ēi-tī 'he goes': Skr. ētī, Gr. ἵον, Lat. it, Lith. eiti eit, cp. O.Bulg. ē-dq 'I go'. Indg. *ghei-men-: Skr. hēman- 'winter', Arm. jiun 'snow', from *jīv, *jiman (§ 202), Gr. χείμα χειμών.

1) We call a sound-group tautosyllabic, when its elements belong to the same syllable, i. e. are uttered with the same expiration-impulse; heterosyllabic, when the last element or elements are produced by a fresh expiration-impulse. ė i e. g. is tautosyllabic before consonants (*bhejādhō = Gr. πείθω) and in a pause (*muj/kej/ = Gr. οίκει). It is, as a rule, heterosyllabic before sonants (*γυς/τε/ζες = Skr. gātayās, Gr. βάνις from *βανις).


Rem. Av. final ae became ē, see §§ 78, 94. Here would have to be mentioned loc. sing. aspē beside aspōi and aspar-ca (-ca = Gr. ς, Lat. -que) = Skr. ēve (from Indg. stem *ekṣo- 'horse'), if -aij, the prim. Ar. ending of o-stems, arose from Indg. -ej (cp. ēvei). This, however, can also be traced back to Indg. -oj. Cp. § 116 and the accidence.

For Av. e, i, o from prim. Iran., prim. Ar. a = Indg. e see § 94.
§ 63. Armenian. cor 'old man': Gr. γίγων 'old man', Skr. jārant- 'fragile, old man'. eln (gen. elin) 'stag': Gr. ἐλαφος (orig. form *elv-bho-s) 'stag', Cymric elain 'cerva', Lith. eln-i-s O.Bulg. jelen-i 'stag', cprf. *elen-. evtn, 'seven': Gr. ἑπτά, Lat. septem, O.Ir. secht n- (§§ 211, 243), Goth. sibun, Lith. septyn, O.Bulg. sedmi, Skr. saypta. ev 'and, also': Gr. ἑν 'on, at', Skr. ḍi 'also', cprf. *épi.

e became i before nasals. hin (gen. hnoy) 'old': Gr. ἵνως 'old', Lat. sen-i-or, O.Ir. sen 'old', Goth. sin-ista 'the oldest (man)', Lith. sėna-s Skr. sānu-s 'old', Indg. *seno-s. cin 'birth': Gr. γένος. hing 'five': Gr. πέντε.

Occasionally a is found instead of e, e. g. tasn 'ten': Gr. δέκα, Lat. decem. The circumstances under which a occurs for e have not been ascertained.

Indg. tautosyllabic eɪ appears as e in final syllables, in other syllables as i. dizem 'I accumulate', orig. form *dheighō (cp. Gr. τάχος 'wall', Av. pairi-daēza- 'fence'), aor. 1.sing. diṣi, 3. sing. e-dēz. lizem, lisanem 'I lick': Gr. λείχω. jīum 'snow': Gr. χειμών.

Indg. tautosyllabic eu appears as oi in final, as u in non-final syllables. lois, gen. lusoy, 'light': Gr. λευκός 'white', Goth. liuh-up 'light'. unain 'empty' from *oin-aín: Gr. εύ-νας 'bereft'. ev probably in the first place became ov; cp. § 79 and nor (gen. noroy) 'new' as compared with Gr. νέφος, νε(φ)αρό-ς.

§ 64. Greek. ἑπταi 'he is together with, follows': Lat. sequitur, O.Ir. sechur 'sequor', Lith. sekū 'I follow', Skr. sācātē 'he is together with, follows', Indg. 3. sing. pres. mid. *sēq-o-tai. 1. sing. ēw o: Lat. erō (used as future), Skr. āsāmi, conj. to Indg. *es-mi 'I am'. γένος neut. 'sex, race': Lat. genus, Skr. jānas, Indg. *gēnos. πλῆ(φ)ο 'I sail, swim': O.Bulg. plōva 'I flow, sail' (§ 68), Skr. plāvatē 'he swims, sails', Indg. 1. sing. act. *plēyo-ū. ἐγώ 'I': Arm. es, Lat. ego, Goth. ɪk, Skr. ahām. Comparative suffix -τερο- : pó-τερο-ς, ὀμο-τερο-ς : Skr. i-tara-ς 'other', Lat. i-teru-m, O.Ir. luathi-ther 'quicker', O.Bulg. je-teru 'quidam'.

λάθω 'I leave': Goth. leihwa 'I lend', cprf. *lēg-ū. ἐγώ neut 'yoke': Lat. jāger-o- (cf. dat. abl. jāger-ibus) 'acre'. ἐγών τοὺς...
straps of the yoke': Skr. yōktār- 'he who puts the harness on'.

In the Elean dialect ε was pronounced very open, as is seen through the representation of this sound on inscriptions by α, e.g. σκευάων gen. pl. beside σκεύα, ευθαύθων = Att. ἐσαβήλ. 

In the Locrian dialect εφ became αφ, e.g. πατάρα = πατέρα, ἀνφόταρος = ἀμφότερος.

In the Doric dialects, as well as in Lesbian, Thessalian, Pamphylian and Cyprian ε became i before vowels, especially before o and a, e.g. Lacon. θιός = θεός, Cypr. ἕνα = Ion. ἕνεα, whilst ε in this case at least, was pronounced close in the Boeot. and Ionic-Attic dialects. This is shown by the representation of this short vowel by means of ε, ι, ι in Boeot. (e.g. θεοθεο-θεο- θεο-) and by ε, ι in Ionic-Attic (e.g. καντόν and σιαντόν from *σε(φ)αντόν, κνεά and εννεά from *ἐννε(φ)α).

The Indg. tautosyllabic ει in λείπω etc. was still a diphthong in Ionic and Attic at the beginning of the V. century B. C.; but during this century it became a close ε and in the III. cent. B.C. i, though the spelling ει was retained. This change also took place in the other dialects, earliest in Boeot., where ε appears on inscriptions already in the V. cent. B. C. and ι was dislodged from the written language.

In Cret. εν became ον by the assimilation of the ε to the second component of the diphthong, e.g. ψουδά = ψεννέα ψενδά. αφ for ει in Ionic can be traced back to the V. cent. B. C., e.g. ψεόγαυ (ep. αφ from αγ § 96).

come', O.Ir. ce-chan 'cecini' (cp. Lat. canō, ce-cinī), Goth. rai-rōþ (to pres. rêda 'I advise'). Lat. pecu-, Umbr. pequō 'pecua': Goth. faิกun, Skr. pāṣu, cpf. *péku 'cattle'. Lat. Umbr. et : Gr. ἕρ. Lat. mēdir-s, Osc. mefiaī loc. from st. mefiaī- 'media': Gr. μέδους- μέδος 'medius', O.Ir. medōn 'the middle', Goth. midjīs 'medius', O.Bulg. mežda 'medium, boundary', Skr. médhya-s 'medius', Indg. *mēdhi-s 'medius'.

Heterosyllabic and tautosyllabic Indg. ey became common Italic oỹ:


Rem. 1. The nature of the transmission and the historical facts of the language, as exhibited above, exclude any importance being attached to the form Leucæie in the Salian hymn; cp. also Jordan Krit. Beitr zur Gesch. der lat. Sprache 1879, p. 31 ff.

e remained unchanged in Latin:

1. Before r. ferō, cōnferō, vertō, convertō, alter, alterius with r = Indg. r; the form lévir 'brother-in-law' arose through popular etymological association with vir, cp. Gr. διήνος acc. διήρω, Lith. dēver-ı-s. gerō, ingerō, sceleris with r from s (cp. § 569).
2. Finally, lupe : λυκε. age agite : ἀγε ἄγης. quīnque : πέντε.
3. As a rule before double consonants: scelestu-s, od-sessu-s (ob-sideō), au-spex (au-spic-is).

Change of e to i:

1. According to prim. Lat. accentuation in unaccented syllables (§ 680) followed by a single consonant (except r).

Rem. 2. The i instead of e in plicō (Gr. πλέω), O.Lat. spiciō (rt. spek-) miniscor (rt. men-), and others, is to be explained from the fact that the form, which regularly arose in composition, made itself independent (com-plicō, cōn-spiciō, re-miniscor).

Rem. 3. juven-em with -eu- instead of -in- was, perhaps, influenced by juentēs juvene-ü-s etc. ap-petō, ex-petō for *ap-pitō, *ex-pitō re-formed from analogy with the simple form petō, or else formed at a time when the activity of the law had died out according to which collīgō etc. arose; cp. exquātur beside exquirō, exaquō beside inīquo-s, conclusu-s beside conclusu-s etc.

2. Independent of accent, in closed syllables before nasals. quīnque 1) : πέντε. tīngūō : τέγγω 'I wet'. in intus : ἐν εντός. To which may be added dīgnus beside decet, as well as lignum-, ttgnum-m, in case they really are related to legō 'I gather, collect' and τίγη; for gn was pronounced wn ( §§ 500, 506). This change also affected en and em from ù and ù (§ 237), e.g. vīginītī : Dor. Fixart, sim-plex : ἀ-παξ. There are, however, in both cases many exceptions, the explanation of which is difficult, e.g. offendimentu-m (fend- = Indg. *bhendh- and -mento- = Indg. *-myto-), supine ventum (= Skr. gāntu-m, Indg. *gēm-tu-m), part. in-ventu-s (= Gr. βαρό-ς, Skr. gatā-s, Indg. *ga- tō-s). Cp. further decem (= Skr. dāśa, Indg. *dēkṣa) beside undecim.

For Lat. -o- from -ue- see § 172, 3.

Tautosyllabic ei seems to have still been a diphthong in Lat. at the period of the oldest monuments, cp. the spellings deivos deiva, deico, feido and others. The diphthong, however,

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1) Concerning the long vowel in quīnque, dīgnus, lignum-m, and lignu-m see § 619.
at an early date became an open \( \textit{e} \), and the sign \( \textit{ei} \) now became also employed for the representation of open \( \textit{i} \)-vowels (or close \( \textit{e} \)-vowels) of other origin (see §§ 41. 73).

In Umbrian and Oscan Indg. \( \textit{e} \) was mostly represented by \( \textit{e} \). Besides the examples already mentioned, the following may be compared: Umbr. \textit{petur-pursus} ‘quadrupedibus’, Osc. \textit{petora ‘tarrapa’}, Umbr. \textit{co-vertu} ‘convertito’, \textit{dextram-e} ‘in dextram’, Osc. dat. Genetai ‘Genitae’ (to Lat. \textit{genitor}). Beside these occurs also \( \textit{i} \), Osc. \( \textit{i} \), e.g. Umbr. \textit{ti-xit ‘decet’}, Osc. \( \textit{ist ‘est} \) (beside \textit{estud ‘esto’}, nistrus ‘propiores’ (beside nesimum ‘proximum’). Owing to the scarcity of the material it is impossible to decide whether the change to \( i \) (open) took place under certain conditions, unknown to us, or whether \( e \) had everywhere the same close pronunciation in Umbrian-Oscan, and that we have here to do with a mere irregularity of the graphic representation of the sound.

Tautosyllabic \( \textit{ei} \) was represented in Oscan by \( \textit{ei} \), \( \textit{ei} \) and (rarely) if. \textit{deikum deicum inf. ‘dicere’. deivai dat. ‘divae’, deivatud imper. ‘iurato’, diiiviai dat. ‘divinae’ (a derivative like Umbr. \textit{deveia ‘divina’}). terei loc. ‘in terra’, cp. Gr. \( \textit{oikos} \). The spelling \( \textit{if} \) points to a passage of the diphthong into open \( \textit{e} \). In Umbrian \( \textit{ei} \) certainly became closed \( \textit{e} \). etu estu ‘ito’. \textit{deveia ‘divina’. dextra loc. ‘in dextro’, cp. Osc. loc. terei.}


In such cases as: gen. \textit{eich ‘equi} from prim. Kelt. \textit{ekyī} (– still in, Ogam inscriptions, as \textit{maqui ‘filii’, and in Gall. Segomari etc.): Lat. \textit{equī}; 3. sing. pres. \textit{as-beir ‘he brings forward,}
says' from *berit, prim. Indg. *bheret; deich n- 'decom' from *deken, Indg. *dekyō (§§ 242, 243) the i after the e only indicates the palatal timbre of the following consonant, which had been produced through the palatal vowel of the next following syllable. In a corresponding manner the u-(o)-timbre of the following consonants is represented by u and o in the dat. sing. neurt, eoch from *nertō, *ekyō (nom. nert, eoch, stem nerto- 'power, might', echo- 'horse'; with nerto- cp. Gall. Nerto-marus, Cob-nértus etc.). See § 634. Under certain conditions chief-accented e became i before a following palatal vowel or u. tige fr. *tegesos, gen. sg. to tech 'house'. as-bīr 'thou sayest' fr. *biri(s), prim. f. *bhere-s. mid 'mead' fr. *medu, to gen. sg. meda, s. above. as-biu 'I say' fr. *biu, prim. f. *bherō.

e in other than chief-accented syllables, in case it did not entirely vanish, (§§ 634, 657), became an irrational vowel, the quality of which adjusted itself mostly to the timbre of the following consonants.

i. as-bérīd 'you say' = Gr. ῥεπερε. is 'est' always proclitic = Gr. ἥρι; the accented form would be *eis.

a. as- 'ex' in as-bérīd, as-rēnaim 'reddo' and others beside éś- (O.Gall. ex-, Cymr. eh-: Lat. ex, Gr. ἔξ) in éς-rechtaiđ 'exlex' éς-organ 'a striking, killing' etc.


In forms like sō-nirti adj. pl. 'strong, brave', sō-nirte 'strength, power' compar. sō-nortu 'stronger' beside nērt er had first becomeγ. S. § 634. In the later orthography sō-nairti sō-nairte beside sō-nirt sō-nirte a merely indicates the timbre of the preceding consonant. S. § 640.

Indg. and prim. Keltic tautosyllabic êi became ĕ, whence ia, if a, o, or u followed. ad-fōded 'narrabat', ad-fiadat 'narrant': Gr. φειδομα, rt. yeid-. Fut. 2. pers. pl. for-tēsid 1. pers. pl. for-tiasam, to 1. sg. pres. for-tiagaim 'I help': Gr. σεικω σεικω, Goth. steiga. Voc. dē 'O God' from *dē(y)e (Lat. deī). nom.
dia from *dā(y)o-s (Lat. deivos). On the 2. sing. for-tēis cp. § 640. ē = Indg. ēi is to be held for prim. Kelt. Cp. e. g. Gall. rēda ‘waggon’ Epo-rēdia, O.Ir. rēid ‘passable, free, even, smooth’ Cymr. rhwydd ‘prosper, expeditus’ (st. *rēdi-), O.Ir. riadāim ‘I drive, ride’, rt. roidh-: OHG. rītan ‘to move oneself away, drive, ride’ and be-reiti ‘ready, equipped’ (the latter with rt. form roidh-).


In like manner we have ő from antosonantal oy in O.Ir. nōi n-nine’ (beside Cymr. naw Corn. naw Bret. nau nao), fr. *noyen, Indg. *nēyya (cp. §§ 65. 174. 233); whereas ő in O.Ir. clī ‘renown’ = Gr. κλή-ος and in nāe ‘new’ beside O.Bret. nowaid, to Skr. nāvyā-s (cp. §§ 139. 154).

Rem. If the change from ő to ua in O.Ir. was occasioned by an a or o in the following syllable, then such forms as nom. srūaim fr. *srūmin, dat. tuath from *tōtā cannot have been formed according to law, but are merely due to a levelling with the forms of other cases.

oy is still found in Gall. in forms like Tento-matus, Leucetius (Zeuss-Ebel G. C. 34 f.); beside these already also Toutus Tōurivnōc etc. (as quoted above). In like manner also Nivella, Nivisium, the i of which is also probably a direct continuation of e, but also already Novesium and Novio-dānum ‘New-castle’ (as quoted above 56). The question is probably here a difference of dialect within the Gallic branch itself.

§ 67. Germanic. Indg. e became i in prim. Germ. in the following cases:

Rem. 1. That this ī made its appearance already in prim. Germ., is confirmed by the fact that the verb Goth. rīnna OHG. rinna 'I run', whose orig. form *ri-*nna-ē contains Indg. ī, and which belongs to Skr. ri-pā-ti 'lets flow, lets run', ri-pā-tē 'begins to flow' (Osthoff Morph. Unt. IV. 45), passed over into the series binda : bōnd in its tense-formation in every Germ. dialect (pret. Goth. OHG. etc. ran). This could only have taken place, if the ī in binda etc. had already arisen.

2. In hetero- and tautosyllabic ī.


Rem. 2. The great antiquity of this ī is confirmed by the fact, that the present: Goth. þeiha OHG. dēh 'I extend', which in prim. Germ. had arisen from *þināxō, older *þenāxō (= Lith. tenkō 'I reach out with something') (§ 214), gave occasion for the formation of the pret. form: Goth. þāih OHG. dēh etc. (after the analogy of preterites from such roots as steigh-). This was only possible, if the ī in *stīžō (goth. steiga) was already there.


Rem. 3. We have also here a proof of the great antiquity of the ī. The verb *bidjana-n 'to beg' (Goth. bidjian O.Sax. bidjan O.Icel. bidja), which belongs to Gr. νιέω 'I prevail upon, persuade' rt. bhejō-, would not have had ā in the pret. of all Germ. dialects (ς ag. *ba(d)i Goth. baē etc.), had not prim. Germ. *ligiana-n, *sitiiana-n (rt. sed-) been pronounced with ā.
4. Finally, e. g. 2. sing. imper. *fani (Goth. far) from *fare cp. Gr. ἀγαρά. Such an -i, like Indg. i (see 3) had influence upon a preceding e; hence 2. pers. pl. *faridi (Goth. farip OHG. dial. serit): Gr. ἀγαρά; acc. *ni-ki (Goth. O.Icel. mik OHG. mik 'me'): Gr. εἰμί-γα, etc. Cp. Kögel in Paul u. Br. Beitr. VIII 135 f.

5. In isolated cases, where no reason for the change has yet been discovered, especially in unaccented syllables: e. g. Nominal suffix prim. Germ. -iz- = Skr. -as- Gr. -eos- Lat. -es- (Goth. ag-iz-a- 'fear'). Cp. Paul's article in Paul-Braune's Beitr. VI 85, Osthoff Zur Gesch. d. Perf. 419.

The West Germanic dialects in general stopped at this point. An e, preserved in uninterrupted continuity from the Indg. prim. language, is retained e. g. in OHG. beran 'to bear' = prim. Germ. *berana-ν (Gr. ἑρεῦς) and reht 'right' = prim. Germ. *rexta-z (Gr. ῥαξτα-ς).

Rom. 4. The change of e to i through the influence of a following u is questionable. E. e. g. in OHG. 1. pers. sg. biru, nimu, to beran, neman. sītu m. 'custom', probably to Gr. ἰδος 'custom'. sību 'seven': Lat. septem. bīrn 'stag' fr. prim. Germ. *kerut- (with anaptyctic u, s. § 628): Gr. ἱέρως 'horn'. See Paul in Paul-Braune's Beitr. VI 78 f., Brate in Bezzenb. Beitr. XI 185, Braune Ahd. Gramm. p. 19.

The i also of the root syllable in biris, birit etc. might only have been produced in West Germanic through the following i.

The Norse dialects have also such an old e, e. g. O.Icel. bera = OHG. beran.

On the other hand every e, which had remained in prim. Germ., became i in Goth. Then this i, through the influence of a special Gothic law, which also concerned i = Indg. i (§ 35), became e (ai) again before r and h. niman 'to take', as opposed to OHG. neman O.Icel. nema = Gr. νεμαν. ga-vigan 'to stir, move', as opposed to OHG. veogan O.Icel. vega 'to move oneself' = Lat. vehere. fill (neut.) 'hide' (in brutis-fill 'leprous'), but OHG. fel Ags. fell O.Icel fjall 'hide' from *fella- *fellan- (§ 214) = Lat. pell-е, Gr. πέλλα; but bairan from *biran = OHG. beran, rauht from *rihts = OHG. reht. The forms airpeins = OHG. irdin 'earthen' and ga-rathjian = O.Sax.
rihtian OHG, rihtan 'to judge' may serve as evidence to show that balran and raihts had not an e which had been preserved in uninterrupted continuity through the influence of r and h. For it is scarcely possible to separate the at in these forms from that in airža ‘earth’ and raihts ‘right’.

Indg. tautosyllabic eu appears in Goth. as in, kiusa I choose, test, select: Gr. γενάω, cfp. *géus-o. ana-biuda ‘I bid, command’: Gr. πειθάω, cfp. *véyidhô. piuda ‘people’: OSc. tóvdad ‘civitate’, O.Ir. tuath ‘people’, cfp. *téata-. In High German it became, before a-, e-, o- vowels, in the oldest period eo, then io, in all other cases in, deota dióta ‘people’, but diútsic ‘popularis’ (Goth. piúdísisko adv. ‘πλούσιος’). revígan riógan ‘to weep’ = Goth. *riútan: Skr. ródana-m ‘weeping’ (noun), rt. reyid-. It is probable that the pronunciation eu still existed generally in prim. Germ. and that i only arose at that time when there was an i in the following syllable, e. g. *piúdíska-z (OHG. diútsíc) beside *preydô (OHG. deota).


In Lith. e is mostly pronounced very open and in some southern and eastern dialects it regularly became a, when initial, e. g. asì = esì ‘I am’ (§ 666, 2).

Indg. hetero- and tautosyllabic eu apparently became oy, whence Balt. au (cp. § 84), already in the period of the Baltic-Slavonic prim. community.

— Lith. devynį Lett. deviūi 'nine', Pruss. nevints 'the ninth', O.Bulg. devsti 'nine' are to be explained as being formed from analogy with Lith. dēsint O.Bulg. desći 'ten'; we may observe also that the initial d- instead of n- cannot well be explained otherwise than as being borrowed from the word for ten.

Rem. 1. It is doubtful whether the d- of the Lith. and Lett. word for 'nine' was due to Slavonic influence and nev- was the right form in prim. Baltic, which was retained in Pruss., or whether already in prim. Baltic-Slavonic deg- took the place of nøy- and the n- of the Pruss. form was borrowed from Germ. (cp. Bopp. Vergleich. Gramm. I* 76, Fick Wörterb. II* 588, 744, Brückner Litu-Slav. Studien I 80, Ostheff Morph. Unt. I 93).


Indg. tautosyllabic eį appears in Lith. as ei and ė, in Slavonic as i. The course of development of the latter was *eį, *eįį (‘įį), i, cp. the change of heterosyllabic eį: Lith. 1. sing. eimi 1 go′, 3. sing. eiti (Pruss. eit): Gr. εἶμι εἶνα; supine eitu O.Bulg. iti: Skr. inf. ētum from Indg. *eitum, rt. eī-. Lith. slei-va-s slei-įs 'having crooked legs' (Lett. šlēi-ja 'stripe', šlēi-ju 'I lean against'): Gr. κλευ-τίς, rt. klei-. Lith. vēida-s 'face' O.Bulg. vidū
'looks' (noun), Lith. čeidažiu 'I see' (for the z cp. § 547 rem.), O.Bulg. védq 'I look' from *vidiaq (§ 147): Gr. ἴδε, ἴδος. Lith. geidžiu 'I long for', Pruss. 3. pl. geide 'they wait', O.Bulg. židq 'I wait'. Lith. deiviš-s'idol deive (fem.) 'ghost' beside děca-s (Lett. diwos) 'god', Pruss. deiva-s 'god': Lat. deivos dītus. Lith. ži-ma (Lett. žima) O.Bulg. zi-ma 'winter': Gr. χειμών, χειμών. Lith. dė-nu (Lett. dīna) 'day', Pruss. dei-na-n acc. sing. 'day' from a stem *dei-n- (*dei-en-) beside *dě-n- (O.Bulg. gen. di-n-e 'day's'). Lith. sněgu (Lett. snig) 'it snows': Gr. νίκτυ, rt. sneigh-. Lith. lěka 'I leave' (Lett. liku 'I lay'): Gr. λείνω, rt. leig-. O.Bulg. pisq 'I write' from *pis-jaq (§ 147): Gr. πίσω 'I scratch' rt. pejk-.

Rem. 2. The circumstances, under which ej at one time remained (ei) in Lith., and at another time became e, have not been ascertained (ep. Mahlow Die langen Vocale A, E, O, page 145 f. and Osthoff Morph. Unt. IV 112). We are inclined to think that only circumflexed ei, e. g. in ēlti 'to go' (cp. § 691), regularly became e when the following consonant had not a palatal timbre, caused by an é- or ĭ-vowel in the next following syllable (cp. the double forms e and ē in Irish § 66); hence děnas beside deivyš deive, einu beside lěšu. The supine ēltu instead of *ēlu would have been formed after the analogy of ēlti; ēinu ēna 'I go' 'he goes' (instead of ēnů *ēno) with ėi-, because they were not formed until after this sound-law had ceased to operate. Such verbs as lěši lěszi 'to lick' = O.Bul. liq (from *liq-jaq) beside such as geidžiša geisti (Leskien Der Ablaut in Wurzelsilben im Litauischen p. 144 f.) present difficulties. For it is certainly hardly probable that the few forms as sup. lěszi etc. could have extended their ē to the whole verb. Cp. the change ai:e § 84 rem. 2.

en, em before explosives and spirants became ė in Slavonic e. g. sveti 'holy', zēbo 'dilacero, frigeo'. S. § 219.

Indg. ė.


Optative suffix Indg. -iē/-iē-: 2. pers. sing. Skr. s-iyā-s s-yā-s,
Gr. εἰς from *έα-ης, Lat. s-īs from rt. es- 'be'. -τε(r) nom. sing. ending of -er-stems: Skr. mā-tā Arm. mair from *mā-ter Gr. Dor. μα-τη 'mother', Lith. mo-tē and mē-tē 'wife, married woman', O. Bulg. mati from *matē 'mother'. -ē Indg. ending of the instr. sing. of o-stems: Skr. uccā 'above', Gr. Lacon. πη-νοξα 'usquam' or 'unquam', Goth. þē to þa- 'the', hwē to hwā- 'who')


The change from ē to a took place in the prim. Aryan period, after the vowel (like Indg. e) had palatalised the preceding q-sounds, e. g. Skr. -jāni-ś 'wife, spouse': Goth. gēns (st. gēni-) 'wife', Indg. *gēni- (§ 445).

For Avest. ē, ē, ā from prim. Iran. prim. Aryan a = Indg. ē see § 102.

§ 71. Armenian. mi 'that not': Skr. mā, Gr. Dor. μη. mit (Gen. mti) 'sense': Gr. μηδος 'advice' μηδομαι 'I contrive', O.Ir. ro mēdar 'judicavi' (ep. § 314). li 'full', aor. 3. sing. e-li-ę 'he filled', Indg. plē- (§ 69). This i disappeared in non-final syllables. Besides gen. mt-i cp. further gen. amsoy 'of the month' beside nom. amis (-s from -ms- § 202): Gr. Leab. gen.

1) Skr. uccā is not a certain example for Indg. -ē, since it might also represent Indg. -ē. The ē-type must, at all events, be claimed for the prim. Indg. language. a. §§ 114; 115.
§ 71—73. Indg. ε in Gr. and Italic.

μην ὄς (ep. § 72); l-nu-m 'I fill': Lat. 3. pl. ex-plē-νυ-nt, O.Ir. li-naim 'I fill'.

The representation by ε in αἶνες 'fox' beside Gr. αἶνος, Skr. lōpaśa- is uncertain (Hübschmann Kuhn's Ztschr. XXVI 603).

§ 72. Greek. ηυ from *σι-ση-μυ 'I throw, jerk, send off ἦ-μα 'a throw': Lat. sē-men, O.Ir. si-l 'seed', Goth. manu-sēps 'mankind, world', Lith. sēju O.Bulg. sējė 'I sow' sē-me 'seed', rt. sē- 'throw, sow'. μῆν, gen. μήν-βς Lesb. μήν-ος, 'month' (concerning nom. sing. μήν cp. § 611) μῆνη 'moon': Skr. mās- 'moon', Arm. amis (gen. amsoy) 'month', Lat. mens-i-s (cp. however, § 612), O.Ir. mē (gen. mis) 'month' (cp. §§ 212. 574), Goth. mēna 'moon', Lith. mēnū (gen. mēnus-i-o) 'moon', O.Bulg. mēsēc 'moon' (cp. §§ 220. 221). ἦβα ἦβη 'youth': Lith. jēgiu 'I am able'. Nom. dūs-mēnēs 'evil disposed, hostile': Skr. dur- manās 'downcast, sad', cpf. *dus-menēs.

This η, which was probably pronounced open in prim. Greek, and which is marked as open ε in Lesb. by the spelling μη (αὶματων: Lat. sēmi- 'half'; Aἰδιοδος = Dor. Att. Ἀἰδιόδος Boeot. Eἰδιοδος), became ε in Elean, e.g. μά, εῖξ, παῦξ, whereas in Bocot. and Thessal. it became closed ε, which, after the introduction of the Ionic alphabet, was represented by ει, e.g. Boeot. μείνα, παῦξ, Thess. οὔτεπρο-μείνεια, εἶξα; the latter pronunciation can also be established for the Ionic dialects (§ 104).

§ 73. Italic. Lat. fē-mina 'woman' fē-lō 'I suck', Umbr. feliuf fīliu 'lactantes' fel. (abbreviation) 'filius': Arm. di-em 'I suck' (aor. di-ex-i), Gr. θη-καρο 'he sucked' θη-λή 'teat, nipple', O.Ir. di-nu 'lamb', OHG. ταταν 'to suckle', Lith. dėlē 'leech' pirm- dėly 'first-birth', O.Bulg. dē-te 'infans', Skr. dha-trī 'wetnurse'. Lat. plē-nu-s, Umbr. plener 'plenis': Gr. πλη-πος. Lat. mens-i-s, Umbr. menzne 'menso' (i.e. mentsne from *mensne, § 200), semenies 'semenstribus': Gr. μην; for the Lat. ε cp. § 612. Lat. rē-s, Umbr. re-per 'pro re' abl. rī 're': Skr. rā-s 'wealth, treasure, kingdom'. Lat. rex rēg-is, Osc. regatūreī 'rectori', Marruc. regēna dat. 'reginae': O.Ir. rī (gen. rīg) Skr. rājan- king'. Lat. lēx lēg-is, lēgātu-s, Osc. ligōn 'lege' līgātūs dat. 'legatis', prim. Ital. stem lēg-'. Lat. diēs diem, diē-cula, Osc.
zi-colois 'diebus' (to which probably also d]iikulús pl. 'dies'): cp. Skr. acc. dyām 'sky, day', Gr. Zőv (§ 188).

The fluctuation of the spelling e, i in Umbr. and e, i, i, ei in Osc. points to a close ē. Since orig. long e is represented on the tab. Bant. by i, and on the cippus Abell. by ē, while the new ē, which arose from the lengthening of ē on Ital. soil, is represented by e, we must conclude that the latter had a more open sound in Osc.

That Indg. ē had a close pronunciation also in Lat. follows from such spellings as pleib[es], leigibus on inscriptions (see §§ 41, 65).

The i, which arose from ē in Lat. fūlius (fi-), suspicio (spēc-), conviciu-m (vēc-, rt. veg- in vocāre) is by Osthoff, perhaps rightly, assigned to the influence of the following i (i); cp. also de-linīō beside de-lēniō, sub-tīlia.

§ 74. Old Irish. In accented stem-syllables i, fir 'true': Lat. vēru-s, Goth. tuz-vērgan 'to doubt', O.Bulg. vēra 'faith'. mīl 'animal' : Gr. μήλο-ν (Boeot. Thess. μήλο-ν).

The other Kelt. dialects also present ē (i), e. g. O.Cymr. O.Bret. -ri = O.Ir. rē 'rex', O.Corn. O.Bret. guir = O.Ir. fir 'verus' and so also Gall. i in rix 'rex' (Catu-riges etc.). The great antiquity of this sound-change would also be supported by the Germ. *rīk- 'ruler' (Goth. reiks), if this, as it is believed to be, was borrowed from Kelt. rōg- in prim. Germ. times.

R e m. The form Dubno-rix beside Dummno-rix (Zeuss-Ebel G. C. 20) is due to the influence of Lat. rēx.

Concerning the treatment of ē in secondary accented syllables see §§ 613. 634. 657.

§ 75. Germanic. Prim. Germ. open ē. Goth. a, which was pronounced very close, as follows most clearly from the pretty frequent spelling ei, e. g. geins beside gēns 'wife' (occasionally also i, e. g. spīdīsts beside spēdīsts 'the last'). German a. This change to a had its beginning in High German, where it is first found in Bavarian (about 170 A.D.). From thence it was gradually extended to North Germany. a was
established in Franconian in the seventh century, but in Saxon not until several centuries later. See Bremer in Paul and Braune’s Beitr. XI p. 1 ff. α is found in Norse already in the oldest runic monuments, e. g. -marik = Goth. -mērs (vāila-mērs ‘of good report’). I must leave the difficult question undecided as to whether Ags. ā and O.Fris. ē represent the retention of the prim. Germ. e-quality, or have passed through the intermediate stage ā. Bremer and Siebs (in the above named work p. 12 ff. and 226 ff.) accept the first theory.

Rem. 1. ē, in unaccented syllables, seems not to have undergone the change to a, but to have retained its quality; unaccented prim. Germ. ē appears in OHG. OS. as e, and in ON. as e, i. See Bremer’s article in the above named work p. 29 ff.


Rem. 2. Side by side with prim. Germ. open ē there existed also a close ē, which appears in Goth. also as ē, in OHG. as ea, ia (OS. ē. O.Icel. ē), as Goth. hēr OHG. hear hier OS. hēr O.Icel. hēr ‘hero’, Goth. fēra ‘side, country, district’, OHG. fēra fēra ‘side, part’, OHG. heaz hiaz O.Icel. hét I was called’, OHG. leag liaz O.Icel. lét ‘I left’. The origin of this prim. Germ. ē has not yet been satisfactorily explained. (cp. the chapter on Germ. strong preterites in the accidence). The sound can scarcely be traced back in any case to an Indg. ē.

§ 78. Baltic-Slavonic. Lith. spēju spēti ‘to have leisure, or time for a thing, to be quick enough’, O.Bulg. spēja spēti ‘to progress, to have success’; Lat. spē-s spē-rāre, Goth. compar. spēdiza ‘later’ OHG. spāti ‘lato’. Lith. dēdē ‘uncle’, O.Bulg. dēdā ‘grandfather’ : Gr. νυνη ‘grandmother’ νηλικ ‘aunt’. O.Bulg.

Throughout the whole domain of Lithuanian ė is pronounced very close, and in some places can hardly be distinguished from y (İ).


In like manner initial ē- became jā-. jastī ‘eats’: Lith ėst(i) ‘eats like an animal’, cp. Lat. ēst- became first *jēd-, as jastī fr. *estī = Gr. ἔστι (§ 666, 1), then jad- as stojati fr. *stojēti.


Indg. o.

§ 77. Indg. 3. sg. pf. act. Indg. *de-dōrk-e fr. rt. dērk-
§ 77. Prim. Indg. o. 67
cpf. *ugo-ho-m; Lat. proc-e-s 'wooer' to precor 'I beg'; Goth. dags fr. *daga-z 'day' (the flexional -a- retained in Norse runic inscriptions: daga), Lith. tš- saga-s 'burnt out place' daga-s m. (beside daga f.) 'harvest' properly 'hot-season, time', Skr. dāha-s 'burning, fire-brand' ni-dāghā-s 'heat, hot season, summer', Indg. *dhogho-s fr. rt. dhegh- 'burn'; Skr. tāna-s Gr. τόνος 'thread, string' from rt. ten- 'stretch out, extend': Skr. vgha-s 'wolf', Gr. λύκος, Lat. equo-s lupus-s, O.Ir. fer 'man' fr. *uio-s (in Gall. still the prim. form of the ending, e.g. tarvo-s 'bull'), Goth. Acc. pl. vulfa-ns 'lupos', Lith. vilka-s 'wolf', O.Bulg. dat. du. viško-ma to nom. sg. viškis 'wolf'. Indg. pronominal stem *to- 'this, the', nom. acc. neut. Skr. tā-d, Gr. ῥό, Lat. istu-d, Goth. pa-t-a, O.Bulg. to, Indg. *tō-d. The so-called thematic vowel -o-, e.g. Indg. pres. stem *bhero- fr. rt. bher- 'carry, bear': 3. pl. Skr. bhāra-nti 1. pl. bhārā-mas, Gr. Dor. qevo-νι qevo-μες, Lat. vivo-nt fer-nt, Goth. 3. pl. baïra-nd 1. pl. baïra-m, Lith. 1. pl. veža-me (veži 'I ride'), O.Bulg. 3. pl. vezati fr. vezeti-n (§ 219) aor. 1. pl. vezeti-m (1. sg. pres. vezeti 'ride'), -os Indg. suffix of the gen. sing. (beside -e in O.Bulg. kamen-e Lat. patr-is, § 81. rem. 1): Gr. πατρ-ίς, O.Lat. patr-us, O.Ir. athar fr. *patere-os or *patere-os.
Indg. *okt- *okt-o 'eight': Skr. aśṭā aśṭā, Arm. աչք, Gr. ἀκτό, Lat. octō, O.Ir. ocht Goth. ahtāu, Lith. asztāni O.Bulg. osmī. Indg. *poti-s 'master' *poti- 'mistress': Skr. pātī 'mistress', Gr. πάτρις 'husband' πόρνα 'lady, mistress', Lat. potis 'capable, able', Goth. brōh-faþs 'bridegroom', Lith. pātis 'husband', vēsz-patis 'sovereign master'. Skr. akṣi neut. 'eye', Arm. աչք pl. 'eyes', Gr. ὀφασ ὀφασ du. 'eyes' fr. *oklê (§ 489), ὠψ 'I shall see', Lat. ocular-s, Lith. oki-s 'eye', O.Bulg. oko neut. 'eye'. Indg. *prô 'before, in front, forth': Skr. prá, Gr. πρῶ, O.Ir. ro, Goth. fra-, Lith. pra-O.Bulg. pro-. Personal ending of the 3. sg. mid. Indg. -to: Skr. dhāra-ia, Gr. ἐφηβος...
Indg. tautosyllabic oj. 3. sg. pf. Indg. *uojd-e 'he knows': Skr. veda, Gr. θέως, Goth. vēit; O.Bulg. vēnit-fr. *vēd-ni 'I know' (the pf. personal endings have been replaced by the pres.) also represents the stem *uojd-; 3. sg. pf. Indg. *te-lōj-e 'has
left': Skr. *virēca, Gr. λήμνη, Goth. lāihw. Indg. pres. causat. *yeid- 'see, know' : Skr. vedāyami 'I let know, communicate', OHG. weizen (prim. Germ. *weizitjan 'to cause, to know, prove'; O.Bulg. bēditi 'to compel', Goth. bāidjan OHG. piētan beitan 'to compel', cpf. 1. sg. pres. *bhōjhdējō. Gr. loun- 'remaining', Lith. lēka-s 'remaining single, odd' āt-lēka-s and āt-laika-s 'remnant, remainder' O.Bulg. oti-lēkũ 'remnant' fr. rt. lej-. Av. kaṇa- 'fem. 'penalty, punishment', Gr. poiv 'ransom, reward, penalty', O.Bulg. cēna 'pretium' (Lith. kaina according to Mikuckij in Geitler Fonolog. 38. 110), cpf. *ga[jnā- 'ransom' fr. rt. gei-. Indg. nom. pl. masc *toŋ fr. stem to- 'this, the': Skr. tē, Gr. roi, Lat. istī (op. poploē populi), Goth. pāi, Lith. tē O.Bulg. tī. The gen. sg. of ei-stems in Indg. -ojs : Skr. ávē (ávī- 'vis'), Goth. anstāis (anstis 'favour'), Lith. akē (akī-s 'eye') O.Bulg. pați (pātī 'way'). The optative of the thematic tenses with Indg. -oj-, 2. sg. *bhōrōj-s (indic. 2. sg. *bhēre-si thou bearest?): Skr. bhārēj, Gr. qēpous, Goth. bairāis, O.Bulg. ber, Lith. 3. sg. (permissive) te-sukē (sukū 'I turn').

Indg. tautosyllabic oy. 3. sg. pf. Indg. *bhe-hōyāh-e 'has waked, marked': Skr. bābōda, Goth. bauþ; Gr. Hom. elēλουθ (with the added Attic reduplication) beside ἐλεφόμαι 'I shall come'. Pres. causat. Indg. *bhōymhējō 'I cause to awake, wake, remind': Skr. bōdāyami, O.Bulg. inf. budīti; Goth. kūgja 'I taste, test', Skr. jōsāyatē mid. 'likes, finds pleasure in', Indg. 1. sg. *gojējō. The Gen. sg. of eu-stems in Indg. -oys: Skr. sūnō (sūnī- 'son'), Osc. castrōs (castru- 'fundus'), Goth. sunāus (sunus- 'son'), Lith. sūnai (sūni- 'son') O.Bulg. synu (synū 'son').


In Aryan a = Indg. o can still be distinguished from a = Indg. e (§ 62), in so far as q-sounds were not palatalised before it, e. g. prim. Ar. fem. *kaïna- (Av. kaene- 'penalty') fr. Indg. *koṭ-nā- (cp. Gr. νοννή) beside prim. Ar. pres. 3. sg. mid. *caï-nataj (Skr. cāyatē) fr. Indg. *gej-e-taig. See § 445 ff.

-and- fr. rt. geys- 'taste'): Goth. -ana- (bohr-ans, gib-ans etc.), perhaps also Gr. -ovo- (e.g. Kp-ovo-c = Skr. kr-aga-s 'efficient, active', see Osthoff Morph. Unt. IV 374, and on the other hand Froehde Bezenben. Beitr. VII 322).

Rem. Some scholars, especially Collitz and Joh. Schmidt, dispute the validity of this sound-law and assume that Indg. o was in every case regularly represented by a in Aryan. I too am still for from considering my theory given above as mathematically certain (cp. Morph. Unt. III 129). But the difficulties, which it leaves unexplained, seem to me to be less and easier to dispose of than those which the hypothesis of Collitz and Schmidt presents. Nor does Collitz's latest treatment of the graded declensions (though containing certain acute ideas which further the subject) convince me of the validity of his standpoint, since among other things it leaves the distribution of e and o in the Germanic declension (ah-miu, ah-miu: ah-man, ah-mans) unexplained. Cpt. the author's articles in Stud. IX p. 367 ff. p. 380 ff. and Morph. Unt. III 102 ff., Collitz Bezenberger's Beitr. III p. 291 ff., X p. 2 ff., Joh. Schmidt Kuhn's Ztschr. XXV p. 2 ff., Osthoff Morph. Unt. I p. 207 ff., IV p. XV and pp. 226, 303, 388 ff., Hübschmann Das Indg. Vocalysystem 1885.

Concerning Av. e, i, o fr. prim. Iran. prim. Ar. a = Indg. o see § 94.


o is often weakened to u, a process which may be regarded as regular for the combination of o with a following nasal + consonant. -sun in ere-sun 'thirty' etc.: Gr. -koua. hun 'ford, way': Lat. pons 'bridge', O.Bul. pašt 'way'.

Beside o-(u) appears also a, without the special conditions for this representation being ascertained. aţ-k 'eyes': Gr. δόσα, Lat. oculu-s. at-ea-m 'I hate': Lat. od-in-m.\(^1\)

Indg. tauto-syllabic oj appears as ai in ait-nu-m 'I swell' ait (gen. ait) 'cheek': Gr. otdēo otdēo 'I swell' otdos 'tumour', OHG. eiz 'ulcer'. By the side of this perhaps also as ë, which became i in non-final syllables, e.g. mēg, Gen. migi 'mist': Skr. mēghā- 'cloud'; gini 'wine': Gr. olvo-c. It is not certain

\(^1\) Cp. now also Bartholomae Ar. Forsch. II 46.
whether ε, i in these words (cp. Hübschmann Armen. Stud. I p. 60) do not rather represent Indg. ei (cp. § 63).

Indg. tautosyllabic op seems to occur as oi (thence u in non-final syllables) in poit, gen. pitoy, 'πουντή', pita 'πουντάω'. oi (u), however, can here and in other cases (Hübschmann Stud. I p. 62) be also regarded as representing Indg. eu (cp. § 63).


In Aeolic (Lésb., Thessal., Boeot.), Arcadian-Cyprian and Pamphylian o either became fully u or a sound approaching it (written v), e. g. Thess. ánv = áνο, Arcad. áλλο = áλλο, Pamph. gen. Κουρασίων-ες = -ον-ες. o certainly did not undergo this sound-change in every sound-combination and word-position; the limits and conditions, however, under which it took place, cannot be precisely determined owing to the scarcity of monuments.

Tautosyllabic o. πένθθε 'trusts': Goth. baip 'has waited for' (pres. beida), cpf. *bhe-bhőjd-e. oiró-ς oirn: Lat. oino-s ánus-s, O.Ir. oen, Goth. áins, Pruss. acc. aina-n, cpf. *oj-no-s 'unus'. Loc. pl. λέχοι-ς: O.Bulg. pliūč-chi, Skr. ἐξε-ς, Indg. *μλγο-ς, stem *μλγο- 'wolf'.
o\1 became o\2 in Boeotian, e.g. 'Αρηστήθιονος-' in inscript. of Tanagra (to θήλη 'feast' fr. rt. dhei-, Skr. dhī-nā-mi 'I satiate'), thence ι in the third century B.C., Θυραγος-ς, Φωλη (= Φωλή) and in the youngest Boeot. inscriptions beside ι also ι, that is, ι or a sound closely approaching it, e.g. pl. ποιημενει = ποιηματιν (cp. rei: Skr. tē, Goth. ēdī). The change to ι took place in the other dialects (but not before the second century A. D.) and led to the Mid. and Mod. Gr. ι.

Tautosyllabic ου. Hom. ἐλήλυθε 'has come' beside fut. ἐλεύθομαι. οποιή 'zeal' beside pres. ἐπεύδω. This diphthong became ι in Ionic and Attic in the fifth century B.C., but the spelling ou was retained. The diphthongic pronunciation may have remained longer in the other dialects. The representation in Cypr. is noteworthy: o-vo = ου, a-ro-u-ra-i = ἄροφα.

§ 81. Italic. In the prim. Italic period o appears, with the exception of certain reductions in final syllables, to have been still unchanged in every sound-combination.

Lat. totondit 'has shorn' pf. to *tenādī = Gr. τινῶ τένθω 'I gnaw at'. Causat. noceō 'I injure' (Skr. nāsāyāmi 'I make to disappear, destroy') to nex necis. procu-s 'wooer' to precor. Abl. pondō 'by weight' to pendo.

The o in unaccented syllables, which in older Latin still remains unchanged (e.g. filio-s, dōno-m, opos), became u, except before r = s (§ 569) and after y and u: filius, dōnu-m, opus,胸怀, tetuli, con-tuli, sedulō (fr. sē-dōlo). o was retained before r = s, e.g. in temporis fr. *tempoz-is (a new form, in place of *tempes-is, after the analogy of the Nom. acc. temporis), and after y, u, e.g. in vivos, viēm, viēont, equos, sequuntur, mortuos. The forms vivus, vivum, viēunt, mortuus etc. (like locus, legunt), do not occur before the eighth century A. U. C., by which process gu (ku), gu (gu) passed into c, g.: ecus (gen. equi), relincunt (1. pl. relinquimus), ungunt (1. pl. unguimus) etc. (cp. Bersu Die Gutturalen und ihre Verbindung mit v im Lat., Berlin 1885, p. 53 ff.).

u fr. o occurs also in chief accented syllables, especially before nasals. uncu-s: Gr. óγκος-'bow, hook'. uncia older oncia 'ounce'
to Gr. ὑγχο-ς 'mass, bulk'. hunc fr. older honc. unguis to Gr. ὄνυξ. umbō 'boss of a shield' and umbil-icu-s, to Gr. ὄμωσις-ς. In like manner ursu-s fr. *or(es)so-s, multcu-s fr. *molcto-s, whose or, ol arose from Indg. r, l, § 295.

Final -o, like -a (§ 97), became e. Imper. sequere: Gr. ἔρχεσα. Nom. olle (ille seems to be a new form after iste, ipse) fr. *ol-se (§ 571), iste a new form for *is-se (with t transferred from such forms as istum istō): the second component of these compounds is identical with Skr. sā, Gr. ὅ (Indg. *so), cp. the accidence.

Also in other cases o in unaccented syllables seems occasionally to have become e, i, that is, an irrational vowel, which appears after i and in closed syllables as e, and in other cases as i. ileo fr. *in locō. hospes hospitis fr. *hosti-pit- (§ 638) beside potis sum (com-poś -potis). anni-culcus to anno-, auri-fex to auro-, socie-tās to socio-, novi-tās (Gr. νεο-της) to novo.-

legi-mus = Gr. λέγο-μυν. It, of course, still remains to be determined in what relations this change stands to the u in filius etc. and for what reasons here the one, there the other course of variation was introduced; cp. § 680. The question might also be raised as to whether Indg. e does not occur in anni-culcus, auri-fex, socie-tās, novi-tās, and in legi-mus: anni-culcus etc. like oixē-της, legi-mus, new formation after legi-tis =

Gr. λέγε-τε.

Rem. 1. The genitive suffix -es -is (salūt-es salūt-is) has not arisen from -os -us (sēnāt-us, homin-us). -es and -os were both old inherited forms (see p. 67).

Thurneysen Kuhu's Ztschr. XXVIII p. 154 ff. assumes the transition of ov to av, e.g. cavaē: Gr. κα(φ)ω 'I mark'; cavo-s: Gr. καυ 'excavations'; lavō: Gr. λάζ 'he washed'. Cp. however, Hübschmann Das Idg. Vocalsystem p. 190.

The fluctuation of the orthography between o and u in the Umbrian-Samnitic dialects points to a close pronunciation of the o. Since the Umbr. u was the sign both for o and u (§ 29), the tables written in the national alphabet contribute nothing towards determining the quality of the o-sound; the tables written
in Lat. have both o and u. In Oscan ú u, o u. Umbr. purka porca 'porcas': Lat. porca-s, Gr. πόρκας, O.T. ore, OHG. farh farah (§ 277), Lith. pa>rza-s, c.pf. *porco-s 'pig, sucking-pig'. Umbr. uvef ovi acc. 'ovis': Lat. ovis, Gr. ὄβις, Goth. avēpis neut. 'flock of sheep', Lith. aici-s, O.Bulg. oča-ca, c.pf. *oici-s 'sheep'. Umbr. curnac-o 'cornicem': Lat. cornix Gr. κορική 'crow', prim. st. *kor-en-*kor-n-. Osc. pūf iad puti iad 'pussit puit ian 'possint': Lat. potis, Gr. ποτίς. Umbr. pur-e 'quod', Osc. pūd pod 'quod': Lat. Faliscan quo-d, Gr. πο, Goth. ħna-, Indag. *go-. Nominal suffix -o- in Umbr. pūplu-m poplum 'populum', Osc. hūrtu-m 'hortum, templum', dolo-m dolu-m 'dolum', Volsc. pīho-m 'pium': Lat. dolo-m dolu-m, Falisc. voottu-m 'votum'.

The diphthongs oĩ and oy.

Tautosyllabic oĩ in chief accented stem syllables became œ, ŭ in Lat. oino-s oeno-s āno-s; Gr. olív-Ć, c.pf. *ōi-no-s 'one'. moini-cipio-m moenia mānia: Goth. ga-mains 'common', Lith. maina-s 'exchange', Gr. Sicel. μοῦτ-το-Ć 'requita'.

oĩ, i arose in final syllables. Nom. pl. poploś (Saliar hymn), plōirumē (C. I. L. 132), plūrimē: Gr. τοί, λίνω, Goth. bái, Indag. -oĩ, *toĩ fr. stem to- 'the, this'. Cp. instr. pl. *-ois, -oes (oloes) -is (equis) fr. *-oǐs (§ 612). In like manner also i in the monosyllabic nom. pl. hī qui, instr. pl. his quis. qui and quis may have originated from an unaccented position (sī qui, áli-qui etc.) and hī and his may be due partly to assimilation to qui, quis, and partly to assimilation to the polysyllabic forms illi, illis. Cp. also the nom. sg. qui fr. O.Lat. qui (goi = quo in the Dvenos-inscrp., cp. Bersu Die Gutturalen, Berlin 1885, p. 40) i. e. *goi + particle i (f).

Rem. 2. oĩ is also said to have become i in chief accented syllables, when preceded by v or l: vīdit oǐr, vīnu-m oioś, vīnus oino-s, ūquit ǔl-īm, īber loebertatem and others. This sound-change cannot, however, be accepted as definitely proved, since almost all examples under this category can also be easily explained otherwise. See Osthoff Morph. Unt. IV p. 129, Zur Gesch. des Perf. p. 191, Danielsson in Pauli's Altit. Stud. 4. 156 f.

Rem. 3. Why ērēs, which I (against Thurneysen Bezenberger's Beitr. VIII 260) consider equal to Gr. ἔρεις Goth. bestrās, with ę and not i? It is possible that ę arose regularly in the 1. sg. (O.Lat. ērēm)
§ 81. Indg. o in Italie.

and 3. pl., and then from these two forms was extended to the other persons. I leave it undecided as to whether -em, -ent were the continuation of prim. Lat. *-oǐ, *-oĩ-nt (cp. Gr. 1. sg. ἐγώ, 3. pl. ἐγώ, Goth. 3. pl. batra ';'riu-u), or that of Indg. *-oĩ, *-oĩ-, which, according to Lat. sound-laws (§ 237), must, first of all, have become *-o(i)em, *-o(i)ent. It is also conceivable that capiēs and auditēs are regularly formed, but that *feris arose with the same contrast as that in which soci-e-tās and novi-tās stand to each other. In that case *feris has been transformed to ferēs after the analogy of capiēs; but then mediēs, mediēs (μενοι μενοι) must also be regarded as modifications of *mediē, *mediēs after nōri, nōris.

In Umbrian u = o kê whereas the Oscan-Sabell. monuments still present the diphthong, as to which it is certainly questionable, whether the written diphthong still existed everywhere as such in the language itself. Umbr. unu 'unum', Osc. úñīstú 'unita'. Osc. múñīskād abl. 'communi': O.Lat. comoinis. Umbr. kuraia 'curet', Pielignian coisatens 'cuvasserunt': Lat. coirō coerō curō (the forms coraverunt C. I. L. I 73 and couraverunt l. c. 1419 are very singular; in the latter ā was certainly meant), prim. Ital. stem. fem. *koïsa-. Cp. also the Osc. instr. pl. Nuvianūís 'Nolanis' zicolois 'diebus', Pielignian suois 'suis'.

Umbr. veskles -is 'vasculis': Lat. oloes illēs; Umbr., like Lat., indicates here a special manner of treating o kê in final syllables.

Tautosyllabic Indg. oy, fell together with Indg. oy (§ 65) and is still only traceable in Osc. as diphthong: Gen. sg. castrōvs fr. stem castru- 'fundus' (§ 77). In Umbr. ɔ: gen. trīfor 'tribus'; rofu 'rubos': Goth. ráuþs, c pf. *rōudho-s. ɔ arose in Lat., e. g. gen. sg. fructās; pf. fādit: cp. Goth. gāut 'poured out' (pros. giutan 'to pour out'). By side of it also ɔ: rōdu-s = Umbr. rōfo-, gen. domōs = domās (Augustus wrote domos); cp. also the inscrip. forms with (long) o, losnā (= lāna fr. *loyc-snā, § 570), popupicod (beside pōublicom pōublicus), nondinum (beside noundinum nūndinum). It remains doubtful how this duality ɔ and ɔ in Lat. is to be estimated. It was hardly a mere graphic duality.

Rem. 4. In a number of Ital. words containing oy, it cannot be decided, whether this diphthong represents prim. Indg. oy (§ 85) or oy, e. g. in those containing logē- as Osc. gen. Luvkanatēs 'Lucanatēs' Luvkis Luvvikis 'Lucius', Lat. Luicēna Lucius etc., fr. rt. lēsk- 'illumine' (Gr. λευκός λιδωσ).
§ 82. Old Irish. In chief accented syllables o. ocht
‘eight’: Gr. ὄχθος. roth ‘wheel’: Lat. rota ‘wheel’, OHG. rad
heat, warm, burn’: O.Bulg. gorēti ‘to burn’, Lith. gāra-s ‘steam’,
It passes into u with the palatalisation of the following con-
sontant: suide ‘seat’ fr. *sodio- = Lat. soliu-m (l = d, § 369),
magu-s ‘boy, servant’), ru- beside ro- (Indg. *pro ‘before, in
front’, p. 67), cum- beside con- con- (co n-, see above).

In secondary accented syllables o, so far as it did not
entirely disappear (§§ 634. 657), became an irrational vowel,
whose sound quality mostly regulated itself according to the
timbre of the following consonant.

a. 1. pl. as-bérat ‘dicimus’, 3. pl. as-bérat : Gr. γεομεν,
(Doric) γεοντα, ἐγεον, Goth. batram, batrand; -berat may be
middle = Gr. γεοντα, or it is, as Thurneysen thinks, to be
regarded as the regular continuation of *beront, Indg. *bheront
(t in the combination nt had not the same development as t in
other cases in Irish, and we have no evidence that original t
in the final combination -nt was dropped in Irish).

i. Gen. biid ‘victus’ fr. *bi(y)otī, to nom. biad fr. *bi(y)oto-m:
Gr. ἔγεος Lith. gyvātā O.Bulg. životū ‘life’.

u. Dat. biud (to the above named biad) fr. *bi(y)otō.

In forms like cómarbus ‘coheredita’ beside örpe ‘heredita’
(Goth. arbi neut. ‘inheritance’): or had first of all become r.
S. § 634.

In the 3. sg. ad-cón-dairc (Gr. δέδακε), réraig ‘dixerit’
(O.Icel. rak, rt. reg-) a only indicates the timbre of the prece-
ding consonant. See § 640.

Cp. Gall. o in tarvo-s ‘bull’ : Gr. ταῦτα-ς; νεμπτον ν neut.
‘sanctuary’ (O.Ir. nemed n-) : cp. Gr. ζυγό-ν; epos- ‘horse’ in Epo-
rēdia = Lat. equo-.

In chief accented syllables Indg. oj became og (written oe
and oi). oen ‘unus’: Lat. oinos ānus. cloen ‘oblique, unjust,
bad’: Goth. kláins ‘hill’, fr. rt. klei- ‘lean, incline’. Before pala-
talised consonants ô for oe, e.g. cloine ‘obliqueness, injustice’. Old ô may, therefore, have been retained here.

Rem. Beside oe, oi was also written ae, ai, e.g. aeun ‘unus’ beside een; clain nom. pl. of cloen; maini ‘dona, pretiosa’ (to Lat. moenīa, mānia).

In final syllables ô became ɹ, which disappeared and only left its traces in the palatalisation of the preceding consonant. Nom. pl. eich ‘equi’ fr. *ekŷ, cp. Gr. ἰπνοι, Lat. populo populi (§ 657, 4). In Gall. inscrip. the nom. pl. still ends in -oi: Tanotaliknoi.


Rem. 1. Indg. o fell indiscriminately together with Indg. a (§ 99) and Indg. ã (§§ 109, 110) already in prim. Germ. At this period a was used for the three vowels in chief accented syllables, in other syllables frequently or always a. The latter quality was still retained in Westgerm. in historical times: e.g. in the dat. pl. OHG. worto-m wort-um OS. wordo-n wordu-n, Ags. wordu-m fr. stem orig. *yrðho- or *yþ-to- ‘word’ (but Goth. wordo-m). See Paul’s article in Paul-Braune’s Beitr. IV p. 358 ff. and VI p. 186 ff. Since it has not been definitely settled for many syllables, whether o or a was spoken in prim. Germ., we write the prim. Germ. forms throughout with a according to the Goth. notation, an inexactness, which is of little importance for this-comparative grammar.


In the eighth century a became e in OHG., caused by a consonantal or sonantal i in the following syllable. nerian i.e. nerjan = Goth. nasjan (for regular *nazjan, § 581) 'to rescue', causat. to ga-nesan = Goth. ga-nisan 'to become healed', fr. rt. nes-, Gr. νεόμαι. Nom. pl. gesti (sg. gast) 'guests' = Goth. gasteis (sg. gasts, st. gasti-). This umlaut, however, was hindered by r, l, h + Consonant (see Braune in Paul-Braune's Beitr. IV p. 540 ff.), e. g. far-wartan 'destroy' (p. 77) dat. nahti-m 'noctibus' (st. nahti- = Lat. nocti- Lith. nakti-). But the e, which arose from this i-umlaut, differed from the e which arose out of prim. Germ. i, e (§§ 35, 67) not only in OHG. but also in MHG. and even in NHG.: the latter, also written e by way of distinction, was open, the former close (J. Franck Zeitschr. f. deutsch. Altert. XXV 218 f., W. Braune Lit. Centralbl. 1884. column 124 f., Luick Paul-Braune's Beitr. XI 492 f.).

Prim. Germ. aĩ became ei (weiz, ein) except before r, h, w where it became e: lerran, leh.

Prim. Germ. au remained partly as diphthong, au and later ou, e. g. pf. scauð scoub = Goth. skauf 'pushed' (pres. Goth. skunba), houg = Goth. bōug 'bent' (pres. Goth. biuga), and partly became ō ōiz. before dental consonants and r, l, h (= Goth. h), e. g. böñ, rôt, pf. droz = Goth. frōut 'troubled' (pres. Goth.
§ 83–84. Indg. 0 in Germ. and Balt-Slav.

prieta), trōran 'to make to drop, spill' = Goth. drāusan (for regular *dranzjan, § 581) 'make to fall, droll, throw' (causat. to Goth. drīusan 'to fall'), pf. zōh 'drew' = Goth. tāun 'led' (pres. Goth. tiuha).

Quite independent of this change of aī and yu to e and ə, there was an older (prim. Westgerm.) reduction of the same diphthongs to e and ə, which took place in unaccented syllables. Final e and ə were shortened according to § 661, 6. OHG. blinte nom. pl. masc. 'blind', blintēm dat. (instr.) pl. 'blind' = Goth. blindai, blindaim, prim. Germ. *blindai, *blinaj-mi. berēs 2. sg. opt. = Goth. bairāis (p. 78). tage dat. loc. sg. (to tag 'day') = prim. Germ. *dažai, cp. Gr. loc. oikou and dat. oikos (§ 659, 2. 3). suno gen. sg. (to sunu 'son') = Goth. sunus (p. 78).

Here belongs also OHG. dē 'the', dēm 'the' = Goth. þai, þaim, since the pronoun regularly suffered the change in those cases, where it was unaccented.

The forms dia die = dē and deam diem = dēm show that this e = prim. Germ. aī was equivalent to the e discussed in § 75 rem. 2.

Rem. 2. These OHG. (Westgerm.) sound-laws in like manner held good for Germ. a = Indg. a and Indg. 0. See § 99 and § 109.

§ 84. Baltic-Slavonic. Indg. 0 was 0 in the Baltic-Slav. unitary period, and generally remained 0 in Slav., whilst it became a in Baltic.

Lith. tāka-s 'path', O.Bulg. toku 'course', to Lith. tekū O.Bulg. tekū 'I run'. O.Bulg. raz-dorū 'rent, gap'; Gr. ἱππα 'skin, hide', fr. rt. der- 'tear, flay'. O.Bulg. causat. ložiti 'ponere': Goth. lagjan 'to lay', fr. rt. legh- 'lay, make a bed'; topiti 'to heat': Skr. tāpāyami 'I heat', fr. rt. tep-. Lith. nakti-s, O.Bulg. nošī 'night': Lat. noctis, Goth. nohts 'night'. Lith. avēs O.Bulg. ovi- 'sheep': Lat. ovi-s. Nominal suffix -o-: Lith. nom. sg. vilka-s 'wolf', dat. pl. vilkā-ms O.Bulg. vilkō-mi, prim. Balt-Slav. st. *vilko- (§ 302) 'wolf': Gr. λύκος- The thematic vowel -o-: Lith. 1. pl. pres. nēṣza-me 'we carry', O.Bulg 1. pl. aor. neso-mi 'we carried': Gr. φέρο-μεν.
om, on before consonants (except i) generally appear as q in Slavonic. zám-bi 'tooth': Gr. γόγγος 'plug, bolt', rt. gemh-. biadā 'error' beside biedą 'error', rt. bhlendh-. o became u (ū) in final syllables before final nasal and before -ns. Thus Indg. *-o-m (in the acc. sg. of -o-stems and in the 1. sg. pret.) became *-u-n (§ 217) -ū (§ 219), as vlükū 'lupum', nesū 'I carried'; Indg. *-o-n̄s in the acc. pl. (cp. Gr. kóqon̄c) became *-uns whence further the -y of historical times, as vlük'y 'lupos' (§ 219). Final -ū = Indg. *-om was lengthened to y before j, e. g. dobrū-t and dobrū-y 'the good (man)' (dobra is the accusative form, used as nom., see the accidence), cp. § 36 p. 37.


In like manner i influenced a following a in Lithuanian: a, in this combination and after consonants which have been palatalised by i, is pronounced as an open e in many dialects, e. g. krau̯jes 'blood', pl. krau̯jei = krau̯jas, krau̯jai; svēcẑes 'guest', pl. svecei̯ = svēĉẑas, svecei̯at; dat. sg. jėm 'him', instr. pl. jeiks = jām, jais.

Rem. 1. Lith. ĵ-e 'he' is not equal to Gr. ḟ-ē Skr. yā-d, but stands to these in the same relation as Gr. τί-ε, Lat. qui-s stands to Skr. kā-s Goth. hna-s. Also szi-s 'this' (beside gen. sziθ) is not fr. *kjo-s, but like O.Bulg. st 'this' = orig. *k̂i-s (O.Bulg. gen. sego, dat. senu etc. for regular *seo, *senu etc. fr. *sjeo etc. after the analogy of the nom. si and acc. si). After the same manner as jēs stands to gen. jē, dat. jēm etc. are also to be explained nominatives sg. like mēdis (gen. mēdio) 'tree', whose -i- instead of -ji- is on the same level as the -i- in gēra-s 'good', and those like guidēs (Gen. go干涉 'cock', whose y arose from īji (§ 147). Indg. i was likewise contained in the final syllables of O.Bulg. nom. and Acc. konji 'horse' (st. konjex-), Goth. nom. as harji-s 'army, host' (st. harja-) and heireis. fr. *xiridi-s 'shepherd' (st. prim. Germ. *χιρίδις), O.Lat. Corinēlis Cornēlim, qlib omnim beside Cornēlius, allus Osc. Kli̯pis 'Cipius', Umbr. Trūtītis 'Truttidius'. To these may possibly be added the Greek proper names in -i̯ς beside -i̯ς -i̯ς, as Kōmus Deı̯nc etc. Cp. §§ 120, 143. 219 rem 1. 660 rem. 3 and the accidence.
Indg. tautosyllabic oj appears in Lith. as ė and ai, in Slav. as ě. Lith. snėga-s 'snow' (beside snaižalá 1) 'snow flake' snaižyti 'to snow a little') Pruss. snaygis O.Bulg. snēgū 'snow': Goth. snáies 'snow', cpf. *sneigho-s, fr. rt. sneigh-. Lith. at-loka-s and at-loka-s 'remnant, rest' laikyti 'to hold', O.Bulg. at-liékī 'remnant, rest': Gr. λοιπό-ς, fr. rt. leip-. Lith. laipinti 'to let rise', O.Bulg. pri-lěpě 'salve, grease': Gr. áloqē 'salve', fr. rt. leip-stick, glue'. Lith. mažsala-s 'medley, compound' maizyži 'to mix', Pruss. maysota-n 'mingled', O.Bulg. pri-měšu 'admixture' měšiti 'to mix', from rt. měžk- (Gr. μείζω), cp. § 414 rem. Lith. 3. sg. opt. te-sukę (suką I turn'), O.Bulg. 2. pl. opt. berělo (berą 'fero'): Gr. φέρων, φέρων. Lith. kėma-s 'farm, village' kaimynas-s 'neighbour': Goth. hāims 'village', cpf. *goj-mo-s (cp. O.Bulg. po-kɔj't 'rest, repose'), fr. rt. goj-. Pruss. waisi weisse 'thou knowest', O.Bulg. věmě fr. *věd-mě and věd-ě 'I know': Gr. οἶδα, Indg. pf. stem yojā-. Lith. pėmą 'shepherd boy': Gr. ποιμήν. Lith. staigą 'sudden' staigyti-s 'hasten': Gr. στρείχω 'row', fr. rt. steigh- 'rise'.

Rem. 2. It is undetermined after what law ė and ai interchange in Lith. I conjecture that originally ai regularly remained only when the following consonants had a palatal timbre, which had been caused by an ė- or ĭ-vowel in the following syllable; in other cases oj became ai, then open ė, and later ė. Op. e. g. kaimynas with kėma-s, pa-saiki-s (maso.) 'a binding thong' with sėka-s 'cord' (§ 100), and the numerous verbs in -ysti as laikyši (laikauši, laikauši, laikyšius). In this case kaima-s (another form of kēma-s) would be a new formation after kaimynas, and laikaši after laikaiši etc.; in the case of nouns like at-loka-s 'remnant', mažū-s 'exchange', the verbs in -ysti and the like which exist side by side with them would come into consideration, etc. Only slurred ('geschliffen') oj (ai) seems to have undergone the change to ė, whereas ai (dąikta-s 'place, thing', pa-đaide-s 'loose, slack') remained also before consonants having a labial timbre. Cp. ė and ci = Indg. oj § 68 rem. 2.

Slav. ě = Indg. oj and = Indg. aj (§ 100) are to be distinguished from ě = Indg. ė (§ 76) in historical times from the fact that before them k, g, ch do not appear changed into ė, (d)į, ė, but into o, (d)ě, ŗ. Loc. pl. šūčečči (pluičči 'wolf'), bo(d)šččči (bočči 'god') with the Indg. ending *-ojuscp. Gr.  

1) Kurschat in Lith.-Germ. Dict. accounts it thus snaižala.
Indg. o in Baltie-Slavonic. § 84.


Initial ē- = Indg. ĕj- ēj- likewise became i-.... iini 'unus': Lith. cēna-s (§ 666, 1), Pruss. aina-n acc., Lat. oino-s ans-s. iskati 'to seek' : Līth. j-ēskōti 'to seek', OHG. eisön 'to seek', a verb whose root is probably to be set down as ajs-, not eis- (Osthoff Zur Gesch. d. Perf. p. 133); iskati certainly incurs the suspicion of being a Germanic borrowed word, see § 414 rem. Also here a difference is shown in comparison with Indg. ē. For this latter, when initial, became ja-, see §§ 76. 666, 1. Cp. further § 666 rem. 2.

Just as *iō became įe (see above), so also *iōj became *iēj and further (by § 68) īi. Loc. pl. jīchū (fr. st. je- 'he' fr. *iō-), konjīchū (fr. st. konje- 'horse' fr. *konjo-) as opposed to tēchū, vīūcēchū. Opt. 2. pl. dējite (dēja 'I put'), as opposed to berēte.

Indg. tautosyllabic ox as well as the oy (§ 68) which arose from eu in the Balt.-Slav., unitary period, appears in Lith. as au, and in Slav. as u. Gen. sg. Lith. sūnaus, O.Bulg. synu : Goth. sunās, Indg. *oys. Lith. raudā 'red colour', O.Bulg. ruda 'metal': Goth. rūps 'red', rt. reydh-. Lith. naudā 'profit, wealth, property': OHG. nōz O.Icel. naut (neut.) 'domesticated animal' te Goth. niutan 'to obtain, enjoy', rt. neynd-. Lith. raudā 'lamentation': OHG. rōz (masc.) 'weeping' to rīozan 'to weep', rt. reyd-


Concerning Av. ē, ō, ā = prim. Iran. prim. Ar. ə fr. Indg. ə see § 102.
§ 87. Armenian. The regular representation seems to have been u. e-tu 'I gave': Skr. ādām. tur 'gift': Gr. δῶρον, rt. δὸ-. hum 'raw': Gr. ὁμός Skr. āmda-s 'raw'; the initial ḥ- has no etymological value. śun 'dog' fr. Indg. ṣuṃ, Lith. šnuo (§ 92 rem.).

§ 88. Greek. γνω- 'perceive, know' ἡγων- γνω-τό-ς γνω-μα : Skr. jña- 'perceive, know' fut. 3. sg. jña-suṭi partic. jña-tā-s, Lat. gnō-scō nō-tu-s, OHG. ein-chnuadil 'insignis, egregius' de-cmuodelen 'to give a countersign', O.Bulg. inf. zna-ti 'know', zna-nte 'sign'. Aeol. πα'-νο I drink' pf. πέπω-κα ἁμ-ποττί-ς 'ebb-tide': Skr. pāṭi 'he drinks', pāṇa-m 'drink', Lat. pōtus pōtīō pōtor, Lith. pūta (fem.) 'drinking-bout'. Acc. βων 'bovem': Skr. gām 'bovem', epf. *gōm, to nom. *gōy-s (§ 85). Derivative verbal stems in -ō-, ἐνω-σω ἐνω-σιν : Lat. aegō-tu-s, Lith. sapnū-ti 'to dream'.

In the Thessalian dialect ω passed into ι (ov) : e. g. ἐδωκε = ἐδω-κε, γνωμα = γνω-μη, Ἄριστον = Ἄριστον.

§ 89—91. Indg. ő in O.Ir. and Germ. 85

'Nolani': Skr. vṛkṣas Goth. vulfsōs 'lupī'. Imperatives in -tōdː Lat. estōd, Umb. fertu 'ferto', Osc. ifītīd licitud 'liceto', Pel. petītīu 'petito' (?), Volsc. estu 'esto': Gr. ἕως.

The ő instead of the expected ə in Lat. datēr-u-s quaestār-u, fār = Gr. qwó 'thief', hā-c beside quō (are they to be compared with fāg-u-s beside equ-o-s? § 81) and others (Corssen Aussprache II 2 p. 193 f.) is unexplained.


Rem. As to whether ő was also spoken in Gallie depends, so far as I see, upon the view taken of proper names in -gnāt-o-s. Zeuss-Ebel (p. 16) identify this word with O.Ir. gnāth, whereas Thurneysen identifies it with Lat. gnāt-u-s (Cintynātus 'first-born', Keltoroman. p. 2).

In final syllables ő passed into ə, and became shortened.


nom. sg. πός 'foot'. Goth. sat-sō pf. 'sowed': Gr. ἄφθωνα, ἄν-
-έωναι, Heracle. ἄν-δύσθω, pf. of ἄφθημα ἄνθημα fr. rt. ἁτο- 'throw, 
sow'. OHG. spoht OS. spōd 'success; speed' fr. spē-; spō-, cp.
the ablaut grade spē- in Goth. spē-diza 'later' Lith. spė-ti 'to-
be at leisure' (§ 76). O.Icel. ðss (masc.) 'estuary': Lat. ðs oriś,
ōstitu-m. Nom. pl. Goth. vulfōs 'lupi': Osc. Nuvlanūs 'Nolani'.

Indg. ə and ā fell together in ə in the prim. Germ. period,
and were therefore similarly treated in all Germ. dialects.
Cp. § 107.

Goth. ə was a close sound approaching closely to a, hence
it is occasionally also written u.

In OHG. ə is only retained in the oldest monuments. This
became first of all əə, əu, and then later əo, which, from about
the year 900, became the universally predominant form. This
change of ə to əə etc. did not take place in unaccented final
syllables.

Prim. Germ. final -ə became -a in Goth. and -u in HG.: 
Goth. baira OHG. biru = Gr. qīw. Prim. Germ. -ən became
-ə in Goth. and -o in OHG.: Goth. nom. rafjo 'number, account',
OHG. hano 'cock'. See §§ 659—661.

dā′-ti O.Bulg. da-ti 'to give': Lat. dos dōtis. Lith. jūs-ta
O.Bulg. po-jas-nī 'girdle': Gr. γωστός γως-νη. Lith. nū 'of,
from', O.Bulg. na 'on, up': Gr. ἄνω. Nom. acc. du. masc. of
-o-stems: Lith. gerū-ju 'the two good (men)' (Nom. sg. gerūs-is),
O.Bulg. vūka (nom. sg. vūkā 'wolf'): Gr. λύκω. Lith.
udō′ius 'I smell, scent': Gr. ὄδ- in pf. ὄδ-ωδα, ὄδ-ώδης. Lett. fnūtē
'son-in-law': Gr. γρωτός 'relation, brother'.

In Lithuanian this vowel, when it had the broken (gestossen')
accent, became u in final syllables. gerū 'āyabu' beside gerū-ju 'to
āyabatu'. sukū 'I turn' beside the refl. sukū-si sukū-s cp. § 664, 3.

In both sections of this branch final *-ōm, *-ōn became *-an,
whence Lith. -u, O.Bulg. -y. Lith. gen. pl. dēvā (which pro-
perly ought to be written dēnā), in dialects still dēnuo (fr.
dēnā- 'god'), orig. form *deiwm, Skr. Ved. dēvāmi, cp. § 218.

Rem. Lith. sū̀ 'dog', akū̀li 'stone' have the same formation as Lat. homō, Goth. guma fr. prim. Germ. *gamō, Skr. dāmbā, cp. also Prus. emon = Lith. ėmō 'man'. On the other hand the dial. form szyn (beside sū̀) is a formation in -on (cp. Armen. šun Gr. σύν).

Indg. a.

§ 93. Indg. *aǵò 'I drive, lead' (rt. aǵ-) : Skr. ájámi
Arm. ačem, Gr. áγω, Lat. aǵō, O.Ir. aǵim, O.Icel. inf. aka.
Indg. *aǵro-s 'field, acre' : Skr. ájra-s, Gr. αγρός, Lat. ager, Goth. akrs. Skr. ákśa-s Gr. ἀξον Lat. axi-s OHG. ahsa Lith. aszli-s O.Bulg. oš 'axle'. Indg. *aǵó- 'alias': Armen. ail, Gr. ἄλλος, Lat. ali-us, O.Ir. aile, Goth. aýj-s. Skr. ápa Gr. ἄπο Lat. ab Goth. af 'of, from, by'. Skr. mádati 'undulates (of water), is drunk, drinks immoderately', Gr. μαδαίο 'I am wet', Lat. madéō 'I drop with wet'. Voc. sg. of a-stems in Indg. -a- : Skr. ámba 'O mother', Gr. νύμφη δέσποτα, O.Bulg. ženo 'O wife'.

Suffix of the instr. sg. -a : Skr. gerunds in -y-a and -ty-a, e.g. a-gám-y-a ā-gá-ty-a 'by approaching', Gr. πέδ-a (§ 311), παρ-α, áμ-α, Lat. ped-e.

Indg. tautosyllabic aj. Skr. ēdha-s 'fire-wood', Gr. aἴθω 'I burn', Lat. aedēs (originally 'fire-place, hearth'), aēstus- 'heat, ebullition', O.Ir. aēd 'fire', OHG. MHG. eit Ags. aēd 'a burning pile', rt. ajdh- 'glow'. Skr. sē-tu-ṣ 'fettering, binding' sē-tār- 'one who puts in fetters', Lat. sae-ta 'strong hair, bristle', OHG. sei-ð (neut.) 'cord, knot', Lith. sē-tas 'cord', pā-sai-ti-s (masc.) 'a binding thong', O.Bulg. sē-t (fem.) 'cord', rt. saj- 'bind'. 3. sg. mid. in Indg. -taj : Skr. bhāratē, Gr. qρέερα (rt. bher-ferre); this orig. form -taj is not, however, quite certain, since -taj would also necessarily become Skr. -tē Gr. -tai (§ 109).

Indg. tautosyllabic aj. Skr. ǵjas- (neut.) ǵjmân- (masc.) 'power, strength', Lat. augēō augus-tu-s augmen augmentu-m, O.Ir. ǵy 'integer', Goth. duktā 'I add, augment', Lith. augū 'I grow'
augmā (gen. augmeis) 'growth, excrescence', rt. aug-. Gr. παυ-σω 'I shall check', Lat. pau-ca-s, cp. Goth. pl. fav-di 'few'.


Indg. and prim. Ar. tautosyllabic ai, au became €, ö in Skr., æ ői, ao ēu in Av. and ai, au in O.Pers. (cp. §§ 126. 160):


Avestic had € for ae, when final. Dat. sg. Skr. gav-€ Av. gav-şi gav- ‘bovi': Gr. ἱλβων. 3. sg. mid. Skr. bhāratē: Gr. γέρων, Av. vaεναι G. Pers. vainatay 'seems'. Nom. Acc. du. of a-stems, Skr. ोहे Av. unę- 'both': O.Bulg. ženě (žena 'wife').

2. au. Skr. ोज- Av. aοj- (neut.) 'strength, power' Lat. auge-tu-s, rt. aug-.

Aryan a corresponds, in addition to Indg. a, also to Indg. ə (§ 62) and o (§ 78), further to Indg. sonant nasal (§§ 226—231) and occasionally to Indg. e (§ 109a). To these was added further in prim. Iran. a new a in the combination ar = Skr. ur ir, Indg. ər (§ 290). Here may be discussed a few changes which prim. Iran. a, irrespective of its origin, underwent in Av.

1. a became e before m, n or v, and the equality seems to have been most clearly marked in final syllables, since it is here written most consistently. nemah- (neut.) 'reverence': Skr. prim. Ar. námas-, Indg. *nemes-, rt. nem-. te-m acc. 'the': Skr. prim. Ar. tá-m, Indg. *tō-m, Gr. το-v. bare-m 'I brought': O.Pers. (a-)bura-m Skr. (a-)bhara-m, Indg. *(e-)bhero-m, Gr. (e-)θερο-ν. aṣema- 'decimus': Skr. daśamā- Indg. *dekamā- (§ 231). 3. pl. pres. bare-ni, impf. bare-n: Skr. bhara-ni,

ε, which arose from α before m, n or v, passed into i after y, o, j, ṝ, but the orthography is also here inconsequent. y-im 'quem': Skr. yá-m, Gr. ὥ-v. yimá-, name of a hero: Skr. yamáha-ıma- part. of haca-iti 'accompanies', op. Skr. sáca-mañña, vac-im acc. of vāxš 'word': Skr. vāc-am; -am = Indg. -y(m) (§ 231 rem.). jimaḥ 3. sg. conj. aor. fr. rt. gēn- 'go', op. Skr. gámata for regular *jámata (§ 451 rem.). snačśinti- 'snowing' to snačśaiti 'snows'.

Rem. The Gāpś dialect had also ē for e and i before m n v, especially in final syllables. émacant- 'vigoros'; late Av. amarant- Skr. ámacant-. Acc. kehrp-ēm: late Av. kehrp-em 'figure, body', Skr. kēp-ām. yēm beside yim: Skr. yā-m. āṣāṃṇā-İ dat. fr. āṣāmn- 'grief, affliction', op. Skr. vārtman-İ. e-vistī- 'want of acquaintance' beside late Av. e-vista- (see above).

2. α became ē after y before i, ı, ē, y, ūh (fr. Ar. şı, § 125), c or j in the following syllable. The orthography is also here inconsistent, since α appears also beside e. 3. sg. act. kārayeiti, 3. pl. act. kārayeinti, 3. sg. mid. kārayeti of kārayēmi, Causat. fr. kar- 'make'. yeśnya- 'adapable' beside yasna- 'offering, price': Skr. yajñā- Gr. ἀγνό-ς. Gāp. gen. masc. yeḥyā 'cuius' = Skr. yāya, late Av. yeśhā (fem.) 'cuius': Skr. yāyas. ḫyzjāh- 'need, danger': Skr. tyājas-. Cp. ę fr. α § 102.


§ 95. Armenian. aseλn (gen. ašlan) 'needle': Gr. ἀσθεν-
'point', Lat. acu-s 'needle', Lith. asz-t-rūs 'sharp'.
argel 'hinderance': Gr. ἀγκέο 'I ward or keep off', Lat. arceō.
taigr, gen. taiger (g fr. ν § 162): Skr. dēvār-, Gr. ἄσιο (§ 96), Lat. lēvir (§§ 65, 363), Ags. tācor OHG. zeihhum (with remarkable guttural), Lith. dēver-t-š O.Bulg. dēver-i, Indg. prim. f.
*daijēr- *daijēr- 'husband’s brother, brother-in-law' (§ 155 rem. .
§ 96. Greek δάσρυ: Lat. lacruma lacruma O.Bret. doar
Goth. tagr 'ear'. νασό-ς (Heysch.) 'little finger', κασό-ς 'bad' compar. κασο-fl: Av. kasu- 'small'. compar. kasyā. μασό-ς 'long':
Av. masah- 'greatness' O.Pers. māpišta- 'uppermost', Lat. macer, OHG. magar 'lean'. ἀγγώ 'I press tight', ἀγγι 'near': Skr. āhas-
tightness, oppression', Av. āzah- 'tightness, anxiety', Lat. ango angor, Goth. ago-n-s 'close, tight', Lith. aṅkšta-s 'close, tight',
O.Bulg. qzā-kū 'tight, close', rt. aṅgh- 'straiten'.

Tautosyllabic us and us. ucaus-s: Lat. laevo-s, O.Bulg. lēvū, cph. *slaiuo-s 'left'; here also OHG. slēko 'powerless', prim. Germ.
*sleka-z? aŭi 'time, life-time', aľfel aš 'always': Lat. aevō-m 'time, life-time', Goth. àias (st. áipa-') 'time', rai 'yes, verily';
Lat. nasc. xavlo-ς 'stalk': Lat. cawli-s 'stalk' cawles 'holes, cavities',

In Bretoian aj became â (e.g. Āĥaçosādās, Αυναινε, inscript. of Tanagra), for which η (e.g. ἄς = aľfel) appears from about 400 B. C. and on the latest inscriptions us i. e. close ə (e.g. Εμυν). The same us = α in Thessalian about 220 B. C., e.g. 3. sg. conj. mid. δίλπα-τι = Dor. δηλ-ται 'velit'. Later, but probably not before the second century A. D., α passed into ə also elsewhere in Greece.

In Ionic-Attic α fr. a(Φ) before e-, i- and a-sounds. ἄηφ fr.
*δαλήφ: Skr. dēvār-. ṭel (ṭel) = aľfel. Hom. ἄνω Att. ἄττω fr. *fai-fε-μο (a reduplicated form like δαλ-δαλλο, ἀνα-

αϕ for αμ can be established for Ionic from the fifth century B. C. onwards, e.g. aντόν = αντόν. Cp. εφ fr. εφ
§ 64.
§ 97. Italic. Lat. agō, Umbr. aitu Osc. actud 'agito': Gr. ἀγων. Lat. amb-itu-s, Umbr. amb-etu-tdo 'circummento' (concerning -δ- cp. § 209), Osc. amfr-et 'ambiant': Gr. ἀμφί ἀμφί, 'circum'. Lat. albu-s, Umbr. alfu 'alba', Osc. Alafaternum 'Alfaternum': Gr. ἀλφό-ς 'white leprosy', cpf. *alhbo-. Lat. caper capra, Umbr. cabriner gen. 'caprinus': Gr. κάπης 'wild-boar', O.Icel. hafr 'buck'. Lat. ante, Osc. ant 'ante': Gr. ἀντί- 'opposite', Skr. ἀντι 'opposite, before'. Lat. am-aru-s 'bitter': Skr. am-lá-s am-bła-s (§ 199) 'sour, sourness'.

In Latin, a (we here also take into account a = Indg. a, § 109 d, and ar, al which arose from ἅ, ἄ, § 306) was changed in syllables which were unaccented, in prim. Latin (§ 680):

1. to a sound lying between u and i before labials and l in open syllables. man-cupium and man-cipium beside capio cupul-um. in-sulio and in-silió beside salio: Gr. ἀλλομυ 'I spring, leap'. Cp. § 49 p. 42. The orthography fluctuated greatly, and it is questionable whether this fluctuation is not partly to be attributed to the fact that the sound was a different one, when followed by i, cp. e.g. ac-cipio beside oc-cupio. sur-reptus for sur-reptus fr. rapió was certainly formed by analogy (see 3).

2. to u before l + consonant (except ll). ex-sulto beside saltio, in-culcäre beside calcäre.

3. to e in closed syllables (exceptions under 2), before r and finally. ac-ceptus parti-cesp beside capio man-cupium, cœn-fectus arti-fex beside facio cœnició. ac-centus corni-cen beside cano ac-cinio corni-cin-is. obstetriz beside stator cœn-stituo. impertió beside partio. Instr. sg. of consonantal stems, as ped-e, aer-e, cp. Gr. πεδ-ά, ἄερ-α (cp. § 93 p. 87); perhaps also inde = Gr. ἵνα. red-dere beside dare.

4. to i in open syllables (exceptions under 1. 3. 5.) and before ng. ad-igō beside agō. concinó beside canó. Juppiter beside pater. cœn-stituó beside status. sisti-te = Gr. τὸσα-τε. in-sitis beside satus. serite fr. *si-sa-te (§ 33) = Gr. *τάρε, the older form of τάρε (§ 109 c). red-ditus beside datus. at-tingō beside tanγό.
5. -ay- became -u-: e-luē e-luēcrus beside lavācrum and (O.Lat.) lavere, s. § 172, 1. -ya- probably also became -u-: con-cutīō con-cussus beside quātiō quassus).

Before the Christian era tautosyllabic ai became e in Latin (having passed through the intermediate stage ae). This change occurs earliest in the popular language. The various stages of the change cannot be precisely fixed chronologically, since the orthography inconsistently retained ai and ae long after the monophthongic pronunciation was established; ai is still found on inscriptions under the Empire. aidīlis aedēs: Gr. αἰῶν (cp. § 93). caecus Caecilius Caecilius Cæcilius: O.Ir. caech 'blind', Goth. háfs 'blind'. haedus ēdus: Goth. gāits 'goat'. lēvir (popularly connected with vir, s. § 65): Gr. ἱερό (§ 96), Skr. dēvār-, Indg. dājyēr- 'husband's brother'.


Tautosyllabic ay. aurōr-ā fr. *aus-z-ā (§ 569): Gr. ἀγ-αυρο-ς 'near the morning' aυραν 'morning' from stem *au-σφ-, O.Icel. austr OHG. OS. ostar adv. 'eastwards', Lith. ausz-rą day-break'. aurī-s: Goth. āusō (Gen. āusins) Lith. ausis- 'ear'. This ay became aŋ (cp. aŋ fr. aj) in the popular language and later ą or the pure monophthong a, as the orthography o shows, e.g. oricula = auricula. Unaccented ay before u appears, in the time of the Emperors, as a, e.g. Agustus, asculto, augurium.

To the proportion in-quīro : quaerō correspond in-clūdō : claudō and dē-frūdō : fraudor. Concerning con-clausu-s and like forms cp. § 65 rem. 3.

Tautosyllabic ai and ay remained diphthongic in Oscan, whilst in Umbrian they became respectively e and ē.

§ 97—98

Indg. a in O.Irish.

Osc. svaf svae Umbr. sve ‘si’ (Volsc. sepis ‘siquis’), probably = Gr. αἰ. Osc. Aifinēs (or Aifineds) gen. ‘Aedini’, to Lat. aedēs (Osc. ailil ‘aedilis’ was a borrowed word, as is shown by the d).


In forms like aile ‘alias’, gen. maice fr. *markif (Ogam inscr. still maqui) ‘filii’ (nom. mace fr. prim. Kelt. *makyo-s), the i following a denotes the palatal timbre of the following consonant. In like manner u denotes the u-timbre of the same consonant, e. g. in 1. sg. ad-gaur ‘I forbid’ for *garu *garo (cp. gāir ‘call’ and Gr. Dor. γάρ ‘speech’ and others). S. § 640. Original a, so far as it did not entirely disappear (§ 684), appears mostly as a in unaccented syllables, e. g. cúm-ang ‘angustrus’ (Lat. angustu-s Gr. ἀγχος) 1), beside the u and i, caused by the timbre of the following vowel, e. g. for-cón-gur ‘praecipio’ beside ad-gaur.

Indg. tautosyllabic aį became aį. caēch ‘blind’: Lat. caecus-s. aed ‘fire’: Gr. aἰδω. Before palatalised consonants aį, e. g. caich nom. pl. ‘caeci’ fr. *caici.

aį became ū in final syllables. dū (fem.) ‘two’: Skr. dwē, Indg. *dwā; the change to ū may here have taken place, when the word did not have the chief accent. ū in orig. polysyllabic forms is still only recognisable in the palatalisation, as du. tuaith (sg. tuath ‘people’ = Goth. piuda) fr. *tōtī, older *teytaij (§ 657, 4).

Indg. tautosyllabic aų appears, when accented, as au, ő: ť

'ear' dat. pl. auib, au-nasc 'ear-ring': Lat. auris. ōg 'integer': Lat. augeō.

§ 99. Germanic. Goth. ahva OHG.OS. aha 'water, river': Lat. aqua. Goth. skabun OHG. scabun Ags. scafan O.Icel. skafu 'to scrape': Gr. ὀξάναψ ῥάπαδον ὄξανατω ἴδιγ, O.Lat. scapres 'shabby, rough' Lat. scabō 'I scrape, scratch', rt. sqap- sqab- (§ 469, 7). Goth. haban OHG. habōn Ags. habban O.Icel.hafa 'to have': Lat. habeo, cplf. of the stem *khabbē- (§ 553). Goth. O.Icel. OS. salt OHG. salz 'salt': Armen. աղ Gr. ἀλς Lat. pl. salēs O.Ir. sulūn O.Bulg. solt 'salt'.

Rem. Concerning the falling together of Indg. a and o in Germ. see § 83 rem. 1. Indg. a appears as o in other than chief accented syllables, e. g. in ob, of, the Westgerm. proclitic forms of the prep. ob of 'of' (Gr. ἐν, Lat. ob), e. g. OHG. ob-lāya 'dimittore'. Cp. Paul in Paul and Braune’s Beitr. VI pp. 186, 191.


Indg. tautosyllabic au. Goth. áuk 'for, but', OHG. auh OS. ōk Ags. eāc 'also', O.Icel. awk 'therefore', to Goth. áukan 'to increase': Lat. augetō.

The special OHG. treatment of a, aį, au has been stated in § 83. According to the sound-laws given there, are to be explained e. g. the following forms: eli-lenti fr. older ali-lanti 'from another land, strange': Goth. alji-s, Lat. alius. erran fr. *erjan: Goth. arjan 'to plough', Lat. arō. eōin: Goth. āveins 'eternal', Gr. αἰῶν, Lat. aevom. auh, later ouh: Goth. áuk (see above). óra: Goth. áusō 'ear', Lat. auris, Lith. ausi-s.

§ 100. Baltic-Slavonic. Indg. a became o in the Baltic-Slav. unitary period, and fell entirely together with Indg. o (§ 84).

Lith. nas-rait pl. 'throat', O.Bulg. nos-ů 'nose': Skr. nás- OHG. nas-a 'nose'; that the rt. is Indg. *nas-, not *nos-, follows from Lat. oār-ēs, Lith. nōs-i-s (fem.) 'nose' which stand in ablaut relation to the above words. Lith. ariū O.Bulg. orja 'I plough': Armen. araŭr 'plough', Gr. ἀρῶ Lat. arō 'I plough', O.Ir.
arather 'plough', Goth. arja 'I plough'. Lith. ąkla-s 'blind': Lat. aquilu-s 'dark'. Lith. aļgą 'pay, reward': Skr. arghá- m. n. 'worth, value, gift of honour', Gr. ἄλφη ἄλφηνα 'wage', fr. rt. algh-. O.Bulg. otí-ći 'father': Skr. atti-atta- 'elder sister', the latter also 'mother', Gr. ἀττα 'father', O.Ir. aite 'foster-father, trainer'. O.Bulg. instr. sg. ἐνοῇ voc. sg. ἐνο of ἐνε 'wife': Skr. instr. sg. jihvája (nom. jihvā 'tongue'), Gr. voc. sg. νομα (nom. Dor. νομα). With regard to the following sound-developments compare the laws given in § 84.

Slav. ć before explosives and spirants. O.Bulg. qzū-kū 'narrow', q-chati-'odorari' (s. § 219).

Slav. je fr. jo. Voc. sg. zmíje, duše, to nom. sg. zmíja 'serpent', duša (fr. *dūčjā, §§ 147 rem. 3. 588, 3) 'soul', cp. ženo from žena. Instr. sg. jejq, nom. sg. ja 'she', cp. tojfq from ta 'the'.

Indg. tautosyllabic ai as ć and ai in Lith. and as ē in Slav. Lith. dēver-i-s O.Bulg. dêver-ţi 'brother-in-law': Gr. ἀνή fr. *eunή (§ 98). Nom. du. fem. Lith. tē-tvi (-dvi = dvi 'two') O.Bulg. tē from st. *tā- 'the': Skr. tē, perhaps also Gr. τα Lat. istae (see Brugmann, Kuhn's Ztschr. XXVII p. 199 ff.), Indg. *tāj. Lith. pā-saiti-s m. 'a binding thong', sēla-s 'cord' (cp. also at-saj-ā 'trace of a horse'), O.Bulg. sēli-f. 'cord' fr. rt. saj- 'bind'. Lith. skėdà and skėdrā 'chip' skaitu-s and skaita-s 'clear': Lat. caedō part. caesus, caesius 'clear-eyed', Goth. skaidan 'separate'. O.Bulg. lēvb 'left': Lat. laevo-s.

Before this ē in Slav. k becomes c, e. g. račę nom. du. of račka 'hand'.

Rem. Concerning the change between ć and ai in Lith. see § 84 rem. 2, concerning final Slav. ē see § 84 rem. 3.


Indg. tautosyllabic ay, as au in Lith. and u in Slav. Lith. sausa-s O.Bulg. suchu 'dry': Skr. sōṣa-s (fr. *sōṣa-s, § 557, 4) 'a drying up', Gr. αἰω 'I dry, make dry' fr. *sauo (§ 564), Ags. sær 'withered, dry' OHG. sōren 'to parch' O.Icel. saurr 'mud', fr. rt. saus-. Lith. augmū (gen. augmēns) 'growth, ex-
[Text content]

Indg. a.

§ 101. Indg. *bhaghnu-s 'elbow': Skr. bāhū-ś 'arm', Gr. Dor. παχυ-ς 'fore-arm, elbow', OHG. buog O.Icel. bógr 'elbow'
Indg. *ma-ter- 'mother': Skr. mātār-, Arm. mair, Gr. Dor. μήτηρ, Lat. māter, O.Ir. māthir, OHG. mouter O.Icel. mōder mōdir, Lith. motē ('wife'), O.Bulg. mati.

The tautosyllabic diphthongs aj and ay were not, as it seems, frequent in prim. Indg. -aj ending of the dat. sg. of a-stems: Skr. su(v)-apatyai (su(v)-apatyā- 'having a beautiful posterity'), Gr. χώρα, O.Lat. Matuā 'Matutae', Goth. gibai 'to a gift'. Skr. nāś 'ship', Gr. ναῦς fr. *ναύς (§ 611).


1) Gr. φέρω, φέρε for *φαρά, φαρέ with vowel quality after the analogy of the indic. and conj. forms with o, e as Hom. conj. τομες, αὐρά, Att. indic. φέρει, φέρει.

Aryan ā corresponds not only to Indg. ā but also to Indg. ē (§ 70), ō (§ 86), and to long sonant nasal (§ 253). Here may be discussed certain changes which prim. Iran. ā, irrespective of its origin, underwent in Avestic.

1. After y, ā became ē before i, i, y, c or j in the following syllable. kārayāṇi: Skr. kārayāmī causat. fr. kar- 'make', cp. Lat. moneō. ver'syētī 3. sg. act., ver'syētē 3. sg. mid. conj. of ver'syēmi 'I work, do': cp. Lat. capiēt, capiētur. Cp. ē fr. a § 94.

2. ā became ō before u, ū or v in the following syllable, but the orthography is mostly inexact, since ā also occurs. vi-dōtu-s 'demon of the dead' beside abl. vi-dataōp. Cp. o fr. a § 94.


§ 103. Armenian. eibair, gen. eibaur, 'brother' (§ 263): Skr. bhrātār-, Gr. qęṭωq (member of a qęṭēla), Lat. frater, O.Ir. brathir, Goth. brōpar, Lith. broter-čli-s (little brother), O.Bulg. brar-ū, Indg. *bhrātor-'brother'. nav, gen. navu, 'ship': Skr. acc. sg. nāv-am; the Arm. word is, however, not free from the suspicion of having been borrowed from Persian.

-rāς -rār-os 'youth': Skr. dēnā-tat- (gen. dēvā-tat-as) 'deity, worship', Lat. novi-tas, gen. novi-tat-is, 'novelty'.

In Ionic-Attic ᾥ became η: ἑδος, φημι, νεότης. This was in certain Ionic dialects an open e in comparison with the Indg. ē in θή-σω (§ 72). This passage to η is older than the first appearance of Att. Ion. τάς, πάσα fr. τάνς, πάνσα (§§ 205. 618). Forms like νυμα ἱνδά beside σφῆ fr. -η(ο)ς-α etc. render it more probable that the ē in Att. ἱάσμα, καρδία, γενέα, σικώα, πράγμα, χώρα etc. (Ion. ἱάσμα, καρδίη, γενέη, σικώη, πράσω, χώρη) goes back to an open ē than that it should be an unchanged Indg. and prim. Gr. α.


In Umbrian open o fr. α in the nom. sg. of a-stems and in the nom. acc. pl. neut. of o-stems, as the fluctuation between o (u) and a shows. etantu mutu 'tanta multa' and panta muta 'quanta multa'. vesklu and veskla 'vascula'. triiu-per trio-per 'rer' and triia 'tria'. The same o-sound in pihaz pihos 'piatus', Casilo 'Casilas' (dat. Kasilate Casilate). In Oscan likewise ú, u, o, u for the final a in the nom. sg. of a-stems and in the nom. acc. pl. neut. of o-stems. Fem. víú xiu 'via'. molta
§ 103—108. Indg. a in O.Ir. Germ. and Balt.-Slav.


In the following examples the i after a indicates the i-timbre of the following consonant. fáith 'poet' fr. *yati-s: Lat. vátēs, cfp. of the stem *yati-. taid 'thief': O.Bulg. tati, cfp. of the stem *tati-: Skr. tāyā-š 'thief', Gr. Dor. τάραμαυ 'am bereft, in want'. gāir 'call, cry': Gr. Dor. γάγ-ν-ς 'voice, speech'. Cp. § 640.

In unaccented syllables mostly a for á. tūatha nom. pl. of fem. tuath (fr. *teytā) 'folk' beside mnd fr. st. mnā- 'woman'. Adjectives in -ach fr. *-aco-s (cp. Gall. Benacu-s, Dunmacu-s and others), as cnoc-ach 'hilly' from cnocc 'hill'. Cp. §§ 613. 657. Concerning the dat. pl. tūathaib i. e. tūath*ib s. § 640.

§ 107. Germanic. Goth. sokjan OHG. söhhan soahhan suahhan suohhan OS. sökian 'to seek': Gr. Dor. āyōμαι 'I lead or show the way', Lat. sāgu-s 'predicting' sāgēre 'I track, perceive'. Goth. stōls 'throne', OHG. stuol OS. Ags. stōl O.Icel. stöll 'stool': Lith. pa-stōla-s 'frame, scaffold'. Goth. brōpar OHG. brooder O.Icel. brödr brödir 'brother': Lat. frater. Verbal stems in -ō, e. g. salbō- 'anoint' part. pass. Goth. salbōps OHG. -salbōt 'anointed': Gr. περα- περατέω, Lat. testa- testatur-s.

Indg. a and ē fell together in ē already in prim. Germ., s. § 91. What was there said concerning the treatment of ē = Indg. ē in Goth. and OHG., also holds good for ē = Indg. a. For the shortening of final ē in polysyllabic words cp. e. g. Goth. nom. sg. piuda fr. prim. Germ. *peyū, orig. *йтеа.

§ 108. Baltic-Slavonic. Lith. ė, Lett. Pruss. a, O.Bulg. a (prim. Slav. a, s. § 615).

Lith. broter-čli-s 'little brother' bróli-s 'brother', Lett. brē-ši-s 'brother', Pruss. voc. brāti, O.Bulg. bratr-ń 'brother': Lāt frāter. Lith. motē 'wife', Lett. māte 'mother', Pruss. po-mātrę


ə is to be inferred for the Baltic unitary period. This ə remained in Lett. and Pruss., whilst it became ɔ in Lithuanian. Lith. ɔ is still pronounced very open in the Memel dialect, whereas elsewhere, probably in most places where Lithuanian is spoken, it has a close articulation. The universal Lith. shortening of the broken accented vowel e. g. in the nom. sg. žėmā (orig. f. *ghej-mā) arose at a time when ə, or at all events an ɔ differing very little from pure ə, was still spoken (§ 664, 3). This short ə just as ə — Indg. ə (§ 84) is pronounced as open e in many dialects after j and palatalised consonants, e. g. gijė = giję f. 'thread', gire = giria 'forest'.

ə arose in Slav. in those cases where ə with the following nasal became a nasal-vowel. Acc. sg. ženə 'wife', orig. f. *gena-m. 1. sg. seza 'veho' = Lat. veham, cmp. *vegha-m. Cp. § 219.

Indg. ə.

§ 109. This vowel, whose quality cannot be more precisely determined — it may be pronounced as a sound lying between ə and ɛ — appears in many root syllables as the sonant of the secondary accented weak grade ( §§ 315—317). We denote it by ə following the general practice of writing ə for the 'indistinct vowel-sound'.

In Armenian and European it fell together with Indg. ɛ ( §§ 93—100) (for the representation of it in Greek s. below), but was still separated from this in Aryan: Indg. ə = Ar. ə, but Indg. ə = Ar. ɨ, only before i-vowels = ə (cp. Hübschmann Das idg. Vocalsystem p. 1 ff.).

Indg. *pō-tēr- 'father': Skr. pitar-, Arm. hair gen. haur, Gr. närkos, Lat. pater, O.Ir. aithir, Goth. fadar. Indg. stə-,
§ 109. Indg. ə in root-syllables in Ar. and Armen.


b. Armenian. ta-m 'do' ta-mk 'damus' fr. rt. form do- 'give'. daiz (dal) 'beastings' daieak (gen. dayekī) 'wet-nurse' fr. dhē-; weak grade to rt. dhē(j)- 'suck' (cp. a.). ba-n 'λόγος' (rt. bhā-) either from bhē- (Gr. ḍā-μεν) or bhā- (Gr. ḍη-μι, Lat. fa-ma), see § 316.

c. Greek. ad-ṇv 'abundantly, enough': Lat. sa-fur sa-tis, O.Ir. sa-thech 'satiated', Goth. sa-ps 'satiated', Skr. a-si-no-ā-
'insatiable', fr. rt. sa- (O.Ir. sāith 'satiets', Goth. sō-þs 'satisfying', Lith. só-tis f. 'satisfying, satiety'). παλαι-φα-το-ς φα-τι-ς φα-μιν fr. rt. δια- 'speak'. λαβεῖν beside λαγῖν 'to escape', rt. λαθ- τακεῖν 'easy to melt' ταγεῖν beside τήκειν, rt. τάκ-.

The weak grade forms of α-roots regularly retained α. In like manner also the forms which became isolated through their development of meaning: δά-νος fr. rt. δό- and λαγ-αρό-ς 'slack, thin' λαγ-όνες 'the flanks, loins': Lat. laxu-s, OHG. slach OS. slac 'slack' O.Icel. slakr 'slack, idle' fr. rt. slōg- (Gr. λήγω 'I leave off' ὀ-λήγητο-ς 'incessant'); also δάκρυο-ς 'finger', in case it is connected with O.Icel. taka 'to take' beside Goth. tēkan (pf. taitōk) 'to touch'. In other cases α, in forms from ε- and ο-roots, took the timbre ε and ο after the analogy of forms with η and ω: θε-τό-ς fr. θη- 'set', ετό-ς = Lat. satū-s fr. η- 'throw', σύν-δε-το-ς cp. Skr. sā-di-ta-s fr. δη- 'bind', με-τρο-ν fr. με- 'measure' (Lat. mé-tior), δο-τό-ς = Lat. da-tu-s fr. δω- 'give πο-τό-ν 'beverage' fr. πω- and others. Cp. ωφ, ωλ for regular αφ, αλ = Indg. ἰφ, ἰλ after the analogy of οφ ωφ, ωλ λω = Indg. ἰ in ἕ-νοο-ς-ν etc. § 306.

Rem. Fick's hypothesis (Bezzenberger's Beitr. IX 313 ff.) that the vowel triad α, ε, ο in στα-τό-ς, θε-τό-ς, δο-τό-ς is a continuation of three different prim. Indg. vowels, is not at all convincing.


Lat. sa-tu-s fr. rt. sō- 'sow' in sē-men. spa-tiu-m 'space' fr. rt. spē(ι)- 'extend' in spē-s, Lith. spē-ti 'to be at leisure, to be quick enough', O.Bulg. spē-ti 'to progress, have success'. lassu-s 'weary, tired': Goth. lats 'weary, idle', fr. rt. lēd- in Goth. lētā 'I let, leave'. Lat. ca-tu-s 'sharp' beside cōs cōtis 'whetstone'.

For the treatment of Lat. α in syllables which, according to prim. Late accentuation, were unaccented, e. g Juppiter; s. § 97.

The form -airissið, 2. pl. of -airissim ‘I stand, stand still’ fr. rt. stā-, probably may not be traced back to *(pari-)*si-sta-te and directly be placed equal to Gr. ἥσσα-τε, as can be the case with Lat. sisti-te = ἥσσα-τε (§ 97 p. 91), since the form *-airessið with the influence of the a on the preceding syllable would be expected; cp. also 1. sg. -airissiur, which points to *sistið.


For the treatment of a in OHG. (e. g. gen. steti to nom. stat) s. § 83.


§ 110. In prim. Indg. ø was frequently spoken directly after the root syllable. Some regard this ø as forming a fixed part of the root and speak of disyllabic roots; whether rightly (cp. p. 17), or not is here a matter of indifference.

The forms, which the vowel in this case assumes in Lat. and O.Ir., are explained by the laws which hold good for unaccented syllables in these languages, cp. §§ 97. 98.

In Greek it appears as α, η, ω. A still closer investigation is needed to determine on what the various timbre in this
case depends. The explanations hitherto attempted are unsatisfactory.


Skr. kraviṣ- 'raw meat', Gr. κρέας, cpf. *cretos-; Skr. ḍoṣi- 'flame', Gr. γηρας 'old age'.

Skr. tan-i-ṣyāmi 1. sg. fut. act. fr. tan- 'stretch, extend', vēd-i-ṣyāmi fr. vid- 'know', var-t-i-ṣyē 1. sg. fut. mid. fr. var-t-turn'. ávēd-i-ṣam 1. sg. aor. fr. vid- (cp. also vēd-i-tum inf., vēd-i-tar- 'knoweg'), áyās-i-ṣam fr. yā- 'go'. Gr. fut. tēv-s-o tēvō (tēvō 'I stretch'), xoμ-ā-w xoμēō fr. the verbal stem xoμa- 'hang
up' (cp. κρατ-α-θρα 'a basket to hang things up in'), Hom. ὀτούμαμον fr. ὀτο-ο-ομαι fr. the verbal st. ὀμ-ο- 'swear' (cp. ὀμ-ο-της 'swearer'). Plusquamperf. ἦδο-ε-α, opt. pf. εἶδ-ε-ετ-ν, opt. aor. δειδ-ε-εαν. Lat. fut. pf. vid-ε-ερό (= Gr. εἶδ-ε-ω) dix-ε-ερό, conj. pf. vid-ε-ερίμουs (= Gr. εἶδ-ε-ετ-νυ) dix-ε-ερίμουs. Here perhaps belong also the Slav. aor. in -ο-чю, e. g. 1. sg. нес-ο-чю, 2. pl. нес-ο-ст from несα 'I carry'.

Pres. Skr. vām-i-mi 'I vomit', ῥόδ-i-mi 'I lament, weep'. Gr. κρεμ-α-mai 'I hang'; εμίω 'I vomit' is probably a transformation of *fεμ-ε-μai = Skr. vām-i-mi. Lat. vom-i-s, vom-i-t (cp. Skr. vām-i-ṣi, vām-i-ti) may be forms of this class, which, being associated with legis legit and the like, was the cause of their passing into the 5-conjugation; here probably belongs also vol-u-mus (συ-μουs a new formation, after which 1. sg. s-u-m).

It also seems necessary to assume Indg. s in certain flexional syllables. Nom. acc. pl. neut. Skr. bhārant-i Gr. χρογοντ-α = Indg. *bhěront-α, part. pres. fr. rt. bher- 'bear'; cp. on the other hand voc. Skr. āṃba, Gr. νύμφα, O.Bulg. єнo with Indg. -α §§ 93, 94. Are the personal endings Skr. -mahi and Gr. -μθα (1. pl. impf. mid. Skr. ābharā-mahi, Gr. ἵψο-μθα) to be traced back to an Indg. *-medhα?

Vowel contraction in the indg. primitive period.

§ 111. The Indg. long vowels and ą- and ą-diphthongs, whose regular representation in the individual branches of languages has been exhibited in §§ 28—108, were not, as may with probability be assumed from an etymological analysis of word-forms, originally monosyllabic, but first became so by contraction.

Rem. As regards the putting down of pre-historic forms we follow this principle: where by analysis a form can be deduced as being originally disyllabic, and all languages concurrently exhibit it as monosyllabic, we regard the contraction as having already taken place in the prim. Indg. period, e. g. the pf. stem ęd- (rt. ed- 'eat', Lat. ēd-imus etc.) which, after the analogy of perfect stem forms whose root begins with a consonant, is to be resolved into an older *-ęd-1).

1) Since it is here only a question of the formative-typē in general, it is immaterial whether this very example belongs to the oldest of its
Observe further: when an isolated form in a single language presents two vowels directly coming in contact with each other (but neither arising from the meeting together of two stems or words, nor due to the elision of a consonantal element which originally stood between the vowels), of which the first is an a-, e-, or o- vowel, it is never, so far as can be seen, the regular continuation of a prim. Indg. form with uncontracted vowels, but always a new formation. Here belong, e.g. the Homeric conjunctive forms ἔσπομιν, πορίστροφον etc. and Goth. 1. sg. pf. altuk (āukan 'to add, augment'). Cp. also § 600.

The following are examples of forms which became monosyllabic in the Indg. prim. period. They, of course, all rest upon etymological analyses only and their hypothetical character should not be mistaken.

§ 112. I. Contraction of a-, e-, o-vowels with a-, e-, o-vowels.

The product of the contraction was everywhere a, e, or o. When the two vowels differed in quality, the product regulated itself after the quality of the first. Cp. Osthoff Morph. Unt. II 113 ff., Zur Geesch. d. Perf. 123 ff., Bremer in Paul-Braune’s Beitr. XI 264 ff.

§ 113. I. a arose from:


a + o. Conjugative stems in -a- fr. -a-o-, e.g. Skr. Ved. 1. pl. yunāma (1. sg. ind. yu-nd-mi 'I bind to'), Gr. Dor. ιυ-νά-μου (Att. δονομοι is a new formation).

kind, and accordingly a dissyllabic e-ē- as predecessor of ē- was once really spoken, or whether ē- first made its appearance after the termination of the process of contraction and on coming into existence took its ē after the analogy of other perfect stems.
Rem. The Indg. nom. acc. pl. neut. *jugā (Skr. Ved. jugā, Lat. junga) fr. stem *jugo- presents difficulties. If a (or ə) was the case suffix: why not *jugō or *jugē? If Osthoff is right (Zur Gesch. d. Perfl. 123 f.) that the product of contraction only assumed the quality of the first vowel, when the second did not contain the chief accent of the word, one might think of an older *jugo-ə or juge-ə (respec. -ā). But it is equally possible that Indg. *jugā is to be looked upon as jug-ā, i.e. the stem forming suffix was dropped before the case ending (tonlos tiefstufe, 'unaccented weak grade' § 311).

§ 114. 2. ē arose from:

ē + a. Perfect stem *ēg- fr. *ē-aug- (fr. rt. aug- 'drive, lead'):

1. pl. Lat. ēg-imus Skr. dā-imā. Instr. sg. of -o-stems, e.g. *qē fr. stem *go- 'who', Gr. Lacon. πη-νοὺα 'usquam' or 'unquam', Goth. hvē: Skr. instr. in -ə can equally as well be placed here as to the form in Indg. -ō fr. -o-a. (§ 115).

ē + e. Perfect stem *ēd- fr. *ē-ad- (rt. ed- 'eat'):


Skrs. ds-am, Gr. Hom. ἡν, Att. ἡ.


§ 115. 3. ə arose from:

o + a. Dat. sg. masc. *ekusō fr. *ekus-u (ekus-o-s 'horse' = Skr. dśva-s, Lat. equo-s): Av. -ai, Gr. -o, Lat. -ō, Osc. -ū. Instr. sg. of the same class of stems in -ə fr. -o-a: Lat. -o (modo, cito), Gr. -o (since a number of adverbs in -o-ω-ς are probably instrumentals, not ablatives), O.Ir. -u (cēlīn fr. cēle 'comrade'), OHG. -u, Lith. -ū (gerū fr. *gerū, as gerū-ju shows, s. § 664, 3); the Skrs. instrumentals in -ə can equally as well belong here as to the form in Indg. -ē fr. -e-a (§ 114).


§ 116. II. Contraction of a-, e-, o-vowels with i- and u-vowels.

ēj fr. e+i, oj fr. o+i. Loc. sg. of o-stems partly in -ēj, Gr. -ē, Osc. -ēj, partly in -ōj, Gr. -ō, OHG. -e O.Bulg. -ē (compare however § 84 rem. 3).


1) Skr. mā-d, tvā-d, asmā-d permit the assumption that in the abl. sg. -ad and -ād stood beside each other in the same manner as -es, -ēs and -a in the gen. sg. Lith. vilko and Slav. vljka ‘wolf’s’, whose ending is to be traced back to an orig. form with ā on account of Lith. ā (§ 108), can only stand in an indirect relation to Lat. -ād and Gr. -o; they are a problem of a similar nature as Indg. *juga ‘iuga’ (§ 113 rem.).

B. THE VOWELS AS CONSONANTS.

§ 117. Of the vowels ascribed to the prim. language there were two, i and u, which were employed both as sonants (i, u) and as consonants (ᵗ, ᴱ). It is not possible in every case to draw a sharp line between Indg. i, u and the Indg. spirants j, v. (§§ 554. 598).

i, u can everywhere be assumed with certainty, where they correspond to an i and u of other forms of the same form-system, or stand in ablaut relation to i and u. 3. pl. *i-ṅṭi (Skr. y-ánti) beside 2. pl. *i-té (Skr. i-thá) fr. rt. ej- 'go'. 3. pl. *qi-nuṅṭi (Skr. ci-nu-ánti) beside 2. pl. *qi-nu-té (Skr. ci-nu-thá) fr. rt. qeį- 'to set in rows'. Nominal-suffix -jó- beside -i(j)ó-, as *medhjo- (Skr. mádhya-s Gr. ἡμέσσο-ς fr. *mēθyo-ς 'medius') besides *patri(j)ó-s (Skr. pitriya-s Gr. πάρτου-ς 'patrius'). *dyō 'two' (Skr. ved. dvā, Gr. δύο-δεκα) beside *dui(u)b (Skr. Ved. duvā, Gr. δύο) . Nom. pl. *trej-es 'tres' (Skr. tráy-as) beside loc. pl. *tri-su (Skr. tri-ši). Nom. sg. *djęu-s 'sky' (Skr. dyāu-š, Gr. θέος) and loc. sg. *diu-i (Skr. diw-ś, Gr. Δύ-ς). Root form *sup- or *syop- in Skr. sváp-na-s 'sleep, dream' beside *sup- in Skr. part. sup-tā-s, Gr. ὑπ-νο-ς.

Where i and u were missing from Indg. times in formations which properly should have weak grade, the probability is for j, v. E. g. the participles Skr. tyaktā-s, Gr. σέντα-ς exhibit the rt. tjeg-, not tieg- ('step back from something', hence in Gr. 'to be timid, to honour with pious awe'), since from tieg- the form *tiqtā-s would have to be expected. Skr. bētē Gr. μισθα 'lies' permits the assumption of the rt. kej-. Rt. ves- 'clothe', not ves-, on account of Skr. pr. mid. va-vas-e, etc. Cp. § 307 ff.

In Greek initial ζ ἄν and ' decide whether we have to do with j- or j-, e. g. ζέω 'I seethe' fr. rt. jes-, ζυγόν 'yoke' fr.

In every case where the spirantal value of the sound can not be determined with certainty, or with great probability, we write the Indg. orig. forms in this work with i, u.

In most Indg. languages i and u, in dissyllabic vowel combinations as iu, ua, were spoken as glides: ija, uya. This sound must have existed also in the Indg. unitary period. We assume therefore e. g. *pātr-ιό-ς and *duyō as the Indg. orig. forms of Lat. pātrius, duō etc. Cp. Sievers Phonetik 7 146, Osthoff Morph. Unt. IV 398 ff. Analogously i and u also before nasal and liquid sonants, e. g. *sīj-γt = O.Lat. sīent (sint) fr. rt. es- 'be', *έ-κιλίκ-γt = Skr. āśriyan and *ke-κιλίκ-γtāj = Gr. Hom. ̣νιλαμεν fr. rt. ̣κέλι- 'lean against'. i and u in this case corresponded to the r in *is-pro- (Skr. iśirā-, Gr. Core. laqō-ç) and to the n in *tyn-ν- (Skr. tanu-ñ, Lat. tenn-i-s) etc., s. §§ 223, 4. 284, 3.

Indg. i.

Prim. Indg. period.

§ 118. Initial i only before sonants. Pronominal stem *ίν- (Skr. śme-) 'ye, vos': Skr. nom. yāydm Abl. yuśnad, Arm. je-r 'your', Gr. ὄμης 'ye', Goth. jūs 'ye', Lith. jūs 'ye'. Skr. ya-ti 'goes', Av. jār n. 'year', Gr. ὀφο-ç 'year' ὦφα 'time', Lat. jānu 'entrance, door', Goth. jēr 'year', Lith. jō-ju 'I ride' O.Bulg. jadq 'I drive, ride', jarū m. jara f. 'spring'. Skr. yānti fr. Indg. *i-ṛti (3. pl. of *e-ми 'I go').

§ 119–120. Primitive Indg. i


Present stem *my-je- fr. rt. mer- 'die': Av. mer'yeiti, Lat. morior; Gr. σωπω 'I struggle convulsively', Lith. spriū 'I push with the foot', opf. *spr-įd (§§ 284, 2. 286).

i as glide after i. For examples see §§ 117. 120.


Postconsonantal i often interchanged with ĭ in prim. Indg. (in the same manner as u, a, m, r, l with uevo, ąn, ęm, ęr, ęl, §§ 153. 227. 287). A formative element assumed various shapes not only in different words, e.g. suffix form -iô- in *pitr-iô- (Skr. pîtrīya-s Gr. πάριος Lat. patrius) beside -jo- in *medh-jo-(Skr. mādhya-s etc., s. above), but also in the same words, e.g. stem forms *diēy- *dīeu- (Skr. nom. dyātī-ς acc. dyātin, Lat. Dio- Osc. Diuv-ēi Dov'ēi 'Jovi', Lat. diem) beside *dīeu-*dīeu- (Skr. dyātī-ς etc.). In this change it is a question of a difference of ablaut-grade, e.g. *giī-ă (Lith. giįė 'thread', Gr.
\[\beta\acute{o}-\varsigma\] 'bow' for older -\[\beta\acute{o}\alpha,\] s. Osthoff Morph. Unt. IV 188) represents the secondary accented (nebentonige) weakgrade form, but \[\delta\acute{g}-\delta\] (Skr. \textit{jyā} 'bow-string') the unaccented (tonlose); cp. §§ 307 ff. and 670.

We shall here confine ourselves to cases in which no ablaut (the opposite of weak and strong grade) can be determined. From the investigations hitherto made concerning the origin of the double forms \[i\acute{i}\] and \[i\acute{\i}\] (s. especially Sievers in Paul and Braune's Beitr. V 129 ff., Hübschmann Kuhn's Ztschr. XXIV 362 ff., Osthoff Morph. Unt. IV 353 ff., Zur Gesch. d. Perf. 421 ff.) the following may be given as probable:

After initial consonants the change depended on the nature of the final syllable of the preceding word. In the parent language they may have spoken \[*\textit{só sījēt} = \text{Skr. sā syāt} 'he may be', but \[*\textit{tōd sījēt} = \text{Skr. tāt sīyāt} 'that may be'\] (cp. also Goth. 1. sg. \textit{s-iyān}). Double forms may also here be shown as pres. st. \[*\textit{mr-ijē} = \text{Av. mer'yē-it} \text{Lat. morio-r}\] beside \[*\textit{mr-iijē} = \text{Skr. mriyā-tē, Oot. st. \textit{bhū-iijē} = Av. 3. sg. \textit{bu-yā-p, Gr. Cypr. \textit{vū-η} beside \textit{bhū-ijē} = O.Pers. 3. sg. \textit{b-iya fr. rt. bhēy- 'be, become'} (cp. Osthoff Zur Gesch. d. Perf. 426 ff.).} \[*\textit{tōd mrijetāi}
that dies' possibly stood originally beside \[*\textit{só mrijetāi} 'he dies',\] impf. \[*\text{ē mrijeto}.

\[i\acute{i}\] was used medially after short syllables, \[i\acute{\i}\] after long, especially after consonant groups. This is seen most clearly by the suffix -\[jo\]. Cp. on the one hand \[*\text{medh-jo} - 'medius' (s. above); \[*\text{al-jo} - 'alias' = Arm. \textit{ail} Gr. \textit{άιλο-} O.Ir. \textit{ail} Goth. \textit{aljī-s}; and on the other \[*\text{patrio-jō - 'patrīus'} (s. above); \[*\text{ekh-ijō - 'equīnus' = Skr. \textit{āśvya-s} Gr. \textit{ίππio-ς}; \[*\text{ghesl-ijō - 'deriv. of \textit{gheslo} - 'thousand'} = \text{Skr. sa-hasriyā - 'thousand-fold', Gr. Lēsb. \textit{χέλλοι} - 'thousand'; \[*\text{mort-ijō} = \text{Skr. \textit{ā-martiya- 'immortal}, Gr. \textit{á-mysthōs-ς} (βοστός for \textit{μυτhός} through the influence of \[*\text{βωτά-ς \textit{mortuus}}); \[*\text{nepht-ijō = Av. \textit{naptiya- 'relation}, Gr. \textit{ἄνεγμo-ς} 'first cousin', O.Bulg. \textit{netij}i 'first cousin' (-\[i\] fr. -\[i\] - \S 36); \[*\text{nuv-ijō} = \text{Skr. \textit{nāvīya- 'navigable}, Gr. \textit{ναύo-ς νηo-ς 'belonging to a ship'}; also especially the established difference in Goth., e. g.
between gen. sg. harjis (harja- ‘army’) and hairdeis (haìrdja-‘shepherd’), cp. § 84 rem 1.

It may be presumed that regular forms occasionally suffered interruption in their development already in prim. Indg. through analogy. This certainly frequently took place in the separate developments of the orig. language, as e. g. Skr. Ved. gāv-ya- (beside gāv-ya-) ‘bovivarius’ after such forms as āsviya-, Gr. Dor. -zaría Aread. -kávou (δια-κάρου ‘two hundred’ etc., cp. Skr. -śatya ‘consisting of a hundred’) after χίλλων (χίλιοι). But, besides this, i.e. fr. i arose in Aryan (§ 125) and Lat. (§ 135) by regular development.

§ 121. Anteconsonantal. i only occurred in this position after α-, α- and o-vowels, with which it formed ‘diphthongs’, e. g. 3. sg. *yójâ-e ‘knows’: Skr. vêda, Gr. Forâ, Goth. váit. For the fate of i in these combinations cp. §§ 61—108 and § 150.

§ 122. Finally. ḳ only occurred finally as the second component of diphthongs, cp. nom. pl. *tôi ‘the’ = Skr. têi Gr. Hom. roî etc., dat. sg. in -āi of a-stems (§ 101 extr.). The treatment in the individual languages was generally the same as before consonants, cp. e. g. Skr. tô with vêda (= Gr. Forâ). When conditionally final (in the body of a sentence), i also stood after consonants, e. g. Indg. *prośi eberom may be assumed for Skr. praty-abharam Gr. προσ-έβερων ‘I brought forward’. Cp. § 645 finals 2.

Aryan.


Brugmann, Elements.
Gr. ἄζομαι 'I honour, stand in pious awe of' fr. *daγγομαι (§ 131), ἄγος n. 'veneration'.

The difference between initial Indg. i- and j- is still seen in Skr. ptc. iṣṭ- fr. yaj- 'honour' (Gr. ᾨγ-ως) and yas-tā fr. yas- 'bubble, seethe' (Gr. τέω) and similar forms. See §§ 117. 318. 598.


In Av. for final -ayē (= prim. Ar. *-ayā) -ē is written and for final -ayem (= prim. Ar. *-ayam), -em, e. g. dat. sg. matēē = Skr. matāy-ē (nom. sg. Av. maiti-ś Skr. maiti-ś f. 'sense, thought'), 1. sg. impf. vaedaem 'I let know' = Skr. (d-) vēdayam, prim. f. *vōdejo-m, rt. vēd- 'know'. See Bartholomae Handb. §§ 93. 95. 224. 290.


In Vedic ī often interchanged with ē, e. g. āśv-īyā—'inνος', rāj-īyā-m' 'dominion' (cp. Lat. rēgiu-s), mitr-īyā—'friendly' but sat-īyā—dat. abl. pl. prajd-bhiyas beside pra jd-
‘posterity’) pitṛ-bhyas (pitār- ‘father’), etc. Cp. § 120. In the classical language mostly only ḷ occurs, e. g. only bhyas, only rāj-ya- etc., only opt. syām ‘sim’. The old grade ḷ remained however e. g. in mr-īya-tē ‘moritur’, kr-īya-tē ‘is made’ (kar- ‘make’) and similar presents; in the opt. (preceptive) kr-īyā-t from kar- and similar forms; in the aor. a-śī-śriy-a-t fr. īray- śri- ‘lean against’; in the instr. sg. bhīyā fr. bhī- f. ‘fear’ (cp. Ved. part. bhīy-ānd-, Lith. bij-au-s ‘am in fear’) striya from strī- ‘wife’ (but ḷ in other than initial syllables: datryā fr. datrī- ‘donatrix’). In the popular dialects ḷ frequently appears for the ḷ of the classical language, without the quantity of the preceding syllable being a criterion in the same manner as in Vedic. In this case it is undoubtedly, partly at least, not a question of Indg. ḷ or analogy, but of a purely regular evolution fr. consonant + ḷ (as in Lat.), e. g. Pāli māri- yāda = Skr. maryāda ‘mark, boundary’; ariya- = Skr. arya- (-iy- very frequently after r); kammaṇīya- beside kammaṇīa- = Skr. karmaṇya- ‘operative, active’; Prākr. cōriam = Skr. caurya-m ‘theft’; uddisia = Skr. ud-dīṣya absolutive ‘by pointing to’. With Prākr. ia for ija cp. niutta- = Skr. ni-yukta- ‘bound to’.


Final -ja -ja, which was still retained in the Gāpā dial. as -ya (i. e. -ya and -ya, § 649, 1), appears after consonants, especially after ḷ, (= prim. Ar. s, § 558, 3) as -y. yeḥ, Gāp. yeḥya : Skr. yā-sya, gen. sg. fr. ya- ‘which’.


In Av., as in Vedic, the metre shows that ṣ is often to be read as iy especially after long syllables, e. g. bāmya- ‘beaming, shining’ as bāmiya-, dat. pl. hitaṇḍbyō = Skr. sitaḥ-bhyas ‘vincit’ as hitaṇḍhiyō. This is further shown by the preceding voiceless
explosives not being changed into spirants, e. g. \textit{dāitya-} 'legal' was \textit{dāitya-}; because \textit{*dāṭa-} would have become \textit{*daiḍya-}, as e. g. \textit{haiḍya-} = Skr. \textit{satya-} 'true' shows (§§ 353. 473).

In Old Persian \textit{iy} or \textit{īy} mostly occurs (the latter only graphically different from \textit{iy}, s. § 21). In a number of cases in which these spellings are found, the pronunciation may have been \textit{ī} as in Ved. and Av. But this can only be directly supported in cases where the preceding \textit{t} was not changed to \textit{s} (§§ 353. 478), e. g. \textit{martiya-} 'homo' = Av. \textit{maṣiya-} (§ = \textit{r}t § 260) Ved. \textit{mārtiya-} (§ 120 p. 112). In most cases, however, \textit{iy} (\textit{īy}) will have to be read as \textit{i}, certainly in \textit{hasiya-} (= Av. \textit{haiḍya-} Skr. \textit{satya-}) and others, where \textit{s} was caused by \textit{ti}, probably in \textit{aniya-} (= Av. \textit{anya-}, Skr. \textit{anyā-}), \textit{maniyaḥ} (2. sg. conj. pres., to Av. 1. sg. indic. pres. \textit{manya}, Skr. 3. sg. pres. indic. \textit{mányatē} fr. Ar. \textit{man-} 'think'), 3. sing. opt. \textit{jamiya} (= Av. \textit{janyāḥ} Skr. \textit{gamyādē} 'eat') and others of the same kind.

On the other hand O.Pers. \textit{tya-} 'which' is to be read as \textit{tiya-} on account of the non-change of the \textit{t}, cp. Ved. \textit{tiyā-} beside \textit{tyā-} 'that, the'.

§ 126. Anteconsonantal and finally. The vowel remained \textit{i} after \textit{a} (\textit{ai}) in Sanskrit, whereas in prim. Ar. and prim. Skr. \textit{ai} became \textit{e}. Prim. Ar. and prim. Iran. \textit{ai} appears in Av. as \textit{ae} (i. e. \textit{ae}) or \textit{əi}, finally as \textit{-əi} and \textit{-ə}, prim. Ar. and prim. Iran. \textit{əi} as \textit{əi}; prim. Ar. \textit{əi} and \textit{əi} remained unchanged in O.Pers. (\textit{ai}, written \textit{-aιy -ay} when final, and \textit{ai}).


§ 126—130. Indg. ķ in Armen. and Greek. 117

Av. sata- 'centum', Gr. -ος (§ 611). Av. dat. sg. mazıštai fr. st. mazısta- 'maximus': Gr. μεγίστος.

Cp. §§ 62. 78. 94.

§ 127. The transition of ķ to a palatal spirant.

y was probably everywhere a consonantal vowel in Vedic and classical Sanskrit. Whilst initially and frequently also medially it became a spirant in Prākrit, hence e.g. ja- 'which' (आ) = ya-, kajja- n. 'business, trade' (कार्य) = kārya-

Bartholomae (Handb. pp. 9. 36 f., cp. also Hübschmann Kuhn's Ztschr. XXIV 354 f.) thinks that it had partly a spirantal function in Iranian. The change of prim. Ar. tenues into spirants seems to have been caused by this in every case. (§ 473).

Armenian.

§ 129. It is here difficult to ascertain the sound-laws owing to the scarcity of reliable etymological material. In any case ĵ probably did not remain unchanged.

Initial ĵ seems to have became a spirant j in je-r 'your', which is generally connected with Skr. yu-šma- Lith. jūs 'ye'. ĵ disappeared after consonants. ĵu 'a breaking up', to Skr. cyu-li-š 'quick motion, departure from something'; it is not however clear whether the prim. Indg. rt. is qjeu- or qjeu-. Epentheses appears in ail, gen. ailoy, 'alius' fr. *alio- (Goth. alja- Gr. ἀλλο- etc.).

For the rest we refer to Hübschmann Armen. Stud. I 78.

Greek.

§ 129. Initially uniformly ū, which presupposes a voiceless ĵ as intermediate stage. ūō 'who': Skr. yā-s. ṣap̄o 'liver': Av. yākar∗, Skr. yakṣ, Lat. jacur. āyō-ū 'holy, venerable': Skr. yajñā-ś 'offering'. υμιττη 'battle': Skr. yudh- 'fight'. Lesb. ū fr. ĵ; υμμες 'ye' beside Att. ἦμες, to Skr. yuṭ-šma-, cp. Lesb. ὅ fr. ķ = Skr. sā § 564.

§ 130. Intersonantal. ĵ between vowels, when the first was not ū, dropped out in prim. Gr. (except when, after i, it
served as a glide to the following vowel, e. § 131). διος 'fear' fr. δεξιος, Hom. pf. δειδω i. e. δειδω 'I fear' probably from δειδω (ξ)+, rt. δεις. Nom. plur. τρεις 'three' fr. τρεις (α)+ς : Skr. trāy-o. 1. sg. φαίνω 'I frighten, scare away' : Skr. bhājāyami 'I hunt'. The cases, in which ι seems to have been retained in this position, are new formations, e. g. Arcad. τελω 'I atone for, pay' not = Skr. cāy-a-tē, but a formation from τελω τιω (Skr. cāy-a-tē) after τελω ἔτεσα etc., Hom. ὄκνωμ σ beside ὄκνωμ 'I hesitate, linger' not fr. ὄκνω-μω (cp. ὄκνος 'hesitation'), but formed after such presents as τελω fr. τέλεσ-μω 'I finish' (§ 131).


When the second vowel arose from Indg. sonantal nasal:


§ 131. Postconsonantal.

ι- became υ-μην (υ) 'thin skin' υ-μης-ος 'hymn, song', to Skr. sya-man- 'cord' sya-ta-s 'sewed', cp. further the compounds with kar(α) κάσταμα Att. κάρταμα - anything stitched, leather sole, νεό-κάρταμον 'new-soled'.

Postvocalic s and ι became palatalised by a following ι, then the latter combined with the preceding vowel to form a diphthong (§ 639). Gen. sg. *το-σιο 'of the' = Skr. tā-sya became τοιο, Hom. τοιο, Att. τοι. Hom. τελω Att. τελιο 'I complete' fr. τελεσ-μω st. τελεσ- 'end', cp. Skr. nāmas-ya-ti 'honours' from nāmas- 'honour, respect'. Hom. τήν 'sim' fr. *Δην, cp. Skr. sydm; the - in the Att. form τήν is due to the
influence of *ελένη. *χλαφ-ιω 'I weep' (fut. χλαφιασμα) became *χλαφω, hence Hom. Att. χλαδω, but *χλαφε- Att. χλαδ- in χλαδες etc., like δαίμω 'brother-in-law' fr. *δαιμη = Skr. dēvar-, s. § 96. The double forms χλαδω, and χλάω, as well as καιω and καύω 'I burn, light' (fut. καύσω) are due to levelling: the forms were originally χλαδω χλάες χλάει χλαδευεν etc.

*κτεν-ιω 'I kill' became κτένω in Lesb. and κτενω in Att. (by compensation lengthening). *αμεν-ιων 'better' became Att. αμεινων. Bæot. Άμεινολεός Arcad. Άμεινες Cypr. Άμεινα. *φθερ-ιω 'I destroy' became Lesb. φθέρω, Att. φθερω, Arcad. φθηρω. Πειρ-(ανθος-ζ) = Lesb. πειρ-(ανθος-ζ) fr. *πειρ-. These forms show that Hom. ειν and ύπερ, which arose from *ινε, *υπερ before words beginning with a vowel, are due to compensation lengthening. πειρ- Dor. πηρ- (Πιερ-θος-ζ, Πηρο-θος-ζ) is a mixture of περι + πειρ- (Dor. *πηρ-), as is also Hom. εινε of ειν + ειν. Cp. § 618.

Whereas *στελ-ιω 'I order' became universally στέλλω, *άλλο-ζ 'alias' Att. etc. ἀλλος, but Cypr. άλλος. Cp. §§ 130. 699.

Indg. γι γι, κι, τι, δι, ψι appear as σο, ττ, see § 489; Indg. δι, δι, δι as τζ (σο), δι, s. § 493.


The prim. Indg. duality ἰ and ἴ was preserved e. g. in μίςος μίςος 'medius' (fr. *μεθ-ιος = Skr. mādhy-a) compared with πάτρως 'patrius' (= Skr. pātriya-s), in ἤδειω 'I do, work' (fr. *ΧΘΕΥ-ιω, cp. § 120) compared with ἠδ-ιω 'I sweat'. On the other hand the Lesb. forms μέτερπος, ἄλλοτερος = Att. μέτρος 'moderate', ἄλλοτερος 'alienus' etc. show a sound-change which took place within Greek itself: μέτρος became *μετρήω, *μετεριος, thence μετερρος (§ 626). It seems to me more probable that the ζ in Lesb. ζα, καρζα, Ζώνζος, Cypr. χάζα and others, beside διά, κυρζία, Απώνζος (s. Meister Griech. Dial. I p. 127 ff.) is due to a Gr. change of ι to ι than to regard it as an old inherited double form as in the case with μίςος and πάτρως.
The Cypr. orthography Παρίμα, ἰαρήγαυ, Pamphyian. δυά, Εὐφράκτης (= 'Ἀσπενίδης') (read ἵ), and other facts show that the antevocalic ι was pronounced -ια- in words like παρήγας. The ending -ιό-ς was therefore probably the unchanged form of Indg. -ιο-ς.

§ 132. Anteconsonantal and finally.

The Indg. anteconsonantal ει, οι, αι, οι, οι, αι can all be proved to be pure ι-diphthongs up to historical times. E. g. εινα (= Indg. *εινα 'I go'), οδε (= Indg. *υοίδε 'he knows'), γραφε (= Indg. *βηρεταί 3. sig. mid. fr. rt. βερ- 'bear'), τπνοι τπνο (= Indg. *εκποι 'to a horse'), χωρέω χωρέω ('to land' with Indg. ending -αι) were, in Attic, still pronounced with ει, οι etc. about 500 B. C.

But ει, οι, αι underwent manifold changes even at an early period. In certain cases ι became ε, and in others the consonantal vowel coalesced with the first component to form a simple long vowel. S. §§ 64. 80. 96. In the Middle Ages monophthongs were generally the only forms still met with.

The first component of ει, οι, αι was shortened before consonants in prim. Gr., e. g. τπνος = Skr. ṛśvaiṣ (§ 611). When final, they remained unchanged up to historical times. But then final ι became mute at the same time with the new ι in the combinations, ιμ, ομι, αμ (γι, ϝι, αι) which in the meantime had often arisen before consonants, as γτς 'ye went', οιδος 'easy'. This process however did not extend itself over the whole language at the same time; it seems everywhere to have taken place with ιμ earlier than with αμ and ομ. Towards the end of the third Cent. B. C. they were still only spoken as simple vowels in all or most dialects, e. g. τππο as hippō, γτς as ἐτε.

Italic.

§ 133. Initially. Indg. ι and ι fell completely together in ι, written ι in Lat. words, and ι in Umbr.-Samnitic. Indg. ι e. g. in Lat. jecur 'liver': Skr. yakft, Gr. γνας. Cp. Lat. ju-gw-m 'yoke': Gr. γυγό-ς, with Indg. j-. It is frequently uncertain
whether a form represents Indg. i- or j-: Lat. jōcu- 'joke', Umbr. iuka ‘ioca': Lith. jūkas 'joke'; Lat. juven-i-s juven-cu-s, Umbr. Ivengar nom. iuvenac' (i- fr. *iun-): Skr. yuvan- 'young' yuvā-śā-s 'youthful', Goth. jūggs 'young'.

Several centuries after the beginning of the Christian era Lat. j- (i-) became a spirant which became developed to dē: cp. e. g. Ital. giovane Fr. jeune with Lat. juvēnis.


Lat. finīō 'I finish' represents an older *fīni-iō. from fīni-s, just as Skr. Ved. arāṭi-yā-ti 'is hostile, bears ill-will' from ārāṭi-ś 'hostility'. Notwithstanding the orthography -iō we must probably assume that i was not quite mute. This consonant however disappeared by contraction in fīnis, fīnīte, whose original endings were *-i-je-s, *-i-je-te. Cp. § 135 concerning fieri, patrius etc.

1) Some forms, in which i was only apparently retained, as in Osc. stafet, Umbr. fuia 'flat' portaia 'portet', will be disposed of in the accidence.
Indg. *gmi- (Gr. βεινει) 'I go' became *gmenið in prim. Italic (§§ 208. 239), thence Lat. venið; Indg. pres. st. *mi-Jo- 'die' (Av. 3. sg. mer'-ge-ititi) became prim. Ital. *mori- (§ 296), thence Lat. morior, s. §§ 120. 135.

§ 135. Postconsonantal. ï was only retained as a consonant in this position when a consonant had disappeared before it. Lat. Jov-is, Umbr. Iuv-e 'Osc. Iuv-eí 'Iovi': Skr. ṅyaú-ṣ, Gr. Ζεπ. Lat. âjó 'I say' fr. *ah-jo or *ah-jo beside ad-agînum: Skr. pf. 3. sg. dha 'said'; májor 'greater' beside mágmu-s: Skr. máhājus- 'greater'; cp. § 510.

In other cases ï became sonantal, a process which may be compared with the transition -μο- to -νο- (§ 170), of -clo- to -culo- (intermediate stage -çlo) etc. (§§ 269. 627). E. g. medi-s: Skr. mādhy-s; alius: Gr. ἀλλο-γ; acupedi-s 'quick-footed': Gr. πεζ-ο-ς; con-spiciō: Skr. pāśyāmi; capiō: Goth. haffja. In like manner also venið, morior directly fr. *venið, *morīð (cp. § 134). That ï was spoken (if only with a weak articulated ï), is probable in itself, and is vouched for by such spellings as Fabius, Corneliia (Seelmann Dio Ausspr. des Latein. p. 237).

The form socius fr. *sokm-jo-s (rt. seq- in sequor, cp. Gr. α-συνηή ἡ helper' with ασ = ù, §§ 131. 489) is of interest for the chronology of the change of -j- to -ji-, since ù probably dropped out at a time when ï, not already ïi, was still spoken.

Further such forms as capis capit fr. *capjes *capjet = Goth. haffis haffip, cape fr. *capi (like mare fr. *mari, § 33), the latter fr. *capje, also point to this old ï, likewise nom. alis, Cornēlis fr. -jis cp. Lith. mėdis fr. *medgis (§ 84 rem. 1).

Rem. It is hardly probable that we have still an older ï for i(ï) in such quantities as arjui (fr. avε-i), princjum, facjās, found in Roman poets, these possibly follow the prevalent pronunciation of some dialect. It is quite incredible that a similar one holds good for prim. Romance *medjus (Italian mezzo) etc. (Diez Gramm. d. rom. Spr. I* p. 179 ff., Horning Ztschr. f. rom. Phil. VII 572 f.).

On the other hand Indg. ï seems to have remained unchanged in the following cases. Lat. gen. pl. trium: Goth.
We cannot tell whether the i was consonantal or sonantal in Umbr. faśia, Volsc. faśia ‘faciat’, Umbr. avis dat. ‘auspicis’, Osc. mēfial ‘in media’, diuvia- ‘Iovia-’ and other similar forms in the Umbr.-Samnite dialects. Whereas jō may be traced in spellings as Umbr. Vuśia-per ‘pro Vicia’, Osc. Iūvīa ‘Ioviam’ (cp. Osc. Meelikiicis Mvliyōn), and i in such as Umbr. vistiśa vestīsa beside vostiśa vestiśa abl. ‘libamento’, spinam-ār beside spiniam-ā ‘ad spinam’. Osc. s from tj in Bunsæ ‘Bantiae’, x fr. dj in zicolom ‘diem’ (cp. Lat. diēcula). j seems to have sprung from older jō in both forms; the zetastic process may have been limited to the local dialect of Bantia.

§ 136. Anteconsonantal and finally.

Indg. eij, oij, aij were still diphthongs in prim. Italic. At the beginning of historic times eij seems to have become an open i in Lat. and Osc., the orthography ei was at all events retained for a long time after the diphthong had become monophthong (§ 65). oij and aij were certainly still diphthongs at the beginning of historic times. They became in the first instance oeg and aeg. For their further development s. §§ 81. 97. Prim. Ital. eij, oij, aij are met with only as monophthongs in Umbrian, e. g. etu eetu ‘ito’ fr. prim. Ital. *eitōd, un u ‘unum’ fr. prim. Ital. *ejono-m, see ‘si’ = Osc. sañ sae.

The first component of dij, sij, aij was shortened before consonants in prim. Lat. or prim. Italic, e. g. Lat. oloes illis = Skr. -dīṣ, Indg. *-aṃs (§§ 85. 612).

Final *-aṃ became -o in Lat., e. g. dat. sg. aequo = Gr. ἀναψα; Marius Victorinus knew -oī ex libris antiquis foederum

1) nōbis, nōbīs probably not fr. *-bhīṣes = Skr. -bhīṣas in Ved. prajāḥ, bhīṣas etc. (cp. Stolz Lat. Gramm. § 90), but a transformation of *-bhī after sīṣes, in the same manner as sībi was of *-bhī after sā, cp. Skr. tābhīṣaṃ ‘tībi’, yusūṃ-bhīs-am ‘rovis’ with particle -am (see the accidence).
et legum; perhaps still the old -οῖ. -αῖ became -ά, e. g. Dat. Ματαία 'Matutae' like Gr. χώρα; -αί may still be represented in the oldest inscriptions in such forms as Μενερβαι, whilst -αε is the locative ending of later times. Osc. dat. Αβέλλανύι 'Abellano', δείβατ 'divae'.

Old Irish.

§ 137. Initially. In most words which come under consideration it cannot be determined whether the initial sound was Indg. ʰ- or ʲ-, and traces of this Indg. difference have not, so far as I know, hitherto been proved in Keltic. The consonant was dropped in Irish, but was retained in the Gallo-Britannic branch.

Indg. ʰ- in Iud- ('strife, fight') found in many Britann. proper names, as O.Cymr. Iud-nerth (nerth 'strength'): Skr. yudh- 'battle, combat', Gr. νίχη.

Whether the following have Indg. ʰ- or ʲ- is doubtful: O.Ir. ʰæc ʰce Cymr. ieuanc Corn. iónenc Bret. iaonank 'juvenis' Gall. Iovincillum-; prim. Kelt. *iōmoko-s: Skr. yuva-śa-s; O.Ir. compar. ʰa (Bret. iaou), superl. ʰam: Skr. yáu-yaṣ-, yáu-iṣṭha-. O.Ir. ʰêt 'zeal', Gall. Iantu-mārus (cp. Mid. Ir. edmor = O.Ir. *etmar 'jealous, zealous' fr. ʰêt + mār 'great'). O.Ir. aig 'ice', Cymr. ia (= *iag) 'ice', Bret. ien (= *iagin) 'icy'. Other Gall. proper names with ʰ- as Iura, Iuvavum s. Zeuss-Ebel p. 47.


-ε with palatalisation of the preceding consonant (§ 640) appears for -jo- in the Indg. endings *-jo-s, *-jo-m and for *-ją, e. g. aile 'alius', aile n- 'alium'; neutr. suide n- 'seat' fr. *sodjo-m: Lat. soliū-m; nūs 'new': Skr. nāva-s, Indg. *neu-jo-s (cp. §§ 66.
154); fem. aile ‘alia’. This -e also appears in cases where according to § 120 we should expect an original -ijo-, e. g. orpe n- n. 'hereditas': Goth. arbi n. 'inheritance'.

Rem. The process, which gave rise to this -e, is not clear. We do not know whether in this case we have also to take into consideration the suffix form -ji- (§ 84 rem. 1) for the masc. and neut., and for the fem. a suffix form as in Lith. žolę 'root, plant'. Thurneysen conjectures that *aljus first of all became *alios (cp. Lat. alius), thence *alios (is) (is is to be read as palatalised l), aile; correspondingly in the fem. *aljā, *alā *alā, aile: cp. Gall. Allisea = Alisia and similar forms.

§ 140. Anteconsonantal and finally. In accented syllables ei became ē (ia) § 66; oj became oe, finally i § 82; ox became ae. finally i § 98.


Germanic.


Indg. i-. Goth. jér OHG. jär n. 'year': Av. yar n. 'year', Gr. ὄχος 'year'. Goth. jus (a?) 'vos': Lith. jūs, Gr. ἕυεις.

Indg. j-. Goth. juk OHG. joh n. 'yoke': Skr. yugā-m, Gr. τεγόνυ 'yoke'.

It is uncertain whether we have Indg. i- or j- : Goth. jewgs (jwgs?) OHG. jung 'young', prim. Germ. *juyum-ga-s: Skr. yuvā-śa-s Lat. juven-ct-s.

Goth. j- was i-. In OHG. (and OS.) i- before e and i became a spirant, which was written g, e. g. gēn 'yon', gehan 'to say, speak', indic. pres. gihu, but pret. iah iahun; s. Braune Adh. Gramm. § 116, Holthausen Die Soester Mundart § 182. Prim. Germ. i- dropped out in O.Norse: O.Icel. ar, ok, ungr = Goth jēr, juk, jewgs.

§ 142. Intersonantal.

Goth. fem. stem ijō- 'ea': Lat. ea-, cpf. *ejā-.

gostje, cmp. *ghosteij-es. 2. sg. imper. Goth. nasei OHG. neri 'save, nourish' fr. *nazi-i(i) (Goth. s for z after the analogy of nisan 'to recover, be healed', s. § 581), Goth. fra-vardei 'destroy (something)'; Skr. vartāya 'let something take its course', Gr. φόβει 'scare' fr. *qoβei(ζ), Indg. *-ēje. Cp. §§ 660, 1. 661, 2.


It is questionable whether Goth. 1. sg. opt. batrāu (indic. bufra 'I bear') is regularly developed from *bhervi-yn prim. Germ. *bervin(n) (§ 244) (Paul in Paul-Braune's Beitr. IV 378, VI 161, Osthoff Morph. Unt. IV 302, Zur Gesch. d. Perf. 626).


Indg. ēi- appears in Goth. before vowels as ai- (aij-). saia 'I sow', 3. sg. saiyp (also saijip, saijand): Lith. sėju O.Bulg. sėja 'I sow', cmp. *sējo. armaiō f. (st. armaiōn-) 'compassion' (from arma 'I pity', 3. sg. armāip), prim. Germ. *armējōn-. In unaccented final syllables as -ai- fr. original -ē-je-: 3. sg. armāip fr. *armē-ji-ī(i), *-ē-je-ti; it is here a question of the present-class which is represented in Lat. by habēre, tacēre, silēre (Goth. haban, pahan, silan). In OHG. we have the forms sāan (sāhan), sān, sācn (i = ē), sāwan (OS. sāian, Ags. sāwen, O.Icel. sā) as compared with Goth. saian and the form armēt as compared with Goth. armāip.

Rem. 1. The much discussed question as to the history of antevocalic ēi in Germanic (recently more fully discussed by Paul in Paul-Braune's Beitr. VII 152 ff., Kögel IX 509 ff., Bremer XI 46 ff.) has not yet been completely cleared up. The following seems to me to be the most probable.

*sejō existed up to the end of the prim. Germ. period. The ai in Goth. saia was the long vowel of the ai in bufra, namely an open ē,
which vowel is certainly to be assumed also in loan words as *hairaisis = Gr. ἀέρας (Gr. ας was an open ɛ in Ulsha’s time); s. Braune Got. Gramm. 3 § 11. Cp. Goth. au before vowels § 179. It is probable that the ɛ in *snijąš was still prim. Germ. -ɛ-, but it must not be maintained as certain. We may apparently assume for West Germ., where ɛ became ɛ (§ 75), that ɛ partly (before a and guttural vowels) regularly dropped out and that then ɛ made its appearance before guttural vowels as glide (1. sg. sawu), after which by form assimilation ɛ became also used before guttural vowels and ɛ before palatal; and at this stage the different dialects took different directions. One might also assume that those forms in which ɛ regularly dropped out were extended by analogy to all other forms and that ɛ was later generated again as a glide in sā-is, sā-it etc. Original ɛi in unaccented final syllables was treated somewhat differently. 3. sg. *armęjidi became *armęji (with open ɛ), thence Goth. urmdǐp and OHG. armišt. For Goth. 1. sg. arma, 1. pl. armam, see the preceding.


Rem. 2. It is remarkable that ɛi and ɛi were treated differently before consonants, but I see no plausible means of avoiding this assumption.

After short vowels -i- occasionally appears as -đi- in Goth. Gen. pl. tvaddjē ‘duorum’: Skr. deva-yā-. dennja ‘I suckle’: Skr. dhāyā-mi. iddja ‘I went’: Skr. ā-yā-m. To this -đi- corresponded O.Norse -gg-, e. g. O.Icel. sveggja : Goth. tvaddjē. In Westgerm. the original prim. Germ. ‘sound’ generated an i, which, uniting with the preceding vowel, formed a diphthong, and when the preceding vowel was i, an ɛ, e. g. OHG. zweijo: Goth. tvaddjē, Frija: O.Icel. Frigg. The conditions for this universal Germ. special treatment of -i- have not been determined. Cp. § 179 and Kögel in Paul-Braune’s Beitr. IX 523.

Rem. 3. The consonant, developed before the prim. Germ. ɛ-sound in Gothic-Norse, was a palatal ɡ. Nothing stands in the way of our assigning this palatal value to O.Icel. ɡg before i. This sound moved further
Indg. ɪ in Germanic.

§ 142—143.

forward in Gothio and became (dorsal?) ɪ (ɛd). See Braune in Paul-Braun’s Beitr. IX 545 f.

Indg. Combination -yɪ-. Goth. glitmunja 'I shine', like Gr. ονωκαιμο 'I sow' with seed', Indg. -my-ɪo (§ 245). Goth. kuni, st. knuja-, n. ‘sex, race’ fr. *yɪ-ɪo-, sama-knuja- 'of the same race or family' to Gr. ὅμο-γνο-ς, which stand to one another in the same relation as Lat. morior to Skr. mṛiyē 'I die' etc. (§ 120 p. 112).

Goth. -j- was -ɪ-. The frequent spelling with g in OHG. points to a spirantal pronunciation, e. g. pluogentiu to blunoian 'to blossom', wort-sāgo 'seminiverbius' to sāian 'to sow', 3. pl. opt. pres. salbogēn beside salboiēn salboēn from salbōn 'to anoint', cp. § 120 extr.

§ 143. Postconsonantal.

Consonant + ɪ in the initial syllable was not retained unchanged.


The ɪ of *sɪj- united with the following u to form a diphthong in Goth. sīujan OHG. siuwan 'to sow', OHG. siula 'awl' (cp. Skr. syu-tā-s 'sewn', Lith. sūla-s 'sewn', sūla-s 'sewing thread'), likewise in OHG. chiuwan 'to chew' fr. *giō- (cp. O.Bulg. ღiゅa 'I chew' fr. *xjūa *xjūa, §§ 52. 147).

Rem. With sīujan, as compared with midwan-garde 'sphere of the earth' (i. e. *midjam(a)-gards) etc., compare þius 'servant' fr. *þia(a)-z (gen. þie-i) with sunjus 'sons' fr. *sunij(i)z (cp. § 179).

Medially.

Goth. midjis midja 'medius media': Skr. mādhyā-s mādhyā. aljis 'alius': Gr. ἀλλο-ς. bērus-jōs 'parents', properly partic. 'having brought forth': cp. Lith. gen. sg. partic. pf. sikuš-io of siku 'I turn'. Cpt. vīlijān 'velim'1) for orig. *vel-jē-m (with this cp.

1) The ending formed after the analogy of baɪrṇu, s. the accidente.
§ 143—144. Indg. į in Germanic.

sijāu for orig. *s-iū-m). hafja 'I raise': Lat. capiō fr. *capiō. Verbs in -atja as kāupatja 'I give a box on the ears', svōgatja 'I sigh' like Gr. verbs in -āi,ō fr. *-ai,ō. Of the nom. sg. hai̯reis 'herdsman' fr. *xirāii(ī)-z (cp. 3. sg. fra-vardeisp fr. *yardeis(ī)d(ī), § 142) as compared with harjis 'army' we have already spoken in § 120, we refer also to § 660 rem. 3; pl. hai̯redjōs fr. *xirāiiōz like 1. sg. fra-vardeja fr. *yarda,ō. Goth. namnja 'I name' may be regarded as the representative of a prim. Germ. form *namn-iūō, so that it would stand to glitmun-ja 'I shine' (§ 142) in the same relation as Skr. mr-iyū-tē to Av. mer*-ye-iti (§ 120 p. 112) and as Gr. πόν-ν-α to τέκταν-α (fr. *tektr̩-n-a § 234).

In OHG. į had suffered manifold changes the course of which it is to some extent difficult to control, because no difference was made in writing between į (j) and i, and because the fate of į was connected with the West Germanic consonant-lengthening which arose before this consonant (§§ 215. 277. 529. 532. 535. 540).


In other respects postconsonantal į- was still retained in the oldest period, e, that is ē, was also written instead of į, and disappeared in the IX cent. willio willle (read -willio willļo) willlo 'will, desire': Goth. vilja m. heff(i)an : Goth. hafjan 'to raise', bito(i)an : Goth. bidjan 'to beg'.

į had already disappeared before į prior to the time of our oldest monuments. 2. sg. bitis: Goth. bidjis 'thou beggest'. Dat. pl. herīm fr. *her-īim (and further fr. *-iem, *-jom): Goth. harjam 'exercitibus'. More will be found regarding postconsonantal į in OHG. in Braune's Ahd. 3ramm. p. 83 ff.

§ 144. Anteconsonantal and finally.

Indg. eį* became į, į in prim. Germ. 1. sg. *stiμ (Goth. steiga) 'I ascend': Gr. ἀστεῖω. Loc. sg. *χαιμι (OHG. heimi
\( \text{hēthūs} \) 'at home': cp. Gr. οἶκος 'at home' (Kögel Zeitschr. f. deutschf. Altert. 1884 p. 118 f.). See § 67.

Indg. \( \text{o}i \) and \( \text{ai} \) fell together and have partly remained \( \text{i-} \) diphthongs up to the present time. 3. sg. Goth. váit OHG. wēiz Mod.HG. weiss : Gr. \( \text{φῶς} \). Nom. pl. Goth. \( \text{þai} \) OHG. \( \text{þē} \) dē 'the': Gr. τοῦ. OHG. seita f. seito m. 'string, cord': Lat. \( \text{svētō} \) 'strong hair, bristle', Lith. \( \text{sētā-s} \) 'cord', from rt. \( \text{sak-} \) 'bind'. See §§ 83, 89.

Goth. dat. sg. fem. gūbāi 'to a gift' fr. orig. -\( \text{ā} \)i : Skr. Ved. -\( \text{ā} \)i. Gr. -\( \text{α} \). See §§ 659, 3. 660, 3.

**Baltic-Slavonic.**

§ 145. Initially. Indg. \( \text{i} \) and \( \text{j} \)- fell together in \( \text{i} \)-, which has retained the pronunciation as consonantal vowel in historic times. Acc. sg. fem. Lith. \( \text{jū} \) O.Bulg. \( \text{jē} \) 'eam': Skr. \( \text{yā-m} \) Gr. \( \text{ēv-ŋ} \) 'quam', Indg. *\( \text{jā-m} \). Lith. \( \text{jō-ju} \) 'I ride, drive', O.Bulg. \( \text{jūḷa} \) 'vehor'! : Skr. \( \text{yā-mi} \) 'vehor', Indg. *\( \text{jā-} \). Lith. dial. jeknos pl. 'liver': Lat. jecur, Gr. Ἰάνκο. Lith. \( \text{jūs} \) 'vos': Skr. \( \text{yūyām} \), Gr. \( \text{μῦς} \).

In Slavonic-initial \( \text{jē} \)- became \( \text{i-} \)-. \( \text{i-ē} \) 'qui' fr. *\( \text{iē-ē}, \) beside which \( \text{jē} \) (= Lith. \( \text{jē}s \), cpf. *\( \text{jī-s} \), § 84 rem. 1), which was analytically attached, remained ; cp. especially the 'definite' declension of adjectives, as \( \text{dobrjējē} \) and \( \text{dobrjījē} \), and bereto \( \text{jīt} \) = beretū \( \text{jē} \) with the same change of \( \text{ū} \) to \( o \) as in domoch(ū) = domūčū §§ 52, 665, 5. \( \text{igo} \) 'yoke' fr. *\( \text{sīgo} \), older still *\( \text{sīgo} \) : Skr. \( \text{yugā-m} \), Gr. ζυγό-ν with Indg. initial \( \text{j-} \). 

§ 146. Intersonantal. Lith. vejū O.Bulg. \( \text{vējā vējā} \) 'I turn, wind': Skr. \( \text{vāyāmī} \) 'I weave', cpf. *\( \text{yējō-ō} \). Lith. \( \text{dveyjā} \) 'by twos' O.Bulg. \( \text{dvējē} \) 'twofold': Skr. \( \text{dvayā-} \) 'twofold'. Lith. \( \text{sēju} \) O.Bulg. \( \text{sējē} \) 'I sow': Goth. saia, cpf. *\( \text{sējō} \). Lith. \( \text{lōju} \) O.Bulg. \( \text{lēju} \) 'I bark': Skr. \( \text{vāyāmī} \) 'I bark'. Lith. pāsako-ju 'I relate', O.Bulg. lēkwa-ju 'I deceive' : cp. Skr. \( \text{pratanā-yā-mī} \) 'I fight'. Lith. at-saj-ū 'horse traces' fr. rt. \( \text{sak-} \) 'bind'. O.Bulg. gostiže gostiže

1) The orthography \( \text{rdē} \) beside \( \text{jvēdā} \) is due to a false representation of the sound-combination \( \text{ju} \), which was occasioned by the change of orig. \( \text{ē} \) to \( \text{u} \). (§ 76).
§ 146—147. Indg. ţ in Balt.-Slavonic. 131


Lith. ţ and Slav. ţ retained the pronunciation ţ between vowels.

§ 147. Postconsonantal.

Lithuanian. Here a distinction must be made according as a palatal vowel (e, i) or another followed.

ţ dropped out before palatal vowels already in prim. Baltic (J. Schmidt Kuhn's Ztschr. XXVI 331 f. and 339). Voc. sg. svetē fr. *svet-je, to nom. svečiaus 'guest' fr. *svet-ja-s. Comparat. sald-čes-ni-s (fr. saldū-s 'sweet') fr. *jes-nji-s, formed with the comparat. suffix -jes- = Skr. -yas-. Nom. sg. žiniū 'earth', Lett. fene, Pruss. sēmē, prim. Balt. *šem-je; see the accident for the rotation of this suffix form to -jā in gļria gļre 'wood, forest' (beside gļre), žiniā žinē 'tiding's (Lett. ūņa) and in O.Bulg. zemēja, as well as to martā (gen. martē) 'bride' patē 'spouse'. geras-is 'definite' form of the adj. gēras 'good', beside jls. Nom. sg. mēdis 'tree' (gen. mēdēis) fr. *med-ji-s (ţ retained after vowels: mō-ji-s, gen. mō-jo, 'sign, nod'), Indg. -ji-s (§ 84 rem. 1); whereas lōkys 'bear' (Lett. lāzis) with -ys fr. *-i-ji-s like Goth. hartdeis fr. *χαρδ-ii-ż; i. e. we have here a manifestation of double suffixes -jo- and -ijo-, respectively -ji- and -ii- (§ 120), which in Baltic were brought into relation in the nom. sg. with the varying position of the word-accent.
Postconsonantal ī remained longer before other vowels than before ē, ī. It softened the preceding consonants and then mostly disappeared in this palatalisation, so that the ī, which is now-a-days written between consonants and following vowels, is simply to be regarded as a sign of the softened pronunciation of the consonant. This softening is more intensive in the south-eastern dialects than in Pruss. Lithuania. spiānu 'I spit': cp. Gr. πρῶω fr. *(a)πτώ-ιω (§ 131). siū-ta-s 'sewn': Skr. syā-tā-s. Gen. sg. plīko (pliki-s m. 'pitch'), st. plīkia-, orig. *piq-jo-: cp. Gr. πιθα fr. *πυ-ια. arīū 'I plough': O.Bulg. orīq. *ti-, *dī- became czi-, dži- i.e. softened tū, dū, e.g. gen. sg. tēczio fr. *tētjo (tēti-s 'father'), mēdžio fr. *medjiō (mēdī-s 'tree'); this affection is not old; tī, dī occur still in the dialect of Memel and are pronounced similarly to softened k, g etc. Whilst Indg. *neu-jo-s 'new' (Skr. nāpya-s 'new') became naujās naujēs, Indg. *grej-jo- (Skr. krava-y m 'raw meat, carrion') became kraūjas kraūjēs (cp. Pruss. Vocab. cräuyo).

ī remained in Slav. after p, b, v, m, but in a part of the Slav. languages (amongst which O.Bulg.) a soft l was developed. O.Bulg. pljuti 'to spit' fr. prim. Slav. *(s)pju-ti: Lith. spiā-ti. Indic. pres. 1. sg. zoblīja 2. sg. zoblījėsi etc., inf. zobati 'to eat'. Fem. zemļa 'earth': cp. Lith. šemė.

ī palatalised l, r, n, and then disappeared (as in Lith.). orīq 'I plough': Lith. arūi. tēlja 'ground, pavement': cp. Lith. pl. tēlės 'foot-boards in a small boat' (§ 304). vonja 'smell' fr. orig. *anjā (§ 666, 1) fr. rt. an- 'exhale'. The softened consonants are represented in manuscripts by r, l, n or rj, ĭj, nj or are simply written r, l, n, e.g. volq, volīja and volq beside volq acc. of volja f. 'will, wish', morć beside morje 'sea'.

following ū, it did not prevent this process of assimilation. sū-mōstrja 'I look, consider' fr. *mostr-üş, inf. sū-motriti. Adj. w-út. buštrje 'vigilant' fr. *būdr-je. u-mršteljja 'I kill' (part. pret. pass. u-mršteljenit) fr. *u-mrštivja (for the interpolated l a. p. 132), inf. u-mrštiviti. The form tlišta corresponded to oštrja 'acuo' fr. *ostrij, inf. ostriti, derived from ostru 'sharp', the t of which was excessent (§ 545).

Rem. 1. In the phonetic explanation of this influence of ū on a preceding t or d, and consonant-groups containing them, we must start from sūk, stūk, strū. The treatment of these prim. Slav. combinations in the Slav. dialects shows that the whole combination preceding the ū was first of all softened. There arose: *gvox'd'ů, *ruxt'ů, *ostr'ů ('indicating the softening); ū after t, d in the first two forms then became a palatal spirant (x' voiceless, y' voiced): *gvox'd'y'ů, *tuk's'y'ů (pronounce d'y' and t'y like Russ. ūb and Tū). In O.Bulg. specially *sotr'ů became oštrů, and *gvox'd'y'ů, *tuk's'y'ů became first *gvox'd'z'ů, *tuk's't'ů (pronounce d'z' and t's like Polish dź and c'), then *gvox'd'z'ů, *tuk's't'ů and lastly *gvox'd'z'ů, *tuk's't'ů (cp. below for št fr. *sků).

Analogously *med'ů, *met'ů became in prim. Slav. *med'ě, *met'ě, and then *med'yě, *met'yě. Hence specially in O.Bulg. through anticipation of the spirant *mey'd'yě, *mey't'yě, further *med'ě'ů, *met'ě'ů — *med'yě'ů, *met'yě'ů. The O.Bulg. forms sū-mōstrjů, u-mršteljů, buštrje were also prepared for already in prim. Slav. in so far as ū had softened the whole combinations tr, t'r. dtr. But it must here be observed that the š and ż depending on the anticipation of the palatalism are not always written in the monuments, e.g. sū-motr(j)enije beside sū-mōstr(j)enije n. 'consideration' (Miklosich Vergl. Gramm. I p. 220). We do not decide as to how this fluctuating orthography is to be judged.

That the O.Bulg. combinations ūd and ūt were spoken soft (dź, śt) follows from such spellings as mulečūdě (ě sign for ū) beside mulečūda 'hope', sočjū beside sočju 'our' dat. sg. of the part. sy. ūor met with in most monuments. Cp. rem. 4.

From prim. Slav. ki, gi (mostly = Indg. gi, gi, ghi, § 461) arose in prim. Slav. ě (i.e. tū), dū, the latter was weakened to ū in O.Bulg. pri-tūća 'comparison' fr. *tūkja. liūt 'mendacious' fr. *liūji; OHG. lukki 'mendacious' (prim. Germ. st. *luχia-); liūja 'mentior' fr. *liūji, inf. liūgati.

Analogously skū became sč i.e. stū, hence by assimilation.

1) ū, ū are the softened ū, š. Cp. Ar. ū and š §§ 20. 21 596 and elsewhere.
of the sibilants štē, further historic št (more correctly št, cp. rem. 1). ēstä ēšteši etc. fr. *iskijā, inf. iskati ‘to seek’.

Rem. 2. Cp. vēšteši ‘to begin’ fr. *vēšteši = *vēš + četi. Further on account of the O.Bulg. change of št to št, the loc. sg. človēčestē beside človēčestē from nom. človēčiskih ‘human’ and inf. istēliti beside istēliti ‘to heal’ (st fr. stē) are instructive.

Beside this treatment of prim. Slav. kē, gē there is also a change of them to c (i.e. ts) and dē, the latter was weakened to ts in O.Bulg. in the beginning of the literary period (Miklošich Vergl. Gramm. I5 251 ff.). Nom. sg. in -čē m., -ša n., -ca f., e.g. junčē ‘young bullock’ fr. *junikē, širēšce ‘heart’ fr. *sredikē, ovča ‘ovis’ fr. *ovikejā. Neut lice (gen. lica) ‘face’ fr. *likē. Fem. stīza ‘way’ fr. *stigjā. The treatment here in question took place at a later period of the prim. Slav. language than the one above, viz.: at the same time when the instr. sg. *takēni (O.Bulg. takē ‘talis’) became tucēni (§§ 84. 462). Therefore a *junikē was only formed to *junikē and an *ovikejā to *ovike after the law, whereby kē became c, had already ceased to operate. The voc. junče still belongs to *junikē (cp. vlīčē: vlīkē), so too junčē ‘taurinus’, ovčē ‘ovinus’ are also directly to be referred to *junikē, *ovikejā 1).


1) No direct historic connexion, consequently, exists between junčē and Lith. junikis, gen. junikio ‘bride-groom’ (properly ‘juvenculus’) in spite of their similar suffix formation.
Rem. 3. In those cases where Indg. ę had passed into ě in prim. Slav., ě is not to be traced back directly to ę, but first of all to či (cp. snūčinī 'like a daughter-in-law' adj. fr. snūčinā 'nurse': Skr. snuci, Indg. *snusā). Cp. § 588, 2. 3.

These affections of prim. Slav. ę (= Indg. ě, ď) and ę (== Indg. ģ, ġh), caused by ě, took place also when an l or n stood between them. O.Bulg. myšlją : inf. mysliti 'to think'. blažnįja : inf. blaznitī 'to lead astray'. Here ě first palatalised l, n and thus extended its influence to ę, ę, but disappeared in the softened l, n, according to the remarks made above under ri, li, ni. Cp. oštrją (inf. ostritī) fr. *ostrją above, rem. 1. myšljā : piša, nesiša = ostrją : tlišta.

Rem. 4. That O.Bulg. č, č = orig. qi, qō, qhi; ě, ě = orig. f, f, fhi and č, č = orig. s, s were spoken soft, follows from the spellings with a following ğ, found in most monuments, as mąqju beside mažu dat. sg. of mažš 'man' (st. mažš- fr. *maqju-), dušą beside dušą acc. sg. of duša 'soul'. Cp. rem. 1 extr.

§ 148. Anteconsonantal and finally.

Indg. ėj = Lith. ėj and ė, Slav. ė. Inf. Lith. ė-ti, O.Bulg. ě-ti 'to go' from rt. ěj-. Lith. žė-mą O.Bulg. zi-ma f. 'winter': Gr. χεῖ-μα. S. § 68.


Final Indg. -oį retained the ō down to the Lith. language period, hence Lith. dat. sg. vilkui 'to a wolf', Gr. λύκῳ (§ 664, 4). Whilst the instr. pl. vikais = Skr. yākaiy presupposes the change of ĭ to ė in an earlier period; s. § 615.

Loos of ě in the primitive Indg. period.

§ 149. ě after an initial consonant has frequently been dropped in the different Indg. languages, without its loss being
able to be explained by the sound-laws of the languages in question. E. g. from rt. sīkər- ‘sew’, Skr. sū-tra-m ‘yarn, string’, Lat. sūs sūtus, OHG. sau-m O.Icel. su-m-r m. ‘hemmed edge, seam’ beside Skr. syū-tā- ‘sew’, OHG. siuuan ‘to sew’, siut ‘seam’. Upon this Osthoff bases his neat conjecture (Morph. Unt. IV 19) that the first ī in pres. forms like *sīkər-ī ‘I sew’ *sīkər-ī ‘I spit’ disappeared by dissimilation already in the Indg. period, so that now *sīkər-ī stood beside *sīkər-to-s (part.). sīkə- was then transferred by analogy to pres. forms also, hence e. g. O.Bulg. sījə i. e. *sījə- after forms like inf. sītə i. e. *sītə- (§ 147), and vice versa sū to non-pres. forms, hence e. g. Skr. sū-tra-m instead of regular *syū-tra-m.


Our assumption of -ūs as the ending of the instr. pl. of o-stems, and of *ēs thou wentest’ (Skr. ātī) etc. for the prim. period (§§ 69. 85. 101) would not contradict these combinations. In these latter cases we should only have to assign the first appearance of the monosyllabic from an older, disyllabic form (-ūs perhaps fr. -o-o-ūs; *ēs fr. *ē ēs) to a later period of the prim. language, in which the sound-law, whereby *rēs became *rēs, no longer operated.

Nevertheless the above hypothesis still requires further support before it can be set up in any degree as certain. Cp. also Hübchmann Das idg. Vocalsystem p. 24 and elsewhere.


"pṛ-ya-s 'the front, earlier': Skr. pūr-va-s, Gr. Dor. πράρ fr. *pom-dā-v (Ion. Att. πρώην), s. § 306. *neyy 'nine', *neyy-tō- 'ninth', *neyy-ti- 'the number nine': Skr. nāva navati-ḥ, Gr. ἀνά (f)α (compounded of *ēn ré-ca 'nine in all, fully nine', s. Wackernagel Kuhn’s Ztschr. XXVIII 132 ff.), Lat. novem (-em for -en after septem, decem), O.Ir. nōi n- Cymr. Corn. nau, Goth. niun niunda, Lith. devišta-s, O.Bulg. десетъ десетъ (Lith. Slav. initial do- after the numeral for ten dešišt-a, deštū; the regular form would be Lith. *nauštisi-ta, O.Bulg. *novči), cp. §§ 224, 233.

y as glide after u. Examples s. §§ 117, 153.


y stood beside y on the same principles as Indg. i by beside û (s. § 120).

First after initial consonants. *dxyō beside *dxy 'two': Skr. Ved. dved, Gr. δυ(ϝ)ω, Lat. duv(o). From rt. gha-y- 'call' partly ḡy-, and partly ḡy- as weak grade form (§ 312):
Skr. Ved. 1. pl. opt. huv-∆-ma Av. 3. sg. indic. zuv-ay-iti, O.Bulg. inf. zän-ati beside 3. sg. indic. Skr. huv-ay-iti Av. zv-ay-iti, nominal st. Skr. huv-atar- Av. zv-atar- 'shouter, panegyrist', O.Bulg. zv-onū 'sound, noise', zv-atelē 'crier'.


Medial uy after long syllables, especially after double consonants. Prim. Indg. is the contrast, e.g. between Skr. 3. pl. aś-nu-ānti (1. sg. aś-nō-mi 'I attain'), Gr. ἀγ-ω(Γ)-οι (1. sg. ἀγ-ω-μι 'I break') on the one hand and Skr. 3. pl. su-nu-ānti (1. sg. su-nō-mi 'I press the soma-juice out'), 3. sg. τ-νυ-ατί 'puts in motion', Gr. Att. qθήνω 'I waste away, decay' fr. *qθν-υω-ω (cp. qθν-υω-ω), Goth. rinna 'I run' fr. *ri-nu-ō (§ 180) = Skr. ri-nu-ā-mi 'I let flow, run' (not found) on the other, cp. § 313.


The treatment of y before i was often different from that before other consonants. Whilst e.g. the ey in Indg. *nēyjō-s, a further formation of *nēya-s (Skr. nāra-s etc.), appears developed in the same manner as before other consonants in Lith. nāja-s and Goth. niujī-s, Skr. nāvyas shows the heterosyllabic form of Indg. ey. Analogously in Gr. e.g. ἔκατομ-pous-ς fr. *-pòu-ς (cp. Skr. gāvya-s 'bovarius') in contrast e.g. to pōnt. The manner of dividing the syllables before i therefore took different ways : Lith. naijjas represents a *nįjı̆s, Skr. nāvyas a *nįjı̆s. Cp. also Skr. gāvya- with Av. guvya- (§ 160).

A diphthong was frequently not formed before nasals and liquids in cases where it might be expected, e.g. Skr. vaunuś-beside maghōn- (§ 160), Gr. ἑφάγη (ἡφάγη) besides (Lesb.)
sūrāṇa (§ 167). The various modes of syllabic formation were also here the criterion.

Anteconsonantal ỵ seldom occurred after i-vowels from the very beginning e. g. Skr. dīv-ya- 'celesstial'; Skr. pī-ya- 'fat', weak antevocalic st. form beside pī-van-, e. g. gen. pl. pī-yan-ām; Av. jīvya- 'belonging to life'. Diphthongs were only formed in Germ., e. g. Goth. ga-giunan 'to come to life again' from st. qīva-, which, of course, is not an old inherited formation, cp. §§ 179. 181.

§ 155. Interconsonantal ỵ was not, at it seems, permitted in prim. Indg. E. g. anteconsonantal *getur- (four') for *getur- (Skr. acc. catūr-as) beside anteconsonantal *getur- (Gr. Hom. τέτοιαν τέτοιους fr. *tertou-sa -to-γ, Lith. ketvišt-as). Cp. also prim. Ar. *atharun- (fire priest') for *atharun- (Av. dat. sg. aharun-ı) beside *atharuna = *atharyu- (Skr. dat. abl. pl. atharva-bhyaš), Skr. instr. áyun-ā (life') beside Cr. a1(f)on a1(f)on etc. (The author Morph. Unt. II 189 ff).

Rem. I, therefore, conjecture that Skr. instr. sg. dēer-ā (fr. *daījēr- 'husband's brother') does not represent an Indg. *daījēr-, but a special Sanskrit new formation *daījēr-, *daījēr- and *daījēr- may have existed side by side by each other in Prim. Indg. The spondio form ḍaījēr, Ilias Ω 769, can equally well be read ḍaījēr (fr. *daījēr) as ḍaījēr, conjectured by Ebel.

§ 156. Finally, ỵ only occurred as an absolute final in the second component of diphthongs. E. g. voc. Skr. sānā Lith. sānā O.Bulg. synu 'O son', Indg. *sānū or *sānū; loc. Skr. sānā O.Bulg. synu 'in filio', Umhr. manū-y-e 'in manu', Indg. *sānū (cp. § 85). Its treatment in the individual languages was almost entirely the same as that of anteconsonantal diphthongs. ỵ, when conditionally final, also stood after consonants, perhaps *mēdhy esti = Skr. mādhy əsti 'mel est'. Cp. § 645, 2.

Aryan.


υ- was transposed in Av. with u-prothesis. revida- n. ‘deed, decree, command’: Gr.ῥεῖδης ‘decreed’. Part. pres. mid. rvavemna- ‘powerful’ (x = d) to Skr. vraddh- ‘to be great, powerful’. Cp. §§ 260, 624.


-aom is written in Av. for avem = prim. Ar. -ayam, e.g. ker naom = Skr. áky-ṇav-am ‘I made’. In like manner drūm for druvem = Skr. dhruvā-m ‘firmaum’. Cp. Bartholomae Handb. § 95.

$\mu$ often interchanged with $u\mu$ in Ved. (cp. §§ 120. 125. 153). In the initial syllable, e. g. $dv\ddot{a}$ and $dud\ddot{a}$ like Gr. $dv\ddot{a}-sva$ and $dv\ddot{a}$; $dv\ddot{a}$- and $dv\ddot{a}$- 'dog'; cp. Av. $span$- Lith. nom. $sva\ddot{u}$ fr. *$xva\ddot{u}$ and Gr. $xv\ddot{o}$ $xv\ddot{o}$. As this interchange dates back to the prim. Indg. language, $u\mu$, after a long syllable in the same word, may perhaps be regarded everywhere as an old inherited form, e. g. $rak\ddot{sas}-tud\ddot{a}$-m 'damage' beside $dv\ddot{a}$-tvā-m 'divinity'; part. pf. $dab$-$uv\ddot{a}$ 'doing homage' beside $vid$-$vdu$ 'knowing'; 2. pl. mid. impf. $dv\ddot{a}$- $dhu\ddot{a}$m (ynj- 'yoke, harness') beside $dv\ddot{a}$- $dhu\ddot{a}$m (kar- 'make'). In the classical language *$u$- for the most part only appears, e. g. only $-tva$-, $-dhu\ddot{a}$m. The old stage $u\mu$ remained, e. g. in gen. $bhuv\ddot{a}$- from $bh\ddot{a}$- 'world', $bhruv\ddot{a}$- from $bhr\ddot{a}$- 'brow', and in non-initial syllables in 3. pl. in $-nv\ddot{a}$- $anti$ after consonants beside $nv\ddot{a}$- $anti$ after sonants, aor. $a-su$-$sriv-a-t' flowed' from $srav$- $sriv$- (cp. § 313). In the popular dialects $u\mu$ frequently made its appearance again where the classical Skr. only had $u$. We may have old forms, e. g. in Pāli $tuv\ddot{a}$m (beside $tam = Skr. tv\ddot{a}$m) 'thee'; nom. acc. $dv\ddot{e}$ (Prākr. written $du\ddot{e}$ and $duv\ddot{e}$) beside $dv\ddot{e}$ 'two'; $su$-$v\ddot{a}$- beside nom. $s\ddot{a}$ 'dog'.

Various assimilations took place in Iranian in the combination consonant + $u$. For O.Pers. we must premise that $uv$ or $uv$ was written for $u$ after consonants, e. g. $puv\ddot{a}$m for $pv\ddot{a}$m = Skr. $tv\ddot{a}$m 'thee', $har\ddot{u}$va- for $har\ddot{u}$a- = Skr. $s\ddot{a}rva$- 'all'; cp. the orthography $-iy$- and $-iy$- for $-y$- p. 116

Indg. *$k\ddot{u}$* ( = Skr. $\ddot{s}v$) became Iran. sp. Av. O.Pers. aspa-: Skr. $\ddot{a}\ddot{sva}$- 'horse', Indg. *$ek\ddot{u}$-*. Av. $span$- : Skr. $\ddot{sv\ddot{a}}$- 'hound, dog', Indg. *$k\ddot{u}$on-.*

In like manner Indg. $\ddot{g}u$, $\ddot{g}hu$ ( = Skr. $jv$, $hv$) became Av. $xb$. $xb$- $\ddot{a}t\ddot{a}$r- : Skr. $hv$-$\ddot{a}t\ddot{a}$r- O.Bulg. $xv$- $\ddot{a}t\ddot{a}$l 'crier'.

Indg. *$j\mu$* ( = Skr. $tv$) appears in Av. as $\ddot{p}uv$ ($w$ was spirant), and in O.Pers. as $\ddot{p}uv$; that the $uv$ in the latter combination was a consonant, follows directly from the change of $t$ into $\ddot{p}$ (§ 473). Av. $\ddot{p}uv\ddot{a}$m O.Pers. $\ddot{p}uv\ddot{a}$m : Skr. $tv\ddot{a}$m 'thee'. Gen. sg. Av. $xra\ddot{p}ew$-$\ddot{a}$ : Skr. $kr\ddot{\ddot{a}}$tu-$\ddot{a}$s from st. $xr\ddot{\ddot{a}}$tu-$\ddot{a}$ : Skr. $kr\ddot{\ddot{a}}$tu-$\ddot{a}$ 'power, understanding'.

Indg. $dv$, $dh\ddot{u}$ ( = Skr. $dv$, $dhu$), which, in prim. Iran., fell
together in ḍu (§ 481), appear in Av. initially as ḍv and ḍb (Gāp. ḍb), b, medially as ḍv and ḍv. Initially, dvavāsh-: Skr. dvēṣas- n. 'bearing enmity, hatred'; ḍbī-, Gāp. ḍbhī-: Skr. ḍvī- 'hate'. bitim, Gāp. ḍbitim: Skr. dvitiya-m 'secundum'). Medially, part. pf. evīdod: Skr. ā-vidvān 'not knowing, unwise'. erōwā-: Skr. ārībhōvā- 'upright' (cp. §§ 288. 306). So also side by side of each other Gāp. -dūm (i. e. -dvem s. below) and late Av. -dvem = Skr. -dheen, ending of 2. pl. mid. O.Pers. dvātiya- 'secundus', whose āv (to be read as consonant) was either ṹ or spirant.


Indg. ṛy (Skr. sv) became in Av. xv (init. and med.) and ṇuh (medially). xwa-: Skr. svā- 'suis'. xwaRoḥar-: Skr. svāsari- 'sister'. haraxvauṭi-: sāravatī prop. name. 2. sg. imper. bāroṇha: Skr. bhāra-svā, from Ar. bhar- 'bear, bring'. The pronunciation of -ṇuh-, which is mostly not sonantal, has not been determined. For xv and ṇuh in the Gāpūs ḍv also occurs: hva- 'suis', 2. sg. imper. guśha-hvā 'hear'. In O.Pers. uv = prim. Ar. sy. uva-: Av. xwa- Skr. svā- 'suis'. 2. sg. imper. patri-payauva-'protect thyself': cp. Skr. bhāra-svā. Acc. sg. harauvatim = Skr. sāravatīm. Cp. § 558, 3.

-ūm is written for -vem in Av. Acc. pourum : O.Pers. parūvam (read parvam) Skr. phrva-m 'priorem'. 2. sg. imper. Gāp. dazdéum: Skr. dādhhvām, from Ar. dad- 'give', etc. See Bartholomae Handb. § 95 a.

v in Av. is often to be read as uv, especially after long syllables, just as in Ved., e. g. gen. sg. read zantuv-ō for zantvō from zantu- 'district', cp. Ved. gen. dhrṣṇuv-ās from dhrṣṇu- 'repose'.

§ 160. Anteconsonantal medially and finally.

1) For an uncertain conjecture concerning the reason of the change ḍv- on the one hand and ḍb-, ḍb- on the other, see Osthoff Morph. Unt. IV 371 ff.
The vowel remained in Sanskrit as \( y \) after \( a (\tilde{a}u) \), whereas prim. Ar. \( a\tilde{u} \) became \( o \). Prim. Ar. prim. Iran. \( a\tilde{u} \) appears as \( aou \) (i.e. \( u\tilde{a} \)) or \( eu \) in Av., prim. Ar. prim. Iran. \( a\tilde{u} \) remained (\( \tilde{au} \)); prim. Ar. \( a\tilde{u} \) and \( a\tilde{u} \) remained unchanged in O.Pers. (\( au \), written \( anu \) when final, and \( au \)). Skr. \( dr\tilde{o}gha \) ‘insult, grief’, Av. \( dra\tilde{oya} \)– O.Pers. \( dr\tilde{anga} \) ‘untruth’. Gen. sg. Skr. \( kr\tilde{ut}\tilde{o} \) Av. \( x\tilde{rata\tilde{o}} \ x\tilde{raten\tilde{u}} \) from st. \( kr\tilde{utu} \ x\tilde{ratu} \ ‘power, understanding’, O.Pers. \( k\tilde{r\tilde{a}}\tilde{n\tilde{u}} \) from \( k\tilde{ru\tilde{u}} \) ‘Cyrus’. Nom. sg. Skr. \( y\tilde{a\tilde{u}-} \) Av. \( g\tilde{au\tilde{u}} \) ‘bullock’. Loc. sg. Skr. \( v\tilde{as\tilde{a}} \) Av. \( v\tilde{a\tilde{gh\tilde{a}}\tilde{u}} \) from st. \( v\tilde{asu\tilde{v\tilde{a}}\tilde{hu}} \) ‘good’. O.Pers. nom. sg. \( dah\tilde{y\tilde{a}}\tilde{n\tilde{u}} \) ‘country, district’ (cp. nom. pl. \( dah\tilde{y\tilde{a}}\tilde{v\tilde{a}}-\tilde{u} \)), formed like Av. \( b\tilde{a\tilde{zu\tilde{u}}} \) ‘arm’. Cps. §§ 62. 78. 94.

In Skr. \( v \) is also found before consonants, viz. before \( y, r, n, e \. g. \) \( d\tilde{in\tilde{y\tilde{a}}} \) ‘celestial’, \( d\tilde{evr\tilde{a}} \) instr. sg. from \( d\tilde{ev\tilde{ar}} \) ‘brother-in-law’, \( p\tilde{ivan\tilde{a}} \) gen. pl. from \( p\tilde{ivan\tilde{a}} \) ‘fat’, \( p\tilde{t\tilde{a\tilde{v\tilde{a}}\tilde{nu}}} \) from \( p\tilde{t\tilde{a\tilde{v\tilde{a}}\tilde{nu}}} \) ‘holy, pious’, \( v\tilde{a\tilde{vn\tilde{u}}\tilde{v\tilde{u}}} \) weak st. form of the pl. part. act. ‘triumphant’, but \( m\tilde{agh\tilde{on\tilde{a}}} \) instr. sg. from \( m\tilde{agh\tilde{va\tilde{n\tilde{a}}} \) ‘distributer’. In Av. \( v \) only before \( y \) after \( \tilde{v} \): \( j\tilde{iva\tilde{y\tilde{a}}} \) ‘belonging to life’; but diphthongic in \( ga\tilde{oya:} \) Skr. \( g\tilde{ava\tilde{y\tilde{a}}} \) ‘bovinus’; \( va\tilde{r\tilde{a\tilde{sa\tilde{p\tilde{a}}\tilde{a}}} \) ‘friendliness’ for \( *v\tilde{a\tilde{v\tilde{r\tilde{a\tilde{z\tilde{a}}\tilde{p\tilde{a}}} \) va\tilde{on\tilde{u\tilde{v}}} \) Skr. \( v\tilde{a\tilde{vn\tilde{u}}\tilde{v\tilde{u}}} \) s\tilde{a\tilde{u\tilde{m-a}}} \) Skr. \( p\tilde{t\tilde{a\tilde{v\tilde{a}}\tilde{nu}}} \). That diphthongisation does not appear in Skr. in cases where it was possible (cp. \( v\tilde{a\tilde{vn\tilde{u}}\tilde{v\tilde{u}}} \) with \( m\tilde{agh\tilde{on\tilde{a}}} \), depends on a different mode of forming syllables, in which other forms of the same system may have to some extent set the type (cp. \( v\tilde{a\tilde{v\tilde{a}}\tilde{nu\tilde{v}}} \) beside \( v\tilde{a\tilde{v\tilde{a}}\tilde{nu\tilde{v}}} \). Cps. § 154.

§ 161. \( y \) as spirant.

\( y \) seems in Skr. to have become labiodental and spirantal already in the classical period, s. Whitney Skr. Gramm. § 57. Also forms of the popular language as Pāli \( d\tilde{ib\tilde{b\tilde{a}}} \) = \( d\tilde{iy\tilde{a}} \), \( p\tilde{abb\tilde{ata}} \) = \( p\tilde{are\tilde{v\tilde{a}}} \) presuppose the change of \( y \) to \( v \) spirant.

As to whether orig. \( y \) also in other cases than \( \tilde{p}v\tilde{a\tilde{m\tilde{a}}} \), aspa- etc. (159) had acquired a spirantal pronunciation in Av. (the \( p \) in aspa- was developed from a spirant), we leave undecided, and refer to Hübischmann Kuhn’s Ztschr. XXIV 554 f. and Bartholomae Handb. 9. 36 f.
§ 162—164.
Indg. γ in Armen. and Greek. 145

Armenian.

§ 162. Indg. γ appears partly as v, and partly as g fr. *γγ (cp. Italian guastare 'vastare', Cymr. gweddnu 'vidua'), without the conditions for this difference of treatment being clear.

1. v. wasm 'on account of': Av. vasaṃ m. 'wish, intention', Gr. εἰσών 'voluntarily', rt. yék-. kov, gen. kou, 'cow': Skr. gav-, Gr. βοῦ-, Indg. *γοῦ- vec 'six': Gr. ἕξ ἕξ, Cymr. chwech, cp. § 589, 3.

2. g. gorc 'work': Gr. ἰδεώρ - gitem 'I know': Skr. pf. veđa. loganam 'I bathe myself': Lat. lavō. taiqr, gen. taiger, 'brother-in-law': Skr. dēvar-.


Greek.

§ 163. Indg. γ was retained as f, which was generally spoken as a vowel, not as a spirant. It was sometimes also incorrectly written v and β. The sound remained in most dialects until far into historic times, as inscriptions show. f first disappeared in Ion.-Att. It generally disappeared earlier medially than finally.


Rem. The ' of εἰκων 'I draw', which word can not be separated from αὐλαξ 'furrow' and Lith. vélkū 'I draw', is perhaps to be explained on the ground that an attraction to εἰκ- εἰκ- (with ' fr. σ-, § 564), corresponding to Lat. sulc-̣a and Acs. sulh 'plough', took place.

El. ἱφάρα Att. ἰφαρά 'covenant': Av. 'rudā- n. 'decree, commandment' (§ 157). In Lesb. βγ- fr. Fσ-: βφγωϱφ, to El. ἱφάρα. On Att. φ-, cp. § 226.


In Lesb. ι combined with a preceding short vowel to form a diphthong, i.e. heterosyllabic αυ, ευ, etc. became tautosyllabic, or still more precisely: αυα became αυ̣α (cp. Sievers Phonetik 146). This also occurs in Hom. as an Aeolic peculiarity. οσών 'I drive, hunt': Skr. mid. cyán-atē 'moves himself, withdraws', Indg. 1. sg. act. *γίέμ-ṣ or *γέμ-ṣ. εὐδόν 'I saw': Att. εὐδον, Skr. ᾑίδα-ν, Indg. *ε γίδόμ. αὐγὸν 'air' αὐλία 'gust of wind': Ion. ἀγό ῥίλια, to ἀ(λ)ημ, Skr. ῥάμι 'I waft, blow'.

§ 166. Indg. ɣ in Greek. 147

πίρας κορανός, to Skr. paikan- 'node, knot'. Inscript. (Thessal.?)
κόρας : Ion. κορά η Dor. κορή Att. κόρη 'girl'. Fr. *διφο-ς =
Skr. sānya-s 'whole, all': Hom. οὐλος, Att. ὅλος. With the forms
having compensation-lengthening cp. § 618.

εὐ. ἕπος, dial. ἵππος (handed down by the grammarians;
dialect unknown): Skr. ἅῦβα-s, Indg. *ἔβα-s 'horse'. παῖς παινός
'complete, entire': Skr. ὅσ-σvant- 'complete, entire, each' (§ 557,
= κς also in πέλεκκασ i 'hew' πέλεκκα-ν 'axe-handle' beside
πέλεκμ-ς 'axe': Skr. paraṣū-γ 'axe'.

Rem. πς beside κς is perhaps so to be explained that the latter
process of assimilation belonged to a later period than the former. On
account of ἵκς-ς it would then have to be assumed that also *εκς-
existed beside *ἔκς-, which was not transferred to the o-declension until after the
first appearance of the form ἕπο-ς.

τῆς, δῆς, ἀδῆς. Cret. τῆς (in Hesych. wrongly written τῇς)
Dor. τῇ Lesb. Ion.-Att. σὲ 'thee' : Skr. tvā-. Beobot. πένταρες
Att. πέντερες Hom. τῖσσαρες etc. 'four' : Skr. catvār-as. Cp.
§ 489. Corinth. Δενιάς, Hom. ἐδημαῦν δέδιμαν θεοῦς (the
spellings δηδίμαν, θεοῦς are wrong), in case ἐφ was not still
spoken in the time of Hom., Att. δινός δίδομα, from rt. διε-'
fear'. δη- (δῆκα) δῆς : Skr. ὀδά ὀδ-ς. ὀφθός : Skr. ὀρθύνα-ς,

ρῆμα, ἄρμα. νῆπιος (beside νῆ-πιν-τιο-ς 'unintelligent, under
just as Lat. superbia fr. *super-fi-ida, from rt. bhe- (cp. § 312).

Initial ɣˈ became voiceless f, which became h. For ἀτ, δὲ, ὅ
€ sibi so', ἰνακς ἰκάς 'apart, separated' : Skr. svā-. ἢἐς €ς 'six':
Cymr. chwech. The voicelessness of f is indicated in Beobot.
inscrip. by h, ὁθκα-δέμας, cp. φθ = voiceless φ § 266. Con-
cerning medial ɣ, which probably became σσ σ, as i.e. ἵπος-
ίπος, and the initial σ of σαλος and others see § 563, 7.

Concerning ɣ-epenthesis § 639

ίμ. ὀφο-ς ὄλο-ς 'alone': Av. aevan- 'unus'. afel aji 'ever':
Lat. aevan-m. λαῦς 'left': Lat. laevus. For the a in ἀτ, ἰαῖς
'brother-in-law' = Skr. ᾰdvār- etc. see §§ 96. 131.
Change between κ and υ (cp. §§ 120, 131, 153). δώδεκα and δύο 'two'. Παν-όψια and Sam. Κναν-οψιν (cp. κύαμο-ς with m-suffix) exhibit the double forms πανο- and κνανο- 'bean' (πνανο-ς is a later contamination form) from rt. καρυ- 'swell'. 3. sg. pret. ἐ-φεν-η 'arose', but ὑπερ-φ(τ)-ιαλο-ς (s. above) and O.Bulg. βε 'was' fr. *βη-δ-τ. κιων 'hound, dog': Skr. Ved. śvā; fr. *kFov = Skr. śvā Lith. sąū probably became *pov and this form was then given up owing to its formal severance from κυ- (in κυνoς etc.). 3. pl. ἀγνω-ασι like Skr. āsnav-ānti (beside sunv-ānti). 3. sg. ἐρυνη like Skr. āsusruv-a-t from rt. sre- 'flow'. Cp. also §§ 812, 313.

Spellings like Cypr. δοφάνοι, Chalc. Γαρφόνης prove that the υ from νυ was not quite mute in Greek.

§ 167. Anteconsonantal medially and finally.


The first component of anteconsonantal υ, ὑ, αυ underwent shortening in prim. Gr., e. g. ζυρις fr. *dīēy-s (§ 69), φοῦ 'bullock' fr. *dōy-s (§ 85), ναίς 'ship' fr. *nāy-s (§ 101), s. § 611. They thus fell together with orig. ευ, ου, αυ and became subject to the same changes as these.

Ion. Att. α-φρητο-ς 'unspoken' fr. *α-φρητο-ς, πολύ-φρη 'rich in sheep' fr. *-φρη, aor. ε-φρης 'I broke' (trans.) from (Cypr.) ε-φρης. Whereas in Lesb. (and in Hom.) ἕ before η, ι united with the preceding vowel to form a diphthong: αὐρημας = ἀρημας 'not to be broken', εὐράγη = ἐραγή 'he broke' (intr.), ταλαφρίνο-ς 'shield-bearing' (cp. φρίνος· δέρμα Hysych., written γρίνος in the Cod.), κωλης 'reins' (cp. αὐλην and ἀβληνα in Hevych.)

§ 168—170. Indg. ŭ in Italic.

Italic.


The ŭ of the Indg. combination ŭ in *duyō 'two' etc. was not so strongly articulated in Lat. as to be represented; forms like instituit, suvo, mortuva did not make their appearance until after the end of the classical period (Schuchardt Voc. II 520 f.). Whereas Umbr. tuva neut. 'duo' tuves 'duobus' beside duir 'duobus'; kastruvuf beside castruo 'fundos'; Osc. efituvam beside eituam 'pecuniam'. Cp. § 170.

§ 170. Postconsonantal. Such an ŭ partly remained consonantal in Italic, and partly became sonantal.

Lat. tensis : cp. Skr. tān-ti fem. 'long, stretched'. Lat. genua : cp. Av. xanu-a Gr. Lesb. γόννα 'genus'. Lat. arvo-m, Umbr. arvam-en 'in arvum' arvia aruvia arvio pl. n. 'fruges': 

Rem. Lat. II fr. ἵλιν in illustration of which pallida-s beside Lith. palē-s 'pale-yellow' and other are quoted, seems to me very uncertain. See W. Meyer Kuhn's Ztschr. XXVIII p 163.


su- appears variously treated, but the reason of this diversity has not hitherto been discovered. Lat. suavis : Skr. svādā-OS. svōti 'sweet'. Lat. ñ, Osc. svaí svae Umbr. sve 'si', Volsc. se-pis 'si quis', related to Goth. sva 'so' svē 'how'. Lat. sex : Gr. Fǐς καὶ Cymr. chwech 'six'. Lat. ser-ēnu-s : Skr. svār-spellendour, sky. O.Lat. sitis 'suis' : Gr. σῶς ὢ Skr. svā- 'suus'. The elision of the y in Lat. sādor sādare, fr. *syād- *syād-a according to § 81 p. 74 (cp. OHG. sweiz OS. sweit Skr. svēda-s 'sweat'), may be directly due to the following ā. By the side of this so- fr. *syē- in soror etc. § 172. Medial -su- : Menerva Minerva fr. *Menes-ya, to Gr. μένος n. 'sense'; cp. § 569.

īx Lat. deivos divōs, Umbr. deveia 'divina', Osc. deivaí
§ 170—171. Indg. ṣ in Italic. 151

‘divae’ : Pruss. deiva-s Skr. dēvā-s ‘god’, Indg. *deivō-s. Lat. ævo-m : Gr. αἰεὶ ‘ever’ αἰ(φ)ῶν ‘time’.

Indg. ṣ had become sonantal in such forms as tenuis mortuus, like ḷ (§ 135) and Ḱ (§ 269). Poets occasionally, as it seems, made use of forms not usual in the ordinary language, e.g. svādent trisyllabic = svādent in Lucret. (Christ Metrik 2 43 f.) When, on the other hand, they employ also tenuis, genva etc. (Christ as above p. 32, Kühner Ausf. Grammat. I 94), this pronunciation may be due to some dial. peculiarity, but it can hardly represent Indg. ṣ. This is still less the case in O.FR. tenue ‘tenuous’, Italian belva ‘belua’, Ital. morto Sp. muerto ‘mortuus’ (-to fr. -tvo) etc. (Diez Gramm. d. rom. Spr. I 187 f., Horning Ztschr. für roman. Phil. VII 572 f.)

On the other hand Indg. uy seems to occur unchanged e.g. in dúo dúis dúi-dēns beside bi- (cp. Skr. Ved. dvā ḷuviṣ beside dvā deśi etc.); O.Lat. duonōro ‘honorum’ (cp. Skr. Ved. dvānas); su-is su-i su-īnu-s (cp. Gr. ṣ-ός ṣ-ι with e.g. Goth. su-ein ‘pig’ O.Bulg. su-inu ‘suillus’); Fā-tuo-s ‘prophet’, mā-tuo-s ‘changeable’ (cp. Skr. Ved. jē-tuva-s ‘to be won’). suo-s may have arisen from sovos = Indg. *seyo-s (§ 172), but it may also be identical with Skr. Ved. suvā-s (beside svā-s).

Umbr. forms like saluws show the same change of uy to uy as Lat. quatuor etc.

§ 171. Ante consonantal medially and finally. Prim. Ital. oy (= Indg. eu and oy) became io (o) in Lat., o in Umbr., ov in Osc. : e.g. gen. sg. Lat. tribus, Umbr. trī fors ‘tribus’, Osc. castros ‘fundi’ , s. §§ 85. 81. Prim. Ital. au became Lat. au, Umbr. o, Osc. ov : e.g. aut, ote, avi s. § 97. Umbr. manuv-e ‘in manu’ (o was a glide) is traceable to Indg. -ūy, and perhaps also Lat. āsū used as loc., cp. Skr. sānā loc. sg. of sānā- ‘son’, s. § 85.

similar to the Mod. Gr. pronunciation of αυ and ευ (in αύλη, αυριον, εύνοις, εγγυμων etc.).

§ 172. v = Indg. u was certainly spoken as a vowel, not as spirant in Lat. prior to and during the classical period, probably also in the other Ital. dialects. Lat. v did not become a spirant until the second cent. A. D.

By the vocalic pronunciation of the Lat. v are to be explained the following changes which have not been given above.


2. -u- from -υο-. ecus (class. period) from equo-s (corresponding to aecus fr. aequos with qu = Indg. q, s. § 341a). Gnaeus from Gnaivo-s. deus fr. deivo-s. Cp. also inscr. vius (f) = vivōs, aevum = aevōm etc. The postclass. form equus is a new formation made after the analogy of equi etc., class. divos (divus) after dīvō etc., vice versa Gnaeī, dē after Gnaeus, deus.


Cp. Umbr. buē 'bove' buō 'boum', courtūst beside coventūris 'converterit'.
Old Irish.

§ 173. Initially $f\text{-}$  $f\text{en}$ 'wain': rt. $uy\text{gh}-$ 'vehere' (§ 526). $f\text{e}d\text{im}$ 'I bring, lead': Skr. $vadh\text{-}\mathring{\text{a}}$ 'bride, young woman', Lith. $ved\text{u}$ O.Bulg. $ved\text{a}$ 'I lead'. $f\text{er}$ 'man': Lat. vir. $f\text{iss}$ 'scientia' fr. $\mathring{\text{y}}\text{issu}-s$, $\mathring{\text{y}}\text{id}+t\text{u}$: Skr. $v\text{eda}$ 'he knows', Lat. $vide\text{o}$, frass f. 'shower of rain': Skr. $var\text{\=a}-s$ 'rain', Gr. Hom. $\epsilon\text{p}o\gamma\text{n}$ 'dew' (cp. § 274). $f\text{laith}$, gen. $f\text{atha}$, f. 'dominion, sway': Goth. $val\text{da}$ O.Bulg. $vl\text{ad}q$ 'I wield, rule' (cp. § 274).

Concerning $f$, when conditionally initial, e. g. $a$ $f\text{ir}$ 'O man', s. § 658, 1.

$yu$- fr. $\mathring{\text{y}}u$- in $\text{lingim}$ 'I jump', to Skr. $v\text{algami}$ 'I jump, hop' (s. § 285 rem.)? Otherwise Thurneysen Keltor. 85 f.

$v$- (i. e. $\text{y}$ or spirant?) still appears in Gall., and also in Britannic names of the Roman period, later in Brit. $gu$- ($gu$- $gw$-). Gall. $vergo$-brutus 'cuius iudicium efficax est', O.Cymr. $gu\text{ery}$ 'efficax': O.Ir. $f\text{ery}$ $f\text{erc}$ 'ira', to Gr. $\omega\gamma\gamma\nu$ 'impulse, anger'. Cymr. $gw\text{edd}w$ : O.Ir. $f\text{e}d\text{b}$ 'widow', Lat. $vid\text{ua}$ (cp. § 174). O.Cymr. $gul\text{at}$ Mod. Cymr. $gw\text{el}d$, Bret. $gl\text{at}$ : O.Ir. $f\text{laith}$.

Rem. $\mathring{\text{y}}$ i. e. voiced spirant (cp. § 175) for medial $f$ after the proposition $con$-, which lost its $m$. $\text{co}$-$\text{bund}$ 'stabilis' to $f\text{ossad}$ 'quiet, fast' from $f\text{oss}$ 'a remaining, quietness': Skr. $\text{ved\=a}mi$ 'I sojourn, dwell', Goth. $v\text{isa}$ 'I remain'. $\text{coibnes}$ 'affinitas fr. $\text{co}(n)$-$\text{bines}$ from $f\text{ine}$ 'relationship': OHG. OS. $\text{vi\=n}\text{i}$ 'friend'. Cp. §§ 212. 513. 658.

§ 174. Interconsonantal $\mathring{\text{y}}$ partly underwent contraction with the preceding vowel and formed a long vowel, and partly entirely disappeared, whilst $\mathring{\text{y}}$ remained in the Britan. branch. $cl\text{\=u}$ 'fame, renown', Cymr. $cl\text{\=y}w$ 'hearing': Gr. $\kappa\lambda\kappa\alpha\varsigma$ Skr. $\text{br\=a}$- $\text{vas}$- 'renown'. Plural $cl\text{\=oi}$ 'nails': Lat. $cl\text{\=avit}$. $\delta\text{i}$ 'sheep': Lat. $\text{ovi}$-s. Perf. $b\text{\=oi}$ 'fuit' fr. orig. *($bhe$)-$bh\text{\<=(g)e}$ : cp. Av. $ba$-$\text{v\=a}$-$\text{v}$, rt. $bhe\text{u}$. Gen. pl. $b\text{\=o}$ $n$- 'boum': Gr. $\beta\circ(f)$-$\omega\nu$; Boinc, a river in the south of Ireland, in Ptolem. still $\text{Bou\=u\=v\=a}$ ($\text{Bu}$-$\text{vinda}$). $\acute{\text{o}}\text{ac}$ $\acute{\text{o}}$ (compar. $\acute{\text{a}}$, superl. $\acute{\text{aam}}$) Cymr. $\text{ieu\=anc}$ 'juvenis', prim. Kelt. *$\text{iou\=gko}$-s : cp. Skr. $\text{yuva}$-$\text{sa}$- comparat. $\text{ya}$-$\text{vikas}$- (§ 137). $\text{i}$ Cymr. $\text{liu}$ O.Corn. $\text{liu}$ Mod. Corn. $\text{lyv}$ 'color, splendor': Lat. $\text{liv}or$. $\text{biu}$ $\text{beo}$ (nom. pl. $\text{bi}$) Cymr. $\text{byv}$ 'alive', O.Corn. $\text{biu}$ Mod. Corn. $\text{beu}$ 'vita': Gr. $\beta\text{io}$-$\text{u}$ 'life', Goth. $\text{gu}$-$\text{u}$-s Lith. $\acute{\text{g}}\text{yva}$-$\text{s}$

In feld ‘widow’ (Skr. vidhāvā, Lat. vidua fr. *vidovā by § 172, 1, O.Bulg. vidova) -dov- became -du- at an early period (§ 634), from the latter -db- (cp. § 175).


1) The form fiur, as Thurneysen remarks, does not occur as an absolute initial.

§ 176. Anteconsonantal medially and finally. Indg. ey and oy fell together in ὰ (ua) in accented syllables, e. g. lōche 'fulmen', tuath 'flock', ruad 'red'; from ay ἰ, e. g. au ἰ 'ear'; s. §§ 66. 82. 98. dau ὰ ὰ 'two': Skr. dvā, Indg. *dyōy, s. § 85.

Germanic.

§ 177. Indg. ʉ was, as it seems, still generally a consonantal u in prim. Germ. This pronunciation remained in Goth. (written v), likewise in OHG. (written uu, w); but in the MHG. period ʉ became a spirant, spoken as in Mod. HG.


Goth. urāis 'slant, crooked' : Gr. ὀφθὸς ´crooked, crooked-legged' fr. *ɔfθo-. Goth. vrīts m. 'line, point', OHG. rit 'line, stroke, letter', OHG. rīzan OS. wrītan 'to cut, scratch into' (rt. urēid-, not found except in Germ.). Goth. vlīts m. 'look, face', OS. wili; represented in OHG. by ant-līzzi n. 'countenance' (cp. Ags. anē-wolīta m.), which arose from a contamination with ant-lūtti n. (Goth. lūda fem. 'face') and represented regular *ant-līz. wō- occurs in OHG. only a few times in Frank. monuments as ʒrekhαn 'exulem', to the verb ʒrekhαn 'to punish' = Goth. vrikan 'to persecute'. 


With this cp. lēv n. ‘opportunity, occasion’ fr. *lēu(a-m), lēnja ‘I betray’: nom. dīvas acc. dīv ‘time’ (Lat. aevō-n), fr. *āiv(a)-z *āiv(a-m).
§ 179—180. Indg. γ in Germanic.

-ggv- (the first g is not to be read so as in other cases) fr. -γ- is parallel to Goth. -adj- fr. -i- (§ 142 p. 127). In Norse likewise -ggv- (-gg-), whilst the orig. prim. Germ. sound generated an u in West Germ., which united with the preceding vowel to form a diphthong, or û (when the preceding vowel was u). Goth. trygva f. 'covenant' trigges 'true, faithful', O.Icel. tryggr acc. tryggvan = Goth. triggvana, OHG. treuwa triuwa 'loyalty': cp. Pruss. druwi f. 'faith, belief', Gr. δροσ-ν· λογοῖν. Ἀρνεόν Hesych. Goth. glaggyva adv. 'carefully, exactly', adj. O.Icel. gloggr OHG. inflected glauvār 'exact, clear'. Goth. skuggva 'mirror', O.Icel. skugge OHG. scawo 'shadow'. The conditions for this special Germ. treatment of γ as well as that of the corresponding ḡ have not been determined. Cp. Paul in Paul-Braune's Beitr. VII 165 ff., Kögel ibid. IX 523 ff., J. Schmidt Anz. f. d. Alt. VI 125 f.

§ 180. Postconsonantal. Goth. aīhma-tandi 'bároγ': Lat. equo-s, Indg. *ekyo-s 'horse'. mavi f. 'girl' fr. *ma(γ)u- (§ 444 c) to magn-s 'boy', like Skr. svādv- f. to svādū-s 'sweet'. Suffix -þva, e. g. frija-þva f. 'love': Skr. priya-td̐-m n. 'being agreeable, pleasing'. fidvār 'four': Skr. cattvār-as. Pl. tdāi 'two': Skr. du. dvā dvātū. svistār 'sister': Skr. svāsar-. fātur-vaileiβ 'he rolls before': Lat. volvō.

w remained in OHG. in combinations at the beginning of words. dwahan 'to wash': Goth. ēwahan. me̅ne 'two': Goth. tdāi. sweiter 'sister': Goth. svistār. Sometimes with anaptyctic vowel after s-, z-: sowarz beside swarz 'black', Goth. swarts; sωweiß beside sweiβ 'to doubt'; in other cases seldom, e. g. thwahan beside thwahan dwahan. w remained in medial combinations only when preceded by r, l, s in which case a vowel was developed. marauēr (inflected form to maro) 'mellow', prim. Germ. st. *marua-: O.Ir. marb Cymr. marw 'dead'. ge-lauēr (inflected form to gelo) 'yellow': Lat. helvo-s. zesewēr zeseuēr (inf. form to zero) 'dexter': Goth. talhseu. w disappeared after other consonants. seluā 'shelter'? Goth. salīβa. wohtā 'watch' Goth. vahltō.
Rem. 1. scato, gen. scatowes, m. 'shade', to Goth. skadu-s is generally given as an exception. The form, however, seems to go back to a st. *skaduwa-, cp. OHG. weitora: Goth. vidurí.

Rem. 2. On the forms containing anaptic vowels cp. § 628.


*ã. Goth. ãies, gen. ãis, m. 'a long time' ãiveins 'eternal', OHG. ãa f. 'long time, order' ãeins 'eternal': Lat. aev-o-m, cpf. *auu-ô. Goth. hlâiv n. 'tumulus', OHG. hlâi gen. hlâwes, prim. f. *klej-yo-s from rt. klej- 'lean': cp. Lat. cli-vo-s.


Goth. iu and áu before j are also specially to be noted (§ 154). niujis 'new': Skr. návy-s 'new', Indg. *nej-jo-s (cp. on the other hand OHG. nivi, like Goth. part. aha-nivijs 'renewed'). haujis gen. of hari n. 'hay', prim. st. *gou-jo- or
§ 181—183.  Indg. 广泛应用在 Baltic-Slavonic.

*qay-ja-, to OHG. houwôn O.Icel. haggva ‘to hew’, O.Bulg. kovq kovati ‘to hew, strike, slay’. Cp. in in ga-qiuja § 179 p. 156.

Rem. The supposed of several scholars, that १ also arose from ११ before other consonants than १ (cp. Goth. stōjan § 179) in prim. Germanic, e. g. in Goth. flōdus OHG. flōt ‘flood, tide’, rt. *plō-, is not sufficiently founded.

Baltic-Slavonic.

§ 182. Initially. Lith. veši O.Bulg. vēzq ‘veho’: Skr. vā- 
hami, Indg. ṣeṣhō. Lith. valdaŭ O.Bulg. vladq ‘I govern, rule’: 
Goth. valda ‘I rule, wield’. Lith. vja-ti O.Bulg. vi-ti ‘to wind, 
turn’: Lat. viēd viti-s. Lith. vieda-s ‘face’, O.Bulg. vidū ‘look’: 
ed-ti ‘blow’ vāyū-स ‘wind’. Lith. vilni-s f. O.Bulg. vlīna ‘wave’, 
prim. f. *uľ-mi-s *uľ-na, rt. uel ‘turn, wind, roll’ (Gr. ]\text{*}λ\text{*}ω, Lat. 
volvō). Lith. virsti-s O.Bulg. vričō ‘the upper end, point’, prim. f. 
*ũs-u-s: Skr. vār-īṣha- ‘the highest, topmost’.

§ 183. Intersonantal. Lith. avi-s O.Bulg. ovė-ca ‘sheep’: 
Lat. ovis-s. Lith. sravā ‘the act of flowing’, O.Bulg. o-strovi ‘island’: Gr. ὁβά ὅβῃ ‘stream’, Skr. srava-s ‘river, efflux’ sravati ‘flows’, rt. sreya-. 
bi-bhā-vān (bhi- ‘fear’). 1. du. Lith. vėša-va O.Bulg. veze-vė ‘we two ride’: Skr. vāhā-vas. O.Bulg. nom. pl. synov-e ‘sons’: 
Skr. sūnā-as. Lith. devinā-s Pruss. nevintā O.Bulg. devtiű ‘nineth’ m. (concerning the transformation of the initial see § 68) : 
Goth. niunda, Indg. *neyu-tó-s.

uy. Lith. krův-ina-s O.Bulg. krův-ũt ‘bloody’, O.Bulg. 
krův-t, gen. krův-e, ‘blood’: Lat. cru-entu-s cru-or, Av. xruv-iye ‘m’stain, horror’ beside Skr. krav-ya-m ‘raw meat, flesh’ Gr. ξώδ(ή)-a, 
rt. greu-. Lith. būv-aŭ ‘I was’ būv-us-i fem. part. pf., O.Bulg. 
za-būv-eniţ ‘forgotten’: cp. Gr. ξερπειά, Skr. bhūv-ana-m ‘being, 
world’. Lith. bruw-īs m. O.Bulg. bruč-t f. ‘brow’: Skr. st. form 
bruw- in gen. abl. sg. bruw-ás etc. O.Bulg. xiug-a-ti ‘to call’: 
Skr. huw-įti ‘calls’. O.Bulg. svekrův-e gen. sg. of svekry ‘mother-
in-law’: Skr. Ved. loc. sg. śvaśhrūv-dm.
§ 184. Postconsonantal. Lith. svitėti O.Bulg. svitěti 'to shine brightly': Skr. svit-ṛā-s 'shining', rt. kṣeit-. Lith. asva 'mare', Pruss. asvina-m 'equinum, horse-milk': Skr. āsva-s, Indg. *ekya-s. Suffix -tyo-, O.Bulg. mrt-tyū 'mortuus' množi-s-tvo u. 'crowd', Lith. sena-teči f. 'old age'. Lith. ketverį O.Bulg. četvero 'four' (distrib.), Lith. ketvėta-s O.Bulg. četvētii 'fourth' m. prim. f. *gėtyg-to-s. Lith. dav O.Bulg. dvē 'duae': Skr. dvē, cfp. *dyāj. Lith. 1. du. šd-va 'we two eat': Skr. ad-vas. O.Bulg. bē 'thou wast' bē 'he was' fr. *by-e-s *by-e-t fr. rt. bhev- 'to become' (§ 312); cp. obiti 'to wind round' fr. *ob-viti etc.

Pruss. suais O.Bulg. svojį 'suus': Skr. svā- 'suus'; Lith. svōtai 'parents of the bride, related by marriage' from the same Indg. stem has the suspicion of having been borrowed from Slav., O.Bulg. svatū 'affinis'. Lith. svilti 'to take fire, to burn without flame': Ags. swelan 'to glow' OHG. svilisōn 'to burn slowly away'. O.Bulg. svin-ūs 'suillus': Goth. svēin 'pig'. Lith. savę O.Bulg. jese-vo 'we two are': Skr. s-vās.

y is occasionally elided before initial s- (sz-), without the reason of its elision being clearly known (cp. Osthoff Zur Gesch. d. Perf. 456). Lith. sesū O.Bulg. sestra, but Pruss. suestro 'sister': Goth. svistar. Lith. sāpna-s 'dream': Skr. svāpna-s. Lith. ssesura-s, by assimilation from *seszura-s (§ 557, 2): O.Bulg. sverki Goth. svahru Skr. śvāśura-s fr. *svāśura-s (§ 557, 4) Gr. ἵκτερος 'father-in-law'.

In Lith. szd 'dog' fr. *seyū = Skr. śvā and in ďa 'two' fr. *dā (§ 664, 3), the latter fr. *dyū, the elision of the y was caused by the following ď.


Old -my- perhaps in Lith. dial. tenva-s Lett. tīus (t regularly fr. en), 'thin', to O.Bulg. tin-v-lii 'thin': Skr. tanū- tanvū-'long, stretched'; the Baltic words probably with vowel form of the

įy. Lith. dėver-l-s O.Bulg. děver-i ‘brother-in-law’; Skr. dēvār-, Indg. *dājīer-.

The change between v and ūv in O.Bulg. dva beside dūva ‘two’ (Skr. Ved. dvā and dva), zuvati beside zūvati ‘to call’ (Av. zhaeviti and zuvayeviti ‘he calls’), bē ‘he was’ fr. *byē beside za-buē-emū ‘forgotten’ (Skr. ā-buā- ‘not being, monstrous’ and bhūv-anām ‘the being, world’) etc., may be regarded as old inherited. Cp. the end of § 183.


O.Bulg. loc. sg. synu ‘in filio’; Skr. sūnā, see § 85.


Rem. That O.Bulg. juje n. ‘egg’ has arisen from *āg-je (Lat. œnum, Gr. ἐσω), is very uncertain.

§ 186. Indg. ė, where it remained an independent consonant, has now become a spirant, probably throughout the Baltic-Slav. languages, certainly in a great part of them. I
Loss of \( y \) in the prim. Indg. period.

§ 187. The Indg. parent language had an enclitic case of the pronoun of the 2. person *to\( y \) = Skr. t\( e \) Av. t\( e \) t\( o \)i O.Pers. taiy Gr. t\( o \)i O.Bulg. ti beside accented *ty\( o \)i = Skr. tv\( e \) Av. t\( w \)oi Gr. st\( o \) fr. *x\( f \)oi (cp. also O.Bulg. t\( v \)oi = 'tus'). Perhaps also of the reflexive stem a *so\( i \) = Pr\( a \)kr. s\( e \) Av. h\( e \) h\( o \)i O.Pers. saiy O.Bulg. si beside *sy\( o \)i = Gr. fo\( i \). It is not improbable that the \( y \) in the enclitic forms first disappeared after certain consonants. See Wackernagel Kuhn's Ztschr. XXIV 592 ff.

§ 188. \( y \) seems further to have disappeared between long vowels and (antesonantal) m. Acc. sg. Skr. dy\( \ddot{a} \)m diy\( \ddot{a} \)m, Gr. Z\( \acute{n} \)r, Lat. diem, Indg. *dij\( e \)m *dij\( e \)m (cp. § 120) beside nom. *dij\( e \)s 'clear sky' = Skr. dy\( \dot{a} \)\( \ddot{a} \)s etc.; Skr. g\( \ddot{a} \)m, Gr. bo\( v \), OHG. chwa OS. k\( o \), Indg. *g\( o \)m beside nom. *g\( o \)\( \ddot{a} \)s 'ox' = Skr. g\( \dot{a} \)\( \ddot{a} \)s etc., cp. §§ 192, 645. OHG. guoma Ags. g\( o \)\( m \)a O.Icel. g\( o \)mr 'palate', Lith. gomur\( \dot{a} \)s 'palate' (beside OHG. caumun Mod.HG. gaumen) fr. *g\( h \)\( u \)(w)-mo- or'-men- (Gr. \( x \)\( \acute{m} \)\( \acute{n} \)?, \( x \)\( w \)-no-\( g \) \( x \)\( \dot{a} \)\( o \)g). Some assume such a loss of \( y \) before other consonants also. See, among others, Osthoff Morph. Unt. IV 311, Thurneysen Bezz. Beitr. VIII 285, Schulze Kuhn's Ztschr. XXVII 427 ff. Cp. also Indg. final -\( o \) fr. -\( \ddot{u} \), § 645, 1.

NASALS.

A. THE NASALS AS CONSONANTS.

Prim. Indg. period.

§ 189. The Indg. parent language possessed four different kinds of nasals; labial m, dental n, palatal \( \ddot{a} \) (corresponding to k\( \ddot{e} \)), and velar \( \nu \) (corresponding to g).

§ 190. Initial m.

Antesonantal. *m\( \acute{a} \)ter- 'mother': Skr. m\( \acute{a} \)t\( \acute{a} \), Arm. m\( \acute{a} \)ir, Gr. m\( \acute{n} \)\( \acute{a} \)r, Lat. m\( \acute{a} \)ter, O.Ir. m\( \acute{a} \)thir, OHG. mu\( \ddot{a} \)ter, Lith. mot\( \ddot{e} \) ('wife'),
O.Bulg. mati. *my- tô-s part. from rt. men- 'think': Skr. matá-s, Gr. εὐνοοῖ, Lat. commensu-s, Goth. ga-mundz. *my-ti-s 'dying, death': Skr. myti-ś, Lat. mors gen. mortis, Lith. mirtł-s, O.Bulg. suit-mirti.


§ 191. Medial m.

Intersonantal. Rt. gem- 'vomit' Skr. vāmāmi vāmimi, Gr. εὔμω, Lat. vomit, Lith. pl. vėmalet 'that which is vomited'. 1. pl. ind. pres. from rt. bher- 'carry': Skr. bhārā-mas, Gr. πήγα-μεν, Lat. ferinus, O.Ir. berme fr. *beromi *bero-mes-i, Goth. bátara-m, O.Bulg. bere-mu. Formations with the nominal suffix -my-, e.g. Skr. dhāma 'place', Gr. ἄναθεμα 'that which is set up, votive offering' opf. *dhe-my; Gr. ἤμα 'throw', Lat. sēmen 'seed', opf. *sē-my.

m in the combination yum as consonantal glide (§ 223, 4).

*sum-o- 'any one': sam-a-, Gr. αὑ-ό-, Goth. sum-a-.


II*

§ 192. Final m. Acc. sg. in -m, e. g. *to-m ‘the’ : Skr. tā-m, Gr. τό-ν, Lat. istu-m, Goth. ān-ा, Lith. tė, O.Bulg. та; O.Ir. for n- ‘vīrum’. -m probably occurred after consonants only when the following word began with a sonant, e. g. acc. sg. *bhurātorm a-beside *bhrātorum t- , the former represented by Goth. brūpar (§ 650, 5), the latter by Gr. φράρη (§ 233). *djem ‘serene sky’ and *gōm ‘bovem’ have probably also arisen in this manner from anteconsonantal *dijem, *gōm (§ 188).

§ 193. Initial n. *nevo-s *nevo-s ‘new’ : Skr. nāva-s nāvy-a-s, Arm. nor (with r-suffix), Gr. νέος-ς, Lat. novo-s, O.Ir. nūc, Goth. niuji-s, Lith. nūja-s, O.Bulg. novă. Loc. pl. *nr-su from ner- ‘man’ : Skr. nr-ṣu, Gr. ανδρ-ας. Perhaps anteconsonantal in the combination nr- : cp. Skr. nr-asthi- human bone from nar- (dat. nār-ē Av. nairē were new formations after the st. form nar- in the acc. sg. etc.), Gr. ḍr-opic : ἀνθρωπος Hesych., ἀνθρ-ος gen., ἀνθρ-αγμα ‘the spoils of a slain enemy’.

§ 194. Medial n.


n in the combination yn as consonantal glide (§ 223, 4). *tnn-n- ‘stretched, thin’ : Skr. tan-ṇ-ṛ, Gr. ταρ-ν- ταρ-άς-ς, Lat. ten-ũ-i-s, O.Ir. tan-a Corn. tan-ow.
Postconsonantal. Rt. sneigh- 'snow': Av. snačzaiti 'it snows', Gr. Hom. ágya-nuqco 'much snowed upon' 'Hes. vifka 'nivem', Lat. ninguit nix, O.Ir. snechtla 'snow', Goth. snáives Lith. sněga-s O.Bulg. snēgnu 'snow'. *gnō- 'know': Skr. part. jnā-tā-s, Gr. part. gnw-tis, Lat. gnōscō nōscō, O.Ir. gnath 'solitus', OHG. bencoden to give a countersign, O.Bulg. inf. zna-ti. *sup-no-*surop-no- *syop-no- 'sleep, dream': Skr. svápna-s, Arm. ēun, Gr. ēnno-ç, Lat. sōmnus-s, O.Ir. suan O.Cymr. hūn, O.Icel. svefn, Lith. sūpna-s, O.Bulg. sūnī. *qoig-nā- 'reiquital' (rt. qe-) : Av. kaṇṇa- 'penalty', Gr. ποιμ 'reiquital, penalty, reward', O.Bulg. cėna 'pretium'.


§ 196. In the primitive period ā and ō only occurred before ā- and o- sounds. Skr. pf. anāka 'he attained', āśa-s 'share, lot', Gr. ἀγεγγγ - 'I brought', Lat. nancēscor, O.Ir. con-icce 'he can'. Rt. anīgh- 'tie together, straiten': āgas- Av. qvah- n. 'distress, need', Arm. anjuk (ancuk) 'narrow', Gr. ἀγγω 'I tie, strangle', Lat. angō angor, O.Ir. cum-ung 'narrow', Goth. agg-ven-s 'narrow' (with v from the other cases), O.Bulg. qvē 'string,
fetter. *pənəqe 'five': Skr. pāṇca, Arm. hing, Gr. νέντη, Lat. quānque, O.Ir. cōic O.Cymr. pūn, Goth. finf, Lith. penkšt (-t a Lith. new formation). Skr. ánjaras- 'salve', ánjar-ánti 'they smear, anoint', Lat. ungudi, O.Ir. inn (gen. inme, stem *imben-) 'butter', OHG. ancho 'butter'.

The numerous deviations of the ę- and q-sounds from their original place of articulation and the dependence of the nasals upon the particular organ producing the following explosives and spirants were accompanied, in the later individual developments, by frequent changes in the method of production of original ŭ and ę.

Aryan.


Rem. Nasals before explosives and final ə remained unwritten in O.Pers. e. g. Kabujita for Kamb- Kəbujita, 3. pl. barantiy for bərantiy = Skr. dharanti 'ferunti', abara for abaran = Skr. ādharan 'ferabant'.


In like manner it may be conjectured that n in the combination ānt was dropped already in prim. Ar. in the syllable before the chief accent, e. g. gen. sg. yat-ās beside acc. sg. yānt-am, part. of yāt-mi 'I go'. The accent had here a similar influence as in sat-ās fr. *s-ənt-ās beside sānt-am fr. *s-ənt-m(m) (§§ 228, 250), part. of ās-mi 'I am' (Hübschmann Das idg. Vocal-syst. 86).
§ 199. Sanskrit.


Rem. 1. The nasal vowel both in Skr. and Iran. is generally considered as prim. Ar. But it is in itself very improbable that the a in Skr. rágáyati and Av. nápra- (§ 200), which cannot be prim. Ar., is historically to be separated from the a in Skr. dásisítha-, Av. dāhiśta- etc. The question is decided by the fact that Skr. dán and ágan (§ 198) can only be explained fr. prim. Skr. *dáns and *ágans (not fr. *dágs and *ágas). The dropping of the s in dán, ágan was specially Skr., and older than the first appearance of nasalised vowels, s. § 647, 7. Forms like píñánti 'they bruise', -ñáñi -ñáñi endings of the nom. acc. pl. (háññí, ágnáñ) cannot, by taking into consideration the change of s to š in the prim. Ar. period, be considered as a proof that n was, already at this period, absorbed in the preceding vowel (cp. § 556, 1).

n became š after j, c. yajñá-s 'veneration' : Gr. ágyó-ς 'holy', Indg. *iáñ-no-s. yáñáh 'desire, begging', a Skr. new formation to ydcati 'he desires, begs'.

The same nasal became cerebral nasal (n) after the cerebral sounds ŋ, r, š. my-ñá-mi 'I bruise, beat in pieces' : Gr. μαφ-να-μαι 'I fight', Indg. *my-ná-mi. kyñá-s 'black' : Pruss. kirksna- O.Bulg. črûñi 'black', Indg. *qrsno-s. This assimilation occurred also, under certain conditions (Whitney Skr. Gramm. § 189 ff.), when the two sounds were more widely separated e. g. part. mid. bhára-mána-s : Gr. φερό-μενο-ς. In this case the tongue, which had been brought into the cerebral position by ŋ, r, š, retained this position until the production of the nasal.

Initial mr became br. brá- 'speak' : Av. mrá-. Cp. Gr. βορó-s fr. *μορó-ς etc. § 204. For exceptions like mriyáte
'moritur' cp. Osthoff Morph. Unt. IV 55. -mbli- from -ml- in ambli-s beside older amli-s 'sour, sourness': cp. Lat. amāru-s.

Rem. 2. Is the change of my to ny specially Skr.? The question must be raised on account of the 1. du. mid. injunct. gāvati, part. perf. act. jagāvati from gau- 'go', raṅgā- 'delightful' from raṁ- 'to be delighted'. The process might eventually have to be referred to prim. Aryan — corresponding examples from Iranian have not been handed down to us —, and since Indg. yuṣ is the basis of the forms in question (§ 225), we must further ask whether the dental articulation was not already in existence before the consonantal nasal arose from y.

§ 200. Iranian.

Sonant + nasal became nasalised sonant before prim. Ar. spirants and those which were specially developed in Iran. (§§ 473. 475). We have already mentioned Av. daḥiṣṭa- and qāḥī in § 199. Other examples: Av. naḥpra- 'saying': prim. Ar. and Skr. māṭra-; qēnā- 'reins': Skr. anākhāyati 'he clings to something'; tāṣyā 'stronger' fr. prim. Ar. *taṇcyās, compar. to tanciṣṭa- 'strongest'. Concerning the treatment of r + n before spirants I may refer the reader to Bartholomae’s Handb. pp. 14. 21.

It is a mere conjecture that a nasalised vowel was also spoken in these cases in O.Pers. The written language was not in a position to represent nasalised vowels as such.

Rem. We have seen in § 199, rem. 1. why the q in daḥiṣṭa etc. is to be regarded as a special Iran. and not a prim. Ar. development. Compare also Av. prajāda- 'satisfied' = prim. Ar. Skr. *prapūthā- (§ 475) with mṛāvāyati inf. 'strip, strip off' = prim. Ar. *mṛvānāthā (pres. Av. mrvas-waiti); in both instances rq is the representative of r.

Av. n before palatal explosives = Skr. prim. Iran. ŋ, panaća 'five': Skr. prim. Ar. pānca. renjayaṭi 'he hastens': prim. Ar. *raṇjhaṭati (Skr. raṇhāyati, § 199). Cp. Av. -ṣc- = Skr. -śc-, e. g. manas ca = Skr. mánaḥ ca (Gr. μενος ῥέ) 'and mind', § 556, 2.

n became palatalised in Av. before y and i, i. This modification is however only exhibited in a few Mss. anya-: Skr. anyā- O.Pers. aniya- 'other'. Verbal prefix ni-: Skr. ni- 'down'.

Prim. Iran. final -ān, -ām became in Av. -q, written -q and -ān -qm. 3. pl. conj. barq (barqu, barqm): Skr. prim. Ar.
bhārān ‘ferant’, prim. f. *bherant. Acc. ḫwq (ḫwqm) : Skr. prim. Ar. ṝwām O.Pers. ṝwām ‘theo’. Spellings like “rɛw-Ø beside “rvān-Ø (nom. pl. of “rvaŋ- m. ‘soul’), ḩqna beside ḩṣna ‘creature’ (= Skr. ḍhāna ‘effect, stead, place’), where q is likewise to be read, as q, show that -n, -n were the previous stages. Cp. Bartholomae Handb. §§ 14. 78, 4. 79, 3.

Armenian.

§ 201. mi ‘lest’ : Skr. mī Gr. μὴ. armuƙn, gen. armuƙan, ‘elbow, bow’ : Lat. armu-s, Goth. arms.


Final postvocalic -m disappeared. z mard ‘hominem’ : Skr. myṭa-m, Lat. equo-m, Gr. βοτό-ν. Cp. § 651, 2.

Greek.

§ 203. mē ‘me’ : Goth. mi-k, Skr. mām, Lat. mē. ȳm- ‘half’ : Skr. sāmi-, Lat. sēmi-. ἄξιον ‘anvil’ : Skr. ἄσμα- ‘stone, thunderbolt’. ἀμφ ‘about’ : Lat. amb-.
νέφος 'cloud': Skr. nádhás 'cloud, atmosphere', O.Bulg. nebo 'atmosphere sky'. πόννα 'mistress': Skr. pátā. Dor. φέροντι (Att. φέρουν) 'they bear': Skr. bhávantī.

ἔνεγκα to bring': Skr. pf. ānāsā. ὤγκος 'hook': Skr. avākā-s. πέντε 'five': Skr. pāṇca; πένιον 'fifth': Lith. peiktas-s.

Rem. The guttural nasal was, as it seems, originally represented in writing by υ. Thus inscr. o. g. ἄναξ, ἄγαδς. The representation of it by γ first made its appearance, after the ς in gn, gm (ἄγγελος, ἀγῶν) had become υ (§ 492).

§ 204. Prim. Greek changes.


-μβρ-, -μβλ-, -νδφ- fr. -μφ-, -μλ-, -νφ-. The initial nasal disappeared with the development of the explosive. ἄ-μβροτος 'immortal', βροτός 'mortal'); *μορφός was a contamination form of μορφός Hesych. (Skr. mārtā-s, Indg. *mōrtos-s) and *μορφός (Skr. mṛtā-s), and μορφός itself was also such a form with regard to its accent. μέμβλακε, βλασκο (I come) with *μλω( = orig. *μλφ-) (§ 306), aor. ἐμμολν. βλεκτω 'I cut out the comb of bees' to μελι μελιτος 'honey'. ἀνδρός -όν (nom. ἀνήρ 'man'), δρό-ώφ ἀνθρωπός Hesych., δρο-τηγα acc., 'manhood' (thus with Clemm probably to be read for ἀνδροτηγα in Hom. Π 857, X 363): cp. Skr. nr-asthi- 'human-bone'.


1) ἄ-μβροτος beside ἄ-μμβροτος was a new formation from βροτός. Cp. Prskr. a-rjya- 'guiltless' as a later compound beside an-ṛṣya- = Skr. an-ṛṣa-.

Rem. 1. If, as we conjecture, the -λλ- in the three last named words was likewise already prim. Greek, the -λλ- in φέλλομαι etc., before 'compensation lengthening' took place, was pronounced somewhat differently from that in ολλομαι etc. The forms πίλευμα (to πίλει) and πιλά-ν: φαίνω (to πιλάνης, πιλάς) may have only come into existence after the law, whereby *όλλωμα became ολλομαι, had ceased to operate.


Rem. 2. Where in the course of the individual dialects ν + cons. came into existence again, those dialects, in which ν disappeared before σ with 'compensation lengthening' (cp. §§ 205. 618), show this lengthening. Thus Att. ἐπισίμα ἐπιστέφω (from στιγά 'I deal out') was a new formation after ἐπισίμα (Cret. still ἐπισίμα) and σπείρω; Ion. πέσσω ροπε 'fr. *πιν(θ)-σμα, a new formation for prim. Gr. *πεσθ-μα (cp. Lat. offendímentum-m), like ζώρα for older ζώρα etc.


Concerning prothesis before initial nasals as in ἀμέλγω ‘I milk’: Lith. mėžu s. § 626.

§ 205. Individual dialectical peculiarities.

The uniform omission in writing of the nasal before consonants in Cypr. and Pamphyl., permits the conclusion that a nasal vowel was spoken in these dialects. Cypr. o-ka-to-se = Ὕ(γ)κα(γ)ρος, α-τι = ἄ(τ)τι, pe-pa-me-ro-ne = πε(μ)φαμίρων; thus also to-ko-ro-ne = τό(γ) χώρων, na-o-to-te = ναό(ν) τό(ν)ν etc. (§ 653, 3). Pamph. πέδι = Att. πέντε (§ 487).

Prim. Gr. ἰ-μ- became -π- in Lesb., elsewhere ἰ-μ-.

Lesb. ἀπατα pl., Hom. etc. ἱμμα ‘eye’, to ἵπ-ων-α ἵφομαι. Lesb. ἀλπα beside Att. ἀλπμμα ‘salve’, to λίπ-α λιπάω.

v only remained in Cret. and Argivo before -s and the voiceless -s- which arose from assimilation (§§ 489.490). τό-ς ‘the’.

Goth. ᵐa-ns, Indg. *to-ns. ἰνες fr. ἰντ-ς, part. to ἰντω ‘to place’ πρέπονσα fr. *πρεποντ-μα, fem. to πρέπων ‘becoming, fitting’. ἐπευρά fr. ἐπευρόντα, aor. of ἐπευράω ‘I pour out’. πρέπονσα fr. *πρεποντ-σα loc. pl. to πρέπων. μπροί fr. *μπρό-σι loc. pl. to gen. sg. Lesb. μῆν-ος ‘of a month’. Elsewhere v disappeared, since in most dialects it became with the preceding vowel a long nasal vowel (i.e. short vow. + v became long nasal vowel) and then the nasal sound disappeared. Dor. τῶς, πρέπωσα, θῆς, ἧς (ἐν); Ion. Att. τῶς, πρέπων, θέλ, εἶς; Dor. Att. μπόλ, τὸς (τάνς), πάος (πάνος); Att. 3. pl. ἄγουσι, ἄγοι (Dor. and prim. Gr. ἀγοντι, ἄγοντι). i-diphthongs arose in Lesb.: τῶς, πρέπωσα, θέλ, εἶς, ταίς, παίς, ἄγους, ἄγοι; here the s-sound must have been the chief factor in the generation of the i. In Elean, i-diphthongs arose in the endings -οντι, *αντι, prim. El. -οντι, -αντι (cp. Osthoff Zur Gesch. d. Perf. 26 ff.): τῶς, κατακόρω, but διδώσον, πάος.
Rom. 1. The stage of nasalisation of the vowel which preceded entire loss of \( r \) is perhaps represented by the Cretan and Argive of the historical period. For we are justified in supposing that the pronunciation was nasal vowel (no longer vowel + nasal), but that the spelling with \( r \) was retained from an older period. Cp. French tonsure, mesonge.

Rom. 2. Arcadian preserved the \( \text{\( r \)} \) which arose by transition of \( \text{\( ri \)} \) to \( \text{\( - \alpha \)} \) (e. g. conj. κελάνων), but had alongside it e. g. acc. pl. δεκάδες 'drachmas'. Consequently the activity of the law which produced δεκάδες was already extinct at the time \( \text{\( r \)} \) arose from \( \text{\( ri \)} \) in this dialect. Cp. in Attic the new forms δεκανεις, δεκανες etc. which originated after the completion of 'compensation lengthening' (πνευμα from πνευμα).

Rom. 3. \( n \) and \( ov \), produced by 'compensation lengthening', never were diphthongs. The \( n \) in Ionic-Attic and Boeot. \( si \) δεοσα is only graphically like the \( n \) in Leab. \( si \) δεοσα; the latter was a diphthong. Cp. the other phenomena of compensation lengthening § 618.

Italic.

§ 206. Lat. magis, Umbr. mestru 'maior', Osc. mais 'magis': Skr. mahan 'magnus'. Lat. homō, Umbr. homonus 'hominibus', Osc. humuns nom. 'homines': Goth. guna 'homo'. Lat. termō termen, Umbr. termom-e 'ad terminum', Osc. terremnattens 'terminaverunt': Skr. tārmant- n. 'point of the sacrificial rod', Gr. τέγμαν 'boundary' τέχμα 'goal'. Acc. sg. Umbr. tota-m, Osc. tovta-m 'civitatem', Lat. equa-m : Skr. dāva-m 'equam'.

Lat. ne nē, Umbr. Osc. nei-p 'neque, neve, non': Skr. nā Goth. nī Lith. nē 'non'. Lat. dō-nu-m, Umbr. ūunu Osc. dūnūm 'donum': Skr. dd-na-m 'gift'. Lat. cor-nōx, Umbr. cur-n-aco 'cornicem': cp. Gr. κορονο 'crow'. 3. pl. Lat. ferunt, Umbr. forfa-nt 'februant', Osc. kara-nter 'vescuntur': Skr. bhāra-niti 'ferunt'. Lat. mēns-i-s, Umbr. mënźe 'mense': Gr. Leab. μην- Att. μην- fr. *mēns-.


Rem. The guttural nasal is represented in the Ital. languages by the letter \( n \).
§ 207. Prim. Italic changes.

Prim. Ital. -mt-, the m of which goes back partly to Indg. ης (§§ 237, 238), became in the prim. Ital. period -mt-, and in like manner -md- became -nd-. This change seems also to hold good for the -mt- which arose later in the course of individual dialects. Lat. con-trā contrō-versu-s, Osc. con-trud (prep. with 'loc.') 'contra', to Lat. cum Osc. com. Lat. ad-ventu-s : Skr. gāntu-ś 'a going', Indg. *gēm-tu-s; Lat. in-ventu-s : Skr. gatā-s, Gr. βατό-ς, Indg. *gē-tō-s, rt. gem- 'go'. Lat. centum : Lith. sėni-ta-s 'hundred', Indg. *kētō-m. O.Lat. quan-de 'quam', Umbr. pane 'quam', Osc. pan 'quam', to quam. Lat. quon-dam, Umbr. ponne pone pune Osc. pūn pōn 'quam', to quom. Further Lat. fren-dō beside frem-ū (cp. § 349), septen-triōn-ūs septen-decim (septem), vērun-tamen (vērum), eun-dem (eun), vēnum-dō (vēnum), quan-diū (quam); Umbr. hon-dra 'infra' hon-domu 'infimo'. Osc. hu[n]-truis 'inferis' to Lat. hum-ū s Gr. χαῦ-αι (Danielsson Pauli's Altit. Stud. III 143), Umbr. desen-duf 'duodecim'. Cp. also Osc. Pūntiis beside pontiis 'quinquies' and Ποντίζες (latinised Pontius Pontius) : Lat. Quintiān-s

Many exceptions to this law were created through analogy and new formations. E. g. Lat. quamde, quamdiū, vērun-tamen after the simple forms quam, vērun. Of later origin are also Lat. cūm-pu-tus, Umbr. emps 'emptus' (cp. da-etom 'demptum'), Lat. sūm-pu-tus with excrecent p (§ 208).

Further *kyom kyō probably also became *kyon-kyō already in prim. Ital. (Lat. quonque cunque, Umbr. pumpe) etc. Cp. also Lat. singulu-s fr. *sem-clo-s, princeps fr. *prīm(i)-ceps (§ 633). Lat. quonque cunque was formed in the same manner as quamde.

Analogously -ms- probably became -ns-. Cp. § 568 rem., § 570 concerning tenebrae.

§ 208. Latin.

§ 208. \textit{Indg. m, n, ŋ, ŋ in Italic.} 175


Rem. These affections may partly or entirely be ascribed to the prim. Ital. period. The Umbr.-Samm. dialects do not furnish sufficient material for the determination of the chronology.

Prim. Lat. -\textit{ns-}. The nasal was often unwritten already in the oldest inscriptions, e. g. \textit{thesibus}, \textit{cesor}, \textit{cosol}, \textit{cosentiont}; further also in writers \textit{vicesimus} and \textit{vicesimus}, \textit{quotes} and \textit{quotiens}, \textit{pisare} and \textit{pinsare} etc. Combining this with the clearly ascertained fact that short vowels were spoken long before -\textit{ns-} (§ 619), it follows that a long nasal vowel was spoken, perhaps leaving the sound of a reduced consonantal element. It is not possible to gain an insight into the course of the process and its extent, owing to the inconsequence and inaccuracy in the representation of the sounds, and the possibility that ŋ as full consonantal nasal was restored from other forms of the form-system (cp. e. g. \textit{scānum}, \textit{dēfensor dēfēnstrix}) 1). In two cases the nasal was apparently entirely lost already at the beginning of historic records.


2. In forms with prim. Lat. -\textit{nsl-}. \textit{pīlu-m} 'pestle' fr. *\textit{pinslo-m}. \textit{pēlu-m} 'press' fr. *\textit{prenslo-m}, older *\textit{prenslo-m} (cp. \textit{consequor}


Prim. Lat. final _-m_ (partly coming from Indg. _-m_ § 238). The orthography fluctuated already in the oldest inscriptions, e. g. _pocolo_ beside _pocolom_ _poculum_. The sound was greatly reduced before words beginning with a vowel. After the close of the vowel in the last syllable there only followed a very imperfect lip-closure. Hence the vowel elision in poets, as Verg. Aen. VIII 386 _férrum_(_m_) _acuánt_. Cp. Danielsson Zur Altital. Wortforschung (a separate reprint from Pauli's Altital. Stud. III and IV) p. 14, Seelmann Die Aussprache d. Lat. 356 ff.

§ 209. Umbrian and Oscan.

Prim. Umbr.-Osc. _-ns_ became _-nts_ (ep. _-mps_ in Umbr. _emps_ 'emptus'). This sound-combination was expressed in the native alphabet by _-nz_ (or _-nzs_). Umbr. _menzne_ 'mense'. _anzeriatu_ (beside _anzeriato_) 'observatum', ep. Lat. _am-putāre_ _an-quāre_. _uze_ (beside _onse_; on the omission of the _n_ in _uze_ see below) loc. 'in _umero_': Goth. _ams_ m. 'shoulder', Indg. *omso-_ ep. however also § 568, 3 for the Ital. form of this word. Osc. _kenzsur_ keenzstur (beside _censtur_, _censaum_) 'censor'.

_-mbr_- fr. _-mr_- is probably to be assumed in Umbr. _ambr_- beside Osc. _amfr_-; to Lat. _amb_- Gr. _ἀμβ_. Either *amfer, a new formation after _ander_ 'inter' etc., first became *amer- (ep. umen fr. *umben, § 432a.) by assimilation, then *amr-, _ambr_-; or else *amer- was an Umbr. new formation from _am_-, which then led to _ambr_-.


In like manner prim. Ital. final -m and -n must have been greatly reduced in Umbr., perhaps only a nasalised vowel was spoken. For they often also here remained unwritten and the letter m stepped into the place of n: -e beside -en ‘in’, nome ‘nomen’, puplu poplo beside puprum popRom ‘populum’; -em ‘in’, numem ‘nomen’.

In Osc., -n is uniformly written and -m only seldom omitted, mostly in later monuments, e. g. via (beside viam) ‘viam’, isidu (beside isidum) m. ‘idem’, in (beside inim inim) ‘et’. If fiviim (Zvetaleff Syll. n. 17, 8) contains -im = -in ‘in’, the same sound-development is to be assumed as in Umbr.

For the development of anaptyctic vowels from nasals in Oscan see § 627.

Old Irish.

§ 210. menne, gen. mennan, ‘mind’ (prim. f. *meno-3-men-
nem (gen. nime) n. ‘sky’, nemned n. ‘sanctuary’ (Gall. nemeto-n): Skr. nâmati ‘he bows, bends’, rt. nem-.
Particle *nu no* : Skr. ná, Gr. νό, Indg. *nú 'now'. *canim* 'I sing': Lat. canō, Goth. hana m. 'cock'. Redupl. pf. *ro-se-scaind* 'he leapt': Skr. skándámi 'I jerk, leap', Lat. scaundó. *snám* inf. 'swim': Skr. sná-ti 'he bathes himself'.

*cum-ing* 'narrow': Av. azah- 'distress', rt. anāgh-. *com-boing* 'confringit': Skr. pf. babhāñja 'frogit' pra-bhawgā-s 'breaker, pounder', rt. dhawg-.  

Rom. The letter *n* is employed to represent *n* in Keltic as in Latin.

§ 211. It may be concluded that -nte- became -nt- in prim. Keltic from Cymr. Bret. cant O.Ir. cēt 'hundred': Lith. szimta-s, Indg. *ęptō-m*, cp. § 212.


§ 212. Prim. Kelt. n (partly going back to Indg. y, u, § 243) disappeared in Irish — with 'compensation lengthening' when the preceding vowel was short — before t, c, s (f). The vowel was then shortened in unaccented syllables, afterwards became irrational and entirely disappeared under certain conditions (§§ 613, 634).


Rem. Zimmer Kuhn’s Ztschr. XXVII 449 ff. shows that first an assimilation of the explosive to the nasal took place in the prim. Ir. combinations nl, ne in such a manner that the former became voiced. Zimmer, p. 467, says that the new sound probably did not become a pure media in the first instance, but dt, gr. This change was generally not expressed in the writing of O.Irish, while in Mod. Ir. orthography it is expressed, e. g. evy ‘death’ = O.Ir. év, cend ‘hundred’ = O.Ir. cēt. Cp. §§ 513. 658, 2.

Where m came together with a following r, l, an exerescent -l- was developed, and then initial m became absorbed. brechtrud, older mrechtrud ‘varietas’; to Lith. mūrga-s ‘variegated’. blicht, older mblicht mlicht ‘milk’, bligim, older mblīgin ‘I milk’, to melg ‘milk’, Gr. ἀμελίγω Lat. mūligeō O.Bulg. mlăzu ‘I milk’, rt. mlēj-. Cp. § 298. bláith, older mlāith ‘tender, soft’ (st. *mlatī-), to melim inf. bleith ‘molo’; cp. § 306.

Original intervocalic m, written mh, is in Mid. and Mod. Irish a nasalised labial spirant, e. g. nemh ‘sky’. That this affection already took place in the O.Ir. period, follows from the fact that mh appears in the Modern language in words, where the nasal already in O.Ir. no longer stood directly after vowels; O.Ir. ampron fr. Lat. improbus also speaks for the great antiquity of this change, since m must here have represented a
spirant. The change of m to a spirant is probably likewise to be also assumed in O.Ir. mebuir fr. Lat. memoria, in this case, however, it may be a question of dissimilation as in Mid.Ir. perf. mebad = O.Ir. memaid 'he broke'.

Germanic.

§ 213. Goth. midjis OHG. mitti 'medius': Skr. mādyā-s. Goth. qiman OHG. quemian 'to come': Skr. gāmana-m 'a going', fr. rt. gem-. Goth. hilms OHG. helm 'helmet', Ags. helm 'protector, helmet': Skr. kārman- n. 'protection'. OHG. camb 'toothed tool, comb': Skr. jambha-s 'tooth, bit', Gr. γόμφος 'plug, bolt, nail', O.Bulg. sigŭ 'tooth'.

Goth. nahts OHG. naht 'night': Lat. nox, Lith. nakti-s. Goth. manna fr. *monyan-ō OHG. man 'man': Skr. mānu-ś 'man'. Goth. dinis OHG. ein 'one': Lat. oino-s ānu-s, prim. f. *oino-s. Goth. snāis OHG. snēo 'snow': Lith. snėga-s O.Ir. snechta 'snow', rt. sneigh-. Goth. bindan OHG. bīntan 'to bind': Skr. bāndhana-m 'a binding', rt. bhendh-.

OHG. zanga Ags. tōng O.Icel. tōng 'tong's, OHG. zangar 'biting, sharp': Skr. duṣśana-m 'a biting, bite'. Goth. aggve-s OHG. angi engi 'narrow': O.Bulg. àzükī 'narrow', rt. ângh-. Goth. stiggn 'to push': Lat. stingere. Goth. gaggan OHG. ganjan 'to go': Skr. jāngghā- 'heel-bone'.

Rem. w is generally represented in Goth. by g, s, § 25; in West Germ. and Norse by n as in Lat.


-md- (m partly going back to Indg. yi, § 244) became -ul-. OHG. rant m. O.Icel. rúnd f. 'edge', to rt. ruṃ- 'cease, rest', Goth. rimis n. 'rest'. Goth. skando OHG. scunta 'shame', to Goth. skaman (w. verb) OHG. scaman 'to be ashamed'. O.Icel. sund n. 'swimming' fr. prim. Germ. *s(ū)num-du- (§ 180 p. 158). Goth. kund OHG. hunt 'hundred': Lith. szūnta-s, Indg. *kulpō-m. Whereas m remained before f down to the literary period. Goth. ga-gumpę 'synagogue', OHG. cimnst cmnst with early exerescent f, to Goth. qiman OHG. coman 'to come'. OHG. nunmt nunst 'a taking', to Goth. niman OHG. neman 'to take'. OHG. rannst,
bye-form of *rant 'edge', therefore goes back to a *rām-pa- (§ 529) 1). For OHG. mift from *mp see § 529. In also remained before s, e. g. Goth. ans 'shoulder': Skr. āśa-s, Indg. *omso-s.

-lin- (l partly goes back to Indg. *ś, § 299) became -lin-. OHG. wella 'wave': Lith. vėlė-s O.Bulg. vična 'wave'. Goth. fulls OIG. inflec. folēr 'full': Lith. plūna-s O.Bulg. plūni 'full', Indg. *plū-no-s.

Further in, as the initial sound of chief-accented n-suffixes, seems to have been assimilated to the descendants of Indg. root-final explosives. The prim. Germ. gemination may be thus explained. E. g. OHG. leccōn 'to lick', prim. Germ. *likō- fr. previous Germ. *legh-nā-, cp. Gr. λυκεῖον, rt. legh-. C. Osthoff Paul-Braune's Beitr. VIII 297, Kluge ibid. IX 160. On the relations of sound-shifting s. §§ 530. 534. 538. 541, 5.

v disappeared before χ (§ 527—529), whereby short vowels became long 2). Goth. OHG. fahān 'to seize' fr. *faxkana-n: Lat. pango pax, Skr. pāśa-s 'noose, cord', rt. pāk-, with nasal-infix pānk- (§ 221). Goth. ūkata OHG. dahta 'I thought', pret. of ūgkjan, denchen 'to think': O.Lat. tongere 'to know'. Goth. ūkta OHG. dahta 'appeared', pret. of ūgkjan, denchen 'to seem, appear', from the same root. Goth. bi-ūkts 'accustomed': Lith. j-unkta-s 'accustomed' (§ 666, 1). Goth. peihan OHG. dīhan 'to thrive' fr. *pixkana-n, older *pixkana-n: Lith. tenk 'I have enough', cp. Ags. pret. pl. dūnzen part. dūnzen and the OS. causat. thengian 'to complete'; the r of the present in the Goth. and HG. forms was the occasion of their passing into the analogy of verbs like Goth. steiga 'I ascend' = Gr. στίχω: pret. Goth. pāih OHG. dēh (cp. § 67 rem. 2).

Rem. This disappearance of the nasal before χ took place later than the passing of χ into ź (Verner's law, §§ 530. 541, 4), as is seen by such forms as Ags. dūnzen beside Goth. peihan (s. above), Goth. jūgga 'young' beside compar. fūhīza.

1) Goth. anda-numiti- 'a receiving, taking up' was a new formation after forms like fralusti- 'loss'.

1) It seems to me not to be absolutely necessary to conclude with Sievers Ags. Gramm. p. 15 that the ḗ which arose from *aw must still have had nasalised ţ down to the period of the separate dialects.
Indg. -m became -n. Acc. sg. *mulfu-n 'wolf': Skr. viktu-m; *kyēni-n 'woman': Skr. -jāni-m; *sunu-n 'son': Skr. sānū-m; gen. pl. *zedōn 'donorum': ep. Av. sanaṁ (sanā- 'tree'). When protected by a particle (after the change of -m to -n had taken place) this n was preserved in Goth. pan-u OHG. den Ags. don-e 'the': Skr. tā-m Gr. τό-ν. Where no such protection was at hand, -n was dropped in the prim. Germ. period at the same time with the Indg. -n after short vowels, whereas it only became reduced after long vowels, and first fully died out in the course of the individual dialects. From *mulfu-n, *kyēni-n, *sunu-n: *mulfu, *kyēni, *sunu = Goth. vulf, gēn, sunu. Cp. prim. Norse (runic inscrp.) staina = Goth. stāin 'stone', sunu = Goth. sunun. But fr. *zedōn gen. pl. and fr. nom. *xanōn 'cock' *tuŋōn 'tongue' (with Indg. -n, ep. gen. Goth. hānis tuggōns and the nom. formation Gr. ἁῦν etc.): *zedōn, *xanōn, *tuŋōn = Goth. gībō, OHG. hano, Goth. tuggō (hence the nom. Goth. rafjō 'account' and Lat. ratio are not exactly the same, since n had not been dropped in Lat.). With Goth. tuggō ep. prim. Norse (runic inscrp.) Fino = O.Icel. Finna.

§ 215. Gothic and West Germanic changes.

In Goth., m in the combination -mn-, passed into a spirant, which was now written f, now b, e. g. vundu-fn-i f. ‘wound, plague’, vitu-bn-i n. 'knowledge' with weak form of the suffix -men-, the latter to Skr. vid-mān- 'wisdom' (cp. the author Morph. Unt. II 201. 209). Cp. O.Icel. -fn- from -mn-, e. g. nafn 'name' safna 'to collect'.

Rom. 1. In Goth. namn-ē 'nominum' and namn-fan 'nominare' the -mn- was re-introduced through analogy (after namō, namūns etc.), just as in O.Icel. dat. sg. gnāme beside regular gafne from guman. n. 'joy'.

In the final syllable of nouns with n- and m-suffixes, if the nasals followed explosives or spirants, there arose in West Germ. through the loss of the short vowel following the nasal (§ 635, 661, 2) y and ỳ, from which a vowei was then developed. Nom. acc. OHG. ěban OS. ěban Ags. efēn 'even' = Goth. nom. ǐbns acc. ǐbn, prim. Germ. *ěban-ě *ěban(-n). OS. mēthom Ags. mādum 'present, jewel' = Goth. mā̄þns māþm.
§ 215—216. Indg. w, u, ū, ū in Germ. and Balt.-Slav.

(1t is possible that a sonantal nasal was also spoken in Goth., ibys, ıby, maïfys maïfy). In OHG., the vowel, thus developed, penetrated from the final into the medial syllable of these nouns and their derivatives, at first after short syllables, and later after long also, e. g. ebano adv., ebani 'a plain', ebandr 'to level'; such forms were chiefly due to analogy (cp. Sievers Paul-Braune's Beitr. V 90 ff.). Anaptyctic vowels were also often generated from nasals in OHG. under other circumstances, e. g. wahsanlo beside wahsmo m. 'growth' to wahsan 'to grow', bra-suna beside brosna f. 'crumb', kinoto beside chmodo 'knot, thong'. An assimilation to the quality of the surrounding vowels may occasionally be observed in the development of OHG. vowels, e. g. ebono, ebond, ebini = ebano, ebond, ebani.

Rem. 2. Cp. anaptyxis in the case of w, § 180, and liquids, § 277.

Nasals, like other consonants (§§ 143, 277, 529, 532, 536, 540), were geminated before i in West Germanic. OHG. frum-mian frumman OS. frummian frummean 'to further, promote', to OHG. frum 'apt, fit' OHG. OS. fruma 'advantage'. OHG. wemn(i)an OS. wemnian Ags. wemnan 'to accustom' : Goth. vanjan O.Icel. venja, to Skr. van- 'like, love'.

In OHG. -m, which had become final, passed into -n in the ninth cent., a repetition of the prim. Germ. change (§ 214). Dat. pl. tagun, older tagun : Goth. daga-m 'diebus'. 1. pl. geban, older geban : Goth. giba-m 'damus'. 1. sg. biben, older bibæ-m 'I tremble at' : Skr. bi-bhē-mi 'I am in fear'.

Baltic-Slavonic.


Lith. nāyga-s O.Bulg. nagū 'naked': Skr. nagū-s, Goth. nagaps. Lith. anū anā O.Bulg. onū ona 'that': Skr. anā- 'this.'

Lith. slanka slûkïus-s 'creepere, slow man', O.Bulg. slûkï 'crooked': OHG. slûngo O.Icel. slûnge slanyî m. 'snake', rt. slenq-. Lith. ungûrîs (Pruss. vocab. angûrgis; the ending of the word is wrongly written) O.Bulg. agorîštî 'cel' : Lat. anguilla. Lith. snîنغa 'it snows': Lat. ninguit.

Rem. ș is represented by n in Baltic.

§ 217. -m seems to have become -n in prim. Baltic-Slav. Acc. sg. *to-n 'the' from Indg. *to-m (Skr. tá-m) : Lith. dial. tan tûn, generally tû (218), Pruss. s-tan, O.Bulg. tû.

That for the Slav. form tû first of all *tûn *ton is to be presupposed, is shown by sûn-, in sûn-ésti 'comedere' and other secondary forms of sût = Pruss. sun (san-îne 'girdle') : Skr. sâm, Indg. *som. Prim. Balt.-Slav. final -n did not entirely die out after a in Slav., e. g. acc. sg. fem. tû 'the' = Skr. tâm, Gr. τῆς; op. § 219.

§ 218. Baltic.

Indg. -mt- remained (while in other Indg. languages it became -nt-). Lith. inf. vëmti 'to spit, vomit', supine vëmtu, Lett. inf. went: op. Skr. part. pf. vûnta- beside vamita-. Lith. remti 'to support': op. Skr. inf. rántum, to rámati 'he brings to a standstill, makes fast'. Cp. also the m from Indg. ë (249) in Lith. szûntâ-s Lett. szûmû 'hundred' : Lat. centû-m; Lith. dezszûntâ-s Lett. desmitû Pruss. desmûnts desyûnts 'decimus': Gr. δέκα- etc. Goth. taîhunda, beside Lith. devûnta-s Lett. devûnts Pruss. newûnts 'nonus', Indg. *nezû-to-s.

Nasal + s or ș, ź (= Indg. ź, gh, § 412). In words like źasî-s 'goose' (OHG. gans, Skr. ĥasâ-s), grûšiû 'I turn, bore' inf. grûšû-tti, at-grûša-s 'return' (O.Icel. kringr 'round', Mod.
HG. kring kringel, rt. greñgh-) a nasal-vowel verging into a more or less distinct ŋ is at present heard in a portion of the Lith. dialects, whilst in the greater part the nasal-vowel has entirely died out and a pure long vowel is only spoken (čūsīs, grēšiūs). The nasal hook has therefore only an etymological signification in the literature of the latter dialects. No complete consistency, however, exists in the use of it.

Rem. When in those dialects, in which the pronunciation ŋ for q etc. is the universal rule, e. g. in that with Godlewa, fut. plūsin (pūsin) and plūsin (‘I shall twist’) is spoken side by side of inf. plūti and plū (pūti), it is due to a levelling between the form of the fut. stem and that of the inf. etc.: plūsin is a new formation after plūti, but pūti after pūsin. Cp. the Author Lit. Volkal. und Märch. p. 288 1).

Prim. Balt.-Slav. -n after vowels (§ 217) has entirely disappeared in one part of the language, and a pure un-nasalised vowel prevails. The written language, which represents this state and in which the nasal hook has only an etymological value, is also here inconsistent. It has, e. g. acc. sg. dēna, anā anā, sxi, but gen. pl. dēvū (‘deorum’) for dēvū; the latter from *-ūn, older *-ōm (cp. Ved. dēvām). Elsewhere, as before sibilants, a nasal vowel, ending in a more or less strongly articulated ŋ, is spoken, e. g. tæs, dēvūra, or -n remained intact: tan, anan, ssūn. There are dialects in which all three stages (pure vowel, nasal vowel + ŋ, vowel + ņ) occur side by side. It is clear that in addition to differences of accentuation and quantity (s. Bezzenb. Beitr. X 307 ff.) also various relations of sandhi (position in absolute and conditional finality, various initiality of the following word) brought about the state of fluctuation. Unfortunately so little account is taken of word-combination in the writing down of the forms in question (s. especially Bezzenb. Beitr. VII 163 ff.) that it is at present impossible to obtain a knowledge of the historical state of things.

§ 219. Slavonic.

Before all consonants except ŋ, nasals became, with the preceding vowel, nasalised vowels in prim. Slavonic (cp. § 281

1) The above is unaffected by Bezzenberger’s opposite view (Beitr. VII 167).
rem. 3). The ḯ and ṱ, thus formed, became then further ḯ (O.Bulg. ḯ) and ṱ (y, § 60). O.Bulg. remained at this stage. Examples:

1. *kʰonja 'vapour, smell' from rt. *an- 'breathe' (§ 666, 1): Skr. pres. 3. sg. āniti. zendja 'earth': Lith. žemė, Lat. humus, Gr. χαμαι; concerning the excrecent l s. § 147 p. 132.


č was at the same time the representative of the Indg. sonantal nasals = prim. Sl. m, mm (§§ 248, 249). pa-mentions f. 'remembrance': Lith. at-minti-s 'memory', Goth. ga-mundi- 'remembrance', Skr. māt-tī 'thought, mind', Lat. mens, Indg. *my-ti-s. deseti 'ten': Lith. dėszinti-s, Skr. dāsati-ī, Indg. *desoti-s.

3. q = Indg. o, a (prim. Slav. o) + nasal.

berāti 'ferent': Gr. Dor. qevo-ni. zubī 'tooth': Gr. γόμφο-ς 'bottle'. Cp. § 84.

ażikū 'narrow': Gr. ἀγκώ, Lat. angustus-s. achatī 'to smell' fr. orig. *an-s-: Lat. anima, alu-m hālare fr. *ansto- (§ 208), Gr. ἀνεμε-ς, rt. an-. Cp. § 100.

4. i, y = previous Balt.-Slav. i, u += nasal.

Suffix -iku (-y-iku) = Lith. -inka-s (-i-inka-s), o. g. döriniku 'comes palatii': Lith. dvarinika-s 'courtier'). 1), gen. istes-e, 'testicular', pl. istes-a 'rences': Lith. inksta-s 'kidney, testicular', Pruss. inxeze 'kidney', Lat. inguina. Acc. pl. gosti 'guests': Goth. gasti-ns. Cp. also plita (beside plinīta) 'brick' fr. Gr. πλίτας.

lyko n. 'bust': Lith. šunku-s Pruss. šunku-n. vyknq 'I learn': Lith. j-ünkstu 'I become accustomed' (§ 666, 1). Acc. pl. syny 'sons': Goth. synu-ns.

1) If this suffix belongs to OHG. -ine O.Icol. -inga, it is easy to conjecture that it is borrowed from Germ. For Germ. *inga- beside -air- (the author Morph. Unt. II 238, Kluge Nominae Stammfeld. 13. 26) rather contains Indg. -en- than -in-.
§ 219. Indg. w, v, ù, ¼ in Balr.-Slav. 

y was further the continuation of older -on- in the acc. pl.
masc. růky 'lupos' : Goth. rul-sa-us Gr. Cret. rámu-ς (§ 84);
acc. pl. fem. růky 'manus' : cp. Pruss. gennuns 'feminas' (§ 615).

-u alone occurred as final in the prim. Slav. period (§ 217),
and *-du, *-eu became -u, -v : *-an = Indg. *-on (§ 92) became
-y; *-en and *-in (== Indg. -v § 218) became -e; *-in became
-7; *-nn (== Indg. *-um and *-on, § 84 p. 80) became -i.
O.Bulg. remained at this stage. Examples:

1. -t, -c. Acc. sg. f. žena 'wife' : Skr. ásena 'equum', Gr.
χάριν, Indg. -a-m. 1. sg. ece 'veho' : Lat. ehem, cpl. *hejhat-um.
Nom. acc. neut. inęv 'name' fr. *i-wen: cp. the long vowel in

2. -v. Nom. kunų 'stone' (st. kamen-), formed like Gr.
ákmov, OIIG. lano, Lith. dial. szyp 'dog' (beside szę, Skr. śed,
§ 92 rem.).

*-jeu-m (§ 84 p. 80). J. Schmidl Kuln's Ztschr. XXVII 307
perhaps rightly (doubts however remain, s. W. Schulze ibid. 546)
traces the -e of the loc. sg. kamen-e back to *en = Pruss. en
Gr. ón 'in' (*kamen loc. like Skr. Ved. káruṇ, Gr. δόμερ). The
-e of the acc. sg., e. g. mater-e 'matrem', fr. *-n = Gr. -a,
Indg. -n (§§ 224, 249).


5. -i. Acc. synių 'son' : Skr. sánú-m. Acc. rūkių 'wolf':
Skr. vṛka-m, Gr. λύκο-ν.

Rem. 1. Acc. sg. jī 'cum' konji 'equum' are accordingly not fr. *jo-n,
konjo-n, but fr. *ji-n (Lith. jį), *konji-n. § 84 rem. 1.

Assimilation took place when nasals of different organs
came together. This process was also prim. Slav. kamčiú
'made of stone' fr. *kamni-ęni, to kamen- 'stone'. To the nom.
pl. grašdam-e 'town-inhabitants' (fr. *grádjan-e(s) § 147 p. 132 f.;
from grádi 'town', ep. Gr. óρομεν-ες 'celestial inhabitants')
belonged as dat. grašdami and as instr. grašdami (Miklosich

Rem. 2 Op. the assimilation of -um- to -m- in imęq 'name' (= *himeq)
and imęq 'I grasp, take' (= *himeq, cp. vǐh-imęq, síh-imęq, § 666, 1), the
former fr. *μυ-μέν (cp. OIr. airm, Gr. ἀρόμα etc.), the latter fr. *μυ-μ-μ (Goth. aímna, Gr. ἢμα, rt. hēm-) with pr = Indg. y- (§ 248). On account of Prus. enu-r- 'name' and Lith. imū = Slav. imug we must assume that the assimilation here took place in the prim. Balt.-Slav. period. *y-men-, *y-m-ū (1. sg.) had probably already at this period become *y-mēn-, *y-mūd. Cp. Lat. eumū § 238.

Nasal changes in the prim. Indg. period.


This hypothesis seems to me worth mentioning in this place as being a possibility which ought to be noticed. At present however it requires a still firmer foundation. We shall come to speak below of some of the forms and form-categories which Schmidt has brought forward in support of his theory.

§ 221. In all Indg. languages we meet with forms having a nasal in the root-syllable, when this ends in an explosive or a spirant, where we have good reason to suppose that the nasal once stood behind the root-syllable as nasal suffix. Forms also often occur with nasal suffix beside those with nasal infix. It is probably here a question of a sound-change which dates back to the Indg. prim. period. But it still remains to be established on the one hand, by what law the nasal-anticipation (or the affection preparing the way for it) at that time now appeared, now not; and on the other hand it must be determined whether the same process or similar processes have not also happened at a later time in the individual languages, e. g. in Italic (cp. Thurneysen Kuhn’s Ztschr. XXVI 301 ff.) and thus cause the whole mass of examples to have to be estimated from various points of view. In any case it is no mere accident that the
prim. Indg. change of the voiceless explosives into the voiced at the end of roots (§ 467, 7), so frequently appears in connection with present formations having a nasal infix (Osthooff Morph. Unt. IV 328, Zur Gesch. d. Perf. 548), and that the syllable, which had absorbed the vowel into itself, was generally unaccented (the strong forms of the Skr. seventh present-class as chinád-mi do not come into account here).


Noun formations. Lat. funde-s ‘ground, bottom’, O.Ir. bond binn ‘soil, Gr. πῦδας ‘bottom’ : Skr. budhā-s ‘bottom’. Lat. unda, Pruss. undas- m. ‘water’, Lett. uđe’s ‘water’ fr. *undens, Lith. vandā -eis ‘water’ (the Lott. and the Lith. words seem to be due to a contamination of the stems *unda- and *haden-), to these Skr. unidā undāmi ‘I wet, bath’. Skr. udān- udn- ‘water, wave’, Gr. ὀδαρ- from *udy-t- (§ 233) ὀδαρ- (Τ), Goth. vatim-, dat. pl. vath- a-m, ‘water’ 1). Here come perhaps also Lat. mēns-

1) OHG. undeia ‘wave’ can only be compared on the supposition that the root originally ended in t, so that the d in Lat. undeia Skr. udānto. would stand on the same level with the f in pango πηγώμε (beside Lat. pae-, Skr. paē-). See above.


**B. THE NASALS AS SONANTS**.

§ 223. The Indg. parent language had all four nasals both in a consonantal and sonantal function, ï and ù only occurred before the corresponding explosives.

We cannot ascertain whether the -¿-·, which frequently forms the close of a nominal n-stem, was or was not already in the Indg. prim. period assimilated to the organ of a following non-dental explosive. E. g. for Skr. yuṇān-·, Lat. iunōnen-·, Cymr. iunane O.Ir. óc ōc (the Keltic word has been transformed in the first syllable perhaps after the form of the comparative, see § 137), Goth. jāggs (jāuggs?) are we to regard the primitive form as *jāugg-·kō-s or *jāugg-·kō-s (or with initial j-, § 133)? Skr. instr. pl. vṛṣa-bhis (stem vṛṣan-· 'male') fr. *vṛṣya-· bhis or *vṛṣya-bhis?

The sonantal nasals occurred both as short and long, but mostly short. When long, they corresponded morphologically to i and û see § 312.

1. The short sonantal nasals.

§ 223. The mode of treating the short ¿, ù, ñ, ŋ in the separate languages renders it advisable to divide them into four categories.

§ 223—224. The nasals as sonants. Prim Indg. न, न, न, न

1. Unaccented 1) before explosives, spirants, nasals and liquids, and finally, e. g. *tryō-s part. pass. from rt. ten- 'stretch, extend': Skr. tattu-s; *sēṃ nom. acc. sg. of the neut. stem *sē-men- 'a throw, seed': Lat. semen.

2. न, न unaccented before ज, e. g. *mājō 1. sg. pres. from rt. men- 'think': Lith. miniū. Here are probably also to be placed the combinations यन, यन, s. § 225.

3. With principal accent before consonants, e. g. *s-yēti 3. pl. of *ēs-mī 'I am': Skr. s-ānti.

4. न, न before sonants, in which case उ, ऊ were spoken as glides, e. g. *tyū-ū- (rt. ten-) 'stretched, thin': Skr. tan-ū-. The glide consonant corresponded to उ, ऊ in such Indg combinations as uya, iya, e. g. *dnyō = Skr. Vod. durō O.Bulg. duva. S. § 117 p. 110.

The following is an abstract of the usual representation of न in the Indg. separate developments from these four points of view (न, न, न were similarly treated):

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Primitive Indg. period.

§ 224. 1. Unaccented before explosives, spirants, nasals and liquids, and finally.

*kipō-m 'hundred': Skr. satā-m, Gr. ā-kartō-r, Lat. centu-m, O.Ir. cēt, Goth. hund, Lith. sčiu-tu-s. *gū-tō- 'gone', *gū-ti- 'a going' fr. rt. gem-: Skr. gatō-s gāti-ṣ, Gr. βαρό-ς βαρό-ς, Lat. in-centu-s in-ventiō, Goth. ga-qumpi-. *sny- weak stem of *sem-.

1) Here and in the following §§ the prim. Indg. accentuation is always meant, from which the individual languages deviated in many instances. See § 669.


Rt. form dūk- 'bite' : Skr. dāśati (for *daśāti like gâchāti for *gachāti, § 672), dūkav ēkav; ep. Skr. dāśa-s 'bite', OHG. zangar 'biting, sharp', zangu 'tongs' (δῆζομαι δῆγμα etc. were later new formations after forms without nasals in the roots).


§ 225—227. Prim. Indg. υ, υ, ι, υ. 193

-υ-ι: Skr. usercontent-μι to usercontent- 'bull, ox',  brahman-μι to  brahman- n. 'prayer', Gr. τεκταίνω to τεκτων 'carpenter', σπείρω to σπείρα 'seed, germ', Goth. glit-mun-ja to *glitmin- 'splendour'.


§ 227. 4. γιμ, γιν (m, n glides) before sonants.

γιμ-ο- 'any one' (rt. σεμ-): Skr. sama-, Gr. ομο-, Goth. suma-; by the side of this cp. Indg. *sm- in Gr. μ-ωνειι 'having one claw', fem. μ-ως- 'una' (§ 563, 6). *γιμ-ο present form from rt. γε- 'go': Skr. ved. gam-ά-μι, OHG. koman Ags. cuman O.Icel. koma; Skr. gamamī: Av. a g'm-α- probs huv-ά-μι: á-hv-α-τ etc.

*θυμ-ιι- 'stretched, thin': Skr. tan-ιι-Ι, Gr. ταν-ιι-γλωσσο-, Lat. ten-ιι-ι, O.Ir. tan-α. Corresponding to the double suffix form -ιο- and -ιιο- (§ 120), -ρο- and -ριο- (§ 287), there existed a

1) The ηι in El. ιαν can, of course, by § 64 also regularly represent an older ιι. In that case the form would not belong here as a new formation.

Brugmann, Elementa.

On the prim. Indg. interchange between ṣm, ʔn and m, n after consonants cp. §§ 120. 153.

Aryan.


§ 228—229. Indg. 电厂, 电厂, 电厂 in Aryan.


Concerning the qualitative changes of a in Av. see § 94.


Part. pf. Skr. va-van-vān Av. va-van-vā from Ar. van- 'obtain': cp. the weak st. form Skr. vaṇu-ūṣ- Av. vaon-ūṣ-. Skr. 1. du. gānvas (for *ganauds, accented after the analogy of the sg.) from gam- 'go': cp. 2. pl. gathā. Skr. udan-vānt- 'rich in water' ṛtman-vānt- 'animated'.

Concerning the qualitative changes of a in Av. see § 94.

1) Skr. gam-yāt to gau-iyā (1. sg. mid.) as jagn-vān to jagn-ūṣ (part. pf. act. masc. and fem.). On Iran. initial j- cp. § 451 rem.

On Av. e from a see § 94.

§ 231. 4. saptam-ā-s 'seventh': Lat. septimus, Indg. *septim-o-s, to which probably also belong O.Ir. sechtmad Mid. Cymr. seithud (§ 634); but O.Bulg. sedmy-꜠i Pruss. septnas Lith. sēkma-s fr. *septmō-s. Skr. vanati 'he gains, loves' sanā́ti 'he attains' fr. *vam-ē-ti *sām-ē-ti (Av. vanaiti hanaiti either identical with these Skr. forms or like Skr. vānati sānāti after class I): Goth. un-vunands 'not rejoicing'. Instr. sg. Skr. brāhman-ā (brāhman- n. 'prayer') Av. bar-śman-ā (bar-śman- m. 'sacrificial rod') fr. prim. Ar. *myn-ā, with these ep. Skr. nāmn-ā (nāman- n. 'name'). Antesonantal Skr. Av. O.Pers. an- 'un-': Gr. ár-, Indg. *yn-.

ghan-ā- 'killing' beside -ghan-ā- (go-ghan- 'ox-killing') is similar to gir-ā- beside -gr-ā- 'swallowing, devouring' (§ 290). On the qualitative changes of the a in Av. s. § 94.

Rem. The Ar. ending of 1. sg. -am e. g. in Skr. ās-am 'I was' (ep. Gr. ἦς ἔγερθη = *ēs-pā) and that of the acc. sg. e. g. in Skr. pad-am 'foot' (ep. Gr. πόδ-α = *pōd-pā) point to -um. Three explanations are possible. 1. There existed in prim. Indg. beside -m and -m a form -um (and -m) after the manner of the phenomena discussed in §§ 312, 313. In that case Cypr. -ar in ἐλπίζω(r)-ar (-Att. ἐνὶκάρες) etc. could be directly connected with the Ar. form. 2. -m became -um, by a special Ar. development, when the following word began with a sonant, i. e. generated an m as glide, under the same conditions as i and ū often made their appearance after -i and -u in various languages. 3. -m became -m in prim. Ar. (ep. Skr. dāso) and this became transformed to -am after the analogy of forms like Skr. ābhara-m, dēsa-m. The second possibility seems to deserve the preference, and the first type in consideration of ābharam and dēsam may have been generalised through the side by side existence of āsram a- and ἐλπίζω t-; padam a- and *pāda t- (cp. J. Schmidt Kuhn's Ztschr. XXVII 262 f). Cp. athātār § 285.
Armenian.

§ 232. Եսն 'twenty' according to Hübeschmann fr. *gisan (concerning բ- § 162, and -ս- § 408): Skr. viṣati-, Gr. Dor. Bœot. ἰκτις, Lat. viginti, Indg. *gikti- or *gikt- (first syllable uncertain). տաս 'ten' probably fr. Indg. *dek̄t: Goth. tathun (cp. § 651, 2). Ինն 'nine', pl. inn-Ե or innun-Ե: connected most closely with Gr. *ἐνάς (ἐνα-, εινα-, εινα-, § 166), beside Skr. náva O.Ir. ňō n- Indg. *nēṃy anun 'name' fr. *anyan *an-man (§ 202): Skr. nā-ma, Gr. ἔνω-μα, Lat. nō-men, O.Ir. aínim n-, Indg. aṃ. an- 'un' = Indg. *y- and *yn- (Skr. a- an-, Gr. ἀ- ἀρ-, Lat. in-, Goth. un-), e. g. an-baś 'carens ratione et verbo': cp. Gr. ἀ-φωνος; an-anun 'nameless': cp. Gr. ἀν-ἀφωνος. ᾶκαϊ- in pl. ᾶκαὶ- 'women': Bœot. ᾶκαί O.Icel. kona 'woman', prim. f. *γναϊ-. Present formative suffix -ane-, e. g. ᾶκ-ane-m 'I leave' ᾶγ-ane-m 'I find': Gr. -ἀνοι, λυμάνω, prim. f. -γνα-γνα-1) by the side of this cp. -ne-, e. g. ar-ne-m 'I make', like Gr. δια-νω. amain, gen. amar-an, 'summer' (cp. also amar-ayin 'aestivus' amar-aini 'messis'): OHG. O.Icel. sumar 'summer'.

In the forms տան, Ինն, anun the a in the final syllable -an had disappeared by the law of finals (§ 651, 1).

Greek.

§ 233. 1. βάσιμ 'I go': Skr. gachāmi 'I go', Indg. *γα-κό, from rt. gen-. έκατο 'lovely': Skr. ῥατά-s ' rejoicing, loved', Indg. *γη-τό-s, rt. rem- (Skr. rām-a-tē). -a, ending of the 1. sg. in ἦ-α 'I was', ἦς(γ)-α 'poured out', ἦςεν-σ-α 'showed', ἦςεν-σ-α 'knew' etc., Indg. -η.


1) Only traces found in Ar., as in Skr. Ved. iṣ-ana-t, ἄρ. peṣ-anaaiti mer-ne-ainī. See the accidence, and Bartholomae Ar. Forsch. II 94 f.
2) For a conjecture concerning the strange spiritus lenis in ἀ-νῦμι: ἀ-νῶ see Osthoff Zur Gesch. d. Perf. 479 f.

ἐλαξόν from λειχ-, cp. pf. λέλογχα.

Rem. o in ἐκεῖνο beside ἐκείνοi 'twenty' etc. does not really represent Indg. sonant nasal. See the author's Griech. Gramm. p. 68 f.


§ 235—238. Indg. ς, υ, Ϗ, ϯ in Italic. 199

Rem. Some hold ς, and others a to be the regular representation of accented sonant nasal. The facts seem to us to agree best with the hypothesis given above.


Italic.

§ 237. The Indg. sonant nasals became in the prim. Ital. period en, em, en, and thus fell together with Indg. e + nasal. In the same manner as in the latter combination e passed into i in Latin, e.g. sin-gul (Indg. *sṃ-) like tinguō: Gr. τύγγω, s. § 65 p. 53.


1) Either the nom. sg. and loc. pl. of these Gr. substantival numerals in -ās were the occasion of their passing into the analogy of ē-stems (cp.
-ōsu-s e. g. in virōsus (n preserved in formōnus etc.) explained by Osthoff 1) as fr. *-omensso-, *o-yu-tu-to-, orig. the weak form of the suffix -uent- (Skr. -vant-, Gr. -Fenvr-), -to- participial suffix as in ābertus-, vetuṣtu-s, aegrōtu-s etc. Participial st. rudent-: Skr. rudat- (Indg. *ruḍat-; beside the strong form *ruḍont-: Skr. ruḍant-), from ruḍō : Skr. ruḍmi 'howl, moan'. Acc. pl. ped-ēs, Umbr. ner-f 'nerones, proceres' fr. prim. Ital. *-ens (§§ 208. 209), Indg. *-ys : Skr. -as, Gr. -aç. nō-men, Umbr. nu-mem no-me 'nomen', Indg. *-my : Skr. nā-ma, Gr. ὑνο-μα, O.Ir. ainn n- 'name'; analogously ungu-en, Umbr. um-en 'unguen' : O.Ir. imb n- n. 'butter', ep. Gr. ἄλσυφ-α, κάσα fr. *kασα-α; concerning the Umbr. endings -em, -e, -en s. § 209.

dingua lingua (§ 369): Goth. tuggō OHG. zunga 'tongue'; if O.Bulg. j-ęykă Pruss. insuvis 'tongue' also belong here, it follows that the prim. f. is *dągh-ya, and that d- has been dropped in Baltic-Slavonic; s. Bezenberger in his Beitr. III 134 f., Bersu Die Gutter. 148 f. juvencu-s, Umbr. ivengar 'iuvencae': Skr. yuvāsā-s.

§ 239: 2. veniō veniunt (transferred into the analogy of verbs in -ire) : Gr. βαλέω, Indg. *γυ-ιό, rt. γέμ- 'go' (op. § 208).

§ 240. 3. Umbr. s-ent 'sunt', O.Lat. s-i-ent 'sint', s. § 226. The participial st. s-ent- 'being' (Lat. praes-sēns, Osc. praes-sentīd 'praesente') corresponds both to the accented form Skr. s-ānt-Indg. *s-ūt- and to the unaccented form Skr. s-at-, Gr. iar-Indg. *s-yt-.


septimus, decimus, nōnus (in the first instance fr. *nōmen-s, O.Lat. inscrp. noine) fr. *septimn-o-s, *dekymn-o-s, *neymn-o-s,
§ 241—243. Indg. ṣ, ṣ in O.Irish. 201

s. § 231. Superlative suffix -timo- (op-timu-s): Skr. -tamá- (yatamá-s 'which of many', relat.), Goth. -tuna- -duma- (af-tuman- 'latter', klei-duman- 'left'), Indg. *-tná-.
There exists a doubt regarding terminus, to termen (cp. Umbr. term-nom-e 'ad terminum', Osc. teremnattens 'terminaverunt'), as to whether we have here prev. Ital. ην, or whether old η first became vocalic in Ital. itself, since gen. sg. termin-is could exactly correspond to Skr. tárman- as (cp. bráhman-ā, § 231). The same doubt exists with regard to fémina, dominus beside domnu-s, lámina beside lámna and many other similar forms. Furthermore -in- could here also be Indg. *en-.

O. Irish.

§ 242. Indg. nasalis sonans and Indg. e + nasalis consonans had fallen together in Irish before consonants, as in Ital. But they still existed apart in prim. Keltic, as is shown by the different treatment in the Britt. branch (see Zimmer Kuhn's Ztschr. XXVII 450). Antesonantal -ην- (according to Thurneysen) became -an- already in prim. Kelt.; cp. § 298, 3.


1) Cp. the conjectures of Thurneysen Kuhn's Ztschr. XXVI 308 and of Stolz Lat. Gramm. p. 166 f.
On the treatment of the prim. Ir. combination -en- in these words cp. §§ 211, 212.

2. Examples for Indg. -ηι-, -ηι- are unknown to us.

3. *it 'sunt' (proclitic) with Cymr. ynt goes back to *enti. This was an analogical transformation of *enti = *s-ζίτι (§ 226), s. Zimmer Kelt. Stud. II 133.


Germanic.

§ 244. 1. Goth. OS. hund OHG. hantz O.Icel. hund-rad 'hundred': Lith. sziųnt-s, Indg. *kyntō-m. Goth. tainkun 'ten': cp. Lith. dęszint, pl. dęszints-s (the -t in dęszint cannot of course be a final -t which has remained from the Indg. period), tainkunda 'tenth': Lith. dęszınta-s, Gr. δεκαρο-ς, prim. f. *dekũnt and *dekũnt-os. The Goth. stem tigu- 'decade', originated in the dat. pl., tigum fr. *tegum-m(ī) : cp. Skr. daskúbhiṣ fr. *dekũ-bhĩṣ; tigum, associated with sunu-m, occasioned the passage into the u-declension. Goth. ga-gumpi- 'a meeting, synagogue' (g for regular k §§ 180, 444 b.), OHG. cumft cumft 'a coming' (for the f s. §§ 214, 529) : Skr. gāti-ṣ, Gr. βαττ-ς, Lat. in-ventīō, Indg. *gŷ-ti- from rt. gem- 'go'. Prim. Germ. final -un = Indg. -υ became by § 214 Goth. -u, acc. sg. tunp-u 'dement' fōt-u 'pedem': Gr. -α, Lat. -em.

Goth. bundum OHG. hantz O.Icel. bundum 'we bound', to bund bant batt 'I bound' (rt. bhendh-): cp. Skr. tastabhima to tāstāmbha (rt. stembh- 'fasten') and Gr. παραθυσα to πονοθα (πονοθ- 'suffer'). Goth. vunds OHG. wunt 'wound': Gr. *φαριν in Farália, oïlai Hesych. (cod. γαράλαι), from rt. gen- (Goth. vinnan 'to suffer, feel pain'). OHG. wuntar OS. wundar 'wonder': Gr. ἀθρίω 'I gaze at, observe' fr. *Fwthréw. Goth. undar OHG. untar. 'under': Skr. adhás 'below' adhara-s 'the lower' adhāmā-s 'lowest' (concerning Lat. inferu-s infimus cp. § 389 rem.). Goth. t-uns-u-s 'tooth': Skr. d-at- etc., s. § 243; tunp- was due to a levelling of the prim. Germ. st. form * tán̄p- (OHG. san, § 527)

Goth. þugjan OHG. dunchan 'to seem, appear', prim. f. 1. sg. *þug-jō or *þug-jō: O.Lat. tongēre 'to know', from rt. teug- or teng-. Part. pass. OHG. slungan 'wound' O.Icel. slunginn 'slung', inf. OHG. slingan O.Icel. slýngva: Lith. slinkti 'to creep, sneak', rt. sleng-.


§ 246. 3. Ending of 3. pl. -đti, -đt in O.Icel. eru 'are', O.Icel. vissu OHG. wissun 'knew', s. § 226.


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1) To be read thus I. Cor. IX. 9 instead of Ms. form au<s>hnun</s> s. Kögel Paul-Braune's Beitr. VIII 115.
koman OS. Ags. cuman O.Icel. koma 'to come' the latter to Skr. gamāti (rt. gem-). Superlative suffix -duman-, to Skr. -tamā- Lat. -tino-, Indg. -tyumō-, see § 241.

On the change of u to o before o or a in the following syllable in West Germ. and Norso cp. § 51. This change did not take place before nasal + consonant, hence OHG. part. buntan (§ 244) beside koman etc.

**Baltic-Slavonic.**

§ 248. The Indg. sonant nasals became i + nasal in the prim. Balt.-Slav. period. This i was open and still separate from Indg. i, as follows from the fact that Indg. in is represented in Slav. by i before explosives and spirants, whereas Indg. y in the same combinations is represented by ě. See § 219. We denote the prim. Baltic-Slav. and prim. Slav. equivalents of ū, y by ūm ĭn. Throughout the whole Baltic branch ūm, ĭn arose from ūm ĭn, so that all distinction between these and Indg. ūm, ĭn was lost.


Lith. at-mintis 'memory', O.Bulg. pa-mēti 'remembrance' : Skr. mati-ś, Lat. mentio, Goth. ga-mundi-, Indg. *my-ti- from rt. men-. Lith. ginti 'to drive (cattle)' ap-ginti-s 'defence', O.Bulg. četi 'to hew, mow' : Skr. hati-ś 'a blow', Indg. *guy-
$\S\ 249-252$. Indg. υ, υ, ς, ς in Balt.-Slavonic.

ti-s; Lith. ginčzid and ginčzia-s 1) 'combat, quarrel'; Skr. hatya 'a killing', OHG. gundea (Hildebr. 60 güdea) 'fight, combat', Indg. *ghy-tja-, from rt. ghen-. Pruss. newints Lith. devinta-s O.Bulg. deveti 'ninth' (concerning the first syllable of the word s. $\S\ 68$ rem. 1) : Goth. niunda, Gr. évarto fr. *ěvaro-č ($\S\ 166$), prim. f. *nyg-ta-s; cp. also O.Bulg. deveti 'nine': Av. navaiti- 'ninety'; Skr. navati- 'ninety'. Lith. tišti 'to stretch one's self out, extend' (beside tęsiu 'I stretch'): Skr. vi-tasti-ś 'a span' (causat. taśayati 'he draws to and fro'), cpf. *ytya-ti-s, from rt. tens-, cp. also Germ. pun- in the OHG. part. gi-dunsan 'swollen', to pres. dinsan.

Concerning Lith. inū O.Bulg. ima fr. *ye-mo and O.Bulg. inę fr. *ye-men see $\S\ 219$ rem. 2.

Pruss. insuvi-s O.Bulg. j-cyzkū 'tongue', perhaps to Lat. dicinga lingua Goth. tuggō s. $\S\ 238$; Lith. lišvi-s for *tišvi-s through a popular confusion with lešiū 'I lick'. O.Bulg. pušči f. 'fast': OHG. füst 'fast' (prim. Germ. *fungasti-s, s. $\S\ 214$ p. 181, and $\S\ 527$ extr.), cpf. *pākasti-s, possibly to Goth. figgrs 'finger'. Lith. liūkšti 'to bend one's self liūkš 'inclined, bent', beside lenkšiui 'I bend' lankš 'valley' (O.Bulg. léšti 'to-bend' can be both Lith. liškti and lenkšti 'to bend', cp. Leskien Arch. f. slav. Phil. V 507. 527).

$\S\ 250$. 2. Lith. mėniui 'I think of', O.Bulg. mėnja 'I think': Skr. mānyāte 'thinks', Indg. pres. st. *my-yę- from rt. men-. O.Bulg. mėnja 'I cut off, reap': Skr. hanyāte 'is struck', Indg. pres. stem *ghy-yę- rt. ghen-. Here probably also belong part. perf. act. pinū (pres. pīnq 'I stretch out, hang') from *pīnvoie and tinęķū 'thin' (compar. tinęjį) fr. *tinų-ukū, like Skr. tanvi fr. *ty-yę- ($\S\ 225$).

$\S\ 251$. 3. ņi in O.Bulg. jad-ťi 'they eat', ņit in O.Bulg. aor. bas-č from bodę 'I sting, stab', see $\S\ 226$. It is possible on account of Skr. dād-ati that the -ti in jad-ťi 'they give' (dād- = Lith. dūd-) arose from -ti (with unaccented ņ).

$\S\ 252$. 4. Lith. pinū 'I bend' O.Bulg. pīnq 'I stretch out,

1) Thus spoken in the dialect of Godlewa and probably also elsewhere. Kurschat (Gramm. p. 28) writes gicusos.
hang', Lith. minū 'I tread on' O.Bulg. mînq 'comprimo', Lith. ginû 'I check, keep off', Russ. ėnu 'I cut off, reap' (on the loss of the i s. § 36), like Skr. vanāmi (§ 231). Part. pf. act. fem. Lith. minusi (miiti 'to think of') O.Bulg. pînûšî (pići 'to stretch out'), cp. Skr. Ved. jajan-ūr (beside jajān-ūr) 3. pl. pf. act. from jan- 'beget', tatan-ē (beside tatu-ē) 1. sg. pf. mid. from tan- 'stretch, extend'.

Rem. The Zographos gospel has occasionally ī for i before non-palatal vowels, e.g. täwa 'darkness' (prim. f. *tēm-a) beside tīnūva 'dark'. Cp. § 36 rem.

2. Long sonant nasals.

§ 253. The question, first discussed by de Saussure, as to which sounds and sound-combinations have arisen in the Indg. languages from long nasalis sonans (Mémoire sur la système primitif des voyelles 1879 p. 239 ff.; cp. besides especially Osthoff Morph. Unt. IV p. 1V and p. 280, Zur Gesch. d. Perf. 30. 55. 331. 367. 373 ff.), has not hitherto, in many respects, been satisfactorily solved, just as in the case of the Indg. long sonant liquids (§ 306). The probable results of the investigations hitherto made, are as follow: — In Ar. ā = ĭ, ĭ, corresponding to a = ĭ, ĭ. In Gr. between consonants a (Ion. Att. γ) = ĭ, ĭ, initially varent (Ion. Att. νγ-νγ-) = ĭ-. In Lat. nad and an- from ĭ, corresponding to Gr. a and varent. In Arm. initially an- from ĭ-. Nothing in any degree certain has, as yet, been determined for the other languages. Examples:


Skr. jatā- 'born, son' Av. zat-, Skr. jati-s f. 'birth', Lat. gnatu-s natu-s, natiō (cp. also Gall. Cintu-gnatu-s 'first-born' according to Thurneysen Keltorum 2), from rt. gen- 'glignere'. Analogously Skr. satā- from san- 'reach', vatā- from pan- 'to like', gha-ta-s 'killing; blow, a putting to death' gha-ti- 'blow, a wounding' from han- 'strike, kill' etc.
Skr. jānati 'I recognise, know', O.Pers. 3. sg. pret. adāmā (= Skr. ájānāt), prim. f. *gā-nd-mā, Lat. gnātus, prim. f. *gā-rū-s (formed like du-rū-s), rt. ēn- 'nocere'.

Skr. ātā- f. 'rim, door-frame', Arm. -and in dr-und 'door-post, threshold', Lat. anta 'four-cornered door-pillar, pilaster' 1).

Skr. āti-ś f. 'a water-fowl', Gr. νῆσσα 'duck' fr. *nār-ṣa,
(with these also Lat. anas anitēs, OHG. anut, Lith. ánti-s 'duck'
we venture to make no assertion as to their phonetic-relations).

Skr. yātar- 'wife of the husband's brother'; that the ā arose from ą is probable on account of Gr. εἰνάρης, Lat. janitricēs, O.Bulg. ńčtry.

Further ā = ā in the Skr. nouns jā-s (loc. pl. jā-su) 'born, creature, being' (here orig. also pra-jā- 'progenies', which, going out from forms like loc. pl. pra-jāsu, passed into the ā-declension), vāja-sā-s 'lending power' (cp. vāja-sāṭi-ś f. 'a reaching of power', Skr. sān- 'reach, attain' and 'distribute, administer').

With ā = ā samana-gā-s 'going to the place of assembly'. These nouns are on the same footing as āfr 'commending; praise', pār 'citadel', s. §§ 306. 312.


Greek νά- νή- 'un-' in Dor. νά-νονος Hom. νῆ-κερβης etc.,
Umbr.-Samit. an- 'un-' in Umbr. an-hostatu 'inhastatos' Osc. an-censto nom. sg. 'incensa' etc. fr. *gā- (W. Schulze Kuhn's Ztschr. XXVII 606).

LIQUIDS.

A. LIQUIDS AS CONSONANTS.

Indg. primitive period.

§ 254. One of the most difficult questions of Indg. phonology is to determine how many liquids the Indg. prim. language possessed and what their nature was (op.Sievers Phonetik 3 p.104ff.).

1) If the Av. śpati kṣetaror aįpyā- should mean 'door-post' and be connected with Skr. āti- (Zimmer Alhind. Leben 154), its first syllable
That there were at least two liquids, is seen by the circumstance that the European languages and Armenian agree in presenting \( r \) in many cases and \( l \) in others. \( r \) e.g. in Arm. berem Gr. \( \gamma \iota \omega \) Lat. ferō O.Ir. berim Goth. bafræ 'I bear' O.Bulg. berq 'I take'. \( l \) e.g. in Arm. li (gen. liy) Gr. \( \pi \lambda \eta φε \zeta \) Lat. plō-nu-s 'full' O.Ir. línaim 'I fill', O.Icel. fleirr 'more' flestr 'most', Lith. plūna-s O.Bulg. plūnā 'full'.

A fixed law of representation has not yet been gained for the Skr. liquids.

The Skr. equivalents of Europ.-Arm. \( r \) are 1) mostly \( r \). bhārāmi : Gr. \( \gamma \iota \omega \). 2) \( l \). lūṣcati 'he picks, plucks, plucks out': Gr. ἐρόω 'I dig', Lat. runcäre 'to weed out', Lith. runkū 'I become wrinkled' ranūka-s 'wrinkle'. 3) \( r \), later \( l \). rup- lūp- 'tear, break': Lat. rumpō, Ags. reōsan O.Icel. rūffa 'to break, tear in pieces'.

Corresponding to europ.-Arm. \( l \) we have 1) in most cases \( r \). prātā-s 'filled': Lat. plētus (according to O. Weise Bezzenb. Beitr. VI 115 Skr. \( r \) always corresponds to Gr. \( \lambda \) after ἑ-sounds, e.g. Skr. brāvas : Gr. \( \chi λ \iota \phi \zeta \)). 2) \( l \). tuld 'balance': Gr. τάλαννω 'balance', Lat. tollō, O.Ir. tallaim 'I take away', Goth. pulan 'to endure, suffer'. 3) \( r \), later \( l \). rip- lip- 'smear': Gr. ἔπνος n. 'fat', Lat. lippu-s 'blear-eyed', Goth. bi-leiban 'to remain' (cp. Gr. λπαοίω 'I persist in a thing'), Lith. limpū O.Bulg. prīl(p)nq 'I stick, glue'.

The laws for these differences still remain to be investigated. It does not seem to be a mere accident that Skr. \( l \) = Arm.-Europ. \( l \) occurs much more frequently than Skr. \( l \) = Armen.-Europ. \( r \) 1).

must in that case be strong-grade. The interpretation of the passage in question is however doubtful.

1) "There is hardly a root containing an \( l \) which does not show also forms—within \( r \); words written with the one letter are found in other texts, or in other parts of the same texts, written with the other. In the later periods of the language they are more separated, and the \( l \) becomes decidedly more frequent, though always much rarer than the \( r \) (only as 1 to 7 or 8 or 10)". Whitney Sanskrit grammar § 53.
Old Iranian had only *r as opposed to Arm.-Europ. *r and *l and Skr. *r and *l. O.Pers. *l only in loan-words. It still remains to be investigated whether, and how far the *l-sounds in the younger Iran. dialects are to be taken into account for fixing the development of liquids in pre-historic times.

With this state of things it seems to be most suitable to put down the Indg. primitive forms after the standpoint of the Europ. languages and Armenian, thus e. g. *bherō ‘I bear’, *plešō-s ‘filled’.

Rem. W. Heymann ‘Das l der idg. Sprachen gehört der idg. Grundsprache an’, Weimar 1873, p. 1 ff., and D. Pezzi Glottologia aria recentissima, Torino 1877, p. 17 ff., give a summary of the older views, which have been put forth, regarding the previous history of the *r- and *l-sounds met with in the Indg. languages in historic times.


Nominal suffix -ter-, e. g. *mā-ter- *mā-tr- ‘mother’: acc. sg. Arm. mair, Gr. μητέρα, Lat. mātre, O.Ir. māthir n-, OHG. muoter, Lith. moterį (‘wife’) O.Bulg. matere, Skr. matāram;

1) Indg. *l beside *r could be held as definitely proved if Fortunatov’s rule had a firmer basis viz.: that, where in Skr. a cerebral consonant appears as representative of an original liquid + dental, this liquid is the regular correspondent of Europ.-Arm. *l (Bezzanberger’s Beitr. VI 215 ff.). F’s examples, to which a few others have been added by Windisch Kuhn’s Ztschr. XXVII 168, are for the most part etymologically very uncertain, nor are unexplained exceptions wanting. Cp. § 259.
voc. Gr. μήτρα, Skr. mātār. r as element of the ending of the 3. pl. mid.: Lat. sequontur 'they follow', Skr. riracrē perf. from rīc- 'to let loose, leave'.

r as consonantal glide after r, e.g. *gur-ū- 'heavy', see §§ 284. 287.

§ 256. Indg. l. Rt. leig- 'leave': Armen. ik-anem Gr. λείνω Lat. linquo O.Ir. lēcin 'I leave', Goth. leihwa 'I lend', Lith. liķū 'I leave' O.Bulg. oū-liķū 'remnant', Skr. riṣākti 'lets loose, leaves'. Rt. gel- 'fall, drop': Gr. ἕλκυ 'a throw', OHG. quellan 'to spring, gush', Lith. gūta-s 'end', Skr. gūta-iti 'trickles down'. Rt. gely- 'drag, tear, draw': Gr. ἔλαιο 'I drag, draw', ἔλαξ 'wound, sore', Lith. velkū O.Bulg. eīkē 'I drag, draw'; to the same root Skr. rōkā-s 'wolf'. Rt. ēlig- 'lean': Gr. χλω 'I lean, bow', Lat. clōn-s 'hill', O.Ir. cloen 'slant, unjust, wicked', Goth. hlāins 'hill', Lith. szlaiša-s 'mountain-slope', Skr. śrāya-iti 'leans against, puts to'.

Nominal suffixes -lo- -lā- -lu-. Arm. dov-dal 'beestings', Gr. θη-λύ 'teat, nipple' θη-λυ-ς 'nourishing, suckling, of female sex', Lat. fē-lāre 'to suck', O.Ir. de-l 'teat, dug', OHG ti-lā 'a woman's breast', Lith. pirn-delē 'she who has given birth for the first time', ep. Skr. dha-rā-ś 'sucking', Kurd. dē-l 'little woman'.

l as consonantal glide after ḷ, e.g. root form ḷl-, s. §§ 284. 287.

Aryan.

§ 257. Indg. r. Skr. rādha-ti 'brings about, prepares, satisfies' Av. rāṇāti 'prepares, gives' O.Pers. avahya-rādy 'on that account, therefore': Goth. ga-rēdan 'to provide' O.S. rādan 'to advise, help', O.Bulg. rāditi 'to provide, take care of'. Skr. pārī Av. pārī O.Pers. pāry 'about, over, against': Gr. νέρω, Lat. per- in permagnus. Perf. Skr. da-dārś-a Av. da-darś-s-a 'I saw': Arm. tses-anem 'I see' (§ 263), Gr. δέχομαι δεδομένο, O.Ir. perf. ad-chon-darc 'I saw', Goth. ga-larhjan 'to mark out', rt. slērk-. Skr. pra- Av. O.Pers. fra- 'before': Gr. πρό, Lat. prōd prō, O.Ir. ro, Lith. pra- O.Bulg. prō-, Indg. *pro
'before'. Skr. ud-rá- Av. ud-ra- a water-animal: Gr. ὦδ-ρός ὦδ-ρα 'water-serpent', O.Ieel. otr OHG. ottar 'otter', Lith. ūd-ra O.Bulg. yd-ra 'otter'.

Skr. rikh- likh- 'scratch, tear', rēkha- lēkha- 'scratched streak, stroke, line': Gr. ἐκθέω 'I tear open, up', Lith. rēkia 'I cut, plough'.

§ 258. Indg. I. Skr. rēcāya-ti Av. raucayetiti 'leaves, abundant': Arm. ūk-anē-ṃ Gr. λίπω etc., see § 256. Skr. śvāc-as- n. 'renown', Av. srav-ah- n. 'word, prayer', Skr. śru-tā- Av. svā-ta- 'heard, renowned': Arm. lu 'audible' (?), Gr. αἰθέρ 'renowned', Lat. in-clutus, O.Ir. clā 'renown' cloth 'renowned', Goth. hliuma m. 'ear, hearing', OHG. Ludo-wīg 'Klinōμαζο', O.Bulg. slovo n. 'word'.

Skr. rōca-tē 'lights' rōkā-s 'light' lōkā-s 'a lighting, open space', Av. raocah- n. 'splendour' O.Pers. raucah- n. 'day': Arm. lois, gen. Insōy, 'a light, Gr. λυχνός 'white', Lat. lūx lū-is, O.Ir. lōche 'lightning', Goth. līnāh 'light', Lith. laūka- 'palish' O.Bulg. luča 'beam, ray', root forms lega- and legi-. (cp. § 467). Skr. uḍa-prūt- 'swimming in water' plāv-a-tē 'swims', Av. frafravaiti 'waves to and fro': Arm. luva-na-ṃ 'I wash', Gr. πλίω 'I sail, swim' πληρό-ς 'washed', Lat. plūt, O.Ir. luath 'quick', OHG. flewen flouwan 'to rinse, wash', Lith. pluuti 'to rinse'.

Skr. laubhya-ti 'feels a strong desire': Lat. lubet libet, Goth. liufs O.Bulg. ljubū 'dear'. Skr. nābhi-la-m 'private parts': Gr. ὀμφα-λός 'navel, umbo', Lat. umbi-lēcū-s, O.Ir. imb-l-in 'navel', OHG. nabolo 'navel'.

§ 259. Skr. r was spoken cerebral (hence the change of prim. Ar. n to ņ in its vicinity, § 199), l dental.

r became b in absolute finality. Voc. mātah 'O mother': Gr. μητέρι ἀνταاه 'in the inside': Lat. inter. Cp. § 647, 3.

From a liquid with a following dental explosive or nasal often arose a cerebral explosive, or a nasal. katā-š kāṭuka-s 'sharp, biting': Lith. karič-s 'bitter'. gana-s 'band, crowd': Gr. ἀγάνῳ ἀγανᾶ. jathāra- 'belly, womb': Goth. kilfei 'womb'. ἄνι- 'the part of the leg just above the knee, axle peg': Gr. ὀλίγη ὀλλόν Ἰρ. ὀλλόν, Lat. ulna. paga-s 'wager, stipulation,
promised reward': Lith. pelna-s 'profit'. In like manner probably las-ami 'I long, desire' fr. *la-la-s, cp. lat-las-ut-s 'eager for, desirous', Lat. luscivo-s. It is still unexplained from what point of view such forms, as opposed to others in which the liquid apparently under similar conditions remained, are to be judged. It is not improbable that intermixture of dialects has taken place. Cp. p. 209 foot-note and in addition to the literature quoted there Fröhde Boezenberger's Beitr. III 130 ff.

Nasal from liquid through dissimilation. can-cūryatē fr. older Ved. cār-cūryatē 'moves quickly', intens. fr. cār-. can-cala-s 'moving to and fro', from cul-. pom-phulyatē, intens. to phālati 'springs assunder'. Cp. § 282.

r underwent transposition before certain consonant combinations, e.g. from dask- 'see' fut. drakṣyāmi (cp. Gr. δεξιωμ) perf. 2. sg. dadrāṣṭha inf. drāṣṭum; from turp- 'to satiate one's self' perf. 2. sg. tatrāṣṭha beside tatāṛṭha; from sarpcrāvati fut. srapsyāmi beside sarpsyāmi aor. āsrāpsam beside āsrāpsam.

§ 260. Avestic. Before i- and u-vowels an anaptyctic i or u was prefixed to initial r-. 'rista- 'part. fr. ræp- 'to grow forth'. An anaptyctic vowel arose from medial r before and after consonants, which, when r preceded, was generally represented by e. Perf. dāvar- sa: Skr. dādārśa, Gr. δεξιωμα, from rt. derk- 'sec'. e also after er = Indg. y, b, e.g. g. part. kerū: Skr. kṛtā 'made', prim. f. *gṛto- (§ 288). Other vowels more seldom, e.g. pres. sru-nao-mi from sru-: Skr. śrū- 'hear': s'rī-nao-mi (ni-s'rīnaomi 'I hand down') from sri-: Skr. śrī- 'direct towards, direct to'. Further e was suffixed to final r, e.g. autar- 'between': O.Pers. atar Skr. antār. Cp. §§ 624, 649, 4.

r became spirant before k, p, t, when the next preceding sonant had the chief accent. This pronunciation of the r was represented by hr before k, p, but hrt became ṣ. This law also obtained for er = Skr. ṛ (§ 288). mahr-ka- m. 'death, destruction' fr. *mah-r-ka- beside mar-ka- (with the same meaning) = Skr. marka- m. 'an injuring of the sun, a darkening'. vehrka-:
$§ 260–263.$  Indg. $r$, $l$ in Aryan and Armenian.  


Rem. Prim. Ar. final -rt, -rt always appear as -rṭ, -rṭ, e.g. hāk-dḥ = Skr. sa-kṛt ‘once’. The law, whereby -t became -ṭ (§ 649, 6), was therefore older than the change of rt to ṭ.

yr- was transposed with u-prefix, e.g. *rudā- n. ‘a determining’ : Gr. ἐφαρ- ‘determined, settled’. See § 157.


Armenian.


Indg. l. liž-u-m ‘I lick’ : Gr. λεῖχο Lat. lingō O.Ir. ligim ‘I lick’, Goth. bi-lāigō ‘I lick’, Lith. ležū Lith. ležini lijmi ‘I lick’; rt. leįgh-. ail, gen. ailōy, ‘alius’ : Gr. ἀλλος Lat. ali-us O.Ir. aile Goth. alijis ‘other’.

λ appears in some words for Indg. r and l, without the special cause being known. astl, gen. astel, 'star, constellation': Gr. ἄστερον ἄστερον Lat. stella fr. *ster-lā Bret. stérenn Goth. stārnō Skr. stār- 'star'. elin, gen. elin, 'hart': Gr. ἐλλός 'a young hart' fr. *ēl-v-o-ς, ēlāρo-ς 'hart' fr. *el-ŋ-bho-s, Cymr. elain 'hind', O.Bulg. jel-en-č 'hart'.

br, tr, bl were transposed to rb, rt, lb. surh, gen. srboy, 'clean': Skr. śubh-rā-s 'bright, pretty'. Kīrtā, gen. Kṛtan, 'sweat': Gr. ἰδρυς. e-lbair 'brother' (e- prothetic, s. below): Lat. frater, Skr. bhrdta-r.

Initial liquid developed a prothetic vowel which appears as e, a:

Original initial liquid. e-rek 'evening': Skr. rājas-. əlʊəs 'fox': Skr. lopa-sa.

Secondary initial liquid. e-re'k 'three': Skr. trāy-as. e-lbair brother': Lat. frater. a-λβευρ 'a spring' fr. *bleuv, older *bley(a)r: Gr. φρέωρ 'a well' fr. *φρη-φαρ.


Indg. r was dropped in tes-anu-m 'I see': Gr. δεικνύω. The reason of its dropping out is unknown.

Greek.

§ 264. Indg. r. ἄφεγω I stretch out': Lat. regō, O.Ir. imper. ἄρι «e «ere thyself», Goth. uf-rakja 'I lift up'. πέρα 'beyond, further' πέρα 'I pass through' πόρος 'passage, ford, way': Arm. heri 'far, distant', Lat. per-egre 'in a foreign land', O.Ir. ire 'ulterior', Goth. farjan 'to sail, drive', O.Bulg. perq 'I traverse', Skr. pāra-s 'more distant, farther'. νίπτω νίτσιω (fr. νίπτω, §§ 131. 645 final 2) 'over' νίτσιω-ς 'pestle': Lat. s-uper, Goth. ufar 'over' ufarō 'thereon': Skr. upārī 'above'. πέριμεν 'I break wind': O.Hg. ferzan 'to break wind', Lith. pėrāšiu 'I break wind', Skr. pārdatē 'breaks wind'. τέρπομαι 'I become dry': Lat. toreō fr. *tōrō, Gothic. ga-þa-rsa 'I wither', Skr. tarṣa-s-thirst'.

214 Indg. r, l in Armenian and Greek. § 263-264.
§ 264—266. Indg. r, l in Greek. 215
tréω (aor. Hom. ὑφω-σω) 'I flee, tremble' τρέω 'I tremble': Lat. tremō, Lith. trimū 'I tremble (with cold)' O.Bulg. tresa 'I shake', Skr. trāsāmi 'I tremble at, quake'. ἄγ-ρό-ς 'field': Lat. ager, Goth. ahrs 'field', Skr. ájra-s 'a plain'. πῦρ πῦρ-ός 'fire': Arm. hur, gen. hroy, 'fire', Umbr. purē 'ignes', OHG. fāur 'fire'. ἀ-σω-ς 'powerless, without authority' xuω-ς 'power': Skr. śu-ra- Av. sū-ra- 'strong, sublime'.

§ 265. Indg. l. λέχος n. 'bed' ἕ-λεχο-ς 'bed-mate' (ἕ- fr. ἕ-, § 564) : Lat. lectu-s, O.Ir. lige 'bed', Goth. liga 'I lie', O.Bulg. sa-logū adj. 'consors tori'. κολ-ων-ός 'hill': Lat. colli-s fr. *col-uni-s, ex-cellō, Ags. hyll 'hill', Lith. kūl-uni-s 'mountain' kuli 'I raise'. μελω 'I melt, make liquid': OHG. smelzen 'to melt, dissolve'. πλέν-το 'I steal': Lat. clevō, Goth. blifa 'I steal', Pruss. au-klıpts 'concealed'. καυ-λός 'stalk': Lat. cau-li-s 'stalk' cau-laec 'holes, openings', Lith. kuľ-la 'bone'.

§ 266. Affections of Gr. ρ and λ (partly proceeding from Indg. γ, β, § 292).

The one liquid was sometimes put in the place of the other by dissimilation, e.g. κεφαλ-αγιά beside κεφαλ-αγιά 'head-ache', to ἄγος, μορμολότερο 'I frighten' beside μόρ-μορ-ός 'fear', ἥριφυς (Hesych.) beside θηρίφυς 'hunter'; or one of the two liquids was dropped, e.g. φατρία beside φατρία 'brotherhood, clan', ἰφι-φακτο-ς fr. ἰφι-φακτος 'fence', ἐξ-παγίος 'frightful' fr. *ἐξ-παγίο-ς, to ἐξ-παγίνω; or the first liquid was changed to a nasal, e.g. γαγαλλίζω 'I tickle' fr. *γαγαλλίζω (beside γαγαλλίζω). Cp. § 282. Probably also by dissimilation Cret. (Gortyn.) μάρσφες fr. μάρσφες 'witnesses'; palatal l was the intermediate stage between ρ and l.

Initial ρ, λ underwent vowel-prothesis. ῥ-ϐθρός 'red': Lat. ruber, Skr. rudhirā-s. ἁρός 'I dig': Lat. ranco. ἰ-λαρό-ς 'nimble': OHG. lungar. ἀ-λίνω 'to spread over, besmear': Lat. li-νῦ, O.Ir. le-nim 'I cling to'. Cp. § 626. Ibid. also concerning medial anaptyxis.

The combinations sr- and yr- became ɕ- i. e. voiceless r, the former in prim. Gr., the latter in the course of the individual dialects, e. g. ἕω 'I flow' fr. Indg. sreq-ō, Skr. sravamī, to which
also Corcyr. ϕοσταμ 'streams'; Att. ὑφεθα 'a saying' = El. ὕφεθα. Cp. §§ 164. 565.

Anteconsonantal λ was pronounced l in Cret. (Russ., α), and as such passed into y, e.g. ωίνη: Ion. ἀληθή 'strength', θυύγο: Hom. θηλυγ 'I enchant, cheat' (cp. Lith. § 280).

λ before r, θ became v in certain Doric districts, e.g. γίνταρς 'dearest', ἴνθον 'I came'.

Italic.

§ 267. Indg. r. Lat. rē-s, Umbr. re-per 'pro re': Skr. rā- (instr. rāy-ā) 'wealth'. Lat. rēx rēgis, Osc. regatūreif dat. 'rectorī', Marruc. regen[a dat. 'reginae': Gall. rēx 'king' in Dunno-rix etc., O.Ir. rī gen. rīg, Skr. rāj-an- 'king'. Lat. ferō, Umbr. ferar 'feratur', Volsc. feron 'ferre', Marruc. ferenter 'ferentur': Gr. qēw, Skr. bārāmi. Lat. vertō, Umbr. co-veritu 'convertito', Osc. vēson 'Versori, Τροιὰν': Goth. vorjana 'to become', Lith. veisti and varjšti 'to turn, direct to' O.Bulg. wratiti 'to turn, direct to', Skr. vērtati 'revolves, rolls'. Lat. serpō: Gr ἱγμα, Skr. sārpaṃi, Indg. *sārpo 'I creep, crawl'. Lat. termō termem, Umbr. termom-s 'ad terminum', Osc. terminnattens 'terminaverunt': Gr. τέρμων 'boundary', τέρμα 'goal', Skr. tārman- 'point of the offering rod'. Lat. frīgus, Umbr. frehtef 'refrigerans, frigefaciens': Gr. ἑγος 'frost', prim. f. *srīgos (§ 570). Lat. caper capra, Umbr. cabrirer gen. 'caprini': Gr. κάρπο-ς 'boar', O.Icel. høfr 'he-goat'. Lat. aćer aćris, Osc. a krid abl. 'acri': (Gr. ἁκῷ-ς 'point', Lith. asnir-s O.Bulg. ostrī 'sharp', Skr. catur-āśra- 'four-cornered'.

§ 268. Indg. l. Lat. lāx lācis, Osc. Luvkis 'Lucius': Gr. λέγω-ς 'white'. Lat. lūō re-lūō so-lūō-s: Gr. λῶ 'I loose', O.Icel. lyja 'to crush, shatter', Goth. lūns 'loose', Skr. lū-nāmi 'I cut, cut down, annihilate'. Lat. gelu, Osc. gēla 'pruinam': O.Icel. kala 'to freeze' Goth. kalds 'cold', O.Bulg. šlučica 'snow-rain'. Lat. sōl: Gr. ἱδω-ς ἱλας Mid. Cymr. houl Corn. houl Goth. sowil O.Icel. sól Lith. saulė, Skr. Vod. suvar (gen. sūr-as) Av. hvar 'sun'. Lat. fōs fōris, Osc. Fluusal dat. 'Floraes', Sabin. Flusare abl. 'Florali': O.Ir. blath 'blossom' Cymr. blodau


The one liquid was often put in the place of the other by dissimilation: r for l, e. g. in caerule-s 'azure' fr. caelu-m, suffix -cro- in lucru-m simulacrum-m lavo-creum-m etc. from -clo- (saelu-m), which arose from *-clo- (§ 367), suffix -ari- from -ali- in exemplāri-s militāri-s lānāri-s etc. (cp. aequāli-s natāli-s etc.); l for r, e. g: in vulgar Latin pelegrīnu-s (Italian pellegrino) fr. per-e grīnu-s. r was dropped by dissimilation in prae-stigiae beside prae-stigiae, frāgāre beside frāgrāre etc. For a like reason nasal from liquid in cancer cancerī fr. *carcro- : Gr. xarxivo-s Skr. karkaṭa-s 'crab'. Cp. § 282.

r disappeared before s + consonant. com-pescō 'I constrain' fr. *-per(r)-scō *par(r)-scō, to Skr. parc- 'to put in connexion'. poscō fr. *por(r)-scō : Skr. prāhāmi 'I ask', Indg. *pṛḥ-skō from rt. prek-. tostu-s fr. *tors-tu-s, to torvō. Māspīter beside 'older Māspīter. Turcū-s beside Umbr. Tursco- Tusco-


ss, s from rs (from rss) in prōssum prōsa quōssum sāsām etc. = prōrsun etc. It is uncertain whether the preceding long vowel was here a co-operating factor. This is not proved by vorsus morsus etc., since r may here have been restored by levelling (cp. vortō mordeo).

1) Gr. κόκυξ 'coceyx' will also belong to this category, notwithstanding its problematical vocalism. Cp. the author Zum heut. Stand der Sprachwiss. 70 f.
ri, ro became er through the intermediate stage r in certus = Gr. *xoroc-ü, ager = Gr. *apou-ç etc. See §§ 33. 623 rem. 1. 633.

Just as medius arose from *medio-s, and mortuo-s from *mortuo-s (§§ 135. 170), so also postconsonantal l became sonantal, and thus arose -ol-, -ul-, -il-. This process seems first to have been effectuated in the archaic period.

pō-culu-m, older pō-colo-m, sae-culu-m, piā-culu-m (Umbr. pīha-klu 'piaculorum') etc. beside which also pō-clu-m, sae-clu-m etc. Analogously -bolo-, -bulo-, -bili- fr. -bīo- (Gr. -θο-), -bili-, as tabula tabula fr. *tablā (Umbr. tāflē e 'in tabula'). angulo-s (Umbr. anglom-e 'in angulum') fr. *anclo-s (§ 499), to ancu-s ancu-s and OHG. angul. populus poplus-s (Umbr. poploam 'populum'). nōmen-culātor fr. nōmen-clātor. Concerning coculù-m and torculu-s cp. also § 451 c.

Rom. A similar origin of er from r seems to me very doubtful in pl. generi (cp. Gr. γαμβηζον), numeri-s (cp. Umbr. onse 'in umero' Goth. ans 'shoulder'), numeri-s (cp. Osc. Nium siēs 'Numerii'). See § 583, 3.

§ 270. Umbrian. r often remains unwritten before s, e. g. fasiu fasio beside farrio 'farrea', pesnimu beside persnimu 'precamino'. In like manner the orthography fluctuates with final r, e. g. emantu beside emantur 'emantur', -pe beside -per 'per, pro'. In these cases r must have experienced a weakening.

§ 271. Oscan. r and l became sonantal before and after consonants, and then arose an anaptyctic vowel. This took the quality of the preceding vowel when the liquid came first in the consonant combination, and that of the following vowel when it did not come first. 1) aragetud 'argento', amiricatud 'inmercato, non mercato', Mamercius 'Mamercius', teremmivs 'terminibus', Alafaternum 'Alfaternorum' to Lat. albus-s. 2) sakarater 'sacratur' beside σακροσ 'sacrum' or 'sacra', pútúrús-píd-nom. 'utrique' beside pútúreí-píd loc. 'in utroque', Vestiri-kiliúi dat. 'Vestricio', zicolom 'diem' beside loc. zëkel[ei] abl. ziculud. Beside these however without anaptyxis altrei dat. 'alteri, alttram 'alteram, ethrad 'extra' etc., see § 627.

Old Irish.

§ 272. Indg. r. roth 'wheel', Gall. petor-ritum 'four-wheeled chariot': Lat. rota, OHG. rad n. 'wheel', Lith. rāta-s 'wheel', Skr. rātha-s 'vehicle, war-chariot'. đaur (gen. daro) Cymr. derwéon 'oak' (to which O.Ir. druid Gall. Dcuidae 'druids?'): Gr. δόξε wood, shaft, spear δόξας 'tree, oak', Goth. triu 'tree', Lith. dervė 'resinous wood' O.Bulg. dēva 'wood, tree', Skr. dāru drū- Av. dāru n. 'wood'. orc 'pig': Gr. νόρες-ς Lat. porca-s OHG. fahf farah Lith. pařszu-s O.Bulg. prase, prim. f. *porco-s 'pig, sucking-pig', brāi Mid. Ir. 'eye-brows': Gr. ὀφθαλμος OHG. brāwa O.Bulg. brōvς Skr. bhrā-ς 'eye-brow'. fe-r 'man': Lat. vir Goth. var Lith. vōra-s Skr. vārā-s, Indg. *yi-rō-s and *yi-rō-s 'man'. Comparative suffix Indg. -tero-: air-ther 'East' (to ar 'before, ante') lērithur 'more diligent'. Gr. πο-τερος 'uter' ὀμο-τερος 'rawer', Lat. i-tero-m, Skr. ka-tarā-s 'uter'. e-ter e-tir 'between': Lat. in-ter, Skr. an-tār.

§ 273. Indg. i. lōthur Mid. Bret. louazr 'alveus, 'canalis' Gall. lautro 'balneo': Arm. log-anam 'I bathe myself', Gr. λούω 'I wash' λουφόν 'bath', Lat. lavā lautus-s. gel 'white': Lat. helus (holus, ollus), helou-s, OHG. gelo (infl. gelawer) 'yellow', Lith. želū 'I grow green' O.Bulg. zelije n. 'greens, vegetables' zelenū 'green', Skr. hāri-Ś Av. zauiṛi-ś 'yellowish'. salann Cymr. halan 'salt': Arm. al (gen. alī) Gr. ἄλς Lat. sal salis Goth. salt O.Bulg. soli 'salt'. melg 'milk': Gr. μελιγ 'I milk', OHG. melchan 'to milk', Goth. miluks 'milk' (§ 628), Lith. meliu 'I milk', O.Bulg. mësti 'to milk'. lăr Cymr. llawr 'pavement, floor': Ags. flór 'house-floor' MHG. vlwert 'corn-field, ground, soil'.

§ 274. A transposition of vowel + liquid is assumed in flath 'dominion' (Goth. valdan 'to rule'), frass 'shower of rain' fr. *prastā (Skr. varṣā-ś 'rain') and in many other-words (Zeuss-Ebel G. C. 168, J. Schmidt Voc. II 370 ff., Windisch Dr. Gramm. § 79). It is unknown to us within what limits this sound-
process is to be acknowledged and by what it has been oc-
casioned.

Rem. A great number of the examples brought forward are to be sepa-
rated viz. all those cases in which ri, re, li, le depend upon Indg. r, l (§ 298), and those in which the liquid with the accompanying vowel was
the continuation of r, l specially developed in Ir. through sumprasadara, as du-fu-thacair ‘voluit’ fr. *du-fu-thacair FROM -theacair (§ 634).

Germanic.

§ 275. Indg. r. Goth. radojı ‘account’, OHG. redia, reda
‘account, a talking over, speech’ : Lat. ratiō. OHG. riozan Ags. redan ‘to complain, weep’, OHG. rōz ‘a weeping, complaining’ :
Lat. rudō ‘I bray’, Lith.raudō ‘plaint’ O.Bulg. rydaja ‘plaint,
Skr. rudāmi ‘I lament, weep’. Goth. gw-tairan ‘to destroy,
demolish’, OHG. fir-zeran Ags. teran ‘to loosen, destroy’ : Gr.
inō ‘I skin, flay’, Litt. nā-daras f. pl. ‘chips of bark’ O.Bulg.
dera ‘I skin’, Skr. perf. dudāra ‘he burst’. Goth. gatars
OHG. gi-tur perf. ‘I dare, venture’ : Gr. Acol. ἄρεσσος ‘courage’,
θεραῖς, θεράππος (ἄρεσσος : λόφος : πάθος), Skr.
dhārṣāmi ‘I dare, venture’. Goth. frēhnan Ags. friznan O.Icel.
frēga ‘to ask’ : Lat. precor procu-s, Lith. pruszyti. O.Bulg.
prositi ‘to demand, ask for’, Skr. praś-ma-s ‘a questioning’. Goth.
tag-r n. OHG. zahar m. ‘tear’: Gr. σάκιν Lat. dacruma lacrima
O.Bret. dacr O.Ir. dór ‘tear’. Nominal suffix Indg. -tro- : Goth.
Arm. araur, gen. arauru, ‘plough’ (-ur- = -tr-, § 360), Gr. ἄγο-
τρον ‘plough’, Lat. claus-trum ‘inclusion, bolt’, Skr. śrō-tra-m ‘ear’.

§ 276. l. Goth. lām-n OHG. lōn O.Icel. laun ‘pay, reward’ : Gr. ἄνο-λαύω ‘I enjoy’ λήδα ‘booty’, Lat. lucrum,
Laverna ‘goddess of thieves’, O.Ir. lo-g luag luach n. ‘pay, reward’ (?), O.Bulg. lov-Π ‘hunt, capture’. Goth. lisan OHG.
lesan O.Icel. lesa ‘gather, collect’ : Lith. lėsti ‘to pick up with
the beak’. Goth. viljān opt. ‘velim’ pl. vileima ‘velimus’, inf.
vījan OHG. wellan, OHG. wala f. O.Icel. val n. ‘choice’ : Lat.
velim velle, Lith. vēlyti ‘to wish, grant, advise’ O.Bulg. voliti
‘to be willing’, Skr. va-vāra perf. ‘chose himself, preferred’ vāra-s ‘a wish’. Goth. valdan OHG. waltan ‘to rule,
§ 276—277. Indg. r, l in Germanic.


§ 277. West Germanic.

Examples of dissimilation. In OHG. 1 from r, e. g. in murmułon murrmułunga beside murmrūn ‘to murmur’ murmułunga ‘a murmuring’ : Lat. murmurāre ‘to murmur, grumble’, Gr. μουρμύρω μουρμύρω ‘to murmur, roar, ripple’; in the loan-words turtul-ōba fr. Lat. turritur, martela beside martera martra ‘torture, rack’ martolōn beside martrōn martron ‘to torture; rack’ fr. Greek-Lat. martyr martyrium. Cp. § 282. Dropping of r, l. OHG. crisismūn beside crisirnūn crisirnūm ‘to gnash the teeth with rage’, cp. OS. gristgrimmo ‘a gnashing of teeth’. It is not so certain that OHG. bior Ags. beór O.Icel. björr ‘beer’ are related to OHG. brinwun ‘to brew’, Greek-Thrace. βοῦρον a kind of beer, Lat. dē-frūtum; in case they do, the dropping of the root r must be ascribed to the prim. Germ. period (*b(r)um-ra-). Many bring Goth. fugls OHG. fogal ‘bird’ together with OHG. fliogan ‘to fly’; the dissimilatoric disappearance of the l would also here be prim. Germ. (*f(ō)ug-la-).

In the final syllable of nouns with r- and l- suffixes, when r and l followed a spirant or explosive, through the disappearance of the short vowel (§ 635) after the liquid, there arose in West Germ. ֜ and ֑ out of which a new vowel was developed, in OHG. OS. ֝, Ags. ֝, ֝. Nom. acc. OHG. acchar OS. accar Ags. āccer ‘field’ = Goth. nom. akrs acc. ֝, Gr. ἄγγος ἄγγος; OHG. fogal OS. fugal Ags. fugol ‘bird’ = Goth. nom. fugls acc. fugl. (It is possible that liquids were also spoken syllabic in Goth., akrs ֝, fugls fugl1)). The anaptyctic vowel in

1) The contrast between vor váir fr. *wair* *stairz and akrs speaks for akrs (§ 660, 6). But mono-syllabic akrs may then have arisen from disyllabic akrs.
OHG. forced its way from the final into the medial syllable of these nouns and their derivatives, at first after short syllables, and then later after long also, e. g. archures ‘of a field’, fugalōn ‘to catch birds’ (cp. Sievers in Paul-Braune’s Beitr. V 90 ff.). Here must further be mentioned the development of a vowel between liquids and h which spreads throughout the whole extent of OHG., and in which OS. also to a certain extent shared, e. g. OHG. OS. ferah ‘soul, life’ : Goth. farhōn-s ‘world’; OHG. OS. bi-felahan ‘to hide, bury’ : Goth. filhan. Anaptyxis is also found between r and guttural and labial consonants especially in Oberdeutsch (Upper German), e. g. purag puruc beside burg ‘citadel, city’ : Goth. baúrgs; peragan beside bergan ‘to conceal’ : Goth. baiergan; arapet beside arbit ‘work, toil’ : Goth. aráwps; aram beside arm ‘arm’ : Goth. arma. The vowels thus developed frequently become assimilated to some vowel in their vicinity, e. g. hungirita ‘hungered’ to hungar ‘hunger’; fingirin ‘finger-ring’ to fingar ‘finger’; wuntorôn beside wintarôn ‘to wonder at’; puruc beside purag ‘city’; piricha = pircha bircha ‘birch-tree’ : Lith. bérža-s.

Rem. 1. In these cases it is partly a question of a prim. Germ. r and l, which depended upon Indg. ɾ, ɬ, e. g. the orig. f. of OHG. burg Goth. baúrgs must be put down as *burgh-, s. § 299.

Rem. 2. Cp. the anaptyxis with m § 180, and nasals § 215.

l became geminated in West Germ. before ɨ, e. g. OHG. willio-willo OS. willio Ags. willa ‘wish, desire’ : Goth. vilja, rt. yel-. See § 143 p. 129. Cp. the similar gemination of nasals § 216 and spirants and explosives (§§ 529, 531, 535, 540).

**Baltic-Slavonic.**

Lat. barba OHG. bart 'beard'. Lith. kraužu-s 'blood' krūvina-s 'bloody', O.Bulg. krūv-ḱ 'blood' krūvinā 'bloody': Gr. κρέας 'flesh', Lat. crōnus, O.Ir. crū 'blood', OHG. rō (infl. raukar) O.Icel. krār 'raw, uncooked', Gr. krāvyn-ā krāvī-s- 'raw meat'. Lith. bēbru-s and bēbru-s O.Bulg. bēbrū 'beaver': Lat. fiber O.Corn. befer (to which Gall. Bibr-ax) OHG. bībar 'beaver', Skr. babhrā-ṣ adj. 'brown', as subst. a kind of great ichneumon, Indg. *bhe-bhrus.

§ 279. Indg. l. Lith. lōju 'I bark', O.Bulg. lāja 'I bark, scold': Gr. λύ-γο-ς 'idle talk', Lat. la-trāre 'to bark', Goth. lai-lōm 'they reviled' Skr. rāya-ti 'barks, barks at'. Lith. pelė 'mouse' pālsza-s 'faded', O.Bulg. planū 'whitish' pelesū 'gray': Gr. πελλό-ς πελλιδρό-ς πελλό-ς 'colourless, gray, pale', polu-ς 'gray, hoary', OHG. fulo (infl. fulawēr) 'pale, faded', Skr. palitā-s 'gray'. Pruss. dalpta-n a smith's tool for drilling holes, O.Bulg. dlato n. 'chisel': OHG. delban Ags. delsen 'to dig'. Lith. blendeši-s 'I darken myself' (of the sun) prę-blindē 'evening twilight', O.Bulg. błęda 'I err': Goth. blinds 'blind' blandan sik 'to intermingle'. Lith. mig-lā and myg-lā (also myylā and myyglē) O.Bulg. mig-la 'fog': Gr. Hom. ὀμίχλη (Skr. mihirā- 'cloud', s. § 287).

§ 280. Lithuanian.

The difference between l (hard) and l (soft) is sharper than elsewhere in the south-eastern districts boarding on those where Slav. is spoken; in some parts of the former territory, e. g. in Godlewa (Govern. Suwalki), antaeconsonantal āl sounds almost like the diphthong au, e. g. in wālka 'fire-wood', cp. Cret. akā = al̂kā § 266 1). Following palatal vowels then also occasion a softened pronunciation of the liquid, when they are separated from it by one or more consonants (the separating consonants are also thus softened); hence e. g. nom. sg. tiltus- ('bridge'), but loc. tilte.

Rom. The East Lith. dialect of Szyrwid († 1631) not only shows l before a, o, u, but also before e and ē, e. g. slepū 'I conceal', saulē 'sun'. Garbe, Lit. u. lett. Drucke des 16. u. 17. Jahrh. IV p. XXXIV sqq.

1) Cp. also Polab. vālab 'wolf', rūmno 'wool' = Slov. vlk, rlna; French hault = Lat. altus; Du. woald = Mod.HG. wald, Swiss Alem. (Bero-
Dissimilation. *katruṅ 'in what direction? whither?' fr. *katruṅ, cp. kun, kituṅ. The ending of the so-called verba punctiva -eriu (1. sg. pres.) became in East Lith. (also in Lett.) -elin when preceded by v, e. e. g. būrsztelin fr. būrszteriu 'I knock a little' (then by analogy also stūktelin 'I beat a little' for stūkteriu etc.). purpu-rinis 'purple' from and beside purpurinis. Analogously Lett. skrōdelis 'tailor' fr. skrōderis. Cp. § 282.

§ 281. Slavonic.

-tel-į, the suffix of nomina agentis, opposed to -ter- -tor- etc. of other languages (e. g. da-tel-į 'giver': Gr. voc. σω-την nom. δο-την acc. δο-την, Lat. da-tor, Skr. dā-tār-) seems to have come by its l through dissimilation, and to have arisen regularly in forms like šri-telį 'sacrificer' oru-telį 'arator', oriteli 'destroyer'. Cp. § 282.

Rem. 1. It seems to me improbable that the Lith. fem. -klė belongs directly here, i. e. to feminines like Gr. ἐβρ-την Lat. vic-tri-x Skr. dā-trī (J. Schmidt Kahn's Zschr. XXV 29). I connect it with -klā- = Lat. cloto from *-tlo-.

Prim. Slav. interconsonantal -or- -ol- and -er- -el- appear in O.Bulg. as -ra- -la- and -re- -le-. prosc 'sucking-pig': Lith. puršu-s, Lat. porcu-s. brada 'beard': Lith. barzdė, Lat. barba, OHG. bart. vlakā 'draught' in ovlakā 'cloud' from ovlakā (properly 'a veiling cover'): Lith. už-valku-s 'a cover', Gr. ἐλάσσα 'birch-tree': Lith. bėrža-s, OHG. pircha. vlčkā 'I draw': Lith. velkū, Gr. ελκώ. Corresponding to this mode of treatment, initially, e. g. ralo 'plough' fr. *or-dlo (-dlo- = Gr. -δλο-) : cp. Lith. ār-kla-s 'plough' (-kla- = Lat. -clo- from *-tlo-); ra-taį 'husbandman': Lith. ar-tąį-s; but alkati beside lakati 'to hunger': Lith. ilkī 'to hunger'.

Rem. 2. In the treatment of o, e + liquid between consonants the Slav. languages took various directions: O.Bulg. prase Serv. praso Czech prase — Polish prasię Upper Sorab. praso Lower Sorab. prase — Russ. praseja. Perfect agreement only exists in a few words initially, e. g. O.Bulg. ralo = Serv. Slov. Russ. ralo Czech rállo Pol. Upper Sorab. Low. Sorab. rállo. The investigations hitherto made concerning these phenomena

Münstcr; s. Braundtter Die Zischl. der Mundart von B.-M. 1883 p. 12) seryanšter = vergašttern.
Changes of liquids in the prim. Indg.

§ 282. The beginning of the processes of dissimilation, referred to in §§ 259. 266. 269. 277. 280. 281, probably goes back to the prim. Indg. period.

Already at this period e. g. an original *ger-ger-* (or with other vowel-grade, e. g. *ger-gr-*) ‘to gargle, swallow, gulp down’ may have become *ger-gel-* by dissimilation or an orig. *gel-gel- (gel-gel-*) have become *ger-gel-* (op. Lat. *gurgulio*, OHG. *querechela* ‘gullet, windpipe’, Lith. *gargališčia* ‘I gargle, rattle in the throat’; the latter may of course be a loan-word from German, Mod.HG. *gurgel* is borrowed from Lat. 2).

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1) My attention was drawn to it many years ago by Rob. Scholvin, but I do not know whether it has been observed elsewhere.

2) Forms like Gr. *γέγυρσα* βέγγυρσα (Heaych.), *γαργαλιά* ‘uvala’ do not stand in the way of this theory. For firstly dissimilation need not have been extended to all the derivatives of reduplicated roots, and secondly, the original equality may have been restored again partly by assimilation and partly by form-association.

Brugmann, Elements.
factory explanation is thus arrived at for a number of roots ending in a liquid, and often having full reduplication, which also show now r, now l unreduplicated finally (cp. e. g. Lat. voräre and gula). It would be worth while to investigate more fully whether the nominal suffixes -tro- and -tlo-, beside -dkro- and -dhlo- are due to dissimilation.

In like manner the substitution of a nasal for a liquid by dissimilation might have had its beginning in the prim. Indg. period, cp. e. g. Skr. baur-bhura-s 'bee', Gr. πεύ-πυριδίων a kind of wasp, cp. the author Curtius’ Stud. VII 329. 357 f.

B. LIQUIDS AS SONANTS. 1)

§ 283. The question, how many different, and what liquids were spoken in the Indg. prim. period (§ 254), equally concerns both sonant and consonant liquids. As sonants we represent them by l and r, and as consonants by l and r.

Sonantal liquids like syllabic nasals were spoken both long and short in the Indg. prim. period (§ 222), but mostly short, and from a morphological point of view they corresponded, when long, just as long sonantal nasals, to _trap and _un, see § 312.

1. Short sonant liquids.

§ 284. Owing to the treatment in the developments of the individual languages we distinguish three cases.


3. Before sonants in which case r and l were spoken as glides, e. g. *gr̪-u-s ‘heavy’, Skr. gurá-ṣ. Cp. § 223, 4.

1) Cp. the literature quoted in the foot note to p. 190. To the proofs that sonant liquids were spoken in the Indg. prim. period, we add § 285 rem. ‘a new, and as it seems to us, indisputable one.
The following is a survey of the usual representation of γ in the individual languages arranged from these three points of view. (The treatment of І is analogous).

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Prim. Indg. period.

§ 285. 1. Before explosives, spirants, nasals, у and finally.

*my-ti-s 'dying, death' from rt. mier-: Lat. mors mortis, Lith. mirti-s O.Bulg. stū-mrūš, Skr. myti-ś; *my-tō- part. from the same root (neut. as abstract noun): OHG. mord Ags. O.Icel. morð n. 'murder', Skr. mytá-s 'dead' mytá-m 'death'. *bhy-ti-s 'a bearing, bringing': Lat. forsi forte, O.Ir. brith 'a bearing', Goth. ga-baur& OHG. gi-burt 'birth', Skr. bhṛti-ś 'a bearing, nursing, maintenance'. Tense stem *dyē-ś- from rt. derē- 'see': Gr. ὄφραξ ὄφανω, Skr. áyśl-and. *yṛ+to- part. from root yēr- 'turn, direct to': Lat. vorsu-s, O.Bulg. vrāsta f. 'state, condition', Skr. vrītā-s part., vrītā-m subst. 'state, situation'. *geter-to-s 'fourth', to *getuver- 'four': Gr. τέταρτος τέταρτος, Lith. ketvīčta-s O.Bulg. četviršt. *pr-tō- *bhṛ-tō- antecsonantal weak forms of the stems *poiē- 'father' *bhṛd-tōr- 'brother': Gr. dat. plur. naxéa-oi, Goth. dat. pl. fadr-u-m, Skr. loc. pl. pit-fi; Skr. bhṛaty-putra- 'brother's son', Goth. brōp-rūbō 'brotherly love' (the latter may also like the nom. pl. brōprjus be a new formation).

*ūgo-s 'wolf' from rt. ｙηγ- 'drag, tear along'. *Arm. gail, Goth. vulfs, Lith. vilka-s O.Bulg. vlūkū, Skr. vṛka-s. * Weak
present st. form *pi-pə- from rt. pel- 'fill': Gr. κυ-νιλία-μεν, Skr. piyr-mās; part. *pl-ə-nō-s 'filled, full' from the same root: Goth. fulls (fr. prim. Germ. *ful-na-z, § 214 p. 181), Lith. pilna-s O.Bulg. плъна, Av. per'na-.

Rem. In the same manner as suffix nasals forced their way into the interior of the root syllable, when this contained an i or u, e. g. *junag- (Skr. युनाजे, Lat. jungō, Lith. jünge) fr. *jung-u- (s. § 221), so also when the root contained r or l as sonant. E. g. Skr. kṛṣṭāmi 'I cut' kṛṣṭā-krām 'chip, refuse', Lith. krintū 'I fall off' (of leaves, fruit etc.), rt. gert-. Lith. drīs- in drīs-ti 'to become courageous, venture' fr. drīns- (ep. Skr. dhrīṣ̌- 'courageous'), rt. dhers-. O.Bulg. kɾeṭ- in kɾeṭają 'flecto' kɾeṇg 'deflecto' (fr. *kɾeṭ-ta, § 545) fr. *qṟu- (ep. Skr. kṛṇā-ti 'twists thread, spins'), rt. qṟi-. Goth. wunja f. 'snare' fr. *wunja- from root werga- (O.H.G. wurgan 'to strangle' MHG. er-wurgan 'to strangle', Lith. vertiū 'I string together, straiten'). O.Ir. línciu 'I leap' (ep. perf. 3. sg. le-blaing for *fe-blaing after the initial sound of the pres. form) fr. *wunag-, to Skr. vālgāmi 'I leap' (§ 178), is uncertain. And in a similar manner, as e. g. in Lat. the nasal extended itself from the pres. jungō to other forms belonging to the same root (jāntu-s, con-jānax etc.), there was formed in Lith. after drīs- a pres. džeš (ep. mežu 'I make water' for minēu in Beszenberger's Beitr. zur Gesch. der lit. Spr. 41, after the ratio of renk- : rinkas etc.) and a fem. subst. drasād 'boldness'; in Slav. after kret- an adj. kratā 'tortus'; in Germ. after yunag- a pres. yunagō (Ags. wunag 'to turn, press' O.H.G. rüngan MHG. rüngen 'to move to and fro, wind with exertion') and an adj. yunagae-x (O.Icel. vungr 'crooked, wrong' M.Eng. wunag Mod.Eng. wrong); in Ir. after *yulag- the perf. le-bláing (s. above), whereas Lith. krintū, placed on a line with limpu etc., gave the impetus for the formation of kritisr krisiu etc. These nasalised forms of roots in liquid + consonant in the European languages furnish the best proof of the existence of sonant liquids in prehistoric times. For the suffix nasal can only have been forced over by a root form like dhīrs-, not by one like dhers- and dhors-, since forms like dherns- or dhorns- are unheard of (just as beside jünag- there appears no jynag- or jynag-).

Final ḍ, ḍ. Skr. nom. acc. neut. sthā-tṛ́ 'standing', beside which sthā-tūr (Lanman Noun-inflection p. 422) as representative of original *stā-tṛ́r i. e. of a form originally only used before initial sonants, see § 287; sthātṛ́ : sthātūr = ddā ḍa 'ten' : pādām 'pedem' (§ 231 rem.). Gr. ὕδ-aq- 'udder' ḍḥn-aq- 'liver' fr. *-g, beside which ὕδ-ωq- 'water' probably fr. *-q. Lat. fec-ur fem-ur fr. *-or = *-g, beside which ūb-er, whose -er can be explained from *-ar *-q. ḍ : q = -u : -ā (in Skr. purū Gr. πολύ : Skr. purū Lat. cornu). Armen. albeur (gen. alber) 'source, spring'

Gr. particle ἂρ indicating a natural sequence etc., Lith. įr 'and, also' fr. *γ. The form ḍ̀r was probably developed before forms beginning with a consonant. ἂρα and Cypr. ἀφ(α) fr. ḍ̀r by prothesis (§ 266)? Cp. the author Ber. d. sächs. Ges. d. Wissensch. 1883 p. 37 ff.

§ 286. 2. Before i. *my-ίζ̣- pres. stem from rt. mer-diẹ: Lat. mór-ior, Av. meṛ-yēmi. *syr-ίζ̣- pres. fr. root sper-: Gr. σαλώω ἀσαλώ Ι struggle convulsively', Lith. spiriu 'I push with the foot'. *sqil-ίζ̣- pres. from rt. sqel-: Gr. σκίλλω 'I stir up, hoe', Lith. skiltu 'I strike fire'.


Aryan.

§ 288. 1. Indg. γ (游戏技巧) = Skr. γ, Av. er (ομν before k and ἄ, and eγ fr. *ert in chief accented syllables, in other cases
before consonants or, see § 260), O.Pers. ar; the pronunciation of this O.Pers. ar must still have been different from that of ar = prim. Ar. ar (e. g. inf. cartanaíy ‘to make’); it was perhaps y (cp. Hübschmann Kuhn’s Zeitschr. XXVII 108 ff.).


For Skr. kyṛp-tā- Av. kerśp-ta- ‘put in order, fixed’, there is no certain corresponding form in the other languages.

On Skr. final y = Indg. ā, see § 285.

From pre-Aryan gen. sg. *bhrā-ty-r-s ‘brother’s’ arose -tyś (§ 556, 1), Skr. -tyr before voiced sounds (cp. -ir -ur fr. -iś -uś, § 647, 6), hence by § 290 -tur, bhrātūr. The same formation is shown by Av. nerś from nar- ‘man’. See the accidence.

Owing to the limited extent of the monuments, it is impossible to arrive at anything definite regarding O.Pers. u

1) Lith. platū-s ‘broad’ does not belong here, it has the same vowel-grade as brangūs ‘dear’, daugūs ‘dreadful’ etc.

§ 289. 2. Indg. r before ī seems to have been represented in Av. from the oldest period onwards, in the same manner as before other consonants: mer-gyiti like Lat. morior, Indg. *mr-ī-ṭaj 'dies'; ker-gyetē 'is made, effected'. The Skr. forms mriyāṭē kriyāṭē are, as we have seen § 120 p. 112, of a different nature. O.Pers. amariyatā 'he died' may be amaryata (s. § 125 p. 116), and would then correspond to Av. mer-gyiti; but it may also, according to the O.Pers. mode of writing, be read amriyata, in which case it would be equal to Skr. āmriyata.

ry does not seem to occur in initial syllables in Sanskrit. Optative (precative) forms as kriyāṭ kriyāśma from kar- 'make', as well as jāgriyat (Āit. Brāhm.) opt. of jāgar-mi 'I watch' are to be judged of in the same manner as mriyāṭē. Forms like jāryati 'becomes feeble' from rt. ĝer-, tīryati (ava-tīryati 'descends') from rt. ter- go back to original ī (s. § 306), and are on a level with mt-ya-tē 'disappears' from rt. mej- 'lessen', brū-ya-tē 'is heard' from rt. kley- etc. As regular representatives of Indg. ī, there can only be taken into account on the one hand jāgryat (beside jāgriyat) — how many such forms are extant? — and on the other, forms like opt. kur-yaṭ from kar-'make', tur-yaṭ tuur-yaṭ from tar- 'to press through', a-juryā-s 'not becoming old' from rt. ĝer- (the author Kuhn's Ztschr. XXIV 282 ff.). I am inclined to think that the latter category exhibits the regular development (except that ur took the place of ir, s. § 290) and that forms like jāgryat were later new formations (after jāgriḥ etc.).

Rem. This view might be put forth with greater certainty, if the possibility did not exist that the ur of kur-yā- was taken over from the weak stem of the opt. *kur- (3. sg. mid. *kur-tā) = Indg. *gṛ-i- (§ 290).

§ 290. 3. Skr. ur ir, Av. O.Pers. ar (concerning Av. or fr. ar see § 94).

Skr. puru- Av. parao- pouru- O.Pers. pāru- 'much', prim. f. *pūlu- from rt. pel- 'fill'. Skr. giri-ṣ Av. gairi-ṣ 'mount-

Finally. Skr. -ār Av. -ar, the ending of the 3. pl. pf. act., e. g. Skr. ās-ūr Av. āsah-ar' from rt. es- 'be'. These forms are on a level with the nom. acc. neut. sthā-tūr § 285 p. 228.

The change between ur and īr in Skr. was very probably originally evoked by the varying timbre of the neighbouring sounds. Preceding or following labials developed the form ur; cp. sphrūti; Skr. āraṇa-s 'ram' fr. *yur-an-u-s (§ 157), *ygr-an-(ep. Arm. gārn, gen. gārin, § 291) beside Gr. Taugv-ν'- fr. *ur-n- (§§ 164. 292); gur-ū- (opposed to gir-ī-) etc. The orig. phonetic state became obscured through a great number of new formations made by analogy.

Rem. The present of kar- plays a principal part in the question as to how Skr. ur and īr are to be explained. It may be remarked that I trace the Ved. imperat. kuru- back to *qvr+u; -u was an appended particle like -dhi in i-hi Gr. i-th. 'go' (Thurneysen Kuhn’s Ztschr. XXVII 180). After the relation of bhūra : bhurata, there was formed to kuru the 2. pl. kurata, in the indec. kuruta. For the rest see the accidence.


Armenian.

§ 291. 1. barjr, gen. barju, 'high' fr. *bhrgh-u- : Skr. bhk-
ánt-, O.Ir. bri (§§ 288. 298). harc, gen. harṣį, 'question',

¹) Here come probably also Lat. gravi-s as gr-ave-i-s, cp. Gr. ραρ-
harçane-m 'I ask' with ç fr. (k)sak: Skr. prchā, OHG. forscō (§ 288). mard 'man': Skr. mṛtā-s. arj, gen. arjoy or arjū, 'a bear': Skr. ṇāṣa-s. ard-ar 'just, upright': Skr. r-tā-s 'suitable, right'. arcio and arcui 'eagle' (o fr. p, §§ 330. 483): Skr. ṇjīṽā- 'stretching oneself, taking up in flight' (of birds of prey), Av. erzīfya- 'stretching oneself; falcon'. kar- 'four' (kar-a-sun 'forty') fr. *(q)tyr- (§ 360) = Gr. τρα- in τρα-νεία 'table' (properly 'four feet').

Finally: albeur 'source' fr. *albey(a)r § 285.


2. Examples for ḫi, ḫi are not at hand.


Greek.

§ 292. 1. διαρό-ς διαρώ-ς 'skinned': Av. der-ṭa- 'cut, mown', Lith. nu-dirta-s 'skinned'; dārau-ς 'excoriation': Skr. dyti-ṣ 'leather-bag' (cp. Gr. δόξα 'hide'), Goth. ga-taurf 'a destroying', from rt. der-. Hom. ταρωνίμια τετάρωντει from τέρπω 'I delight': Skr. tṛpāmi (not found), tṛpyāmi, tṛpyāmi 'I satiato myself, become satisfied', rt. terp-. Aor. ἐμφόδο-ν to πέρδω 'pedo'; the same root form in OHG. furz 'crepitus ventris', Lith. pirdi-s m. 'crepitus ventris' pirda 'qui pedit' Russ. perdēt 'pedere' (prim. Slav. *pirděti: μάρναμαι 'I fight' and Coreyr. βαρναμενος fr. *βαρναμενος (§ 204): Skr. mṛṇ-d-mi 'I bruise, beat in pieces'. Analogously βαρδήν 'το βαζωάμαι γυναῖκας'. ιμπρακβάται, fr. *βρανήν: Skr. mṛṇa-ti 'presses vehemently' (cf. Lat. comprimere feminam). τεταράμενον to τέρταφα (τρόπω 'I turn'), like Skr. dadyśimā to dadāśa (dard- 'see'). ἡμοία ταρωνία 'a drying-kiln' to τέρματω 'I become dry': Skr. ἦγα- 'thirst' ἦγαμι 'I am thirsty', rt. tere-. πρακτόν μέλανα
Hesych.: Skr. ρίζ-νι-ς 'spotted'; beside which, with other vowel-grade περίνω-ς. κρω-ή κωρ-δ-ά 'heart': Lat. cor cord-is, O.Ir. eride, Lith. szirdi-s O.Bul. svrdi-ce.


It has not been definitely determined on what the varying position of the liquid depends (ρα λα and αρ αλ). Form association can only be assumed for certain cases, e.g. διαφό-ς: διέρα διανά; εἰκλάπην: εἰκλήπει εἰκληπα. Cp. the author Kuhn's Ztschr. XXIV 258, Osthoff Morph. Unt. II 144 f.


Likewise -αρ fr. ἄτ finally, see §285.

In Acol. ρο αρ from ρα αρ, as Lesb. στρότος μέμορθαι, Beoet. στρότο-ς.


General Greek ἄρ, ολ in ἴ-πορ-ο-ν πολύ-ς etc., concerning which see §306.
Italie.


On the dropping of *r* in Lat. forms as *tostu*-s, *posco* (§ 288) see § 269.


R e m. 0 before *l* + cons. (except *It*) uniformly became *u* in Latin, whereas the vowel fluctuated before *r*, cp. *curtu*-s : Gr. *κατε-σ* 'shorn, cut', *formu*-s, later *furmu*-s : Skr. *gṛ-ṇā* 'heat, glow'. A law for this irregularity has not been discovered.
Finally, -ur fr. γ, jec-ur, see § 285.

§ 296. 2. Lat. morior : Av. merśyēiti 'dies' (§ 289). hiori
O.Lat. = hortor, probably to Umbr. heriest 'volet' Osc. herest 'volet'
and identical with Gr. χαράω 'I rejoice', to which it was the causat.
form ('I make pleasure, joy'); hortor would accordingly be from
a *herto- = χαρό-ς 'wished for'. orior orientur fr. *γ-ίό-, to
ortu-s : Skr. γτά-ς (§ 295).

§ 297. 3. O.Lat. tuō, rt. tel. oc-culō either fr. *hyl-ō or
*celo (= O.Ir. celim OHG. hilu) through the influence of the
l. gul- in gula gulō rather from *gul- (cp. Skr. gira- -gila-
'swallowing', gili-ς f. gilana-m 'a swallowing', § 290) than from
*gel- prim. Ital. *gēl-, since in the latter root form *vel-
would be expected (cp. veniō, veru § 432 b), hence gula : OHG. chela
'throat' = Gr. BΣoτ. βαρά : Goth. qinō 'wife; gulō was formed
like Goth. skula 'debtor' (§ 301).

Old Irish.

§ 298. 1. General Keltic vi (re), li (lo).
O.Ir. bri gen. breg (from *brix *brigos) 'rising ground',
Gall. brigi- (in Brigiani an Alpine race, Are-brigiu-m etc.),
Augusto-ritu-m : Av. peśu-ś, Lat. portus, OHG. furt (§ 295).
Gr. ἐπαθω 'I saw', rt. denē-. O.Ir. brissim 'I break', brisc
Bret. bresk 'fragile, apt to break', according to Stokes' conjec-
ture (Mém. de la soc. de lingu. V 420) from rt. bherdḥ- : Gr.
πέρδω 'I lay waste, destroy' aor. ἐπαθο-ν; on brisc cp. § 516.
O.Ir. lethán O.Cymr. litan 'broad' : Skr. pṛthā-ś (§ 288).

O.Ir. re-nim 'I give up, sell, grant' : Gr. πέργημι 'I sell,
export', which represented an older *παρ-νά-μι (this form
seems to be represented in Hesych. by πορνάμεν · πολείν with o = a,
§ 292 extr.), originally *pr-nā-mi from rt.; per-
ara-chrinim 'diffi-
ciscor' (perf. do-ro-char) : Skr. ṣr-ṇā-mi 'I separate, break in
pieces'. Mид.İr. do-breth 'datum est' : Skr. bhr-tā- 'carried'; brith
'a carrying' : Skr. bhr-ti-ś 'a carrying', from rt. bher-.. sreth 'row' :
Lat. sors sortis beside serō. Here belong further, from such
roots as bher-, the part. perf. pass. in -te, brithe brathe 'brought', and the part. necessitatis in -ti, brithi brethi 'ferendus'. cride 'heart': Gr. τρεῖν-τη (§ 292).

bligim 'I milk' from *mligim (§ 212) : O.Bulg. měža, Indg. prim. f. *mlet-ō from rt. melė-; to which mlicht blicht 'milk': Lat. melē-s. clethi 'celandum' to celim 'celo': Lat. oc-cultus-s. Inf. bliht to melim 'mole'.

When such syllables with ri, li = Indg. r, l became voiceless in composition in Irish, r, l arose anew through vowel reduction when another syllable followed (samprasāraṇa). From these a vowel was then again developed. Thus e. g. sperthe part. pass. 'oblatus' from *ēd-brithe through the intermediate stage *-b-brethe. See § 634 and Thurneysen Rev. Celt. VI 315.

2. Examples for the representation of r̥, l̥ are unknown to me.

3. As yn became an, so also rr, ll became ar, al. maraim 'I remain' : cp. Lat. mora, rt. (s)mer- (§ 589, 3); mora may just as well represent *(s)mrra as *(s)morā. scaraim 'I separate, divide' Cymr. ysgar 'separatio', to O.Ir. scorim scuirim 'I unharness' scor 'an enclosure for unyoked animals' Cymr. ysgor f. 'rampart, bulwark': cp. Lith. skiršiu 'I separate, divide'.-al- perhaps in samail 'likeness, picture' fr. *samul-li- (cp. § 243, 4). Cymr. malu 'I grind, grind to powder' is more certain: cp. O.Ir. melim l̥).

Germanic.


Goth. pauers-u-s OHG. durri O.Icel. þurr 'dry, withered': Skr. tvṣ-ū-ṣ 'covetous, gaping from dryness'; Goth. pauirstei f. OHG. durste m. Ags. dyrst m. 'thirst': Skr. tvṣ-tā- 'hoarse, rough': Goth. paursjan 'to thirst' (originally a strong verb like vaùkjan s. below) : Skr. tvṣ-yami 'I am thirsty'; Goth. part. ga-paúrsans: Skr. Ved. part. tvṣ-āṇā-s and ta-tvṣ-āṇā-s, from rt. ters-. Inf. Goth. ga-daúrsan OHG. turran Ags. durran 'to dare, venture':

1) My attention was drawn to these examples for the representation of r̥, l̥ in Keltic by Thurneysen.
The diversity of the position of the liquid (wr and ru) was in part undoubtedly due to other forms of the same form-system, e.g. Goth. bruskans : priskan with paursans : pairsan. The independent forms have not yet been satisfactorily settled;
ep. the author Kuhn’s Ztschr. XXIV 258 ff., Osthoff Morph. Unt. II 49. 145. It however seems to me probable (cp. Kluge Kuhn’s Ztschr. XXVI 90) that these forms are ur, ul.

On the change of u to au (before r) in Goth. and u to o in West Germ. and Norse see § 51.


§ 301. 3. Part. pret. pass. Goth. baūr-ans (baīran ‘to bear’), ga-taīr-ans (ga-taīran ‘to tear in pieces’), stulans (stilans ‘to steal’), OHG. boran, zoran, stolan : cp. O.Bulg. part. pret. pass. bīr-enī to bīrā ‘I rub’ fr. rt. ter- (§ 305) and Skr. ti-stir-


Baltic-Slavonic.

§ 302. Indg. r, l uniformly became ir, il in the prim. Baltic-Slav. period. Though it cannot be strictly proved, it is nevertheless probable, that the i in these combinations differed from Indg. i in the same manner as the i in in = Indg. y. See § 248. We accordingly put the prim. Baltic-Slav. forms down as yr, yl.

Thence in Lith. ir, il.

In prim. Slav. yr, yl. r and l retained this position in O.Bulg. before i and sonants, in other cases they were transposed (rī, ī). The labial timbre of the l caused the neighbouring r to pass into ī. But the orthography is very inconsistent, and it would be difficult to decide how far the regular state has
been disturbed in the living language by form-association. Cp. § 305 rem.

Rem. 1. That ĳr, not r or g was also spoken in prim. Slav. before consonants in such cases as ērīnā 'black' (= Pruss. kirnā-, Skr. kṛṣṇa-'black', Indg. *kṛṣṇo-) is proved on the one hand by the transition of a preceding k to ĵ (§ 461), in which all Slav. dialects took part (Serv. ĵ), and on the other by the dropping of the s in ērīnā, which is only conceivable on the assumption of an older form *ērīnā (a. §§ 585, 2. 588, 6).

Rem. 2. The treatment of prim. Slav. ĳr, ĵr varied greatly in the different Slav. dialects. Suffice it here to remark that Serv. Slov. and Czech went back again to Indg. liquida sonans, e. g. O.Bulg. ērīnā = Serv. ērn, Slov. ľrn, O.Czech ľrný (the latter the def. form of the adj. = O.Bulg. ľrný-fj).

§ 303. 1. Lith. širni-s m. 'pea', O.Bulg. srino 'corn': Goth. kaŭrn 'corn'. Lith. šisrėšū, gen. šisrėšės, O.Bulg. šisrėšė 'hornet, gad-fly' : OHG. hornož 'hornet' fr. prim. Germ. *χɔr̥ɛn-ata-z, cprf. *χis-en-*χis-n- (cp. Lat. crābō § 306). Lith. kirni-s m. 'worm', O.Bulg. ērīnū 'red' (ērī-ê 'worm' with a diff. suffix): Skr. kīmi-ś 'worm'. Lith. kįsta-s 'hewn', O.Bulg. ėritq 'I cut': Skr. kytta-s 'cut off', from rt. gert-. Lith. viriţys 'cord' viriţti 'to bind with cord', O.Bulg. vrizq 'I bind, close': OS. werģil 'a strangling cord' OHG. wargan 'to strangle', from rt. gerg-. Lith. tîrp-ți 'to grow stiff, to become feelingless', Russ. terpnut 'to grow stiff (prim. Slav. *tirpnatî) : Lat. torpeō (Lat. torp- = Indg. *tirp- or torp-?).

O.Bulg. 2. sg. opt. (imper.) rici 'say' orig. f. *r̥qoj-s, 1. sg. pres. rēka, cp. the accidence.

Lith. vilna 'a single hair of wool', O.Bulg. vlīna 'wool': Goth. vula 'wool' fr. *vulna (§ 214 p. 181). Lith. vilkiū 'I am clad in, with', Lith. vilkės O.Bulg. vlīkė part. pret. act. to velkū vilkq 'I drag': Gr. αὐλαξ 'furrow' (*fleu-) beside εἰλαξ, rt. yelq-. Lith. vilgau 'I moisten', O.Bulg. vlīgūki 'moist': OHG. wolcham n. volcha f. 'cloud', from rt. yelq-. O.Bulg. dilziqsi 'duty': O.Ir. diligēd 'lex, officium' O.Ir. digim I deserve, am entitled to, Goth. dulges_ 'debt', rt. form dihľj-. O.Bulg. yēlva 'husband's sister': Gr. γαλῶς γάλας.
§ 304. 2. Lith. spiriti : Gr. ἱππεύω, skilė : Gr. σκύλω, s. § 293. Analogously dūriė 'I skin' (Szyrwid's diurrw is probably to be read thus) rt. der-, giriā 'I praise' rt. ger-. O.Bulg. vīrja 'I boil up, seethe' 2. sg. vīrīšī (inf. vīrēti) might be put here under the supposition that the original inflection of the present was *vīreši etc., liko šīnjā šīnješi (§ 250); cp. Czech vrū (in O.Bulg. form *vīrą) liko tīrą mūrą etc. (§ 305). Lith. pl. tilės, gen. tilę, 'board in the bottom of a boat', O.Bulg. ąja 'bottom': cp. Skr. tūlya- 'equal, straight', rt. tel-.

§ 305. 3. Lith. mirusi O.Bulg. mūrāši part. pf. fem. 'mortua', O.Bulg. mūrą 'morior', rt. mer-. Analogously pres. Lith. pilā 'I cast, shed' from rt. pel- 'fill', O.Bulg. šīrą 'I swallow' = Skr. girdami gildami, rt. ger-, šīrą 'tero' and others.

Rom. är occasionally occurs for īr before non-palatal vowels in the Zographos gospel, e. g. āvāati for āvati 'to split, tear in pieces', and vice versa, zilē loc. beside zilē nom. 'bad' etc. Op. § 36 rem.

2. Long Sonant Liquids.

§ 306. Regarding the representation of Indg. ĕ, ĭ in the individual languages there still remains much that is doubtful just as in the case of Indg. ė, ė. We hold the following developments as certain: Skr. īr, īr (ep. īr, ur = Indg. ĕr or ĭ § 290), Av. O.Pers. ar; Gr. ὅρ καὶ and όρ ώς, finally ὅρ; Lat. ar (al) and rā lā; Kelt. lā; Germ. ar, al.

Indg. ĕ.

*ędhyo-s 'upright': Skr. ārdhā-s, Gr. ἄρθρο-ς, Lat. ardu-s from prim. Ital. *arþmo-s (§ 170 p. 150, § 370).

* ĭ-mó-s 'arm, bow': Skr. īrmā-s Av. ar'ma-, Armen. armku, Lat. armus-s, Goth. arms, O.Bulg. ramę fr. *ormę (§ 281).

*ę-ti-s : Lat. ārs artis, OHG. art 'manner'. From the same root Skr. ė-tā-m 'propriety, right manner'.

stē from rt. ster- 'spread' : part. perf. pass. Skr. stīr-yā-s Av. stār-ta- Gr. στόχος-ς Lat. stātus-s, Gr. στόξ-μα Lat. sthr-men 'straw', Gr. στρωσ-τα στρω-νήμα and others.

ūg- from rt. ger- 'grind': Skr. jūr-ā- 'ground ē pieces, wasted away', Lat. grā-νu-m 'grain'.

Brugmann, Elements. 16
μῆ- (cp. Skr. ṁravās Gr. πάρος § 294) : Skr. pār-va-s 'the one in front', Gr. πρώτος Dor. πρῶτος 'the first' from *πρῶτο-το-ς (cp. τρίτον-το-ς 'the third'), Dor. πρῶτον 'formerly' fr. *πρῶτον, Att. πρῶτος 'lately' fr. *πρῶτον. Fiāv (O.Bulg. πρῶτ-νυ-ζĭ 'the first' : Skr. pār-va-s = plē-nu 'full' : pār-νā-s etc., s. below).

ῆς- : Skr. śiṁ-a-m 'head' Gr. κόρα-ν 'head, temples'.


γῆ- 'to share in' : Gr. πῆ-πρωτ-το, Lat. pars partis (beside portiō fr. *ρη-τί-). If pārīō also belongs to this root, as is assumed by Curtius Grundz. 5 282, it must be traced back to *γῆ-ō, cp. Skr. jāryāmi from rt. ἑρ- 'fall away, become fragile'.

Skr. śiṁ-tā- 'destroyed', Av. a-sar-î-ta- 'unhurt', root form ḫī-.

Gr. πρῶξ-σν 'a drop' : cp. πρακνό-ν (§ 292 p. 233), περακνό-ς 'sprinkled', Skr. pṛṣṇi- 'speckled, variegated'.


Lat. crābrō 'hornet' fr. *crās-rō (§ 570) *ῆς- ; beside which Lith. sziršō etc. fr. *ῆς- § 303.


Gr. ἕλ-νυ 'water' from ἔ- ; perhaps corresponding to Lat. über fr. *-ar, *-ā. Cp. § 285 p. 228.

Indg. ī.

PL- from rt. pel- (plē-) 'fill' : Skr. pār-nā-s 'filled' imper. pār-dhi 'fill', Gr. πολλόν 'many' fr. *πολ-νό- (or πολ-νό- ?), O.Ir. lān O.Cymr. lann 'full'.


*Βѣδλυ- : Skr. mārdh-ān- 'height, highest part, head', Gr. βαρθ-ος-ες 'high-grown'.


*ḍgho-* 'long': Skr. dīṛghā-s Av. darṛga- O.Pers. darga-,
Gr. δολιχός (with enigmatical i).

*yll- mi-s 'ebullition': Skr. ār-mi-ṣ 'wave' (§ 157), Ags. vieln
urbln 'ebullition, wave' prim. Germ. *yalni-s. To which OHG.
OS. wallan 'to be agitated, boil up' prim. Germ. *yalnana-n
§ 2: οπ. wellan 'to roll, move'.

Skr. sthāna- 'post, stake' fr. *sthālna-, orig. *stl-nda-.
Gr. Lesb. βόλο-μαι Att. βούλο-μαι (beside Dor. δῆλο-μαι)
'I will, wish, desire' fr. *gl-no-, rt. gel- (§ 204).

Lat. latu-s 'carried' probably fr. *łtu-to-s, rt. tel-.

Lat. clād-ēs: to per-cellō fr. *celld-, part. -ćuln-s from
*klōl+to-, Gr. Hom. ἐκλαδάνα 'broke' κλαδ-άνα : σκιάν Hesych.
 Cp. § 369.

O.Ir. bláith 'tender, soft' fr. *mlā-ti-s prim. i. *ml-til-, to
melan 'I pound'; Cymr. blawd 'meal' fr. *ml-til-. On bl- fr. mi-
see § 212.

The side by side existence of *w and *ŋ in Gr. and rd
and ar in Lat. may be compared with that of Gr. ρα and αρ,
Germ. vn and ur fr. Indg. ĵ (§§ 292. 299). Gr. αρ, Lat. ar
fr. *wŋ, *ar were possibly shortened after the same principle
as that which gave rise to Gr. part. āer- 'blowing' (indic. ānu)
and Lat. ventu-s fr. *gēnt- (§§ 611. 612). ǿŋŋ especially
speaks in favour of this theory; for ǿŋŋ: ơćąpnu = ṳr:
ār- and čąw : čąwn (§§ 85. 611).

Skr. gīr 'praise' fr. *giri-s *gī-s loc. pl. gīrus fr. *gir-su
and pār 'fixed place' fr. *pūr-s *pū-s loc. pl. pūrsā fr. *pūl-s
 correspond to nouns like ja-s fr. *gūs-s § 253 p. 207. But
between the nom. sg. gīr pār and instr. sg. gīrā purā nom.
pl. gīrus pūrus (gīr- pur- fr. *gir- *pūl-, § 290) there exists
precisely the same relation as between nom. sg. dhīs ('thought')
ēhās ('earth') and instr. sg. dhītā bhāvā nom. pl. dhīyas bhāvas.
This parallelism was inherited from the Indg. prim. period. (p. 250).

It is remarkable that in Greek antesonantal *w, *l and
anticonsonantal *w *ŋ, *w *l frequently stand to each other in
the same relation as Skr. ĵ ur and ĵr ĵr since one would
expect *w *l as the representative of Indg. antesonantal ĵr,
ABLAUT (VOWEL GRADATION)²).

§ 307. By ablaut or vowel gradation we understand such quantitative, qualitative and accentual differences of the sonantal element of a root- or suffix-syllable, as were not called forth by sound-laws which were in operation at the time of the individual development of the Indg. languages, but had their origin either directly or indirectly in prim. Indg. differences. With them are further often also connected consonantal differences in the syllable containing the sonantal element. The following, e. g., stand in ablaut relation to one another: Lat. dio-tus : do-numi ; s-tas (O.Lat. for sīs) : s-i-nes ; Gr. aγ-ω : στρα-αγ-ός (Ion. Att. στρα-ηγ-ός) ; λείν-ων : λοιπ-ός : λις-ώυ ; aγ-ερ : aγ-ο-μαν ; μη-τελ-ες : μη-τερ-ός : μη-τερ-α-ς ; Goth. ahus-iν : ahus-an-s : ahus-s-ι (loc. sg., nom. pl., gen. pl. of ahusa 'ox') : Skr. pūc-amī 'I cook' : pak-tas 'cooked' (difference of accentuation).

1) Hom. vounē-ς is probably to be explained from a supposed stem form *poul- : Skr. pāve- (onom. instr. pl. pāve-l-bhīṣ) Indg. *pl-ν-η-, which regularly gave voun- just as oūl-ε- 'whole' from *ōl-ε-ος (§ 166). poul- and pole- became contaminated to voun-.

2) The most important literature has been mentioned on p. 31—32 footnote 2. To this may further be added Leskien Der Ablaut der Wurzelsilben im Litauischen, Leipzig 1884.
Rem. 1. Accordingly the difference, e.g., between Gr. ἰ-γνο-ν, ἰ-γνο-ντιν and ἰ-γνο-νον-τιν has nothing to do with ablaut; since γνο- became γνα- by a special Greek shortening, s. § 611; nor the contrast between Goth. frekja 'I think' and fēhtu 'I thought' (s. § 214 p. 181), nor that between OHG. ird-liu 'earthmen' and ord-a 'earth' (s. § 67 p. 57) etc.

Rem. 2. Indg. long vowels, which from etymological considerations are shown to be the product arising from the contraction of two vowels (§§ 111—115), are rightly not put under ablaut as separate members. Cp. e.g. abl. sg. *ekyo-ḍ (Lat. equo) fr. *ekyo-ut nom. pl. *ekyos (Skr. देव) fr. *ekyo-es (§ 115) beside nom. sg. *ekyo-s (Lat. equus) voc. sg. *ekyo (Lat. equus) etc. Cp. § 314.

§ 308. ᾖ and ū with a preceding or following vowel (αι, ια) stand, so far as relations of ablaut are concerned, on a level with consonant nasals and liquids. The following root-syllables, e.g., correspond to each other:

bhēdh-, bhōdh- (Gr. πέθαν-ει, πέθαν-θείς) | bhendh-, bhonh- (Goth. bind-ip, band)

bhēdh-, bhōdh- (Goth. bind-ip, band) fr. *derk-, dork- (Gr. δέκατον, δέκας) sup-, sup- (O.Iocl. sem-ν, Lith. sip-αν-ν) : pref-, pref- (Lat. prece-or, prec-us).

The sonants i and u appear in the place of ᾖ and ū in the ablaut-grade, which is deprived of the vowels e o, just as sonant nasals and liquids in the place of the consonant.

bhīdh- (Gr. i-πιθ-ει) | bhūdh- (Goth. bind-aus)

bhūdh- (Goth. bind-aus) : dyḳ- (Gr. i-δεκ-ει)

sup- (Gr. ū-ν-ον) : pref- (Lat. posco fr. *πο(γ)θείο, § 288).


(Gr. πέτ-εταν : ποτ-εταν : δέκατα). The only difference is that in the latter case the last grade does not form a syllable in itself. The last grade, in the case of roots like bheu- γεν-, whose ablaut is exhibited as bheu- : bhou- : bhu- : bhy and γεν- : γυ- γν-, may be both syllabic and non-syllabic; cp. Gr. kv-ως beside ὑπερφθαλος fr. *ὑπερ-φθαλος (§ 166 p. 147), γέ-γα-μεν beside γι-γυ-εται.

§ 309. We distinguish six ablaut-series. They all have one grade in which the vowel of the syllable has entirely disappeared. Representing this by 0, we have the following vowel-series:
1. $e$-series: 0, $e$, $o$, $e$, $o$.
2. $e$-series: 0, $o$, $e$, $o$.
3. $a$-series: 0, $a$, $a$, $o$.
4. $o$-series: 0, $o$, $o$.
5. $u$-series: 0, $u$, ($o$?), $a$, $o$.
6. $o$-series: 0, $o$, $o$.

Many attempts have already been made (the most recent by Hübschmann Das idg. Vocalsystem, 1885) to systematise these series morphologically, i. e. to place together those phases of the different series, which belong to a definite morphological category, e. g. the root-syllable of participles formed with -to- or of the present indic. formed with the so-called thematic vowel. A parallelism clearly exists in many cases. E. g. part. *$d$+tö-$s$ 'given' (Skr. dövá-tta-$s$ 'god-given') to *$e$-dö-$m$ 'I gave' (Skr. $a$-dä-$m$) from rt. dö-, as *i-tö-$s$ 'gone' (Skr. itá-$s$) to *$e$-ji-$m$, contracted *$e$ji-$m$ 'I went' (Skr. āy-$a$m) from rt. āy-.

Or *$kr$-$n$-u-vti 3. pl. 'they sever, break' (Skr. $śr$-$u$-ánti) to *$kr$-$nā$-$mī$ 1. sg. (Skr. $śr$-$nā$-$mī$) with present suffix -$nā$-, as *qi-$nu$-u-vti 3. pl. 'they pile up' (Skr. ci-$nu$-ánti) to *qi-$nē$-$mī$ 1. sg. (Skr. ci-$nā$-$mī$) with present suffix -$nē$-.

On this principle, the three first series e. g. have been parallelised in the following manner:

<table>
<thead>
<tr>
<th>Weak grade</th>
<th>Medium gr</th>
<th>Strong gr</th>
</tr>
</thead>
<tbody>
<tr>
<td>$e$-series: 0</td>
<td>($e$)</td>
<td>$e$</td>
</tr>
<tr>
<td>$e$-series: 0</td>
<td>$o$</td>
<td>$o$</td>
</tr>
<tr>
<td>$a$-series: 0</td>
<td>$a$</td>
<td>$a$</td>
</tr>
</tbody>
</table>

from which the members $e$ and $o$ of the $e$-series were excluded because parallels were not found to them (they appear e. g. in Gr. περιφέρει and δοξάσω, Dor. πως 'foot') in both the other series.

The investigations instituted in this direction have not yet gone far enough to let us give a system of gradation-series completely worked out on this principle. And it is questionable whether we have a right to aim at the attainment of such a system at all, in the sense in which it is usual to do so. Several strata of formations, distinct in their time of origin, seem to overlie each other. In those which arose earlier, much

may have been obliterated by transference of forms before the new cause of gradation came into activity, and the later phonetic law which called new distinctions into being did not act in the same manner as the older law or laws. In this case it is from the outset impossible to expect that parallels can be found everywhere.

§ 310. Cleanness prevails most of all in the case of the weak grade, which is recognisable in each ablaut-series and assumes in most series a distinct twofold shape. It is due to a reduction of the vowel, which was caused through the chief accent lying on the following syllable. Cp. e. g. the participles, *d₁-tₙ-s from rt. dₙ- and *i-tₙ-s from rt. e₁-, quoted in § 309. This connexion between accentuation and the phase of ablaut is best recognisable in Skr., since this language had most faithfully preserved the prim. Indg. accentuation (§§ 669. 672).

What we denote as the 'weak' stem-form in the accidence, has weak grade vocalism.

Rem. Many phenomena of younger phases are instructive for the relation of drk- to μc- etc. (§ 308). E. g. by the West Germ. law of syncope OHG. *bōrītā 'heard', *brannītā 'burnt' appear as bōrītā, brantā, whereas *zimbŭtītā 'built' (= Goth. timbūta) became *zinmbītā, whence historic zim- burtā; prim. Germ. *μulfa₇s 'wolf' became OHG. wulf, whereas prim. Germ. *akraz became *ékys, whence OHG. echor (§§ 623 rem. 1. 635).

Opposed to the weak grade we call the other phases of each series the strong grades and distinguish strong grade 1. 2. etc. It is not known whether the strong grades, having the same number in the various series, always came into existence under the same conditions of accentuation etc.

What we denote as the 'strong' stem-form in the accidence, has strong grade vocalism.

1. e-series.

§ 311. The scheme is:

<table>
<thead>
<tr>
<th>Weak grade</th>
<th>Strong grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. unaccented</td>
<td>b. secondary accented</td>
</tr>
<tr>
<td>0</td>
<td>(e)</td>
</tr>
</tbody>
</table>

1.  e-series.
This series appears most completely carried through in the noun al suffixes -t(ér- -(t)or-), -en-, -men- and in the stem ped- feet:

\[
\begin{align*}
\text{-(t)er-} & \quad -(t)rr- & \quad -(t)ér- & \quad -(t)or- & \quad -(t)ér- & \quad -(t)or- \\
\text{-(n)en-} & \quad -(n)en- & \quad -(n)en- & \quad -(n)en- & \quad -(n)en- & \quad -(n)en- \\
\text{pd-} & \quad \text{ped-} & \quad \text{pod-} & \quad \text{pēd-} & \quad \text{pōd-} & \\
\end{align*}
\]


The change between e and o and between ē and ē seems
here (cp. the material collected together by Collitz in Bezzenerberger’s Beitr. X 34 ff.), as also frequently in other circumstances, to have been so regulated that e and ô originally stood in chief-accented syllables, o and ò in the next following syllable.\textsuperscript{1)}

Wg. a. *pd-: Av. *fɪr̥a-bu-l-ɐ- (-b- fr. *-p̥d- § 469, 2) ‘the instep of the foot’. — Wg. b. ped-: Gr. Lesb. Bœot. πεδ- (instr.) ‘after, with’ (ep. Osthoff Zur Gesch. d. Pers. 574), πεδ-όσ-, gen. sg. Lat. ped-is Skr. p̥da-śis. — Str.g. 1. ped- (whether it occurs, is uncertain). — Str.g. 2. pod-: acc. sg. Gr. πύδ-α Skr. p̥da-ṁ, nom. pl. Arm. ot-ë (§ 330 rem.), to which Lat. tri-pud-are. — Str.g. 3. p̥əd-: Lat. nom. sg. pēs, perhaps also Lith. pêd-ą ‘foot-print’. — Str. g. 4. pōd-: Gr. Dor. noś, Goth. fōt-ns. — Umbr. du-pūr-ns ‘bipedibus’ either Str.g. 2 or 4, according as u is to be understood as ə or ə. Skr. nom. sg. p̥dt either Str.g. 3 or 4.

Rem. In the Indg. prim. language the simple form perhaps had in the nom. sg. *p̥əd-, acc. sg. *p̥əd- (Lat. pod-em?), whereas the compounds (ep. Skr. aśt̥a-p̥dt, Gr. ἁστι-νος; etc.), and also the simple form, when in accent it entered into a close connexion with preceding words, had *-p̥d- and *-pod-. Then levellings in various directions took place\textsuperscript{2)}.

For further information regarding these declensions with gradation see the accidence.

§ 312. The weak grade.

In formative syllables ending in an explosive or a spirant, the weak grade has only two forms, while four appear in those ending in i, u, nasal, liquid, since the unaccented as well as the secondary accented phrase assumes two forms according as a sonant or a consonant follows:

\begin{itemize}
  \item 2) By this it is not implied that this change in the vowel quality is to be maintained for all monosyllabic gradating nouns. These nouns were not all created in the same period.
\end{itemize}
### 250 Ablaut. The e-series. § 312—313.

<table>
<thead>
<tr>
<th>a. unaccented.</th>
<th>b. secondary accented.</th>
</tr>
</thead>
<tbody>
<tr>
<td>rt. ped-:</td>
<td>ped- (Av. <em>fra-bel-u-</em>)</td>
</tr>
<tr>
<td>rt. ed-:</td>
<td>ed- (Gr. ἐδ-<em>e-ro-r</em> 'breakfast')</td>
</tr>
<tr>
<td>rt. suighe-:</td>
<td>suighe- (Gr. <em>riça</em>)</td>
</tr>
<tr>
<td>rt. legg-:</td>
<td>legg- (Goth. <em>lukans</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>before sonants</th>
<th>before cons.</th>
<th>before son.</th>
<th>before cons.</th>
</tr>
</thead>
<tbody>
<tr>
<td>rt. bhey-:</td>
<td>bhu-</td>
<td>bhug-</td>
<td>bhā-</td>
</tr>
<tr>
<td>rt. gen-:</td>
<td>guh-</td>
<td>ggu-</td>
<td>gū-</td>
</tr>
<tr>
<td>rt. ster-:</td>
<td>str-</td>
<td>str-</td>
<td>str-</td>
</tr>
</tbody>
</table>

Examples for the three last named roots are:


**Rt. gen- 'go'.** gu-: Av. 3. sg. act. γη-μ-α-θ, O.Pers. 3. sg. mid. a-gn-ā-∅. ghu-: Skr. gu-tā-s, Gr. πα-το-, Lat. in-even-tu-s. ghu-: Skr. gu-ṃ-ṃi, OHG. kom-∩. gū-: Skr. ú-ga-ta, Gr. ἑ-α-τι.


The parallelism between *-ē, -ā, -ē, -ē* etc. on the one hand and *-iē, -iye, -iye, -e*- on the other is clearly seen e. g. in such forms as Skr. bhā-ś 'world' gen. bhū-ās, bhūr-ā-ς gen. bhūru-ās (Gr. ἑγίν-η-ς gen. ἑγίνπι(f)-o-s and Skr. pār fr. *pārē (Indg. *pā-s) gen. pār-ās (Indg. *pāl-ōs or *pāl-ēs). gō-ṣā-s 'oxen gaining' (Indg. *sē-s) gen. gō-ṣau-as (Indg. *sē-ṃ-ōs or *-sē-ṃ-ēs) etc. See §§ 253. 306. Gr. ἃς also seems to be a noun of this kind, whose gen. ἁρός in that case has taken the place of *χαρ-ός* *χαρ-ός* (s. §§ 294. 306), further (*oμο-*)πός ('swallowing raw') = Skr. (mukh-)gīr ('swallowing suddenly'), Indg. *gīr-s; -βρω-τ-ος a new formation like *χορ-ός*.

§ 313. That both phases of the weak grade — here as in all other ablaut-series — originated in the different degree of the stress-accent (§ 667, 3), is a probable result of Osthoff's investigation (Morph. Unt. IV).
The sound-form to which we have given the name of weak grade b., shows a less degree of weakening and regularly appears wherever a secondary stress remained upon the syllable. The phase a. originated whenever through any circumstances, connected with position in the sentence, the syllable lost its secondary accent and became accentless. Such circumstances are priority of another member of a compound, the prefixing or suffixing of a formative syllable etc.

That position of a syllable at the beginning of a sentence or member of a sentence occasioned secondary accent, may be concluded from the numerous double forms as Av. fra-bd-a- and Skr. pad-ás; Av. haurve-fás-u- 'the whole beast' (fás- from *-ps-, § 473) and paśu- Skr. paś-ú- 'beast' (Indg. *peś-ú-); Skr. á-bhe-a- 'contrary to all existence, monstrous' and gen. bhau-ás; su-bhrú-ā 'having a beautiful brow' and bhrú-ā 'brow'; gō-ghua-ās 'cow killer' and ghu-ás 'destroyer'; ā-gru-ā and guru-ā (§ 290); Gr. πολύ-τλάς and τάλας. We may probably assume also that forms like *gud- (Ved. gud-, O.Ir. gen. sg. mnaí), *kutú- (Skr. krutá-ś, Gr. κλυτός etc.), *stipto-ś (Skr. stiptá-ś, Gr. στιπτοῦ-ς) beside *guña- (Ved. guṇa-, Bæot. guvná, O.Icel. konú), *kutú- (OHG. hlut), *stipto-ś (Gr. στιπτοῦ-ς, Lat. strátnus) originally had their position regularly in such combinations as *sū guṇā 'this wife', *tóm kutóm 'this renowned man' (= τόν κλυτόν). Naturally as soon as accentless and secondary accentted forms were firmly established levelling took place, e. g. Skr. prá-pada-ś 'point of the foot' ánuṣṭa-pushu-ś 'he who loses nothing from his herd' a-guru ś 'not heavy' beside the more archaic Av. fra-bd-la-haurve-fásu- Skr. ā-gru-ś.

It is worth noticing how double forms have been often called into use for euphonic reasons and through the striving after etymological clearness. In forms like *peqtó-ś 'cooked' *peqtí-s 'cooking' (Skr. paktá-s pakti-ś, Gr. παχτός παξύς, Lat. coctus coctio from *quaeto-ś *quaetio §§ 172. 431u), *spkto-ś 'spied' (Skr. spaṣṭá-ś, Lat. spectu-ś), a generalisation of the secondary accentted form took place in the system of verbal forms belonging to one unity, since *pqtó-ś *spktó-ś etc. had become obscure.
by their modification; *μοίτω-ς is however perhaps still represented by Gr. ὀ-ντό-ς with prothetic vowel. Of the double forms prim Ar. *зд-λθι and *αζ-λθι 'be' (rt. es-) Skr. generalised the second form in spite of s-μας s-θά s-τά etc., since *δλθι from *зд-λθι was too indistinct; from *αζ-λθι came regularly ो-λθι (§ 591); the first form was retained by Iranian, Av. з-λθι. If a combination of consonants preceded formative syllables ending in š, y, nasal or liquid, the antosonantal secondary accentuated form was often generalised. Thus we have *भु-ν- beside *भृ- 'brow', but no *भृ- beside *भृ-, only *स्रु- not *स्रू- beside *स्रू- ('flow') (Skr. अ-स्रु-व-त, Gr. ἰπνόη), only क्रिय-, not *क्रर- beside *क्र- ('lean') (Skr. शि-क्रय-ि, Gr. Hom. κρ-κλ-ατα). Compare further postconsonantal *यृ-ष्टि in Skr. सक-षौ-द्वि Gr. आ-व-ि with Skr. सक-वु-मिस्त्र आ-व-मेव and with Skr. वृ-ष्टि, the Skr. gen. sg. वात-म-न-न-स (prim. f. *यर्त-म्य-बो or -ब) with the loc. pl. वात-मा-स (prim. f. *यर्त-म्य-ब) and the gen. sg. नाद-मन-न-स. Cf. §§ 117, 120, 153, 159.

Rem. The question as to how the two phases of the weak grade developed phonetically from the forms of the strong grade, has received different answers and is even now not ripe for settlement. We may refer to the latest discussions by Hübschmann loc. cit. p. 181 ff. and Bremer Paul-Braun’s Beitr. XI 264, 267.

Specially deserving of attention is the circumstance that we may very often be in doubt as to whether we should refer a secondary accentuated form of the weak grade of a root to the e- or e-series, e. g. प्ल- 'dill' (§ 306) गि- 'livo' (§ 37) to प्ल- गि- or to प्ले- (Lat. प्ले-ता-स, Skr. प्रा-ता-स) गि- (Gr. γή from *γε-ν, Av. ज्ञात-ि-ि 'life') just as the optative suffix -ि stands to the strong form -िे-. Cp. Hübschmann loc. cit.

§ 314. The strong grade.

On the grades e and o there is nothing to add here to the observations in § 311.

The phases e and o present difficulties in so far as in the case of many forms with e and o in the separate languages the question arises whether they first obtained their long vowel in the period after the Indg. prim. period had broken up, or whether the long vowel was inherited with the rest of the ablaut.

Forms with such an old e o were cited in § 311. Others are nom. Gr. Ζεύς from *ά-ζεμ (§ 611) Skr. आदि 'sky'; Lat.
vōx 'voice' Skr. vāk 'speech'; Gr. διν-μενής 'evil disposed' Skr. dūr-mānas 'downcast'; part. perf. act. Gr. etails from *sīd-ēs Av. (Gāp.) vēl-ēd. Also old inherited forms or at any rate modelled on old inherited types were Gr. φών κλίσις σκώρ, Lat. fār; with these go as denominatives the Gr. verbs κλωσιόμενον τραπέζω πιστάσιμον etc.

Rem. Observe that the ē of forms of the weak perf. stem as Lat. sēlitum Goth. sētum from rt. sēd- 'sit' have nothing to do with the ē of the strong grade. ē arose here from ē by lengthening, sēl- from *si-ēl- = orig. *si-s(e)d-. See §§ 590. 591. 594 and the accidence. The same reduplicated root-form was apparently at the basis of many non-perfect verbal forms and noun formations which for the most part were formed later from the perfect. Thus Lith. sētini sētīn Ó.Bulg. sēbūg 'I sit' Lat. sēn-ēs sēd-āre to perf. Lat. sēn-ē is sēnāre; Armen. mē 'sense' Gr. μελῳδωμ. 'I deviso' OHG. māo 'a measure' to perf. Goth. mēt-wan O.Ir. mō mid-er 'judicavi' from rt. med- (Gr. μιδις Goth. midu Lat. medius etc.); Lat. tēgula Lith sēgīn 'I thatch a roof', rt. steg bezg.; Goth. uōd-nēmů 'pleasant', rt. nuw-; etc. How far the assumption of such origin for the ē should extend, is certainly still doubtful. Cp. the author, Morph. Unt. IV 414, Osthoff Zur Gesch. d. Perf. 82 f. 110 f.

We have further to distinguish according to § 307 rem. 2 the ē and ē which have arisen by contraction. Especially to be mentioned here is the ē in the forms of roots beginning with a vowel, as ed- 'eat' es 'be' etc. In the perf. stem ēd- (Lat. ed-inus Skr. ēd-intu etc.) ē arose by contraction of the e of the root with the e of the reduplication, in the imperfect stem ēd- (Skr. ēd-am) by contraction of the e of the root with the augment e (§ 114). From this now originated to some extent a new root-form ēd-, from which came Lat. ēv-te ēv-us, Lith. ēd-mi ēd-i-u, Goth. uēz-eu etc., and which called into being Gr. ēd-āed- after the analogy of the ablaut ē-series. Cp. author loc. cit., Osthoff loc. cit. 122 ff. 148 ff.

On the other hand it must remain quite undecided if many other ē and ē forms were proper ablaut vowels of the ē-series i. e. whether directly inherited or introduced by analogy. Besides sporadic forms as Gr. ἱνων Av. yāka 'liver' the Skr. Vṛddhi-vowels come especially into consideration. It is quite conceivable that e. g. the s-aorists u-bhānt-sam (rt. bhṛgyā-) u-drāṅ-gam from *u-dār-k-ām § 259 (rt. dēk-) u-jāti-šam (rt. gej-) u-bhār-śam (rt. bhēr-) represent an Indg. aorist formation with long root-vowel; cp. Lat. rēx rōxi, O.Bulg. nēsā nēchā bāku and observe that in Gr. ἅγωνα ἥγεσα ἥγεω the e of the root syllable may have been shortened from ē (§ 811). Cp. the accidence:
§ 315. The scheme is:

<table>
<thead>
<tr>
<th>Weak grade</th>
<th>Strong grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. unaccented</td>
<td>1.</td>
</tr>
<tr>
<td>b. secondary accented</td>
<td>2.</td>
</tr>
<tr>
<td>0</td>
<td>ē</td>
</tr>
<tr>
<td>ō</td>
<td>ō</td>
</tr>
</tbody>
</table>

e. g. from rt. dhē- 'put, place':

\[
dh- \\
dhē- \\
dhā- \\
dhē \\
dhū-
\]


From root sē- 'throw, sow': — Wg. a. sē- : Skr. s-trī 'woman'? (ep. Lat. su-tor 'begotten'). — Wg. b. sē- : Lat. su-tu-s, Gr. τρός, ἑρ-τερός ἑ-μετ. — Str.g. 1. sē- : Gr. ἑ-μετ, Lat. sē-men, O.Ir. sē-l 'seed', Goth. manu-sē-s 'mankind, world' OHG. sē-t 'sowing', inf. Goth. sējan OHG. sân (§ 142), pres. Lith. sējū O.Bulg. sējū, Lith. pl. sē-men-s O.Bulg. sē-męc 'seed, sowing'. — Str.g. 2. sō- : perf. Gr. Dör, ἐρ-τερός ἐρ-τερός Oth. sē-tē-tō The Gr. s (Wg. b.) in τρός, ἑ-τρός etc. had taken the place of regular a, see § 109 c.

Skr. du-dh-mās bears the same relation to dhi-ṣvā (imper., ep. Gr. θέ-ο) as Av. haurva-fā-u- does to pas-u- Skr pas-ā- (§ 313 p. 251), that is, the unaccented weak grade phase in du-dh-mās was occasioned by the prefixing of the reduplicated syllable. Greek τί-θε-μετ was a new formation for *τί-θε-μετ.
Other examples of this ablaut-series in Hübsochmann loc. cit. 71 ff.

3. α-series.

§ 316. The scheme is:

<table>
<thead>
<tr>
<th>Weak grade</th>
<th>Strong grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. unaccented</td>
<td>1.</td>
</tr>
<tr>
<td>b. secondary accented</td>
<td>2.</td>
</tr>
<tr>
<td>0</td>
<td>α</td>
</tr>
<tr>
<td>a</td>
<td>β</td>
</tr>
</tbody>
</table>

From rt. bḥār- 'speak': — Wg. b. Gr. qa-mèr, Lat. fa-teor. — Str.g. 1. Gr. qa-μ, Lat. fa-mu fa-bula (Armen. ba-n 'lógoς' here or to wq. b. ?). — Str.g. 2. Gr. qa-o-νβ.

From rt. sta- 'stand': — Wg. n. st- : Skr. weak stem of the part. perf. act. ta-sth-ās- (e. g. fem. tushtūṣ), savyē-ṣṭhār- 'the warrior' who stands on the left (of the charioteer) Av. raḍa-ṣṭan- 'standing on the war-chariot, warrior' from *ṣṭh-ṣṭar-. — Wg. b. st- : Skr. 3. sg. aor. ą-sthi-ta, part. sthi-tā-s, sthi-ti-ṣ a standing', Gr. στᾶ-τό-ς στᾶ-σι-ς στᾶ-γη, Lat. sta-tu-s sta-tio, Goth. sta-pās 'stead, place', Lith. sta-taū 'I place', pl. sta-klės 'loom', O.Bulg. sta-jq 'I stand'. — Str. g. 1. sta- : Skr. aor. ą-sthā-m, sthā-man- 'standing-place, strength', Gr. ἵστην-με ἵστην-ν στῆ-μον, Lat. sta-men Sta-tor, O.Ir. -tav 'am' from *stā-jō, Goth. stō-ma 'basis, substance' stōls 'stool, seat', Lith. po-stō-tu 'I become something' sto-mū 'stature', O.Bulg. sta-jq 'I stand'. — Str.g. 2. stō- cannot be established with certainty, it may be represented by Skr. perf. 3. sg. ta-sthāu.


Other examples of this ablaut-series in Hübsochmann loc. cit. 91 ff.

4. ο-series.

§ 317. The scheme is:

<table>
<thead>
<tr>
<th>Weak grade</th>
<th>Strong grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. unaccented</td>
<td>1.</td>
</tr>
<tr>
<td>b. secondary accented</td>
<td>2.</td>
</tr>
<tr>
<td>0</td>
<td>a</td>
</tr>
<tr>
<td>1</td>
<td>β</td>
</tr>
</tbody>
</table>
Ablaut. The ð-series and a-series. § 317—318.


From rt. pō- 'drink': — Wg. b. po- : Gr. po-tō-v πό-σις ἡράμον-ν — Str.g. pō- : Skr. pā-tār- 'drinker', Gr. πο-μα πέ-νω-κα, Lat. po-tor pō-culm-m.

Gr. o (Wg. b.) in ἡράμον- ν εράμον- etc. had taken the place of regular a; the latter is preserved in ἡράμος. See § 109 c.


Other examples of this ablaut-series in Hübschmann loc. cit. 99 ff.

5. a-series.

§ 318. The scheme is:

<table>
<thead>
<tr>
<th>Weak grade</th>
<th>Strong grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. unaccented</td>
<td>1.</td>
</tr>
<tr>
<td>b. secondary. accented</td>
<td>2.</td>
</tr>
<tr>
<td>0</td>
<td>a</td>
</tr>
<tr>
<td>(a)</td>
<td></td>
</tr>
</tbody>
</table>

From rt. a=g- 'drive, lead': — Wg. a. g- : Skr. pāri-j-man- 'wandering about' j-mān- 'path'; here also Gr. ἀγ-μο-ς 'path' with prothetic ἀ- (as in ἡράμος, see p. 252)? — Wg. b. a=g- : Skr. aj-ā-s 'driver' = Gr. ἄγ-ά-ς, Skr. aj-irā-s 'quick' = Lat. ag-ilis (with transition into the i-declension), Skr. pass. aj-yā-te, Gr. part. ἐν-ακ-τό-ς. — Str.g. 1. a=g- : Skr. ajāmi, Armen. ac-em, Gr. ἀγ-νο, Lat. ag-ō, O.Ir. ag-aim, O.Icel. inf. ak-a. — Str.g. 2. Skr. ajī-ḥ 'a race', Gr. σηρο-ηγός, Lat. amb-agēs.

From rt. bhag- 'allot, enjoy, eat': — Wg. a. bhag- : Skr. perf. mid bhēj-ě, an irregular transformation (see the accidence) of
vażaiti 'leads, goes', Alb. viéð 'I steal' (orig. 'I lead away'), Lith. vežé O.Bulg. vezq 'veho'.

Prim. Indg. suffixes with ṣh seem not to occur.

a. The language-group with explosives.

Greek.

§ 384. Indg. ḍ. καρδ-ῐα, Ion. καρδί 'heart': Lat. cor O.Ir. cride Goth. h₇₄r₇o 'heart' + Skr. śraddhā- f. 'confidence' (§ 282), Arm. sirt Lith. szirdi-s O.Bulg. srđixe 'heart'. *κλυ-το-ς 'renowned': Lat. in-clu-tu-s O.Ir. cloth 'renowned', OHG. Hlot-hart Lothar = *Κλυτό-σχιτο-ς + Skr. śru-tā-s 'heard, renowned', Arm. lu 'audible' fr. *slu-? (s. Hübschmann, Armen. Stud. I 33), O.Bulg. slon-o 'word', rt. klęy-. *είκοσι, Boicot. etc. Fīkati 'twenty': Lat. vicēsimu-s, O.Ir. fiche 'twenty' + Skr. viśati-ś 'the number twenty', Arm. ḍsan 'twenty' fr. *gsan *gisan (g- fr. y-, § 162). nόκος-ς 'pig': Lat. porcu-s O.Ir. ore OHG. farh farak + Lith. pašza-s O.Bulg. prasq 'pig'.

From ḍy arose πn, which was simplified to n initially. ḍnno-ς 'horse': Skr. ḍsva-s. πάντ- 'all': Skr. -śvant-. See § 166 p. 147.

ḥy became ṣσ, ṣ. μάσσων 'longer': Av. masyd 'greater'
See § 489.


§ 385. Indg. ḍ. yeu̯w 'I let taste': Lat. Gus-tu-s, O.Ir. to-gu 'choice', Goth. kiusa 'I test, choose' + Skr. jōṣ-a- Av. zaos-a- m. 'favour, kindness', rt. ḍyem- Ćyé̯w 'I reach': Lat. regi̯, O.Ir. imper. ṣ-rig 'stand up', Goth. nif-raka 'I reach up' + Skr. rāj-iṣṭha- Av. raz-iṣṭa- 'straightest, most just', Lith. rāžyti-s 'to keep on stretching oneself'. ḍyev-r 'work': Goth. vær̯kja 'I work, effect' + Av. vər̯zyeti 'effect, completes', Arm. gọre 'work', rt. yerğun-.

ḥy became ḍ (ṣd), ḍ. ḍyomai 'I stand in awe of', ḍo aγ-ọ-. rt. iagṣa. See § 493.
§ 386. Indg. ɣh = prim. Gr. ἰχ. χάμαν 'on the ground': Lat. humus-3, homō (= δ ἐπιχθόνος), Goth. gunna 'man' + Skr. jm-ās (§§ 469, 8. 554 rem. 1) Av. x'm-ō (§ 407) gen. 'of the earth', Alb. xe 'earth', Lith. žemō O.Bulg. zemľa 'earth'. χελ 'hand': Arm. jern 'hand' pl. jeri-. ɣχw 'I have, hold' fut. ɣχh-ωσ: Goth. sigis 'victory' + Skr. sāhas- Av. hazaḥ- n. 'strength, power, victory'. ανίχχω 'I hurry on, drive': + Skr. spṛhayati 'eagerly, longs for' Av. sper'zailī 'strives'.

ɣhī became os, rr. ḍason 'nearer' to ḍχ, rt. ṣṅh-. See § 497.

Italic.

§ 387. Indg. ȳ. Lat. cēnėsō, Osc. censamur 'censetor': + Skr. ḍās-ati 'recites, praises'. Lat. ci-s cī-ter, Umbr. sī-mu sī-mo 'at citima, retro śīve 'citra': perhaps Gr. neut. nom. acc. -u(os) in ou-xī vad-xī pollā-xī (Osthoff Morph. Unt. IV 241 f.), O.Ir. ce 'on this side', Goth. hi-mma 'to this' + Arm. -s 'this' (suffixes pronoun), Alb. si-vīt 'in this year', Lith. szl-s O.Bulg. šį 'this'. Lat. cī-nō cī-tellāc, Umbr. kletram 'lecticam': Gr. xītō I lean, bend', O.Ir. cloen 'slant, unjust, bad', Goth. hlāins 'hill' + Skr. śrāy-ati 'leans against, lays on', Lith. szlaīt-s 'mountain-slope', rt. Eleį-. Lat. decem, Umbr. desen-dv 'duodecim' tekuries degurier 'decuriis' Osc. dekmannius 'decumanius': Gr. ḍēxa O.Ir. deich n- Goth. tathun + Skr. dāśa Arm. tasn Lith. dēxint O.Bulg. dēsēt 'ten'. Lat. equo-s, Umbr. tra ekvine 'trans equinum' (cp. § 431a): Gr. ḍππο-ς O.Ir. e[č] 'horse', Goth. athva-tundi 'pároç' + Skr. áśva-s 'horse', Lith. aszva 'maro', Indg. *ekvo-s *ekvā. Lat. queror questu-s: + Skr. śvās-īmi 'I breathe, snort, sigh', rt. ḍyes-.

-ōf- became -ff- in Lat. : efferō efficiō; the c in ec- ex was probably ȳ.

Prim. Ital. ȳ (part! = Indg. ɣ, § 430) became a sibilant in Umbrian before e- and owels, which cannot be more closely defined: 严格按照 § 23. Besides sīmu etc. already named cp. further: tiśit 'deceit', to Lat. decet decus, Skr. dāsqa-yā-ti 'does honour, is gracious'; curnāke 'cornice' beside curnaco 'cor-
§ 387—389. Indg. palatal explosives in Italic.

nicem’; faśia ‘faciat’ beside fakust ‘fecerit’. With this may be compared the treatment of Lat. c before palatal vowels in the Romance developments, as Italian cento Fr. cent from centum.

Rom. Lat. c had the pronunciation & also before e- and i-vowels down to the Middle Ages, thus kentum, kito. Cp. Seelmann Die Ausspr. d. Lat. 332 ff.


§ 389. Indg. ḡh = prim. Ital. ḡ. Lat. humu-s homō, Umbr. hōnra ‘infra’ hondomu ‘inismo’ Osc. huntru ‘infra’ (s. § 207), Umbr. homonu ‘hominibus’ Osc. humus nom. ‘hominis’ : Gr. χαμιά etc., see § 386. Lat. hor-tu-s co-hors, Osc. hūr-tum ‘hortum’ : Gr. χόρτος ‘grass, hay, fodder, feeding-place, courtyard’, O.Ir. gort ‘seges’ lub-gort ‘vegetable-garden’ + Lith. žar-di-s m. ‘pasture for horses, pasture-ground’ Pruss. sardi-s ‘a place enclosed by a hedge’ 1). Lat. vehō, Osc. vehia ‘plaustrum’ (Paulus F.): Gr. ἀχος etc., see § 383. Lat. mihi and Skr. māhym ‘mihi’ probably contained Indg. ḡh, the same sound as in Skr. nom. ahām.

Concerning the dropping of Lat. h = ḡh see § 510.

f also occurs instead of Lat. initial h, e. g. folus beside holus helus: O.Ir. gel ‘white’, OHG. gelo ‘yellow’ + Skr. hari-ś Av.

1) It is uncertain whether Goth. garðs ‘yard, house, family’ and OHG. garto also belong here. Lith. garde-s and O.Bulg. gradu seem to have been borrowed from Germ. See § 467, 2 and Kluge Etym. Wtb. der d. Sprache under Garðn.
zairi-š 'yellowish', Lith. želū 'I grow green' O.Bulg. zeliqe n. 'greens, vegetables'; fariolu-s beside hariolu-s haru-spez : Gr. ἄροθ 'a string of gut', O.Icel. garner garnir pl. 'entrails' + Lith. šarnā 'gut'. Along with Osthoff (Morph. Unt. IV 96, cp. Danielsson in Pauli's Altital. Stud. III 144, Bersu Die Gutturalen im Lat. 131) we do not hold these forms with f as also fosti-s beside hosti-s (§ 430) for Lat., but for Sabine.

Rem. I am in doubt about the f in Lat. fundō, to Goth gītian 'to pour', Gr. χίου 'I pour' κυ-τεα 'holy water', Av. zao-prā- 'libation'. One might regard the f as having regularly arisen in in-fundō cōn-fundō, and then carried to the uncombined form, if the assumption had a firmer basis, infunum-i infunum-s may have come from an older ‘in fundō = in humō (cp. Umbr. hon-dra above), which, being regarded as a superlative, was followed by the forms inferu-s inferior. The f in the Lat. words cannot be regularly connected with the dental in Skr. adhās 'below' Goth. undar 'under'.

Lat. ng fr. prim. Ital. InBackground. angō: Gr. αγγω 'I press tight, strangle', O.Ir. cum-ung 'narrow', Goth. aggenv-s 'narrow' (with v from the oblique cases) + Skr. āhas- Av. aṣak-h 'distress, need', Arm. anjuk (ancuk) 'narrow', O.Bulg. qza 'bond, fetter'. mingō (beside mějō, probably fr. *mejhō, § 510) : Gr. ὠψίω 'I make water', Ags. mězan O.Icel. miga 'to make water' + Skr. měhati Av. maṣaiti 'makes water', Arm. měz (gen. mizi, mixoy) 'urine', Lith. mįžalaš pl. 'urine'.

O.Irish.

§ 390. Indg. ḳ = prim. Kelt. ḳ. O.Ir. clō 'renown' cluas 'ear', Mid.Cymr. clusteu pl. 'ears': Gr. κλω-τό-ς etc., see § 384. O.Ir. imm-chom-arc 'question, an asking', O.Cymr. di-erchim 'ad poscendum' (for the loss of the p- see § 339) : Lat. prec-ĕs pl., Goth. fraihnan 'to ask' + Skr. praś-nā- Av. prāṣ-na-(§ 398) 'question, an asking', Arm. harsn (gen. harsin) 'bride', Lith. praszyti O.Bulg. prositi 'to beg, request'. O.Ir. dere 'eye', Mid.Bret. derek 'aspectus': Gr. δέοκου 'I see', Goth. ga-tarahjan 'to mark out' + Skr. dadārśa perf. 'I saw', Arm. tesane-m 'I see'.

O.Ir. brēc (read brēg) 'lie, deceit' with loss of n before c: + Skr. bhṛṣa-s 'downfall, loss, a perishing'. See §§ 212, 513.
O.Ir. *fiche* Mid.Cymr. *ugeint* 'twenty': Gr. ἕξας *koxou* etc.

§ 384. See § 514.

O.Ir. *ocht* 'eight' probably with prim. Kelt. *cht*: Gr. ὑκτό etc., § 381. See § 517.


In Irish *k* and *g* fell together in *c*. Whereas in the Britt. branch and in Gall. they can still mostly be distinguished, since in the latter *g* had become *p* (§§ 435. 436). *p* arose from Indg. *ky* in Cymr. *ebol* 'foal' = O.Cymr. *espaul*, Gall. *epo-* (Epo-rédia) 'horse' beside O.Ir. *ech*.


Germanic.


1) Thurneysen conjectures, that the form *gam* was formed through the influence of *sam* 'summer'.

Goth. hund-s OHG. hunt Ags. hund O.Icel. hundr 'hound, dog': Gr. κύων (gen. κυνος) O.Ir. cū (pl. coin) Cymr. ci (pl. cun) + Skr. śvan- śun- Av. span- sūn- Arm. šun (gen. śan) 'dog'. Goth. ga-leihan 'to announce, tell; relate' OHG. zihan 'to accuse of': Gr. δικαυμί I show' δικarious, law', Lat. jū-díc-dicō + Skr. dēbhāyāmi Av. daēshaqmi 'I show, teach', rt. dejēk-

Goth. OHG. fahah O.Icel. fa 'to seize' fr. prim. Germ. *fan-
yana-n (§ 214 p. 181) : Gr. νάσαλο-ς fr. *νασαλο-ς (§ 489), Lat. pāx paciscor + Skr. pāśa-s 'snare, cord', rt. pāk-.

Goth. sagrs 'befitting' OHG. fagar 'beautiful' OHG. fuogen 'to unite' fang 'capture' from the same rt. pāk-. OHG. swigar Ags. sweegar 'mother-in-law': Gr. ἱκωά etc., see § 381.

§ 394. Indg. ǵ. Goth. kniu (gen. knavis) OHG. chniu kniu Ags. cneō 'knee': Gr. γνα-νεεβ 'to fall on the knees, to become helpless' γόν 'knee', Lat. genu + Skr. jñu-bādh- 'bending the knees' jānu 'knee' Av. fra-śnu 'knee bent forward' (§ 403) zanva pl. 'knees', Arm. cunr 'knee'. Goth. uf-rakjan 'to stretch on high' OHG. reckhen MHG. recken 'to stretch': Gr. ἐρέω etc., s. § 385. OHG. bock boc Ags. bucca O.Icel. bokkr bokkr 'buck' were from a weak stem-form *bhug-n- (§ 534) : + Av. bāz-a- 'he-goat', Arm. buc 'lamb'.

§ 395. Indg. ġh. Goth. *gans 'goose' (hence Spanish ganso), OHG. gans O.Icel. gās 'goose': Gr. χεί 'Lat. ānsar = hānsar + Skr. hasā-s Lith. eisi-s 'goose' (on O.Bulg. gassē s. § 467, 2). Goth. gaggis 'street, way' OHG. OS. gang O.Icel. gangr 'way, passage': + Skr. jāngha- Av. žanga- 'heel-bone', Lith. žengiu 'I stride', Indg. ġgergh-

Goth. deigán 'to form of clay, mould', OHG. teig O.Icel. deig 'dough': Gr. τεῖχος 'a wall', Lat. fingō + Skr. dēhī 'earth thrown out, rampart' sau-dehā-s 'a cementing' Av. uz-daēza-

'accumulation', Arm. dēs 'heap', rt. dhejgh-.
b. The language-group with spirants or affricatae.

Aryan.

§ 396. Indg. ħ, ğ, ǣh were generally represented by š, ẑ, ǣh i. e. by palatal š-(sh-)sounds in the prim. Aryan period. ś and ẑ have the same sound as the 'softened' ș (sz) and ẑ (caused by the following of i- or o-vowels) of the Slavonic and Lithuanian languages.

Prim. Ar. št, šk and zd zdh, źbh became developed to št, šk and zd zdh, źbh probably already in prim. Aryan. See §§ 399, 404.

The value of Indg. šk and źs cannot be precisely defined for the prim. Ar. period. See §§ 400, 401.

§ 397. Indg. ḥ. Prim. Ar. ś (§ 396) mostly remained unchanged in Sanskrit. It became s in Iranian. For this s there appears in O.Pers. mostly (initially before and medially between vowels), and in Av. occasionally ṃ, which, according to Bartholomaeae, is only a graphical variety of s.

Skr. śás-a-ti 'praises, recites' Av. sansh-alti 'naming himself O.Pers. a-pak-a 'he spoke, said, announced': Lat. cœnseō. Skr. śūra- Av. sūra- 'strong', Av. aiwi-pūra- 'over strong, over powerful': Gr. ἀ-χρόο 'without authority, invalid'. Acc. sg. Skr. viś-am Av. vis-en O.Pers. vip-am 'clan, village community': Alb. vise etc., see § 381. Skr. vāś-a-s 'will, pleasure', Av. vas-ō acc. sg. n. (st. vasah-) adv. 'at pleasure' O.Pers. vasaïy loc. sg. (st. vasa-) adv.'very, much' (orig. 'at pleasure'): Armen. vəsən 'on account of' + Gr. ἑκόν 'voluntary', rt. yek-. Skr. āsman- Av. O.Pers. as-man- 'stone, sky' + Gr. ἄκ-μον 'anvil, thunder-bolt'. Skr. svētā- Av. spaca- 'white': Lith. suvaiti svaitinti 'to make bright' O.Bulg. svētī 'light' + Goth. hveits 'white', rt. huejt- huejd-.

§ 398. Prim. Ar. šn and pš became šn and fš in Iranian (on f from p see § 473.)

Prim. Ar. šn. Av. frašna- = Skr. prašnā-'question': Arm. haršn etc., rt. prek-, s. § 390. Av. gen. sg. as-n-ō = Skr. a-śn-as,


Prim. Ar. ṣk = Indg. ṭk is found in Av. 3. pl. aor. act. a-ṣk-ar‘ they run off, go away’ beside 3. pl. pres. mid. sac-intē from rt. Ar. ṭak- sa- from Bartholomae Ar. Forsch. II 51 ff.


Rom. Other examples in Bartholomae’s Handb. d. altiran. Dial. § 146 and Kuhn’s Ztschr. XXVII 356 ff., where (a)ch, and not Indg. ēk, is regarded as the original form. This theory seems to us not to have sufficient foundation. Cp. §§ 475. 553.


The prim. Ar. form might have been šš, since in Sanskrit Indg. ks fell together with Indg. ss (preceded by i, u) = prim. Ar. šš, cp. Skr. 2. sg. dvekṣi (1. sg. dvekṣi-mi ‘I hate’). Cp. § 556, 1.

Rem. 1. Observe that Indg. ks and qs fell together in kš in Sanskrit, whereas in Iranian (as in Balt.-Slav., § 414) they remained separate: ks = Iran. š, qs = Iran. xš. Cp. § 556, 1.

Rem. 2 Skr. final ks became k by § 647, 7, as nom. sg. dīk ‘heavenly direction’ (st. dīk-, pīv-īk ‘sacrificator’ (st. pīv-, rt. ḫēk-). Forms as nom. sg. spāt ‘spy’ (st. spāk-), ḫēt ‘clan’ (st. vīk-), ḫūt ‘king’ (st. rūt- Indg. rēk-) were new formations after the analogy of the cases with bh-suffixes, see § 404 rem. 3. In Av. the regular continuation of Indg.-ks was not altered by the law of finals: c. g. spāk = Skr. spāt Lat. (hark-)spex; ayā-sar ‘causing sins’ to vor-x-yetti ‘works’ rt. xery-.

Rem. 3. xk (not 1) occurs in a number of Gr. words, opposite to Skr. kš = Iran. š = Lat. x, c. g. Skr. tākšā ‘carpenter’: Gr. τιναυ. On this correspondence cp. § 554 extr.

No trace of the first k in the Indg. combination ksk has remained in Aryan, it became assimilated to the following s at an early period. Cp. Skr. pṛchāmi Av. persāmi = Indg. *pyk-skō with Skr. gāchāmi Av. jasāmi = Indg. *guna-skō (§ 400).

§ 402. Indg. ʒ. Prim. Ar. ḷ (§ 396) mostly became j in Sanskrit, and z in Iranian. d i. e. ʒ is often written for z in O.Pers., cp. ḷ beside s § 397.

§ 403. Prim. Ar. šn became šn in Iranian. Av. fra-šnu- 'knee bent forwards' beside zauna pl. 'knees' etc., s. § 394. Av. duž-varšnah- 'evil doer' beside ver'z-yəiti 'works, effects, carries out' etc., s. § 385.

šn appears for šn in O.Pers. xšnā-sā-liy = Lat. gnō-sca-t (z = Indg. šk, § 400) from Indg. žnū- 'get to know' (s. § 382), as also in Av. ā-xšnu- besides ā-šnu- fra-šnu- and others. Cp. Bartholomae Handb. § 100 rem. 3.

Rem. yasna- 'offering' instead of *yasnu- (Skr. yuṣñā- 'offering', rt. ṣaṣ-) received the dental sibilant from analogy with such forms as 3. sg. pers. yasnaṅg.

Prim. Iran. zm = prim. Ar. žm became sm in Av. rāsmān- 'column of an army' besides rāṣaycīti 'puts in order' : Gr. ὑπέρω etc., see § 385.

The transition of šn to šn and of zm to sm points to a voicelessness of the nasal.

§ 404. Prim. Ar. žd ždh, žbh (§ 396) became žd, žb in Iranian (§ 481); in Sanskrit they first became žd ždh, žbh (cp. §§ 399. 591), then ž was dropped before d dh with ('compensation lengthening'), while before bh it passed into ḍ.

1. žd. Here will come Skr.ṁrḍā-ti 'is gracious, pardons, spares', ṁrḍikā- n. 'grace, pardon, mercy' Av. mer'zedika- n. 'grace, pardon, mercy', in case they belong to the rt. merḍ- 'wipe off' (Skr. ṁṛḍ-ā-ti 'wipes off, cleanses from guilt', Av. mar'z-āiti 'wipes, cleanses'); the original form would then be an old syntactical combination *mṛṛ ḍo- 'grant a purity from sins'. Skr. mṛṛ-ya-te 'forgets' marṣāyate 'bears patiently, excuses, pardons' Lith. mifž-ti 'to forget' can equally well be regarded as being from an old *mṛṛ ḍo- (by assimilation *mṛṛ ḍo-) 'grant a forgetting, excuse' (§ 591).


Prim. Ar. a + ù became Skr. ù. vôlhum inf. vectum' (from rt. yeçh-) fr. prim. Ar. *važdhum i. e. *yeçgh+tu-m. sôdhum inf. 'to master, overpower' (from rt. seçh-) fr. prim. Ar. *saṣdhum i. e. *seçgh+tu-m. 3. sg. trôdžhi 'he dashes to pieces' (pl. tatárha) for regular *trôdžhi (fr. *trôaz-dhi) arose from analogy to forms in -ôdhi fr. *nâzdhi (§ 476 rom.)

Rem. 1. It has not been ascertained for certain what was the pronunciation of the etymologically presuppositional combination gh+t at the close of the Indg. prim. period. See § 552.

Rem. 2. Forms like Skr. 2. sg. imper. didiždhi for *didizdhi (prim. i. *di-dizdhi), to didez-mi 'I show', were new formations. The ś-sound (*didizdhi) was re-introduced in *didizdhi after the analogy of didizdz di-deṣu and others (ś = śt, § 399), then this — change of period, change of sound-laws — passed into d. Cp. § 591 rem. 1 on didizdhi and § 476 rem. 1 on diddhi for dždhi.

3. zh. Av. (Gáp.) vízbyō Skr. vižbhûyás dat. abl. pl. to Av. vîs- Skr. viś- 'clan, village community', rt. yeik-. Skr. pâdôhîš instr. pl. to paś- 'a look', rt. spok-. We assume that in such cases ġ for k goes back to the Indg. prim. period, see § 469, 2. Skr. zhô probably became dzô in the same period in which the newly formed *didizdhi (für *didizdhi) became dididzô (rem. 2).

Rem. 3. In Sanskrit the cerebral explosive was carried over to the nom. from the cases with bh-suffixes, hence spât viñ rât instead of the regular *spât *vîk *râk fr. *spâñs etc., see § 401 rem. 2.

§ 405. Indg. ğh. Prim. Ar. žh (§ 396) became h in Sanskrit through the intermediate stage ţh, in Iranian it fell together with prim. Ar. ž in z (O.Pers. d, see § 402).

Skr. hár-ana- Av. zav-ana- 'call, cry', Skr. hv-atar- Av. zh-atar- 'caller, orier': O.Bulg. zov-q 'I call' sv-ateñ 'caller, orier' + OHG. gaunôn 'to complain'. Skr. bâh-§ Av. bâžu-§
Indg. palatal explosives in Aryan and Armenian. § 405–408.

'arm': Gr. πύξυς 'fore-arm', OHG. buog O.Icel. bögr 'bow', Indg. ḫād-kh-ūs. Skr. dekk- 'earth thrown out, rampart' Av. udāra- 'accumulation' O.Pers. di-dā 'rampart, fortification': Goth. deigan etc., see § 395. Skr. gāhati 'hides, conceals' Av. gauzaitī 'hides, keeps' O.Pers. gaudaya imper. 'hide': Lith. *gužietojis 'protector' gūsztā 'brooding nest', rt. in weak grade form ghāgh-

§ 406. In Sanskrit jh, the previous stage of h, was retained in ujjhitā- 'forsaken, given up' fr. *ud-jhī-ta-, to Skr. hā-
Av. zā- 'leave, forsake, lose'.

jh appears where prim. Ar. ẓh came under the law of the dissimilation of aspirates (§ 480), e.g. pres. jā-hā-ti = Av. za-zā-iti, prim. Ar. *ẓha-ẓhā-ti; pf. ju-hāv-a 'he called to' from hū-. This law of dissimilation consequently came into operation before the time that jh became h.

§ 407. Prim. Ar. ẓhm became šn in Iranian (cp. § 403). Av. barš-nu-š 'hight, summit' beside barš-z-a- 'height' barš-išt-a- 'very high' Skr. bārk-īṣṭha- 'very elevated': O.Ir. bri (gen. breg) 'rising ground' etc., see § 392.

Prim. Ar. ẓhm became sm in Av. (cp. § 403). maes-man- 'urine' beside gao-mæza- 'cow-urine' Skr. mēha- 'urine': Lat. mīnā etc., see § 389. xraoślu-sma- 'hard, firm ground' beside nom. za acc. zâm 'earth': Gr. χαμαι etc., see § 386; gen. z'mō instr. z'mā abl. z'maḥ had z for s after the analogy of za zâm; in O.Pers. with zm udārā-zmī- 'Chorasmien'.

Armenian.

ahe (gen. aheis) 'ear of corn' OHG. ohil 'chaff, beard of grain'.
harsn (gen. harsin) 'bride' from the root-form prk-, see § 390.
The s = l in sun (gen. san) 'dog' is unexplained: Skr. śvān- sun- etc., see § 393.

c fr. Indg. (k)sk. harc (gen. harcī) 'question': Skr. prchā-,
Indg. *prk-sk-., see §§ 393. 400. 401.

c fr. Indg. (s)sk. aic 'investigation': OHG. eisca 'demand',
Indg. *ais-sk-, cp. Skr. ichā- 'wish, desire' i. e. *is-skā- beside ēs-ā-s 'a seeking out, wish'.

c fr. šs. vec 'six': Lith. szesul + Gr. ἵκς ἵκς Lat. sex O.Ir.
se Cymr. chwech, cpf. *syeks (cp. § 589, 3).

R probably disappeared as s before t in ut 'eight': Skr. aštā etc., see § 381. Perhaps also before l in lu 'audible' lur 'a hearing, tidings, news', since these words seem to be related to Skr. śru- Gr. ξύ- etc. (§ 384). See Hübschmann Arm. Stud. I 33.

§ 409. Indg. ĝ. cer (gen. ceroy) 'old man': Skr. járati 'rubs, makes fragile' Av. saurvā- f. 'age, a growing old' + Gr. γέρων 'old man'.
calr (gen. calu) 'laughter': + γέλαω 'I laugh'.
aic (gen. aici) 'goat': + Gr. αἰγ- (gen. αἰγός) 'goat'. arciōn 'eagle'
ar fr. r § 291, v fr. p § 330) : Skr. ḫijpyā- 'stretching oneself, seizing on the wing' Av. er'zifya- 'stretching oneself, falcon'.

§ 410. Indg. ǰh. Initially and after n, r as j. jaune-m 'I consecrate, sacrifice': Skr. hōtar- Av. zaotor- 'the high priest' + Gr. χιεω 'I pour'. jukn (gen. jkan) 'fish': Pruss. acc. suckans (read zukans, § 412) 'fishes' Lith. šuk-mistra-s 'master of a fishery' šuvs- 'fish'.
ji (gen. jioy) 'horse': Skr. hāya-s 'steed',
anjuk (ancuk) 'narrow': Lat. angō etc., see § 389. inj (inc),
gen. enju (encu), 'panther, leopard': Skr. sihā-s 'lion'. mi-orj-i 'mūyokhč' orj-i 'not castrated': Av. er'zjī- Alb. herde for *erde + Gr. ἕχες 'testicle'. barjir (gen. barju) 'high': Skr. bhānt- etc., see § 392. barj (gen. barji) 'pročxuqaiioq': Skr. barhiṣ- n. 'the offering-litter' Av. bar'ziš- 'cover, mat'.

z after vowels lieg-um 'I liek': Skr. tēh-mi etc., § 392.
ozni 'hedge-hog': Lith. eisg O.Bulg. jedí fr. *jez- (§ 147 p. 134) + Gr. ἵκτος OHG. igil 'hedge-hog'.
Albanian.

§ 411. According to G. Meyer (Bezzemenberger's Beitr. VIII 186 f., Alban. Stud. II 15 ff.) Indg. ḁ, ţ, ţh are represented in Albanian in the following manner:

ḁ = s. si-viell 'in this year': Lith. sasl-s 'this' Lat. ci-ter etc., see § 387. viise pl. 'places': Skr. viš-āmi Gr. Foîko-ç etc., see § 381. nūt 'ear of corn' fr. *ust : Skr. aś-ri-ś Gr. ȧx-po-ç etc., see § 408. G. Meyer conjectures θ fr. s in djaθtče (dinaçte) 'to the right', the first part of which djaθ- represents Indg. *deis- (Skr. dākṣṇa- etc., see §§ 390. 401).

ţ = ȷ. ȷemp (with def. article ȷemb)i 'tooth': Skr. jāmbha-s 'bite, tooth', Lith. šamba 'mouth', O.Bulg. zafu 'tooth' + Gr. χόµφο-ç 'tooth', OHG. chamb 'comb'. ȷi 'goat': Skr. ajā-s 'buck', Lith. ožys 'he-goat' + O.Ir. ag allaid 'cervus' (wild buck). baro (with article baro-i) 'white': Skr. bhrājatē Av. bhrāzaiti 'beams, radiates. viθ 'I bind' (véθ-): + Lat. ligāre.

ţh = ȷ. The Indg. mediae and mediae aspiratae had fallen together in Alban. as in Iran. Kelt. and Balt.-Slav. āies 'caco': Skr. hād-a-ti 'caca' Av. zad-ah- 'nates', Arm. jēt 'tail' + Gr. χέλω 'caco' perf. κέλω, χόδωρο-ç 'nates'. viθ 'I steal' (véθ-) : Skr. vāhāmi etc. s. § 383. herde 'testicle': Armen. mi-orj-i etc. s. § 410.

d- for ð- in dimen 'winter' (Gr. χειµῶν etc., s. § 383) and in diē 'yesterday' (Skr. hyās 'yesterday' + Gr. χθές 'yesterday', Lat. herī hes-ternu-s, Goth. gistra-dagis 'to-morrow').

Baltic-Slavonic.

§ 412. Indg. ḁ, ţ, ţh were ð-(sh-)sounds in the Baltic-Slavonic parent language, whose place of articulation cannot be defined more precisely. They retained their character as ð-sounds in Lithuanan: ḁ = sz, ţ ţh = ź. In Prussian and Lettic as well as in the Slavonic branch they passed into s-sounds: ḁ = s, ţ ţh = ž. In Pruss. the letter s denotes both s and z, in Lett. s is the voiceless, and ţ the voiced sound.

The fact that the successor to Indg. ḁ did not take part in the Slav. change of s to ch (§ 588), shows that Indg. ḁ and
Indg. s were still distinguished not only in the Baltic parent language but also in the Slavonic.


Rem. It is not quite clear what the regular treatment of the Indg. group šš was in Balt.-Slav.

After the analogy of Iran. (§ 400) we should expect šš in Lith. and š in Slav. Thus Lith. šdēnũ ‘I shoot’ O.Bulg. ušq ‘I send forth, shoot’: OHG. selegan OS. sketan ‘to shoot’ (prim. Germ. *škēg-r-, like Goth. giotan OHG. giojan beside Gr. χι(ό)ν). Correspondingly Oßhoff Zur Gesch. d. Perf. 493. 630 (ep. also J. Schmidt Kuhn’s Ztschr. XXVII 332) traces the šš in Lith. uššin ‘it dawns’ pret. uššo, ausvrd ‘dawn’ (rt. osvr,
Lat. *sur-u-ř-a Skr. *us-ī-) and that in Lith. gaiss-tu gaiss-at gaiss-ti ‘to linger, loiter’ (rt. gaiss-, Lat. haer-e) back to (a)sk, according to which one might regard the sz in Lith. miszytį and the s in O.Bulg. mésiti ‘to mingle, mix’ (to Skr. miṣṭ-y-a ‘mixed’) as the representatives of Indg. (k)s̄k (op. Lat. misceō = *mic-seō), just as Indg. sk̄, ask̄, esk̄ had fallen together in s in Iranian.


Moreover we must bear in mind firstly that a *ščirj-š might be present in száujn szuq, as not unfrequently roots, which begin with s + tennis, have old forms without s- (§ 389, 3), secondly that jėskešti izkari and *ščirj-š might be Germanic loan-words (cp. § 387 rem. 2). The balance as it seems to me, inclines in favour of sk̄ = Lith. sz, Slav. s.

Slav. šj̄ = Indg. š̄j̄ became š̄, e.g. pišq from *piš-š̄q. See § 147 p. 134.


Slav. šj̄ = Indg. ǧ̄ became ̄z̄, e.g. šuq fr. *šu̅q-š̄q. See § 147 p. 134.

§ 383. Lith. šiōju O.Bulg. zifaja 'I open my mouth wide': + Lat. hiare, OHG. gīn 'to gape'.

Slav. zį = Indg. Žhī became ž, e. g. ližq from *liz-jaq. See § 147. p. 134.

4. The velar explosives.

§ 417. With regard to the development of ɣ, ʁ, ʁh the Indg. languages arrange themselves into the same two groups, as they did in the history of the palatals.

In the group, in which ɣ, ʁ, ʁh appear as explosives, ɣ, ʁ, ʁh frequently appear as k-sounds with following labialisation (μ), as Lat. quis = Indg. *qi-s, or as sounds, which presuppose this articulation, as Umbr. Osc. pis 'quis'. These labialised sounds were originally everywhere, as it seems, simple sounds and in Greek and probably also in Italic had not fallen together with prim. Indg. palatal + ɣ (as in *ekyo-s 'horse'). But the languages of this group do not all uniformly show this affection in each of the words in question. In numerous cases this affection appeared in one language, but not in another.

In the other group, Ar., Armen., Alban. and Balt.-Slav., the ɣ-element is entirely wanting as an old inherited affection.

Here, as in the case of the palatals (§ 380), possibly exists a dialectical difference within the Indg. parent language 1).

In §§ 424 and 466 we shall have occasion to discuss the question of the historical relations between words with and words without labialisation in the ɣ-languages, and whether the group which had no ɣ was without this accessory element from the very beginning or had lost it in prehistoric times.

1) The maintenance of the existence of two dialects in the bosom of the Indg. prim. language on the basis of the differences of development of the palatal and velar explosives, does not imply that we ought to expect also the same boundary for other dialectical differences which we might feel inclined to ascribe to the Indg. prim. language. The limit, within which one dialectical peculiarity is confined, cannot without any further consideration be taken as typical for others. See Paul's Prin-
cipien der Sprachgeschichte p. 237 f.

Brugmann, Elements.
The following is the representation of the velar series in the separate Indo-Germanic languages:

### a. Languages with labialisation.

<table>
<thead>
<tr>
<th>Indg.</th>
<th>Greek</th>
<th>Latin</th>
<th>Irish</th>
<th>Brit.</th>
<th>Germanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>g&lt;sup&gt;1&lt;/sup&gt; with l.</td>
<td>꞉, ꞌ(α), ꞉</td>
<td>꞉, c</td>
<td>c</td>
<td>p</td>
<td>ꞌk, ꞌk, ꞌk, ꞌg</td>
</tr>
<tr>
<td>g&lt;sup&gt;1&lt;/sup&gt; without l.</td>
<td>꞉</td>
<td>꞉</td>
<td>c</td>
<td>c</td>
<td>ꞌk, ꞌk, ꞌg</td>
</tr>
<tr>
<td>g&lt;sup&gt;2&lt;/sup&gt; with l.</td>
<td>꞉, ꞉(♂), ꞉</td>
<td>꞉, ꞉, ꞉, ꞉</td>
<td>b, g</td>
<td>b, g</td>
<td>ꞌk, ꞌk, ꞌk, ꞌp</td>
</tr>
<tr>
<td>g&lt;sup&gt;2&lt;/sup&gt; without l.</td>
<td>꞉</td>
<td>꞉</td>
<td>g</td>
<td>g</td>
<td>ꞌk</td>
</tr>
<tr>
<td>g&lt;sup&gt;h&lt;/sup&gt; with l.</td>
<td>꞉, ꞉, ꞉</td>
<td>꞉, ꞉, ꞉, ꞉</td>
<td>b, g</td>
<td>b, g</td>
<td>ꞌw, ꞌz, ꞌ(b)</td>
</tr>
<tr>
<td>g&lt;sup&gt;h&lt;/sup&gt; without l.</td>
<td>꞉</td>
<td>꞉, ꞉</td>
<td>g</td>
<td>g</td>
<td>ꞌz, ꞌg</td>
</tr>
</tbody>
</table>

### b. Languages without labialisation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>k, c</td>
<td>k(ɔ)x, ḫ, ḫ</td>
<td>k</td>
<td>k</td>
<td>k, ĺ, c</td>
</tr>
<tr>
<td>g&lt;sup&gt;h&lt;/sup&gt;</td>
<td>ḫ, ḫ</td>
<td>ḫ, ḫ</td>
<td>ḫ, ḫ</td>
<td>ḫ, ḫ</td>
<td>ḫ, ḫ, ḫ, ḫ</td>
</tr>
</tbody>
</table>

Prim. indg. period.

Forms with -qu- from rt. jug. 'to harness, yoke': Gr. πεφθο-ς, κεφις from *κεφθ-ς (§ 489) κοπτήρ, κεφαλιν οὖ-τις, Lat. junctio, junci con-jux + Skr. part. yuktá-s nom. agentis yuktár-s, sg. pres. yukktē, 3. ag. fut. yūkṣyātē nom. ag. sa-yuk from *yukṣ (§ 647, 7), Lith. part. jünktas inf. jünkti, fut. yünksiu.

Suffix -qu- see § 419.

§ 419. b. Tenuous q with labialisation in the g-lan-

guages. Pronominal stem masc. neut. *qa- *qo- 'who, which' (interrogative and indefinite), fem. *qā-: Gr. νό-θεν 'whence?' Hom. τέο 'whose?' πη πη in 'what direction?' (Dor. πα πα), Lat. quo-d cotti-dē fr. *quetē, qua-m, O.Ir. cia (fr. *ce) Cymr. pwey 'who, what?' prim. Kelt. *kwej, Goth. hva-s 'who? hva 'by what?' fem. hve + Skr. ká-s 'who?' Av. dat. ca-hmāi 'to whom?'. Alban. kë 'which', Lith. kâ-s 'who?' O.Bulg. kū-to 'who?'. *geter- 'four': Gr. Ion. τέσσερις Lat. quattuor O.Ir. cethir O.Cymr. petguar Goth. fīdu>r + Skr. cātā-r as Arm. čor-ē Lith. keturāl O.Bulg. četırive. Rū. seq.-: Gr. ἐκ-ο-μαi 'I accompany, follow', Lat. sequoric, O.Ir. sec-om 'a following', Goth. saihu-a 'I see' (follow with my eyes)? + Skr. si-ṣak-ti sāc-a-tē 'conducts, escorts', Lith. sek-û 'I follow'. *penolo 'five': Gr. πέντε Lat. quinque O.Ir. cóic O.Cymr. pimp Goth. fimf + Skr. pāśca Arm. hing Lith. penkti; *penqto-s 'the fifth' *penqti-s 'the number five': Gr. πέντε-ς Lat. quintū-s Quinctius Ose. Ποντια-ς 'Quinctius' Goth. fimf- (in fimf-tadhinda 'the fifteenth') + Skr. pankti-ē Alban. pe-se fr. *pe(n)k-ti- (in the Gagica dial. of Alban. pō-se perhaps still has the nasal of the original form in the nasalised e) Lith. penktas O.Bulg. petū peti from *pekti *pekti (§ 545).


§ 420. a. Media g without labialisation in the u-languages. Gr. γεγαν-ς Lat. grū-s Cymr. garan (Gall. trigaranus, s. Curtius Grundz. 5 176) Agra. crān OHG. cranuh + Armen. krunk Lith. gēroę O.Bulg. ėravo 'crane'. Rt. gar-: Gr. γηρω 'I speak, utter', Lat. garrīō 'I chatter', O.Ir. gair 'call' Cymr. gower 'clamor', OHG. cherran 'to scream, neigh, squeak' + Skr. gyāḍ-mi 'I call, call to' gir- 'an invocation, speech, words'. Rt. steγ- teγ- 'cover': Gr. στέγω 'I cover' στέγος 'roof', Lat. tegō, O.Ir. tech teg 'house' O.Bret. bou-tig 'stabulum', OHG. dah O.Icel. þak 'roof' + Skr. sthāgāmi 'I cover, hide', Lith. stūga-s 'roof'. *jugō-m 'yoke' (rt. jeug-): Gr. ζύγον- Lat. jugŭ-m Goth. juk + Skr. yugá-m Lith. junga-s (with n taken over from jungiu 'I yoke'), O.Bulg. iго (§ 145).

§ 421. b. Media g with labialisation in the u-languages. *gív-o-s : Gr. βίος 'life', Lat. viv-o-s O.Ir. biu beo Cymr. byn Goth. giu-s + Skr. jīvā-s 'alive', Armen. kea-m 'I live', Lith. gūva-s O.Bulg. živū 'alive'. Rt. gem- : Gr. βά-σω βαλέω 'I go' (§§ 204. 233. 234), Lat. veniō (§§ 208. 239) Goth. gim-an OHG. quem-an 'to come' + Skr. gā-chāmi 'I go' (§ 228), Arm. ę-kn 'he came', Lith. gem-ą 'I am born' (§ 249). *regos n. : Gr. ἡρεμός Goth. riqiz-an 'darkness' + Skr. rājas 'darkness', Armen. erek 'evening'. Root-form ašg- 'smeear, anoint, smooth': Gr. ἁρησ- 'delicate, luxurious', Lat. unguō, O.Ir. imb inn (gen. inme, st. imben-) 'butter', OHG. ancho 'butter' (Goth. *agga) + Skr. anji-š 'salve, ornament, splendour' 2. pl. avokthā 'ye anoint'.

Indg. suffixes with g cannot be established with certainty.

§ 422. a. Media asp. gh without labialisation in the u-languages. Lat. hosti-s 'foreigner, enemy', Goth. gasts OHG. gast 'stranger, guest' + O.Bulg. gostī 'guest, companion, friend', opf. *ghos-ti-s 'stranger'. Rt. steigh- : Gr. στείγω O.Ir. tiagaim 'I stride, go', Goth. steiga 'I mount' + Skr. stejñ-mu-tē
'leaps up, ascends' (not found), Alban. šteku (definite form šteg-ū) 'entrance' Lith. staigūtis 'to make haste' Lett. staigūt 'to go, travel' O.Bulg. stīnuq 'I come'.


Indg. suffixes with gh cannot be established with certainty.

a. The language-group with labialisation.

§ 424. Many kindred words, which are found in all or several y-languages, appear in one language with labialisation, in another without it or in the same language show labialisation in one set of forms, but not in the others.

Manifold difficulties stand in the way of our being able to form a judgment of their history, especially in as much as we do not know how old the labial affection of the velar explosives is, or whether in the group of y-languages it belonged from the beginning to all forms of a form-system irrespective of the quality of the neighbouring sounds, or was connected with some definite vicinity of sounds, and whether, later, but still in prehistoric times, a new y-afterclap, caused by fresh sound-laws, did not here and there make its appearance quite independent of the first y-development.

The chief question is, to what extent can the disappearance of the old inherited y-affection be established or made probable within the circle of the y-languages? It is seldom that its
disappearance is to any extent carried out before our eyes, as in Lat. secundur from sequuntur. We may conclude that it was probably dropped in the following cases:

1. When other forms of the same kindred class of words have \( y \) and the sound-laws of the respective languages permit our assuming that the labialisation has been lost. We thus assume in regard to Goth. qiman OHG. queman ‘to come’ (§ 421) and prim. Germ. *sun-da- fr. *symm-da- etc. (§ 180 p. 158) that prim. Germ. *kumana-2 ‘come’ pp. (OHG. koman) arose from *kym-an-an-2 (§ 444b).

2. When closely related dialects (of the same language-branch) have \( y \) and the native sound-laws are not in the way. Thus the -pt- in Osc. Πουμπτες ‘Quintius’ shows that the -ct- in Lat. quīn(c)tu-s goes back to prim. Italic -kut-. O.Cymr. petguar ‘four’ permits our assuming an older ky- for Ir. cethir.

3. When other languages have \( y \) and the native sound-laws are not in the way. We thus conjecture prim. Germ. *kuuru- for Goth. kauru-s ‘heavy’ and prim. Lat. (or prim. Ital.) *g*rayi-s for Lat. gravi-s (§ 432d) on account of Gr. βαρύς, Indg. *gru- *gru-.

Several proofs may often be united together. Thus we may appeal 1. to quīnque, 2. to Osc. Πουμπτες, 3. to πέμπτος and Goth. jīnsta- for Lat. quīn(c)tu-s from *kʷeŋkʷto-s.

Opposed to these cases there are many in which, by virtue of other forms of the same dialect or of the connected forms of a closely related dialect or of those of another u-language, one is inclined to maintain the loss of \( y \), but is prevented from doing so by the sound-laws hitherto discovered. Thus Ion. ἵκ-θεν κας etc. beside Att. etc. πό-θεν Lat. quo-ē Goth. hva-s as opposed to Ionic ποῃj fr. Indg. *goj-na (§ 427a); Gr. λαυεῖν ‘to scream, speak’ beside Lat. loquī as opposed to Gr. λαυεῖν ἐνεθαύμ etc. with \( π \) = Indg. q; Lat. gen. voc-īs vocāre beside Gr. ὃν ‘voice’ ἔνος ‘word’, as opposed to Lat. coquīs etc. with qu = Indg. q. With our present state of knowledge we can, in such cases, only make uncertain conjectures, as e. g. that in forms connected with
Lat. voc- the c for qu had been extended by analogy from the nom. vōx, which can be regularly traced back to *uōk’s (§ 431 c).

For words and groups of words, which do not appear in any language with labialised velar-sound, it must for the present be left undecided, as to whether they ever had the u-afterclap. In each language we give first the examples for this form-category apart from the other.

Greek.

1. Indg. q, g, gh without labialisation.


Indg. g.  ǵytiw ‘I collect’ ǵyrod ‘assembly’ γάρ-γαρ ‘heap’; Lat. gre-x gre-g-is, O.Ir. graig ‘herd of horses’ (the Lat. and the Kelt. word with ‘refracted reduplication’) + Skr. grāma-s ‘crowd, army, village’. ǵriyous ‘I spit out’: ǵrūgō, OHG. itaruchian ‘to chew again’ + Lith. rūgū ‘I belch’ O.Bulg. rygaja sē ‘I belch, vomit’.


1) The nasalisation of this root in the present *ghendō is explained in the same manner as the Skr. present formation limdāti etc. (p. 189).
\( \kappa \chi \lambda \), \( \gamma k = qi\ gh\i, qi\ \) became \( \sigma\ \tau\zeta\ (\sigma\delta)\ \delta\j,\ \) as in the case of the corresponding palatal sounds + i, see §§ 384–386. 489. 493. 497. \\
\( \delta\rho\i\sigma\omega\ \) 'I dig' fr. \( \ast\delta\rho\i\nu\-\rho\omega\) : Lat. \( \text{runçare} + \text{Skr.}
\)
\( \text{luçami} \ 'I pull out, pluck'. \( \phi v\zeta\ \) 'right' fr. \( \ast\phi v\nu\-\\lambda\alpha, \\) to \( \phi v\nu\nu\)
\( \) 'I flee': Lat. \( \text{fugiô}, \text{Goth.}
\)
\( \text{bingan} \ 'to bend' + \text{Skr.} \text{bhugnā-s} \ 'bent',
\)
Lith. \( \text{baugū-s} \ 'fearful', \rt. \text{bheug-} - \text{bheug-}.
\)

2. Indg. \( g,\ g,\ gh = \) prim. Gr. \( k^a,\ g^u,\ khl^u\).

§ 426. The prim. Greek sounds partly became developed to \( \pi,\ \beta,\ \varphi,\ \) partly to \( \tau\sigma,\ \delta\zeta,\ \theta,\ \) and partly to \( \kappa,\ \gamma,\ \chi.\ \) The conditions, under which these differences of the place of articulation were formed, were mostly the same for the three forms of articulation.

That the \( \eta\) following the explosive sound in prim. Greek was not a full \( \eta\), can be concluded from the contrast between \( \text{innoc} \ 'horse' \) (fr. Indg. \( \ast\eky-o-s,\ \) § 166 p. 147) and e. g. \( \text{çlinov} \ 'I left' \) (fr. Indg. \( \ast\-\text{leiq-o-m} \). Cp. p. 305 f.

§ 427. Prim. Greek \( k^u\) became

\( \alpha\pi \) before \( o\)-vowels, before sonant and consonant nasals and liquids, and before \( t,\ \theta,\ s\). Stem \( \pi\o\- \) 'who': Lat. \( \text{quo-},\ \) Skr. \( \text{ka-} \) etc., see § 419. \\
\( \text{po\nu\j} \ 'expiation, atonement, fine': \text{Av.}
\)
\( \text{kæpa} \ 'fine', \text{O.Bulg.} \text{cëna} \ 'price', \text{Indg.} \text{\( \gamma\o\i\-nä \) from rt. \( \text{gei-}
\)
\( \) to which also Gr. \( \text{ti-o-ç} \ 'atonement': \text{Skr.} \text{ápa-ci-ti-} \ 'requital' \)
\( \) (under \( b\)). \text{leinw} \ 'I leave': Lat. \( \text{linguō},\ \text{O.Ir. lēcin} \ 'I leave',
\)
Goth. \( \text{lyhva} \ 'I lend' + \text{Skr.} \text{rivāk-ti} \ 'leaves', \text{Arm. aor. e-lih} \ 'he left',
\)
Lith. \( \text{levē} \ 'I leave', \rt. \text{leig-} \). \( \text{ηπα-t} \) - 'liver', orig. form
\( \text{\( \ast\text{leig-t}\) - : Lat.} \text{gen. sg.} \text{jekin-or-is} (§ 431 c) + \text{Skr. gen. sg.}
\)
\( \text{yakn-ās}, \text{Lith. nom. pl. jeknu-ös.} \text{pej\nu\jäš} \ 'the number five' =
\)
\( \text{Skr. paçcit} (§ 448 rem.),} \text{epf.} \text{\( \ast\text{perqyt-s}; \text{Gr.} \text{\( \alpha\)} \text{Skr.} \text{\( \alpha\)} \text{in}
\)
\( \text{the last syllable instead of the expected} \ \text{ev} \ \text{au} \ (s.} \text{§§ 230. 235)
\)
\( \) are explained by the original accentuation of the weak cases, gen. sg. \( \ast\text{perqyt-ōs} \) etc.; concerning the \( \text{J of the} \text{stom} \text{perqad-}
\)
\( \) see footnote 1 pp. 199–200. \( \text{ôtμa} \ 'eye' \) fr. prim. Gr. \( \ast\text{ôt-μa}
\)
\( \) (§ 488): Lith. \( \text{akl-s} \text{O.Bulg. oko} \ 'eye'. \) In like manner also \( \pi\lambda\mu\a \ 'any kind of dressed food': Lat. \( \text{coquo} + \text{Skr.}
\)
\( \text{pácami O.Bulg.} \text{pekä} \ 'I cook'. \( \text{lä-πρ-āmr} \) 'I bought': O.Ir. \text{cre-nim} \ 'I
\)
\( \) buy' \text{cr̃h̃id} 'desirous of buying' O.Corn. \text{pr̃id} 'emptus' + Skr.
κρέ-να-μι 'I buy, purchase'. ἐ-πρ-τ-ς 'versatus est' (περ-να-ὁ-
μενο-ς) πόλο-ς 'the axis on which something turns, land turned
up with the plough': Lat. colō fr. *gueō (§ 431 a), in-quillino-
ṣ + Skr. cārāmi 'I move myself, wander', rt. qel-. πέμπτο-
ς 'the fifth': + Lith. pe̞nkta-s etc., see § 419. πεντά-
ς 'cooked': Lat. coctus from *qucesto-s + Skr. paktā-s; fut. πέ̅ψω 
aor. ἐνψα: Lat. coctum from *qucest + Skr. fut. pakṣyā-ti 
aor. Ved. pākṣā-t. νίν-τρον 'water for washing' fut. νίψω 'I shall wash' nom. 
sg. χέρ-ψψ 'water for the hands' + Skr. niktā-s 'washed off' fut. nākṣyā-
ti 'he will wash off', rt. neig- (acc. χέρ-μπ-α, Skr. uco-nēj-ana-m 
'washing-water').

πτ became ττ in Cret. πέντε-ς from *πεντε-ς = πέμπτο-
ς quintus'. Cp. § 33

b) τ before e- and (sonantal) i-vowels. τε 'and': Lat. -que,
O. Ir. -ch Cymr. -p + Skr. ca, Indg. *qe, related to πό-θεν etc.
Hom. τέο 'whoso', Cret. (Gortyn) fem. ὅ-τελα, as opposed to Att.
ό-νοίεα 'qualis' from the stem *qe- (§ 419). τέλεω 'to rise'
τέλο-ς, rt. qel- see above under a. πέντε 'five': Lat. quintus etc.,
see § 419. τί 'what?': Lat. quid + Skr. -cid Av. -cip (indef.),
Indg. *qi-d. τί-οι-ς 'atonement', rt. qei-, see above under a.

That this τ arose from prim. Gr. k², not k (as § 425), and
that no direct historical connexion existed between the palatal
articulation which is to be postulated as the previous stage for
τ and the Aryan palatal c = Indg. q (§ 445) (as is maintained
by some scholars e. g. J. Schmidt), follows from the fact, that
τ only occurs in such kindred classes of words as have π = 
prim. Gr. k² beside τ (τέο beside πό-θεν) and, so far as they
are at the same time represented in other γ-languages, have
a labialised sound opposite to the Gr. γ (τίς = Lat. quis). If
τ had had no y from the most ancient times, this sound would
also have to appear as representative of Indg. q in the words
belonging to § 418, as e. g. κέλγις 'runner' (Lat. celer, Skr. cal-, 
rt. qel-), where however it does not occur. The following palatal
vowel, notwithstanding the y-afterclap, caused palatalisation of the
k-sound (k² from λ), just as in the change of prim. Skav.
*κυίστι to O. Bulg. εύιστι ('to blossom') you did not prevent the i from exercising its influence on the k (§ 462).

These. κις probably stands to Att. τις in the same relation as Mod. HG. quasi in MHG. tisengen (§ 374), that is, before the disappearance of the y of the prim. Gr. form *κγ'is this caused the change of the explosive sound back again to k. Also Cypr. δι-ς = τις (op. Arcad. ζιβλω, § 428 b.) supports the assumption that κις = Indg. q before palatal vowels and Indg. t had not yet fallen together in prim. Greek.

Rem. 1. Through new formations n and r came to stand in sound-combinations, in which they had not regularly arisen. E. g. Dor. loc. πτι 'where?' instead of *πτι, Ion. Att. λίπως λίπον λίπος instead of *λιπως etc., conversely δεκτις 'rising' instead of *-τολις (to δεκτολο, Skr. caur-). Cp. §§ 428 rem. 429 rem. 1 and 448 rem.

c) x, when ν preceded or followed; in some cases this ν seems first to have been called into existence by the y in κυ, a point, which still requires closer investigation. λύκο-ς 'wolf': Goth. vulfs + Skr. vika-s 'wolf'. Gen. νυκτος 'noctis'? : + Skr. nakti-ς Lith. nakto-s 'night'. Nom. sg. oνόθ-φλυς 'drunk with wine' (gen. -φλυνγ-ος) τυκτος 'bladder' beside φλεψ φλεβ-ος 'blood-vessel'. νυκτος 'circle': Ags. huceol huseowol 'wheel' + Skr. cakro-s 'circle, wheel'. Cp. §§ 428 c. 429 c.

Rem. 2. Also κκ in δκκο-νον 'eye' in Hesych. (op. κις in δυς 'a peep-hole, hole' etc.) for κις + γι? Cp. νυκτος § 166 with rem. Doubts remain on account of Basot. δκκολλο-ς 'eye', whose κκ must be taken into consideration in connexion with the κις in δφικλωο-ς and the κις in Skr. akkan-.

d) With following i, there arose σο, ττ. Hence prim. Gr. κις thus fell together with κις = Indg. ις (§ 384). Since Indg. qi and Indg. ti remained apart in Greek, we may assume that κις did not first become τις — as one might expect according to τις from *κις-i-s—, but that the 'zetaistic' influence of the i already began, when the explosive sound belonged to the sphere of the back articulation. νέων νέτον 'I cook' beside fut. νέυω etc., rt. peg-_. Further under § 489. § 428. Prim. Greek γι became

a) ι before o-vowels and sonant and consonant nasals and


b) Ȝ before e-vowels. Arcad. ἧδω, Delph. Gorzyn ődēlő-ς.

In Arcad. this δ must have been different from the δ = Indg. d. For it was also represented by ζ : ζέλλω, ζέριθρον, cp. Cypr. σιζ = τις § 427 b. Hence Indg. ge- and de- had not yet fallen together in prim. Greek.

Rem. Through new formations, β and δ came to stand in sound-combinations, in which they would not have regularly arisen. E. g. βολας 'shot' instead of διλας to βάλλοι; ὀβόλος beside ὀβλός and ὀβόλος; βολόφος ὁ μύτηρ Hesych., beside δελφός ὁ δελφός δελφός: Skr. γάμβα-σ 'womb'. Cp. § 427 rem. 1, § 429 rem 1 and § 451 rem.

Does Boeot. διλτηθέ Thess. διλτείν beside Locr. διλτείν Leub. δολετά also belong here? The idea is not entirely to be rejected, since prim. Gr. γνά may regularly have become β before ε in Aeol. Cp. β before υ in βυός etc.

c) γ in the vicinity of ν, corresponding to the ε in § 427 c and to the χ in § 429 c. Gen. εινό-γλυκ-ες, see § 427 c. ἕγ-γύνη 'consent, surety, betrothal': Lat. novēō from *γνού-εο, rt. γνυ-. γογ-γυ-γνώ 'grumble, am unwilling' beside βοή 'call' from *βοή-ά : Skr. ḯā-gu-० 'I proclaim aloud'; the γ in γάο-ε 'plaint' was transferred from γν-. γνυνί pushed Boeot. πανά and Hom. μνάμαι see a.

The side by side existence of πρόσβος-ς and πρόκυπτος-ς is probably due to a double stem form προσ-γν- and προισ-βισ- (to Lith. šmā-gis 'man'?). It is not clear whether -βε- was regular after σ (cp. σβή-πνυμι σβή-ναι to Lat. sēgni-s, rt. seg., § 432 d, beside zeinuειν : σβήνειν in Hesych.), or whether β was borrowed from πρόσ-βισ-ς πρόσβιςς πρόσβος etc. It must be observed that γν before ν lost its labialisation earlier than γν before a which led to β and δ. The last two sounds stood for a time in a closer relation to each other as compared with γν. Association

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with the form of the superlative etc. would have taken place at that period.

d) With following ᾳ, there arose ζ (τάξ), ὒς. Prim. Gr. γ*ά thus fell together with γί = Indg. ȳί (§ 385). γ*ά did not first become δί, any more than λ*ά first became τί (427 d) 1). ζ*ά 'lives' fr. *ζή-(ή)τι, fut. ζή-σουσαί : + Av. jyūiti-jyūitu- 'life'. ἰζω 'I wash off' beside ἱππω-ν etc., see § 427 a. For the rest see § 493.

§ 429. Prim. Greek κή became

a) φ before o-vowels and sonant and consonant nasals and liquids. φόν-ο-ς 'murder' part. φα-τό-ς perf. πε-φα-ταί pret. ε-πε-φυ-ο-ν : + Skr. hún-ti 'strikes, slays' 3. pl. ghn-ánti, Armen. gan 'blows', O.Bulg. xBC-n 'I cut down, reap', rt. ghen. ἰλο-ο-ν 'I acquired' pres. ἰλο-άνω from ἰ-φν-ο : + Skr. árvami 'I earn, deserve' arghá-s 'worth, price', Lith. algà 'pay, reward', rt. algh- oτέφρος τιφος n. 'leather, hide', esp. 'the hard hide on the back of animals' : Lat. tergus 'thick hide' esp. 'the hide on the back of animals', then 'back'. νόφρο-ς 'kidney': OHG. níorö etc., see § 423. ἠλαφό-ς 'quick, dextrous, nimble': OHG. lungear, cpf. *bogh-ró-s; to ἱλαχύ-ς, see c.

b) θ before e-vowels. θείμα pres. to ἑπερνεον etc., see a. θεμιτ-ό-ς warm' = Armen. fam 'warm', θέρος 'summer' = Skr. hárás 'glowing heat', rt. gher- , see § 423. ὅλοσονθι to obtain by entreaties' fr. *θε-τα-σ- : Av. jādyāmi, O.Pers. jādyāmī 'I beg, ask', rt. ghedih-; to which probably also πόθο-ς 'desire, a longing for', from *φοθο-ς (§ 496), according to a. θητρ 'animal': Lat. fērus = O.Bulg. (d)zvēř 'wild beast' from prim. Slav. *guēři (§ 464); it remains uncertain whether the ή of the Slav. form was an old inherited ữu (J. Schmidt Kuhn's Ztschr. XXV 178).

Rem. 1. Through new formations ῥ and θ came to stand in sound-combinations, in which they would not have regularly arien. E. g. τέρ-νυς after τέρ- (in τήρσμονος and others) τή-να etc., rt. sneigh-, see § 428. ηλός after ηλπο-ν etc. L-θε-ς 'he died', 3. pl. perf. τε-θρ-ίον (for τε-φυ-ο-ντι) after θείμα (s. above), see Osthoff Zur Gesch. d. Perf. 368 f. Cp § 427 rem. 1. § 428 rem. and 454 rem.

1) Hence we have also no right to maintain, that ιβος proves, that

*θίος stands for regular *ίος-.
§ 429—430.  

$q = \theta$ in Aeol. ϕή (Thess. Φιλό-ϕέιος-ς) seems to be due to a change of $p$ to $f$, cp. §§ 365, 495.  

Rem. 2. If $\beta = \text{Indg. } \varphi$ should have arisen regularly in Aeol. (§ 428, rem.), we might similarly trace ϕή directly back to $*k\theta\varphi$.  

c) $\chi$ corresponding to the $x$ in § 427 c and to the $\gamma$ in § 428 c. ὡνῃ- 'nail, claw' in the gen. ὡνῃ-ς etc. : Lat. unguis; it is here of course a question of prim. Gr. κάθ = Indg. ϑ ($§$ 553). ἐλαχύ-ς 'small, little' = Skr. rāghu-ṛ lāghu-ṛ 'quick, small' beside ἐλαφρύ-ς 'quick' see a; the $\theta$ in ἐλαθρό-ς (Hesych.) was perhaps transferred from the once existing forms $*\epsilon\lambda\theta\kappa\phi$- (beside ἐλαχυ-) and $*\epsilon\lambda\alpha\theta\nu\tau\sigma\ω-ς$.  

d) with following $\lambda$, there arose os, ττ. ἐλάσσων ἐλάττων 'smaller, less' compar. to ἐλαχυ-ς (c). Cp. §§ 427 d, 428 d, 497.  

Italic.  

1. Indg. $q$, $g$, $gh$ without labialisation.  

Gr. σκάνδαλον 'stumbling-block', O.Ir. ro se-scaing perf. 'he leapt' + Skr. skándāmi 'I hasten, leap'.

Concerning Umbr. 's from k before e- and i-vowels see §§ 387, 502.

Indg. g. Lat. gelu, Osc. yslan 'pruinam': Goth. kalds 'cold' O.Icel. kala 'to freeze' + O.Bulg. šlédica 'sleet'. Lat. augeo augmentum (cf. auctor Umbr. uhtur under Indg. q): O.Ir. òg 'uninjured, whole', Goth. áukan 'to increase' + Skr. đjas- Av. aójah- n. 'power, might', Lith. águ 'I grow'. Lat. tegō (cp. téctu-s, Umbr. tehteři-m ' tegimentum' with qt): Gr. τεγω etc., see § 420.

Indg. gh. Lat. hosti-s: Goth. gasts etc., see § 422. prehendō: Gr. χαυδάω etc., see § 425. gradior: O.Ir. in-grennim 'I pursue', Goth. griþs (st. gridi-) f. 'step, stride' + O.Bulg. grēda 'I come'. Cp. also congru-s: Gr. κόλπος + Skr. śavakha-s 'muscle' with Indg. gh, § 553.

fostis beside hostis likefolus beside holus. See §§ 389.

2. Indg. q, g, gh = prim. Ital. kʰ, gʰ, çʰ.

§ 431. Prim. Ital. kʰ became

a) Lat. qu before all vowel qualities except u¹), corresponding to p in Umbr.-Samm. Lat. qui-s, Umbr. Osc. pi-s 'quis': Gr. τις etc., see § 427 b. Lat. -que, Umbr. -pe Osc. -p: Gr. τε etc., see § 427 b. Umbr. petur- 'quadru'- Osc. petiro-pert 'quater': Gr. τέσσαρες etc., see § 419. Lat. quinquè, Umbr. pumpehias Osc. pumpehias *quintiliae' (cp. § 336): Gr. πέντε etc., see § 419. Lat. quo-m quom-que, Umbr. pon-ne Osc. pún 'quom' fr. *kʰom-de (§ 207), Umbr. pum-pe 'quamque': Gr. πά-θερ etc., see § 419. Lat. coqū fr. *queue, probably Osc. popínā 'coquina' (§ 336): Gr. πίνον 'ripe' πόνανον-ν 'sacrificial cake', Mid. Cymr. popuryes 'pistrix' (O.Ir. cuscann 'pistrix' was a Lat. loan-word) + Skr. pdcāmi 0 Bulg. peq 'I cook', rt. pes-. Lat. qua qua-m, Umbr. paf-e 'quas' Osc.

¹) There is no satisfactory foundation for Bersu's assumption (Die Gutturale p. 184 ff) that the labial affection had disappeared before e in prehistoric Latin and had been restored again in quod lingus etc. by form-association.
paa-m acc. 'quam' : Goth. hēdē fem. 'quaē', s. § 419. Lat. *quaqu-o-s 'cook', prim. Ital. *kʰ okʰ-o-s fr. *polkʰ-o-s (s. above); the form coquo-s (coqu-o-s) had its co-through analogy to coquō.

That kʰ = Indg. q was still distinguished from Indg. ḵ in prim. Ital., follows from Umbr. ekvine loc. 'equini' (Skr. āśva-s etc.), in case this word was not borrowed from Lat. The Ital. form epo- is of Gallic origin. Cp. § 426.

Anteconsonantal que- became co- in Latin. coquō from *quequō, s. above. colō fr. *quelō, incola fr. *-quelā beside in-qui-limnus : Gr. τέλλω πόλος etc., see § 427 a. b. cotti-die fr. *quettī-, s. § 419. This sound-change took place at the same time as *syssēr etc. became soror, see § 172, 3. inquīlimnus shows that this change is younger than the weakening of e to i in unaccented syllables (§ 65 p. 53), and thus also forms like linquis linquitās (cp. Gr. ἔλπις ἔλπις), in like manner probably also sequere fr. *sequiso (Gr. ἔπεο), regularly came by their qu.


In the eighth century U. C. quo- became cu-. sequuntur: secuentur, -loquos: -locus, aequos: aecus, quom : cum, quomque: cunque, *quinqu-onx : quinc-unx (cp. O.Lat. oncia) etc. See Bersu Die Gutturalen p. 53 ff. Correspondingly ecus fr. equos, see § 172, 2. sequuntur, -loquus, eequus etc. were later new formations after forms with qu+t, ë etc. as sequitur, -loqui.

qu passed into c, when it became final. ne-c from ne-que.
ac fr. *at- e (cp. quicquam § 387) from atque

Rem. 2. It seems to me very doubtful whether the e in Lat. vermi-s, verrere, vellere, in-vit-u-s, sapor, is a regular continuation of qu- (ḵu-) (cp. Bersu in the above named work 144 f. 151 f., Stolz Lat. Gramm. § 48).

b) Lat. c before prim. Lat. u. Stem arcu- beside arqui-tenēns: Goth. arkvazna f. 'arrow, dart'. quincu-plex a new formation after quadr-plexx. secūtu-s locūtu-s, to sequor-loquor, new formations after solūtu-s, volūtu-s.

c) Lat. c before consonants, especially before t, s. coctu-s fr. *quecto-s (a) : Gr. πεντό-ς, in like manner coxtē : ἐπάυσα.
§ 431—432. **Indg. velar explosives in Ital.** 321

in-section-ēs ‘narrationes’ in-sexit ‘dixerit’ beside in-seque (see Bersu p. 125) in-guam (fr. *in-squā-m*) : Gr. ἐν-σκόν-εν ‘I said’ fut. ἐν-σκόν-εσσω, O.Ir. in-se ‘speech’ O.Bret. hepp ‘inquit’ + Lith. sakytį ‘to say’ O.Bulg. sokū ‘informeer, accuser’. anctu-s anxti beside ungūδ, see § 421. quiocītis-s : Gr. πημπτο-ς, Goth. sīmfsta-; the Osc. form Πομπτες shows, as was already remarked in § 424, that the labialisation before t had not yet disappeared in prim. Ital. Lat. fęcurs fecin-ōris, beside Gr. ἱκν-, seems to have developed c regularly in the stem-form *jekn*- (Skr. yākn-, Lith. jekn-, see § 427 a), after *fecn- then also fecin-. The c in socius beside sequor (Gr. ἀ-οσεντῖο ‘helper’ with σσ fr. ἱδί § 427 d, Skr. sdṣya- ‘meet to be assisted, valued’, rt. seq-) and in colliciae beside liqueδ is easily understood from the older sound-combination ἱδί, see § 135, and likewise the c in coculus beside coquō and in torculus beside torqueδ, is to be explained from older ἱδί (s. § 260); musculus-s may also have arisen from an older *musklo-s (§ 419).

Rem. 3. The relation of Lat. u-ter u-ubi nē-cuēbi etc. to Umbr. po-drūh-pei ‘utroque’ pu-fė ‘ubi’ Osc. pātūrūs-pwd ‘utrique’ pu-f ‘ubi’, still remains for the present enigmatical, see Corssen Krit. Nachtr. 28 f., Bersu p. 138. May we perhaps assume that the three stems u-, gu- (Skr. ku-tra) and gu- had become mixed? Op. also § 604 rem. 2.

Rem. 4. The view, that Indg. q occasionally appears as p in pure Lat. words, is to be rejected, See Bersu p. 143, Stolz Lat. Gramm. § 48.

§ 432. **Prim. Ital. gu became**


Lat. stinguunt fr. stinguont, like secuntur, see § 431 a p. 320.

b) Lat. v, Umbr.-Samm. b initially before sonantal vowels (except u). Lat. veniō, Umbr. benust ‘venerit’ Osc. kūm-bened perf. ‘convenit’ : Gr. σαλυo etc., rt. gem-, see § 421. Lat. vō-ōs, Osc. bivus pl. ‘vivi’ : + Skr. jīvā-s etc., see § 421. Lat. veru, Umbr. berus ‘verubus’ : O.Ir. bir ‘sting, spit, spear’ Cymr. ber Corn. ber ‘veru’ Lat. volu-s volāre : Gr. βαλλεῖν etc., rt. BRUGMANN, Elements.
gel-, see § 428. -vor-s vorāre : Gr. βοπᾶ etc., see § 428 a. Lat. valēre : + Lith. galēti 'to be able'.

Rem. 1. Lat. b- = g- is probably to be denied. bōs can be explained as an Ocean loan-word, likewise bactere, in case it belonged to a root beginning with g- (some compare Ocs. bāstēs, to which they give the meaning 'bacteria', and Umbr. s-bnt-raj-e with the supposed meaning 'in exitus').

c) Lat. v between sonantal vowels. avilla beside āgnu-s : Gr. αὐρός etc., see § 428 a. nādu-s fr. *no(g)yed-o-s : Goth. nagās 'naked' + Skr. nag-nā- Lith. nūga-s O.Bulg. нягъ 'naked'.

That -rg"- has become -rv- im Lat., does not seem to me to be proved with certainty. The bringing together of torno-s with Gr. ταράς n. 'fright, terror' Skr. tārjāmi 'I threaten, abuse, frighten', is not free from objection; the other conjectures, hitherto made, are quite doubtful.

d) Lat. g before consonants. āgnu-s beside avilla, see c. sēgni-s : Gr. ἁβάνα 'to cease, become still, go out'. gr-avi-s : Skr. a-gr-u-ś 'young womanish' (s. § 290 p. 232). migrāre : Gr. ἀμφίσι 'I change', rt. meig-. glāns : Gr. βάλανος 'acorn' + Armen. kalīn (gen. kālnōy) Lith. gilē O.Bulg. želqo 'acorn'. ablaut gil- gil- gil- -erg-, cp. § 291, 3.

Rem. 2. If g in guša gušo guruliš gurges, which represent the rt. form gil- gr- (§ 297), had arisen from ḡ- which however may be doubted on account of Gr. γαυκησαι γαυκειο- and O.Ir. gelim 'I consume, devour' (on the interchange r : l cp. § 282), on its account and at the same time in consideration of gurdu-s 'stupid, silly' (βασιλές 'slow, lazy') it must be assumed that orig. ḡ₁r- ḡ₁r₁- was differently treated from orig. ḡ₂r- ḡ₂r₁- : in the former case the labialisation would have been dropped, before r, l became or, ol. Then cultu-s beside colō fr. *quelo (cp. pulsu-s : pello') would probably also have been traced back first of all to *kło-s, the latter to *kło-s.
§ 433—434. Indg. velar explosives in Ital. and O.Irish.

= Gr. nilo-α, beside nîngui (ninguem a new formation to nîscum like con-junx beside con-jux) and nom. nîx (§§ 431 c. 552). In like manner cō-nîveō beside cō-nîxī nîctāre: Goth. kneiwan ‘to bow’, rt. kneigh-. g occurs in Umbr. in co-negos ku-nikaz ‘conixus’.

c) Lat. f both initially and medially before r; in the latter case f passed into b (§ 509).

formu-s: Goth. varmjan ‘to warm’ + Skr. ghrām-ā-s ‘glowing heat’; fornu-s, later furnu-s: + Skr. ghr-ṇā-s ‘glowing heat’, rt. gher-, see § 423. feru-s fera: Gr. θηρ etc., see § 429 b. friō: Gr. χρω ‘I rub over’. fremō, frendō (§§ 207, 349): Gr. χεμι̂ξω ‘I neigh’ χρόμω-ς ‘noise, a lowing, neighing’ Goth. gramjan ‘to make furious’ OHG. gram ‘fierce, angry’ + O.Bulg. gromū ‘thunder’. In the case of the two last words the assumption of labialised prim. Ital. χ has, it is true, no support outside Italic.

Praenest. nefrōn-es Lanuv. nebrundin-es: Gr. νεφρός-ς etc., see § 423.

Rem. That initial and medial χ" passed into f before r (whence b medially), but otherwise medially into gu, brings to mind the relation fūnu-s: grubri: mediu-s (§ 370).

Old Irish.

1. Indg. q, g, gh without labialisation.

§ 434. Indg. q. O.Ir. cara Cymr. car ‘friend’ : Lat. caru-s, Goth. hōrs ‘fornicator’ + Lett. kōrs ‘covetous, lascivious’ kār-dināt ‘to lead into temptation’. O.Ir. canaim ‘I sing’, O.Corn. cheniat ‘cantor’ : Lat. canō etc., see § 430. O.Ir. cru Cymr. crau Corn. crow ‘blood’ : Gr. xρας etc., see § 418.

ēcath (pronounce ēgaθ) ‘hamus’ : + Skr. aṃkā-s etc., see §§ 212, 513.

O.Ir. cuach Cymr. cog ‘cuckoo’ : Gr. κόκως; Lat. cucullu-s MHG. kuckuk + Skr. kūhīla-s ‘cuckoo’, Lith. kūkūti ‘to call cuckoo’ O.Bulg. kukavica ‘cuckoo’. See § 514.

Indg. g. O.Ir. gáir 'call', Cymr. gauw 'clamor': Gr. γῆρω etc., see § 420.
O.Ir. tech teg 'house', O.Bret. bou-tig 'stabulum': Gr. στέγω etc., see § 420. O.Ir. ðg 'uninjured, whole': Lat. augeō etc., see 430. See § 522.
Indg. gh = prim. Kelt. g. O.Ir. in-greim 'I pursue': Lat. gradior etc., see § 430.
O.Ir. lige 'bed': Gr. λέγος etc., see § 425. See § 526.

2. Indg. g, g, gh with labialisation.

§ 435. ky and gu (latter = g and gh), with full developed y, may be put down as prim. Kelt. Since there is no trace of a difference between these and Indg. palatal sound + y: op. Gall. epe- prim. Brit. *epe- (Cymr. ebor 'foal', § 390 p. 293) O.Ir. ech 'horse' = Indg. *ékyo-.

The treatment of the various forms of articulation was just as little uniform as in Italic.


1) In. Gall. probably dialectically also still ky, in Sequana.
kut probably became kt in prim. Kelt., then further cht, so that this combination fell together with pt and kt (§§ 515. 517). In Prim. Kelt. kt from kut stood beside ky, as in Lat. coctus lictus beside coquō linquō. O.Ir. nocht Cymr. noeth, Corn. nouth 'naked': Goth. naqōs etc., see § 432 c. O.Ir. snechta 'snow' from ri. sneigh- (ep. § 552). Perhaps also here O.Ir. in-nocht 'hac noce', Cymr. pen-noeth 'quavis noctē', since the u in G. vei̯s seems to point to labialised q (§ 427 c).

Rem. From the form maqa- (gen. maqi) 'son' (Cymr. map), found on the Ogam inscriptions (p. 9), it cannot be concluded with certainty that ky was still generally spoken in Irish for intervocalic c at the time these inscriptions were written. In the first place it is a question how the 'status durus' in O.Ir. mac mac beside en-ech 'fancies' and ech 'horse' is to be regarded (op. § 514). A satisfactory explanation of the non-aspiration of the c in this word, as also in the forms mac 'pig' (Cymr. coch : Gr. ἔρως 'I blow my nose' μυκτήριο 'nose', Lat. mūc-us 'mucus of the nose' + Skr. mūcāti 'lets loose, lets out' also used of bodily secretions, Lett. mukt 'to flee' Lith. maikti 'to strip, let glide'), casc 'excrement' (Skr. śákū- 'stercus', Lith. azikū 'cacao'), léicim 'I leave', that is, *léiçy-is (Gr. leíno etc., see § 427 a), has, so far as I know, not yet been given.

§ 437. Prim. Kelt. gy = Indg. g became

a) Ir. Brit. b initially. O.Ir. biu beo Cymr. byw 'alive': Lat. vivo-s etc., see § 421. O.Ir. bō Mid.Cymr. buch 'cow': Gr. βοῦς etc., see § 428 a. O.Ir. ben 'woman', O.Corn. benen 'sponsa': Goth. qinō + Armen. kin Pruss. genna (i.e. gēna) O.Bulg. žena 'woman'; O.Ir. gen. mnūd fr. *būnd̂ : Gr. μνήματα etc., see § 428 a. O.Ir. at-báil 'perit' 3. pl. at-balat : O.H.G. quelan 'to have a violent pain' Ags. cselan 'to die' + Lith. gėlė 'to feel great pain' gėlėnė the goddess of death, O.Bulg. kōlt 'pain, grief' fr. *gĕlt (§ 76), rt. gel-. O.Ir. broo brō (gen. broon) Cymr. breuan 'mill-stone': + Skr. grāvan- 'stone for pressing out the soma-juice'. O.Ir. brāge (gen. brāgat) 'neck': Gr. βράχος βραχχος 'throat', MH.G. krage 'neck, gullet' (rt. ger- 'swallow'?).

b) Ir. g before n. O.Ir. guth 'voice, word' fr. *gu-tu-s, to Gr. γυ- beside bo(f)-γ, see § 428 c.

c) Ir. Brit. g medially before n. O.Ir. uan Cymr. oen 'lamb': Gr. αῦνω-ς etc., see § 428 a. On the transformation of -gn- op-§ 523.
§ 439. From prim. Kelt. *gu = Indg. *gh we may a priori assume that it was treated like *gu = Indg. g.

a) Initially. Words with b- are unknown to us. O.Ir. gónim 'I wound, kill' perf. 3. sg. gęgin is remarkable, since this word seems to belong to Gr. qóro-ς rt. ghen- (§ 429 a. b.).

b) Medially. With b after a nasal O.Ir. imb imm (gen. imme) 'butter', Cymr. ymen-yn, stem *imben- = Lat. unguen, OHG. ancho, see § 421. Beside these Mid.Ir. esc-ung 'eel': Lat. angui-s etc., see § 433 a. Cp. also Mid.Ir. inga O.Cymr. eguin 'nail': Lat. ungui-s etc. with Indg. gh (§§ 429 c. 553). On what this difference of treatment depends, I cannot say.

O.Ir. snigíd 'it drops': Gr. νίφα etc., see § 423. O.Ir. laigiu Mid.Cymr. llei 'minor': Gr. ἐλαφρό-ς ἐλαχύ-ς etc., see § 429 a. c

Germanic.

1. Indg. g, gh without labialisation.

§ 439. Indg. q. Goth. us-skava- 'cautious, sober', OHG. sçunvon 'to look', O.Icel. skyn 'insight': Gr. θεό-oxó-ς 'sacrificing priest' xoëw '1 mark'. Lat. caveō + Skr. kavi-ś 'seer' a-kuvatē 'intends'.

Goth. háils 'healthy, wholesome', OHG. heil 'healthy, whole, rescued', Ags. hæl O.Icel. heil n. 'good fortune, favourable token': O.Ir. cēl O.Cymr. coit 'augurium' + Pruss. kail-ūstiska-n acc. 'health' O.Bulg. cěli 'sound, whole'. Goth. háidu-s 'manner', OHG. heit Ags. had 'state, condition, peculiarity' + Skr. kēti-ś 'luminous phenomenon, picture, form'. OHG. howvan O.Icel. hóggva 'to hew': Lat. cū-dō + Lith. kau-ju O.Bulg. ku-jq 'I strike, forge'. Goth. hifä 'I steal': Gr. ελεοεις 'thief', Lat. cliē + Pruss. au-klipts 'hidden' O.Bulg. po-klopū 'a covering'. Goth. veiha 'I fight': Lat. vincō + Lith. vēkā 'power, strength' ap-veihiū 'I compel', rt. veig-.

Goth. hals-agga 'curve of the neck', OHG. angul 'angle': Gr. ἀγκῶρ etc., see § 425.

OHG. wıgant 'warrior', O.Icel. vigr 'battle' veig 'strength', fr. the same rt. veig-, whence Goth. veiha s. above. Goth.
hugs O.S. hugi O.Icel. hugr 'mind, heart, courage'; + Skr. 
śuc- 'ardour, care, trouble', Armen. sug (gen. sgoy) 'grief'.

Indg. g. Goth. kalds OHG. kalt O.Icel. kaldr 'cold': Lat. 
gelu etc., see § 430. Goth. àukan 'to add, augment', OHG. 
auchhôn onuhhôn O.Icel. auka 'to increase': Lat. augeō etc., see 
§ 430.

Indg. gh. Goth. fra-gildan 'to requite', OHG. geltan 'to 
repay, compensate': + O.Bulg. žlōda 'I pay as a fine'. Goth. 
gaggan OHG. OS. gangan O.Icel. gonga 'to go': + Skr. 
janaghâ- 'heel-bone', Lith. žengiš 'I stride', rt. žheghost-.

Goth. dagōs OHG. tag O.Icel. dagr 'day': + Skr. ni-dâghâ-s 
'hot season', Alban. diek (dieg-) 'I burn', Lith. dagâ 'harvest 
time', Pruss. daga-gaydis 'summer-wheat' O.Bulg. žėga 'I burn' 
(§ 379 rem.), rt. dhegoth-. Goth. steigan OHG. stīgan O.Icel. 
stīga 'to climb': Gr. avēizô etc., see § 422. Goth. hrāgja 'I 
run' OHG. drigil 'servant' (runner): Gr. τρήξω 'I run' fut. τρέξω-
mu + Armen. durgn (gen. durgan) 'a potter's wheel' (op. Gr. 
τρ extortion-c), rt. probably thregh- (§ 553).

2. Indg. q, q, gh with labialisation.

§ 440. Pre-Germanic q, q, gh became through the sound-
shifting in prim. Germ. χυ (3y), κυ, ἱ. The labialisation may 
be put down as a full y, since no trace of a difference 
exists beside the combination palatal sound + y. Cp. u. g. 
on the one hand Goth. leiha 'I lend' = Gr. λείνω rt. leig-, Goth. 
heva OHG. waz 'what' = Lat. quo-d st. *qu- and on the other 
hand Goth. athva- 'horse' (in athva-tundi 'bärös') = Skr. āva-
Indg. *ekyo-, Goth. hveis OHG. wiz 'white' fr. rt. hveid-
(§ 397); further prim. Germ. *snēg(3)yphi 'it snows' = Indg. 
*snēgheti or *snēgheti with the same dropping of the ζ as in 
*ma(z)-u-1 (Goth. mavi) 'girl', fem. to Goth. mag-u-s 'boy' (see 
§§ 443, 444 c).

§ 441. Prim. Germ. χυ, ιυ = Indg. g.

Interrog. pronoun Goth. nom. m. hev-s fem. hvi n. heva, 
gen. m* n. hvi-s, OHG. nom. m. hver wer n. huaz waz, O.Icel.
nom. n. **heat** gen. m. n. **hvess** : Gr. πνε- ῥε- etc., see § 419.
Goth. **sáthvan** OHG. **sáhan** 'to see': Gr. ἑρμαυα etc., see § 419.

Goth. **siuns** OS. **sion** O.Icel. **sjôn** 'a seeing, face', prim. Germ. *se(ζ)u-ni-s*, to Goth. **sáthvan**. Other examples of this nature § 444 c.

On the cases, in which *f* or *b* appear for χ*ν* and in which *v* has disappeared after χ, ζ, see § 444.


On *p* for *ku* and the cases in which *y* had disappeared after *k*, see § 444.

§ 443—444. Indg. velar explosives in Germanico.

Ags. snũcēd 'it snows', infin. MHG. snũcēn 'to snow', part.
O.Icel. snīcenn 'covered with snow': Gr. νυξ-α etc., see § 423.
Goth. hneiwan 'to bow': Lat. cō-niveō, root kneigh-, see § 433 b.
OHG. nīo r m. O.Icel. nǐra n. 'kidney', prim. Germ. *ne(z)μ-ᵣōn:
Gr. νεφο-ς etc., see §§ 423, 433 c.

On prim. Germ. ḟ fr. ȝu see § 444 b.

§ 444. The following changes, which concerned the labial-
ised sounds, as such, took place in the period of the prim.
Germ. community.

a) p-sounds for the ḟu-sounds.

f for ḟu = Indg. ḟ. *uλfα-ς 'wolf', Goth. vulfs OHG.
wulf O.Icel. ulfr : Gr. λύω-ς (§ 427 c) + Skr. vṛka-s, Indg.
*μγο-ς 'wolf'. Goth. fidōr OHG. fior Ags. fyeðer- O.Icel.
fiðer 'four': Gr. τέσσαρ-ις, Indg. *getier-, see § 419. *fimfi
'five', Goth. fimf OHG. fimf fimf Ags. fīf O.Icel. fimm : Gr.
nērie, Indg. *pergo, see § 419. Less certain is OHG. forha
'pine' vereh-eih Lango-Bard. fereha 'aesculus': Lat. quercu-s
querqeue-s, see § 431 rem. 1.

b for ḟu = Indg. ḟ. By the side of *uλfα-ς stood a fem.
*uλbī 'she-wolf', by § 530 fr. Indg. *uλī (Skr. vṛkl), hence
OHG. uλpα MHG. wūlpe, cp. § 532. Beside this O.Icel. ylgr
'she-wolf', the g of which arose regularly in the cases with suffix-
form -iō-, e.g. gen. *uλžu-iōs; ū was here forced out.

p for ḟu = Indg. ḟ. Goth. wairpan OHG. werfan O.Icel.
verpa 'to throw': + Skr. vṛyaḍi 'throws to the ground' perf.
vandīja, O.Bulg. vṛgni 'I throw'. OHG. sveifan 'to set in
revolving motion, swing, meander' Ags. sceapan 'to swing': +
Lith. svaikštū 'I become dizzy' pret. sveigaū, sveigulū-s 'dizziness'
sveiginėju 'I stagger with dizziness'.

This transition to p-sounds seems to have been occasioned
by an ū in the preceding or following syllable (dissimilation).

Rem. 1. So far as I can see, the only difficulty lies with fimf. It
is possible that the orig. form was *kveŋkye as in Ital. and Kelt. (§§ 336.
339). Hence *kveŋmp like *sveŋp- fr. *sveŋk-, further *pempe through
assimilation of the initial sound to the medial p or to thc initial sound of
the word for four? Or did Indg. *pergo become *pempe i- Germ. direct-
Ly by assimilation? On those p-sound for q-sounds, see now also Kluge in Paul-Braune's Beitr. XI 560 ff.

b) Loss of the labialisation before ū (ep. § 180).

ζ(ū) = Indg. q (§ 530). 1. pl. pret. *sēg(ū)umī 'saw' (Goth. saithvan), *liū(ū)umī 'lent' (Goth. leihvan) etc.: Ags. sēgōn O.Fris. sāgen. Goth. sēhun OHG. sahun Ags. sāwun (beside sēgōn) were new formations.

k(ū) = Indg. g. Part. *k(ū)umana- 'come' OHG. koman Ags. enmen O.Icel. kenna; OHG. quoman Goth. quman was new formations. *k(ū)uru-x 'heavy' Goth. kairi-s: Gr. βαρός Skr. gurū-ś, see § 428 a. *k(ū)unō 'wife' O.Icel. kona: Bæot. βαύα, see § 428 a. *swōk(ū)umī 'we sunk' OHG. sunchun; Goth. sūgnum was a new formation.

ζ(ū) = Indg. gh. *ζ(ū)ūnbiō 'battle' O.Low Germ. gadea O.Icel. gunnr = Skr. hattā 'a killing' Lith. gineziū 'strife' (ep. § 249); to those Gr. qa-to-ς qōv-ο-ς etc., rt. ghen-, see § 429 a. § 438 rem. *ξiū(ū)umī 'we bowed': OHG. nigung Ags. knīgon O.Icel. knīgunx Goth. knīvun was a new formation.

c) žū became ū, a change, which befell every žū that still remained over after the action of the sound-law, named under b.

(ʒ)ū = Indg. g. *se(ʒ)u-nī-s 'face' Goth. siumus etc., see § 441. *te(ʒ)ū-δ f. 'arrangement' Goth. tōva, to OHG. gi-zehon 'to arrange, regulate', Gr. δινα-ν 'meal, meal-time' (fr. *δενυνο-ν, § 639), rt. deg. *a(ʒ)u-jo 'marshy country, island' (adj. formation, properly 'the watery', to Goth. ahwa OHG. aha 'water', § 441); OHG. auwa ouwa O.Icel. ey pl. eyjar. Part. *li(ʒ)u-anā-s 'lent' (Skr. ri-ric-anā-s, to Goth. leihvan) OHG. -livan. Optative stem *sē(ʒ)u-l-(to Goth. saithvan 'to see') OS. gi-sāwi pl. -sāwin.

(ʒ)ū = Indg. gh. *(ʒ)mar-ma- 'warm' and other examples see § 443.

Rem. 3. If Goth. angō OHG. aufa O.Icel. auga n. 'eye' belongs to Gr. άρπ—σ-—σ. Lith. ekt-š etc., the form must be explained from an old stem-change *αγ(γ)αν— (Indg. *αγαγ-) and *αμ(ξ)αν— *αμ(ξ)αν—*αγ- and *αγ- became amalgamated to αγαγ- in prim. Germ.

d) ȝh became gh after a nasal, and then this remained (§§ 530. 538). Hence prim. Germ. *sinoyidi 'sings' Goth. siggviþ. This verb however has not been etymologically satisfactorily explained; the root was probably sevghi- or seig-.

e) χt became xt. *sexti- 'sight, face' (to Goth. saihvan) OHG. siht OS. gi-siht. *semxta- *míxta- 'light, easy' (§ 214) Goth. leihts OHG. luht O.Icel. léttr, to Gr. ἱλαρός— ἱλαχτός etc., s. § 429 a. c.; xt was here = Indg. gh+t, concerning which s. § 552. fumxta— = Indg. *pemxta- has possibly preserved a trace of the labialisation once present, see above a with rem. 1.

The phonetic position, which was called into existence by these prim. Germ. changes, was on the whole preserved free from new shiftings in Goth.

Rem. 4. The form ni-h 'noque' fr. *ni-hr(f) suggests the conjecture that the hr in lātha 'he learnt' (leithem) saha 'he saw' (saíhvan) was brought about by levelling.

Initial hu- became u- in OHG. (huwr wer), while medial kw, kw gw lost the w by § 180 (sinchit 'sinks', lhiht 'lends', singit 'sings').

b. The language-group without labialisation.

Aryan.

§ 445. Indg. q, g, gh were first of all universally k, g, gh in prim. Aryan. Then before original e- and i-vowels and before Ar. i = Indg. ə, they became the palatal explosives c, j, jh; after the completion of the palatalisation e, ë passed into a, a (§§ 62. 70). All further sound-changes, which made their appearance in regard to the place of articulation, belong to the individual development of the Ar. dialects.

§ 446. Prim. Ar. k, c = Indg. q. The sounds remained unchanged in Sanskrit. In Iranian k became the spirant x. be-
fore consonants, and c became an ś-sound (Av. ś O.Pers. š) before i.


Av. śy O.Pers. šy (written šiy, see § 125 p. 116) = prim. Ar. Skr. cyáv-a-tē 'is active, stirs', Av. šyao-śna- m. 'deed, work' (cp. Skr. cyáu-tá-m 'preparation, undertaking') O.Pers. a-šiyav-am 'I went, walked': Armen. ça 'a breaking up' + Gr. Hom. ἕ-σσε ἕς 'he drove, hunted', see § 427 d. § 489. Av. compar. tašyah- 'quicker' beside superl. tancišta-.

Rem. Through new formations k and c came to stand in the Ar. dialects in sound-combinations, in which they would not have regularly arisen. Cp. § 451 rem. § 454 rem. and § 427 rem.


§ 449. Prim. Ar. g, j = Indg. g. The sounds remained unchanged in Sanskrit. In later Av. g became ĝ initially before consonants except r and medially everywhere except after m, z, ō, the same sound was dropped before v, and medial j became ō except after n and z.

Skr. aṅguḷi-ś aṅguṣṭha-s 'thumb, toe', Av. aṅguṣṭa- m. 'toe': Alban. ǧīšt 'finger'. Av. mazga- 'marrow' beside Skr. mafjān- (§ 590. 591) : cp. O.Bulg. moṣqū + O.HG. marga n. O.Icel. mergir m. 'marrow'; the Skr. form points to g, the Germ. to gh (cp. Bartholomae Kuhn’s Ztschr. XXVII 352).


Late Av. γ = Gāp. O.Pers. Skr. g, as baya- = O.Pers. baga- 'god', see § 478.

Late Av. v = Gāp. gv. ḫovva = Gāp. ḫovvā- a proper family name, cp. Bartholomae Bezzent. Beitr. VII 188.


Late Av. z. naṅ-īṅaīti intens. 'washes off, removes' beside Skr. mid. nē-ṅik-tē 'washes off': + Gr. χέψ-νῦς etc., see §§ 427 a. 428 d. Cp. § 478.

Rem. Through new formations Ar. j for g and vice versa. Cp. §§ 448 rem. 454 rem. and 428 rem.

j for g. Nom. acc. Skr. jējas Av. aojō 'strength' for Ar. *augēs, Indg. *augos (cp. Lat. augus-tu-s) after the stem-form *augējas- = Indg. *auges- in the other cases, see above. Opt. Av. jamyāḥ O.Pers. jamīyā, indio. Av. jamaiti (beside regular Skr. gamyāt gachāt, cp. §§ 228. 229. 450; Gāp. 2. sg. imper. gahīt = Skr. gahi was also regular) after the analogy of jamaiti etc. Skr. yunājmī 'I yoke' for *yunagmi, cp. the conj. yunā́j-ā́t pass. yunājāt and yugād which are regular.

g for j. Skr. indic. gām-a-ti imper. gāntu (beside regular Av. jamaitt jantu) after gau-m-a-ti i. e. *gum-ā-ti etc. Skr. perf. mid. ji-gy-ē for *ji-jy-ē after the act. ji-gāy-a from ji- 'conquer, win', rt. gej.
§ 452. Prim. Ar. *gh, *jh = Indg. gh. gh remained in Skr., *jh partly became h, and partly j (§ 480). In Iran. the two sounds fell entirely together with *g, *j = Indg. g (§ 449).


Late Av. γ = Gāp. O.Pers. g, as draoga- = O.Pers. drauga- 'lie, untruth', see § 481.


Late Av. ȝ. sna٪iai 'it snows' = Gr. νεϊπει, rt. sneigh-, see § 423. Op. §§ 478. 481.


gh for jh. Skr. superl. draghishta- beside regular Av. drājiśa-, to positive Skr. draghā-s 'long', see § 453.

Armenian.

§ 455. Indg. q.

-k, k. akin (gen. akan) 'eye, hole, louver': Lith. akš-s 'eye'.

Gr. òmía 'eye' óny 'louver', see § 427a. ju-k-n 'fish' with suffix -go-, § 419. Ik-ane-m 'I leave': Gr. λιμένα κέινω etc., see § 427a.

g after a nasal or liquid. king (gen. hng-i-ç) 'five': Skr. piṇca etc., see § 419. argel 'hindrance' argel-u-m 'I check, keep off': Gr. åqneò 'I ward off', Lat. aerceō. gail (gen. gailoy) 'wolf' probably from *galjo- and this from *galgo- = Skr. vyks-s O.Bulg. viški; g = y- § 162, -al = -l- § 291. 1.


§ 456. Indg. q. kin (gen. kn-of) 'woman': O.Bulg. žena etc., see § 437a. ker (gen. keroy) 'food, meat', aor. keri 'I ate': Skr. girdmi etc., see § 428a. kov (gen. kovu) 'cow': Skr. gāt-ś etc., see § 428a. Aor. e-kn 'he came' orig. f. *e-gem-t: Skr. a-gan etc., see § 421. erek 'evening': Skr. rājas- etc., see § 621.

§ 457. Indg. gh. gani (gen. gani) 'a beating, flogging', rt. ĝhen- 'to strike' (§ 429a), probably to the rt. form ĝhun- like Skr. ghan-ā- 'killing' (§§ 232. 454). mēg (gen. migi) 'fog': Skr. mēghā-s 'cloud', Alban. mięgulę 'fog', O.Bulg. mígla 'fog'. durgh (gen. durgān) 'potter's wheel': Gr. rọxο-ç etc., see § 439.

f initially and ñ medially from g before original e- and i- vowels (Hübschmann Ztschr. d. deutsch. morgenl. Ges. • XXXV 173. Armen. Stud. I 66. 71. 79). jerm 'warm' jer 'warmth,
§ 457–462. Indg. volar explosives in Armen. and Balt.-Slav. 337
good weather': Gr. θεμού-ς θέρος etc., see §§ 423. 429 b. iš (gen.
iš) 'viper': Skr. áhi-ś Av. aši-ś 'snake, dragon'.

Albanian.
§ 458. Indg. q. krim-b-i krum 'worm': Skr. klimi-ś etc.,
see § 436. piēk 'I roast, bake': Skr. pācêmi etc., see §§ 427 a.
431 d. ĝak 'blood': Lith. sakai pl. 'resin' O.Bulg. sokû 'juice'
pik 'I make bitter, salt': Lith. pikta-s 'angry, bad'; Pruss. po-
parka 'he deceives' + Gr. περχό-ς 'sharp, keen, piercing, passionate,
hard' O Ir. oēc 'enemy', Goth. faih 'a wrongdoing, deception'
OHG. gi-feh 'hostile'.
§ 459. Indg. g. gur 'rock, stone': Skr. girî-ś 'mountain',
Lith. giria gire 'forest' O.Bulg. gora 'mountain'. ğišt 'finger':
Skr. aoguṣṭha-s, see § 450. l'ig-u 'bad, lean': Lith. ligû 'illness' +
Gr. ὀλύς-ς 'little'.
§ 460. Indg. gh. ĭjendem 'am found': O.Bulg. gadaqa
etc., see § 425. šteg-u 'entrance': Skr. stigh-nu-tô etc., see
§ 422. diēk (dieg-) 'I burn': Lith. degû 'I burn' etc., see § 439.

Baltic-Slavonic.
§ 461. Indg. q, g, gh were k and g (the latter = g and gh)
in the period of the Balt.-Slav. primitive community.
These sounds remained in general unchanged in Lith.
In prim. Slavonic k, g became ĺ, dź before the prim. Indg.
sonantal e- and i-vowels as well as before ū+nas. and ū+liq,
as continuation of Indg. nas. and liqu. sonans (§§ 248. 302)
and kį, gi likewise became ĺ, dź. After the completion of this
process, but still in prim. Slavonic, oį (= Indg. oį, aį) became
į, and this new palatal vowel now changed preceding k, g
into c, dz; contemperaneous with the latter change was the
transition of the then newly arisen kį, gi into c, dz. Cp. § 84
pp. 81 f., § 147 p. 133. Further kt became tx' and ks x (ch) in
prim. Slav.
§ 462. Prim. Balt.-Slav. k = Indg. q.
Lith. kâ-s 'who?' katra-s 'which of two?', O.Balg. kâ-to
'who?' ko-toryś 'which': Skr. kâ-s etc., see § 419. Lith. kārtā-

Brugmann, Elements.
O.Bulg. kratŭ (fr. *körtŭ, see § 281) 'time': Skr. sa-kṛt 'once' Lith. ąt-lika-s O.Bulg. oti-liki 'remnant, rest': + Gr. λοιπός etc., see § 427a. Lith. velkŭ O.Bulg. vlēkŭ 'I draw, drag': Gr. ἔλκω 'I draw' (cp. § 164 rem.). Lith. rvešia-s O.Bulg. krūvę 'blood': Skr. kravīś- etc., see § 418.


This same change of k to c was repeated in the combination ky before palatal vowels in the course of the individual dialects (cp. § 427 b). O.Bulg. indic. cvituq inf. cvišti 'to blossom, O.Croatian cvasti (= *cvisti, a new formation after the indie. cvatem), Little Russ. cvysty Great Russ. cvěstit (é transferred from cvět̊i?) beside Low Sorabian kvišć Czech kvıšti O.Pol. kwišć 'to blossom', prim. Slav. *kvišti. Cp. (d)věřy § 464.

Prim. Slav. t̊č = kt through the intermediate stage č̊t. This sound-group thus fell together with Indg. č̊ and had the same further development as the latter. č̊t became št in the Bulgarian branch. O.Bulg. nošč : Lith. nakti-s 'night', Skr. nakti-š. vlēšti 'to draw' sup. vlēšti, to indic. vlēkă, cp. Lith. inf. vilkti. tešti 'to run', to indic. tekă. vréšti 'to throw' to indic. vrığa. Cp. § 147 p. 132 f.

Rem. That the stage č̊t lay between kt and t̊č, is confirmed by the af. vrěšit-'to throw' (indic. vrch̊t = *wrs̊-m, rt. wers̊-, cp. *Lat. sorr̊
'I draw through, sweep' = *gry-s-o], since it must be traced back to prim. Slav. *gor'-ti; it is uncertain whether *χ' had arisen regularly in this form or whether it had been transferred from the indie. Serv. vříčí vříčí beside O.Bulg. vréščí shows the falling together with original kt and t. Op. § 588 rem. 1.

Prim. Slav. *χ (ch) = ks (except before t, see 2. pl. těste § 545) through the intermediate stage χχ. We leave it undecided whether the course was ks—kχ—χχ or ks—χs—χχ. těčiti 'I ran', orig. f. *bēg-s-o-m, pres. teká. běčiti 'I save, run away with' orig. f. *bēg-s-o-m, inf. běgati, rt. bheg- (§ 463). On the change of the ch to š in the 3. pl. těščí běščí cp. § 588, 1.

ks remained in Baltic. Lith. fut. liksiu, to těčiti 'I leave' (cp. Skr. rēkṣyāmi, Gr. λήψω), běksiu, to běgu 'I run, flee'. Pruss. lauxnos pl. 'constellations': Av. raôxšna- 'shining'. Hence Indg. gs and ks did not fall together in Baltic-Slavonic, see § 414.

§ 463. Prim. Balt.-Slav. g = Indg. g.

Lith. giria 'forest', O.Bulg. gora 'mountain' : Skr. girl-ś etc., see § 459. Lett. gūmās 'cow', O.Bulg. govčdo 'bullock': Skr. gau-ś etc., see § 428 a. Lith. bēgu 'I run, flee' boginū 'I save, run away with something', O.Bulg. bēgū 'flight' + Gr. γέβαμα 'I flee' φόβος-ς 'flight, fear', rt. bheg-.


Lith. geniū 'I chop off (branches)'; genū 'I drive (cattle)', yanaū 'I tend (cattle)', O.Bulg. is-geniū 'a driving away, chasing': Skr. hānti 'strikes' etc., see § 429 a. Lith. grūda-s 'corn' grūdēnti 'I pound', O.Bulg. grūda 'clod': + OHG. gruszi O.Icel. graut 'grit' OHG. griez OS. griot 'sand, gravel', rt. ghreid-. O.Bulg. gosi 'guest, companion, friend': + Lat. hosti-s Goth. gastis, see § 422. Lith. snēga-s O.Bulg. snēgū 'snow': + Gr. σνεία etc., see § 423. Lith. angi-s 'snake', O.Bulg. aŋgorištē 'eel': Skr. dhī-ṣ etc., see § 433 a. O.Bulg. lēqa 'I lie down', adj. sq-loğū 'consors tori': + Gr. λέγος ἡ λέγος etc., see § 425.


The same change of *g to tz was repeated in the combination gu before palatal vowels in the course of the individual dialects. O.Bulg. (d)evētī 'animal, wild animal' fr. prim. Slav. *guvētī; + Gr. θηρο Lat. fera, see § 429 b. Cp. cristi § 462.

§ 465. Prim. Slav. sk, zg before palatal vowels and before ʒ. In the period of prim. Slav., in which k, g became
tś (ś), dz̆; sk, zg correspondingly passed into stś, zdś, hence śtś, zdś, further O.Bulg. št zd. Cp. § 147 p. 133 f. Suffix -qo- seems to be contained in O.Bulg. -ište- fr. isk-je-, a further formation of -isko-, e. g. ognište n. 'hearth, fire-side' (cp. the primary form Pol. oginski no n.). moždanů 'having marrow, marrowy' fr. *mozgěnů (cp. běžati 'to flee' fr. *běgěti, § 76) from mozgů 'marrow'; whether we have here Indg. zg or zgh, is doubtful, see § 450.

Retrospect of the history of the velar explosives.

§ 466. Words containing Indg. velars show these partly with and partly without labialisation in Greek, Ital., Kelt. and Germ. The y-afterclap, brought along from prehistoric times, could disappear in the separate languages by certain fixed sound-laws. But we thought that such a disappearance might only be assumed in such forms, as had parallels which were etymologically related, and which actually occurred with labialisation either in the same language or in another of the y-languages, e. g. in Goth. kauřu-s 'heavy' (§ 444 b). We thought that it must be left undecided whether labialisation was ever present in those words, which certainly had an Indg. velar, but do not appear in any of the y-languages with labialisation. The dropping of y can be assumed in some of these words, without the sound-laws of the separate languages standing in the way, thus e. g. in Gr. xýro-ς Lat. cuti-s OHG. hût 'skin, hide' (cp. Pruss. keuto 'skin', Lith. kiautaĩ pl. 'corn-hulls, -husks') from the fact that y disappeared before u in each of these languages (§§ 427 c. 428 c. 429 c. 431 b. 444 b). In other cases the known sound-laws of the separate languages do not furnish any positive support for the assumption of the disappearance of y. But sound-laws may have operated in prehistoric times, which brought about the loss of y (e. g. perhaps before Indg. a, a, as in Gr. xαυξερς : Skr. karkaṭa-s, and if u or y directly preceded the velar, as in Gr. ἵφυς-ν : Skr. yugā-m?) and the activity of which may have become so concealed by the later development that it is no longer possible for us to fix them.

Of late years the question has several times been raised
Interchange of the palatal and velar explosives. § 466–467.

(most recently by Bersu p. 4 ff.) as to whether the words, in which the velars appear in Greek etc. with labialisation, were also once spoken in Ar., Armen., Alban. and Baltic-Slavonic with labialised ɣ, ʝ, ɣh, or whether the labialisation was an innovation of the ɣ-languages — ultimately an innovation which took place in one portion of the prim. Indg. language-terrain. But nothing has hitherto been adduced which admits of a sure decision being formed either on the one side or the other. At all events ɣ may equally well have disappeared from those languages in which labialisation does not occur, as it did e. g. in Irish (cethir beside O.Cymr. petguar 'four') and in French (quatre pronounce katr from Lat. quattuor).

Interchange of the palatal and velar explosives.

§ 467. In Aryan, Armenian and Baltic-Slavonic we occasionally find a guttural explosive or its regular successor, where we should expect the descendant of an Indg. palatal explosive i. e. spirant or affricates, and conversely. Examples from the first and last named language-groups, have been collected by J. Schmidt in Kuhn’s Ztschr. XXV 114 ff. 125 ff. A final answer to the question, how this interchange is to be explained, must be left for the future. For the present the following seems to me probable.

1. In one portion of the cases the mixing of the two classes of consonants was caused by form-transference.

This is seen clearest of all in Sanskrit, where certain sounds, which were originally different, regularly fell together: kṣ = qś and ḍs, j = g and ḍ, h = gh and ɣh.

Thus bhiṣakti 'heals' bhiṣaktama- superl. from bhiṣāj- 'healing', with kṣ instead of ḍṣ on account of 2. sg. bhiṣākṣi nom. sg. bhiṣāk (fr. *bhiṣukṣ, § 647, 7) loc. pl. bhiṣākṣu, ep. Av. baṃsa- = Skr. bhīṣaj-ā- 'medicine'. After the analogy of tyāgā- 'aband'nement, resignation' beside tyājate (rt. tiṃg-) etc. was formed yaga- for older yajā- 'an offering' beside yājate (rt. jaṅ-), correspondingly after ni-dāghā-s 'heat' beside dah- (rt. ḍheṅḥ-) etc., sa-dēghā-s for older sā-dēhā-s 'a cementing to-
gether' (rt. dheigh-). With misplaced g also d̄harga-s 'splendour' (cp. Av. brāzaiti 'beams, radiates'), nir-mārgā- 'a stripping off' (cp. indic. 3. sg. mārṣṭi), sargā- 'gutter' (cp. part. sṛṣṭā-). Further part. dīgāhā- 'besmeared' for regular *dīgha-.

The converse transference occurred less often. Thus drūdhar- for and beside drūghhar- part. fut. from dru- 'injure', rt. dhrēugh- 1).

In Armenian the st in dustr 'daughter', which does not agree with the root-final velar of the other languages 2), may have come into existence through the influence of ustr 'son' (etymologically unexplained), with which according to Hübenschmann Arm. St. I 47 it is mostly used.

2. Where k and g appear in Baltic-Slavonic in place of sibilants, they are due to a borrowing from the circle of languages with guttural explosives; this borrowing may partly be dated back to the period of the Indg. prim. community, if by § 380 we already ascribe to this the difference of articulation, which permits the Indg. languages to be divided into two great groups. Thus O.Bulg. svekri 'sorcer', svekry 'socrates' beside Lith. šėszura-s etc., which point to Indg. *suekuro- *suekrū- (§ 381), O.Bulg. qasu beside Lith. šėsi-s etc., Lith. klaušu 'I obey' beside O.Bulg. sluchū 'hearing, obedient' Skr. śrōṣatamāna-s 'gratifying', Pruss. peku Lith. pēku-s 'cattle' beside Skr. pāsu etc., Lith. smakrā 'chin' beside Skr. śmāśru- 'moustache' (to which O.Ir. smeč 'chin'), Lith. gaŗda-s 'hurdle' O.Bulg. građu 'inclosure, town', beside Lith. žaŗdi-s 'pasture-ground' (cp. § 389).

3. In one portion of the cases, which are generally classed under this category, we have different roots. Thus e.g. we separate gndā- *gena- 'wife' (Skr. gnā- etc., s. §§ 428 a. 437 a) from rt. *gen- 'gignere'; Skr. āhi-ṣ 'snake' Av. aṣi-ṣ etc. (§ 433 a) from rt. aṅgh- 'to lace, string'; Skr. mēghā- 'cloud' from mēha- Av. maēza- 'urine'. Such like roots, which are

1) With these Skr. new formations cp. § 480 rem. 4.
2) The*ā in Skr. duḥitār- is the regular representative of prim. Ar. jī = Indg. gī by § 445, as must be remarked because of J. Schmidt, Kuhn's Ztschr. XXV 68. 116. 122.
similar in sound and meaning, but nevertheless not related etymologically, occur indeed often enough elsewhere, as e.g. Skr. *skambh- and *stambh- 'fasten, support', *yegh- and *yedh- 'lead'.

Rem. The manner in which J. Schmidt (in the article quoted above) attempts to explain the interchange of the two classes of consonants, is in my opinion by no means convincing.

B. THE EXPLOSIVES AFTER THEIR FORM OF ARTICULATION.

Primitive Indg. period.

§ 468. The Indg. prim. language had, as we have seen in § 322, four forms of articulation: tenues, voiced mediae, aspirated tenues and aspirated voiced mediae, e.g. t, d, th, dh. Examples for the two first and for the last class have been given in §§ 324—326, 348—350, 381—383, 418—423.

We have not yet given examples for the tenues aspiratae in section A. And, owing to their comparatively small number and the peculiar difficulties with which the question of their regular representation in the various languages is surrounded, it seems appropriate not to treat this form of articulation in this section either, in each of the separate language-groups, but to treat it collectively at the end (§ 553), in order that everything, which belongs here from the various languages, may be brought together under one head. Before then however we shall however have to discuss the history of the prim. Ar. tenues asp. in § 475.

§ 469. Several of the changes in the form of articulation, which are exhibited by the Indg. explosives and which in many cases are regarded as having taken place within each development, had in all probability already arisen in the period of the Indg. prim. community. Eight cases are to be taken into consideration.

1. The change of mediae into tenues before voiceless explosives and spirants. Indg. *juqtó- 'yoked' i.e. *jug+to- from rt. jeug-; Skr. yuktá- Gr. ἴσυκτος Lat. junctū-s Lith. junktas-s. Indg. *patsú loc. pl. fr. *ped- 'foot' : Skr. patsú Gr. ποδός podí,
2. The change of tenues into mediae before voiced explosives and spirants. Indg. -bd- weakest form of ped-: Skr. upa-bd-ā- 'a pounding, trampling' Gr. ἐν-βᾶ- 'day after the feast' (§ 325). We assume *dudbhis, *uiğbhis, *gybhis as the Indg. prim. forms for the instr. pl. Skr. daddhiṣ (du- = dant- 'tooth'), viḍbhiṣ (eis- 'clan, village community', cp. § 404, 3), gybhiṣ (re- 'hymn'). This assimilation may also have extended itself to double consonants, as Skr. instr. pl. muddhiṣ (nupt- 'napat- 'offspring') fr. *nabdbhiṣ, Indg. *nebulbhis. Cp. also Av. instr. pl. avd-biṣ fr. ast- 'bone': Gr. ὀρθον and Indg. zd from sd in *z-dhi 'be' imper. fr. rt. es-, *sc-zd- perf. st. from rt. sed- and similar forms, § 589, 1.

3. The side by side existence of Gr. ἕξαομος and O.Bulg. sedmyjī 'septimus' (§ 547 rem. 2) permits our assuming that in Indg. there stood beside *sepyī the ordinal *sepṃō- or *seb-dmō-. In that case Gr. ἐπερ- would be a special Greek transformation of ἔκρ- after the analogy of ἔξο-. Similarly Osthoff Zur Gesch. d. Perf. 321.

4. t before t th and d before d dh. Geminated explosives were probably not spoken here, but affricata + explosive. We write tšt(h) and dšt(h) but at the same time readily admit that it might perhaps have been more correct to have written tšt(h) and dšt(h). For the literature on this point see Osthoff Zur Gesch. d. Perf. 560 1). E. g. *setśo- (part. fr. rt. sed- 'sit'): Skr. sattā- Av. hasta- Lat. ob-sessus-; *sed�di (that is, *dde-dhī, 2. sg. imper. of the reduplicated pres. of dō- 'give'): Skr. dēhi Av. dazādi.

5. Aspirates probably lost their aspiration before aspirates. We regard e. g. *jindbhis as the Indg. prim. form of Skr. instr. pl. yuddhiṣ (yudh- 'fight, battle'). If Gr. κύσθος-ς 'a hollow, pudenda muliebria', Lat. custōs, Goth. huzd 'treasure', which

1) The objection raised by Bartholomae in his recent work Ar. Forsch. II 79 against what we have stated above for the Indg. prim. language, is not valid. If ks became k before explosives, it by no means follows that the affricata ts (t') must under the same conditions have become t. kx, µf, not ks, µs correspond to ts.
belong to rt. *kudh- in Gr. κυδάνν ‘to hide’, were an extension of this rt. by means of the ‘root-determinative’ dh as we assume in §§ 494. 507. 536., then *kud’dh- (s. above 4) was probably spoken in prim. Indg.

6. How was the combination — which must be presupposed etymologically — media asp. + t or s spoken at the time immediately preceding the disintegration of the Indg. prim. community? What was e. g. the Indg. prim. form of Av. dug’dar-Lith. dukter- ‘daughter’, which, on etymological principles, would have to be put down as *dlughter-? A positive answer has not yet been found. We leave out the question in our exposition of the history of the Indg. forms of articulation in the separate languages and discuss it at the end in § 552. In the section on Aryan § 482 we shall however previously treat the special history of media + media asp., which can be put down with certainty as the prim. Ar. order of articulation.

7. Change between tenuis and media at the end of roots, e. g. sqap- : sqab- in Gr. σακάνν ‘spade’, O.Lat. scołès : Lat. scabō, Lith. skabės ‘cutting’ (§ 345); pak- : pağ- in Lat. pāx pācis Skr. pāśu-s ‘loop, cord’ : Gr. πᾶγμαι ‘I fasten’, Lat. pango; (s)pek- : (s)peğ- in Skr. pāṣyāni ‘I see’, Lat. -spicio, OHG. spehon ‘to spy’ spāhī ‘prudent, wise’ : O.Icel. spakr ‘prudent, sensible’, O.Bulg. paziti ‘attendere’, refl. with sē ‘avere’. The tenuis is probably rightly considered as the older articulation. The circumstances, under which this sound-modification made its appearance, still remain undetermined. Cp. p. 188 f.

Probably here also belong irregularities in the form of articulation, which occur in other positions than at the end of roots, e. g. Skr. daśat- : Gr. δεκαδ- ‘decade’ (op. § 238).

end of a root: Gr. πώσκε 'bottom' (with π- for φ-, like πιστε for ἀφιερετος etc., see § 496), Ags. botm O.Icel. botn 'bottom' (Lat. fundus and O.Ir. bond 'soil' are ambiguous). megh-: megh- in Skr. maḥān 'great': Skr. majmān- 'greatness', Gr. μεγας Goth. mikils 'great'. Skr. ahām : Gr. ἄγω, Lat. ego Goth. ik T. The media asp. is possibly the older sound. The circumstances, under which the modification made its appearance, are also here undetermined. In most of the cases a nasal is in the vicinity. Cp. Arkiv for nordisk Filologi I 176 rem.

Rem. J. von Fierling's Kuhn's Ztschr. XXVII 478, following up J. Schmidt's theory, conjectures that in those cases where it is a question of gh : g, 'the sound was neither ḡ/ [ḡh] nor ḡt [ḡ] in the parent language, but a voiced palatal spirant γ'. So long as a more special (urgently needed) investigation into the whole question of the change in the form of articulation in the Indg. prim. period is still wanting, it seems to me more prudent not to separate the change ḡh : g from the cases ḡh : ḡ and ḍh : ḍ. With these it is hardly possible to start from a spirant, which is homogeneous with the γ'.

Aryan.

§ 470. The difference between the Indg. forms of articulation was still preserved in the period of the Aryan prim. community.

The palatals ̣, ̣, ̣h appeared as ̣-sounds: ̣, ̣, ̣h (§ 396).
Indg. d'h (§ 469, 4) probably then became zd(h), e. g. *dazdhi = Indg. *deddi ̣h ịvo imper., and thus fell entirely together with Indg. zd(h) (§§ 590. 591). See § 476.

The order med. asp. + t, s — which is etymologically to be postulated — was represented by med. (or voiced spirant) + dh, zh (§§ 469, 6. 552): bdh, d'dh, gh, zdh and bzh, dzh, gh, zdh. For the further history of these combinations in Aryan see § 482.

The Sanskrit separate development left the Indg. forms of articulation separate.

In Iranian the mediae asp. became mediae and in the became ̣. These sounds thus fell entirely together with Indg. mediae.
§ 471. Tenues. Prim. Ar. \( p, t, k, c, s \) = Indg. \( p, t, q, k \).


\( k \) seems to have disappeared in the prim. Ar. period in Skr. \textit{tūrya-} Av. \textit{tārya-} 'quartus' fr. \textit{*ktur-}, to Indg. \textit{*getyex-}.
Skr. \textit{catvār-as}, ep. Av. \textit{a-xtārya-} 'every fourth time' (cp. § 646); so also \( t \) in \textit{*naπt-su} Av. \textit{naʃsu} loc. pl. from Ar. \textit{napat-} \textit{napt-} 'offspring' (s. Osthoff Zur Gesch. d. Perf. 600).

§ 472. Further shifting of the prim. Ar. form of articulation did not take place in Sanskrit.

Rem. In forms like \textit{vagnā-} 'tone, sound' (\textit{sak- vac-}), \textit{γγημι-} 'praising' (\textit{ark- arc-}), \textit{βαγμά-} 'wealthy, benevolent' (\textit{bsak-}), \textit{vāγμιν-} \textit{vāγγιν-} 'eloquent' (\textit{sak- sāc-}) \( g \) not regularly arisen from \( k \) (\textit{ksn-, kṁ-, ksv-} remained, ep. \textit{rākṣas-} 'wealth, riches', \textit{rakmā-} 'shining', \textit{pakrā-} 'ripe'), but was borrowed partly from other forms of the same roots as instr. \textit{vāgbhiś, ṣvābhiś}, 2 sg. imper. \textit{vagdhā,} partly from forms of roots with original \( g \) (\textit{g}) as \textit{tigmā-} 'sharp' rt. (\textit{tig-} (\textit{bgmā-} to \textit{ṣaktā-} like \textit{tigmā} beside \textit{tihtā-}). Similar occurrences in Gr. see §§ 483 rem. 495 rem.

§ 473. In Iranian \( p, t, k, c \) were only retained before vowels and after \( s, s \). Otherwise they became spirants before consonants. This change took place before \( i, u \), after these consonantal vowels had become spirantal (§§ 127, 161).


§ 473. Indg. tenues, mediae and mediae asp. in Aryan.

2. Prim. Ar. t. Av. īnovm O.Pers. īvam (īv- = īv-) 'thee': Skr. tvām. Av. ḫyejah- n. 'need, danger': Skr. tyājas-. Av. mīpra- 'contract': Skr. mitrā-. Av. śyaopna- 'deed, work': Skr. cyāunā-.

In O.Pers. 为抓, 为抓 passed into ș, șy. șī- 'three': Av.  LPARAM. Skr. tri- (§ 261). haśiya- (-șiy- = -șy-) 'true': Av. haișya-, Skr. satyā-.


Prim. Ar. Skr. tk = Av. ąk- oḵka- 'dress': Skr. ąka-. ąk-ąs- weak st. of the part. perf. act. to taśaiti 'runs'.


Rem. 1. Observe that this Iran. st also appears after š and š and their diphthongs, as in višta- = Skr. vītā-, višīšā = Skr. vētāha, Gāp. ṯoštā (š. sg. mid. from rušd- 'grow up'), whereas Indg. st had become ș after the same sounds. The transition of ș, ș into š, ş was already completed and was closed, when țst became st in Iranian. See § 556, 1.

3. Prim. Ar. k. Av. yuṣṭa- 'yoked': Skr. yuktá-. Av. suṣra- 'red' O.Pers. āṣuṣra- a proper name: Skr. śukrā- 'bright, white'. For further examples see § 447.

4. Prim. Ar. c was regular before no consonant except i. Av. śy O.Pers. śy. Av. śyao-ṇa- 'deed, work' O.Pers. a-ṣiyā-'om (ṣiy- = -śy-) 'I went, walked': Skr. cyāv-a-tē 'stirs, moves'. Cp. § 448.


§ 475. The prim. Ar. tenues aspiratae. ph, th, khch were not rare sounds in the period of the Ar. prim. community. It is by no means definitely settled that these sounds are to be traced back in every case to Indg. tenues asp. (§ 553). This form of articulation may partly have arisen in the prim. Ar. period from non-aspirate tenuis, e.g. Skr. path- 'path', sthā- 'stand'. It is certainly not clear by what laws this aspiration arose.

In the following §§ we shall discuss the history of the prim. Ar. ten. asp. without taking into consideration whether this form of articulation was old inherited or newly developed. From § 553 it is obvious in what cases we hold the ten. asp. for prim. Indg.

The only case in which the sounds underwent a change in Sanskrit, was when the following syllable began with an asp. or with s + asp. A tenuis then arose by dissimilation. kumbhā-s 'pot, mug' fr. *khumbha-s = Av. xumba-. Perf. cichēḍa 'I cut off' fr. *chi-chēḍa from prim. Ar. skhaig-. Cp. the dissimilation of the mediae asp. § 480.

Rem. 1. Forms like instr. pl. khē-bhiṣ from kha- 'opening in the body, mouth, ears etc.', pathi-bhiṣ from pathi- 'path' were forms made by analogy after the cases, in which there was no reason for dissimilation. Cp. § 480 rcf.
In Iranian the tenuae asp. became spirants except after s, š and nasals, where they passed into tenuae.


Rem. 2. Fierlinger’s Kuhn’s Zschr. XXVII 334 f. conjectures that the tenuae asp. lost their aspiration in prim. Aryan before m, n, r. This however postulates the originality of the tenuae asp. as proved, which I cannot hold as certain.


The transition of Indg. ḍd(h) to ḍd(h) (§ 470) may be regarded as prim. Ar.; it was in any case younger than the change of prim. Ar. z to š (§ 591). z remained in Iranian; azd(h) became ed(h) in Skr., cp. oḏh from prim. Ar. aḏh § 404. 2. Skr. ḍēhi Av. daḏi ‘give’ imper., Indg. *de-dhi, rt. ḍi- ‘give’. Skr. kiyēdḥā- ‘extensive, capax’, prim. Ar. kṣiṣdādḥā-
Indg. tenues, mediae and mediae asp. in Aryan. § 476–478.

i. e. *kiyat + dha-. Here belongs also edh for Indg. dh + t (§ 552). Skr. mədhas- Av. mazdah- ‘wisdom’, prim. Ar. *mazdhas-, that is, Indg. *mydḥ + tos-, rt. mendh-. Av. veršda- ‘grown up, powerful’ fr. prim. Ar. *urzda- i. e. Indg. *urdh + to- (Skr. vardh- ‘grow’). Osthoff Morph. Unt. IV 261 f. conjectures, that Av. uz ‘out, upwards’ beside Skr. ud, is a generalisation of the form regularly developed before d-, as in uz-dačza- ‘accumulation’, and that uz was developed from ud in compounds like us-tāna- ‘stretched out’ = Skr. ut-tānd-, uz-ca ‘high up’ = Skr. uc-cā; ep. also Gr. ṣw-πλεξεν beside ṣw-ριχεσ and Cypr. Pamp!.. ṣ as also Germ. uz- § 536 rem.

Rem. This regular state was frequently altered through new formations in Sanskrit and Iranian. Skr. dāddhi for dhel, addhī ‘out’ imper. for *zdži, ruṣadḍhī ‘he checks’ (ruṣḍh-) for *ruṣadehi (ruṣṭhī arose at the time when such press forms in -džhi were in existence, see § 404, 2). Av mastsī- ‘insight’ for *maṣči- i. e. *mydḥ + ti- (after the analogy of cisti- etc.). See the author in Morph. Unt. III 144 ff., Bartholomae Kuhn’s Zischr. XXVII 380 ff.

§ 477. Prim. Ar. ē (= Indg. ē) became the explosive j (§ 402) in Sanskrit, and the ē (= Indg. ē) in ēḍ ēdh = prim. Ar. ūḍ, ūdh was lost (§ 404, 1. 2), whereas in ūbh = Prim. Ar. ūbh it became ḍ (§ 404, 3).

-ḍn- became -mn-: bhinnad- ‘split, divided’, from bhid-.

Rem. Analogously -nm- from -ṇm-: gen. pl. śmāṇān (śakṣ- ‘six’), a new formation after śaḍbhī etc.; on this ēḍh op. § 591.

No consistency exists in the treatment of -dm- and -gm- kakunmanti- beside kakudmant- ‘providing with a point’. mṛnmāya- ‘consisting of earth, clay’ fr. *mṛḍ-maya-. vānmāya- ‘consisting of speech’ fr. *vag-māya- beside vagnin- (§ 472 rem.). Whence this fluctuation arises, is not clear to me. Are the forms with -dm- and -gm- new formations as compared with the others?

§ 478. In Iranian b, d, g j apparently remained explosives throughout in O.Pers., and the Gāpā dialect, whereas in later Av. they became the spirants w, d, y ū medially except after sibilants and nasals, g also initially before consonants except r.

Late Av. vaḍa Gāp. vaḍā ‘he knows’: Skr. védā. dadmahi Gāp. daṛmahi ‘we give’: Skr. dadmāsi. baya- O.Pers. baga-
§ 478—479. Indg. tennes, mediae and mediae asp. in Aryan. 353


Rom. 1. j is often written for ī, e.g. ajośh- 'strength': Skr. ājus- (§ 451). See Hübschmann Kuhn's Ztschr. XXIV 553, Bartholomae Handb. § 129 rem.

Rom. 2. der'dā- 'plait' may be held as an example for w = b: Skr. (and prim. Ar.) dyddh- 'knitted, wound' from rt. derbh-, it is however not certain, that prim. Ar. b was a continuation of prim. Indg. b, see §§ 469, 6. 552.

On the other hand the late Av. explosives initially (except g before consonants s. above) and after sibilants and nasals. Late Av. dādmahā: Gāp. dādmalī. hazdyāp: Skr. sēdyāt, 3. sg. opt. perf. from rt. sed- 'sit', Indg. *se-zā-jē-t. rɔndaitē 'he loves': Skr. vāndatē 'he praises'. gāu-š 'bullock': Skr. gāu-š. mazga- 'marrow': cp. Skr. mazjan- fr. prim. Ar. *mazjan- (§§ 450. 580. 591). aoguśta- 'toe': Skr. aoguśha-.

Prim. Ar. ʤy appears in Av. as dv, db, ḍb, b. See § 356. Late Av. nm from dm in nmāna-: Gāp. d'māna- n. 'house', to Skr. dāma-s Gr. δόμο-ς etc., similar in formation to Gr. δυν- in δύναμ-α ev-δύμνας-ς. Cp. Skr. kakunmanta- § 477. Late Av. ḍv fr. ḍv, see § 450.

Prim. Ar. ḱn = Indg. ḱn became ṅn, in Iran. prim. Ar. ṅm = Indg. ṅm became sm in Av. See § 403.


Skr. dhārś-ā-mi 'I venture', Av. darś-i-ś 'vehement, eager', O.Pers. a-darś-nau-ś 'he ventured', rt. dher-. § 357.


Brugmann, Elementa. 23
§ 480. In Sanskrit ञ became in the first instance ฦ, e. g. prim. Ar. ञ ‘to call’ became ฦ, prim. Ar. ञ ‘leave, forsake’ became ฦ (cp. § 406).

Then the law of the dissimilation of aspirates operated, by which the aspiration was dropped when the next syllable began with an aspirate. ञ ‘awakes, is heedful of’ fr. prim. Ar. *bhayadh-a-ti, rt. bheyadh- (Gr. νεώθουμai ‘I inquire’, Goth. ana-biudai ‘I bid, command’). braska ‘malicious injury’ fr. prim. Ar. *dhraugh-a-s, rt. dhreugh- (O.Icel. drengr ‘ghost’). dāṇati ‘places, lays’ from prim. Ar. *dha-dhā-ti, rt. dhē- (Gr. θη-σῳ ‘I shall put, place’). durbhīṣ durbhyās durbhyāṃ (from Indg. *dhur- ‘door’, Armen. dūn, Gr. θύγα, Goth. daúr) from *dhur-bhīṣ etc.; then after these dūr-as dvār-as etc. instead of regular *dhūr-as etc.; observe, that the word was current in the Veda only in the pl. and du., fewer case forms than was otherwise usual therefore stood opposite to the bh-cases. ḍaghdā perf. ‘he struck’ fr. prim. Ar. *jha-ghan-a Indg. *ghē-ghon-e, imper. jaht strike’ fr. prim. Ar. *jha-dhi (a new formation for regular *gха-dhi, see § 454 rem.) Indg. *ghē-dhi, rt. ghēn- (Gr. γον-ζ ‘murder’), jā-hā-ti ‘leaves, forsakes’ fr. prim. Ar. *ṭhau-ṭhā-ti (Av. za-zātī) through the intermediate stages *ḥajḥāti *jajḥati (s. below). janghā ‘the lower part of the leg’ fr. prim. Ar. *ṛhasghā- (Av. ṛṣagā- ‘instep’, Goth. gagg ‘way, street’).

From the similar law affecting the tenues asp., which was undoubtedly specially Skr., I conclude that this law of dissimilation operated first in Skr., not already in prim. Aryan. See § 475.

Rem. 1. Forms like vṛtra-hō-bhiṣ (vṛtra-hān- ‘vritra killing’) instead of *-ja-bhiṣ (cp. jahi above) are easily explained as new formations. So far as I know, dissimilation never appears, when the two aspirates belonged to different members of a compound, cp. e. g. abhi-bhāti-ś ‘ascendency’, garbhā-dhi-ś ‘the place for coition, nest’, abh-hān- ‘serpent-killer’; cp. on the other hand Gr. ḫr-χρωνa § 496. It must here be observed that such compounds might have been formed anew, after the above law had ceased to operate, and that the simple form — which was felt as a factor in composition — might always have exercised an influence on the old inherited and actually reproductive forms.

Rem. 2. In forms like 2. sg. dhatē beside 1. sg. dādhē ‘I place for myself’, fut. ḍhātsyātē beside pres. bōdhatē people often speak, in an
unscientific fashion, of a 'leaping over of the aspiration' on to the media of a preceding syllable. *dhūntē, bhūntyāc had much rather retained the Indg. initial (Indg. dhi, bh arpah-). -s was here already in existence before the operation of the law of dissimilation, and when this came into operation there was nothing to be dissimilated in these forms, hence the initial remained intact. Cp. Gr. ἀντί: ἰπέγραφος: § 499.

Rem. 3. In what manner did dissimilation regularly take place, when aspirates formed the initial sound in three or more syllables? e. g. Skr. bu-bādha 3. sg. perf. = prim. Ar. *bhu-bharpah-a. This question requires further investigation.


h appears several times for dh and bh without the reason for the change being clear. Thus -hi beside older -dhi Gr. -θ, ending of the 2. sg. imper.; -mahē Av. Gāp. -mauḍē Gr. -μαθα, ending of the 1. pl. mid.; sa-hā beside older sa-dhā 'at the same time, with' Av. ha-dā; grh-nd-mi beside older grb-hn-mi 'I seize'. [Cp. von Bradke Ztschr. d. d. morg. Ges. XL, p. 65 sqq.]

Rem. 4. This change of dh bh, which caused the meaning of Skr. h to be foursfold (Indg. bh, dh, gh, ḫ), gave rise to several 'deviations' (Entgleisungen). Thus desiderative jīghṛṣḥati 'he desires to seize' for *ji-ghr̥ṣa-ti, to ghr̥ṣāmi.

§ 481. In Iranian prim. Ar. bh, dh, gh jh, ūh fell together with prim. Ar. b, d, g ǰ, ẃ (cp. Keltic § 524 and Baltic-Slav. §§ 542. 549). Hence all the mutations, mentioned in § 485, took place here also.


Rem. ḫ written for ū e. g. in ar̥jāiti 'deserves, is worth': Skr. ārhatī, rt. ārgh- (§ 429 a). Cp. § 478 rem. 1.

Late Av. n fr. dh: buna- 'ground, bottom': Skr. buddhā-.
Late Av. v fr. gv, see § 453.

Prim. Ar. žhm, žhm = Indg. ĝhn, ĝhm became Av. śn, sm. See § 407.

§ 482. The prim. Ar. combinations bdh, d'dh (thence zdh already in prim. Ar.), gdh, ždh = original bh, dh, gh, gh + t and bzh, (dzh, thence zh,) ĝzh, žzh = original bh, (dh,) gh, ĝh + s. Cp. §§ 469, 6. 470.

Skr. dybhā- 'knitted, tied, wound', Av. der'wala- 'plait' (§ 478 rem. 2), rt. derbh-. Skr. mēdhas- Av. mazdah- 'wisdom' = *mydh+tos-, see § 476. Skr. drughā- n. 'offence, insult', rt. dhreugh-. Av. Gāp. 3. sg. imperf. mid. aog'da (aog- aoj- 'speak, name') = *eug+h+to, cp. Gr. εὐχομαι εὐξρο. Skr. inf. vṛghum 'vectum' = *uēgh+tu-m, Av. vaśdri-š 'promoter' = *uēgh+tri-, rt. uēgh-, see § 404, 2.

Rem. 1. Many exceptions to this law — especially in Iranian — arose through the analogy of other words of the same suffix-category, in which the suffix had t (e. g. Skr. yuktā- Av. yucta- 'junctus'). Examples: Av. daptā- 'deceived, cheated' for *davēda- = Skr. davādā-. Av. O.Pers. basta- 'bound' for *bazda-, cp. Skr. baddhā-, rt. bhendh-. Av. dāuxtā-O.Pers. dāuxtā- 'cheated, belied' for Av. *dūyda- (Gāp. *drug'da-). O.Pers. *dāuyda- = Skr. drughā-. Av. aoxta beside Gāp. oog'da, see above. Av. vaśṭar- 'beast of draught' for *vaśdār- (cp. vaśdrī-š above) = Skr. viḍhār-. Skr. Vēd. 2. du. dhakham for *dughham from dagh- 'reach to,itten', 1. pl. daṅkāna. 3. sg. mid. dhatté 'ferm.' probably in the first instance for *daddhē (see below). Cp. Lat. part. con-estus for com-estus, 2. pl. ėsis for *ēsis etc., § 501 rem. 2, OHG. wista for wissa etc., § 527 rem. 3.

The Skr. forms with ďh, as baddhā-, budhā-, arose by attraction to the other forms of the same root, thus also *daddhē probably as intermediate stage between *dēdhē and dhatē. Cp. daddhī for dēhī § 476 rem. 1; dididdhī for *dī-diddhī § 404 rem. 2.
§ 482–483. Indg. tenues, mediae and mediae asp. in Armenian.

Skr. dīpsati ‘intends to injure’, Av. diwṣaïduṁ ‘to wish to deceive’, desiderat. formations to Skr. dabh- Av. dabh-. Skr. 2. sg. dhōkṣi ‘thou milkest’ (3. sg. dōgāhi); Av. Gāp. 2. sg. aovṣa (3. sg. aov’dā see above). Skr. 3. sg. vākṣat Av. vaṣqā ṣ-aorist to Skr. vāhati Av. vavṣaiti ‘vehit’, rt. yeṣh-.

Rem. 2. Examples for dhw + s seem to be wanting. The -ts- in Skr. bhōtegāte (fut. fr. rt. bhṛgāh-) cannot be regarded as the regular continuation of dhw, because after prim. Ar. zel(h) from dzel(h) (§ 476) it is probable that d became assimilated to the following zh already in prim. Ar.

Armenian.

§ 483. The tenues were very variously treated as regards their form of articulation.

p appears as ҧ in the vicinity of original s: ҧoišt ‘opouy’; epeh ‘I cook’ probably to Gr. ἔβη. As v after vowels: ev ‘and, also’, Gr. ἕμ, eπν ‘septom’. As h (y) initially before vowels: ἓν ‘nèrre’, heři ‘distant’ Gr. πέρα. See § 330.


t appears as t after s: astl ‘star’ Gr. ἀστήρ. As t initially before vowels and (under what conditions?) medially: taram-i-m ‘I become dry, wither’ Gr. τάρασιμ, ९ ‘eight’ Gr. δékā. μ fr. ty: ἰκ ‘of thee’ Skr. tvām. t appears as d after r, n: mard ‘man, homo’ Skr. myṛā-, dr-and ‘door-post’ Lat. antae; op. g fr. k below. See § 360.

Intervocalic t became ṭ and then disappeared: hair ‘father’ Gr. πατέρ, nom. pl. har-ṛ first probably fr. *hair-ṛ. -aur- from -aṭr-: haur ‘father’s’ Gr. πατρό-ός: -ṛh- -h- fr. -ṛti-, or -ṛt-. marh mah ‘death’ Skr. myṛyu-ṛ or Goth. maþpr. See § 360.

t- had disappeared initially in ere-ṛ ‘three’, first of all from *re-ṛ: Skr. trāyas. See § 263.

q appears as k (ṛ) and ṣ except after nasals and liquids: akn ‘eye’ Lith. ak-l-s; ৭-ace ‘I leave’ Gr. λιμπᾶω; aq-ṛ pl. (i-stem) ‘eyes’ Lith. acl-s. As g after liquids and nasals: arge
'impediment' Gr. ἀπεκο; hing 'five' Skr. pānca; cp. d fr. t above. See § 455 1).

Examples for the dropping of q are uncertain. See Hübschmann Arm. St. I 76.

ʾk generally appears as s: sar 'height' Skr. śiras-. c fr. sk (ksk, ssk) and ḫs: harṣ 'question' Skr. pychā, nec 'six' Gr. ἕ. See §§ 408. 561.

Loss of ḫ before t in uṭ 'eighth' (Skr. aṣṭa), probably also before l in lu 'audible' (cp. Skr. śru-). See § 408.

§ 484. The mediae d, g became tenses, ʾg became a voiceless affricata. Cp. the shifting of the mediae in Germanic, § 533.

d became t. tiv 'day': Skr. ḍivā instr. 'by day'. See § 361.
g became k. ker 'food, meat': Skr. girdmi, rt. ger-. See § 456.

ʾg became c. cer 'old man': Av. xaurcā- 'ago', rt. jer-. See § 409.

Examples for the shifting of b to p are unknown to me.
Cp. § 331.

§ 485. The mediae aspiratae bh, dh, gh became b, d, g; ʾgh became the voiced affricata ʾj, or the voiced spirant z.

bh became b, which remained initially and after l, r, m, but became v after vowels. ba-n 'λόγος': Gr. φημί. celdcr 'spring, source': Gr. γρεάρ. arbi 'I drank': Lat. sorbē. Instr. sg. akam-b pl. akam-bk from akam- 'eye': Skr. bhiṣ. lus-a-vor 'clear, bright': Gr. λευκο-φόρο-ζ. See § 332.

dh became d. diem 'I suck': Skr. dhāyāmi. See § 362.

gh became g, which remained except before original e- and i-vowels, before these it passed into ʾj initially, and into ʾj medially. gan 'strokes, blows': Skr. ghan-ā-. jerm 'warm': Gr. θερμο-ζ. ʾiṣ 'viper': Av. aṣi-š. See § 457.

ʾgh became j initially and after n and r, and z after vowels. janne-m 'I consecrate, sacrifice': Av. zaotar-. anjuk 'narrow':

1) The ʾj in ʾarj 'bear': Skr. ṣeṣa-s Gr. ἄκρο-ζ is probably parallel to this ʾg and ʾd. Cp. § 561.
Greek.

§ 486. The tenues generally retained their form of articulation.

p. πλέ(ƒ)ω 'I swim': Skr. pláv-ē. See § 333.

t. τάλ-αντο-ν 'balance': Skr. tuld-. See § 363.

k. καρδ-ιά 'heart': Lat. cor. See § 384.

g. καρπ-ό-ς 'fruit': Skr. kṛpāna-s. nový 'atonement': Av. kṣepa-. vè 'and': Lat. quæ. See §§ 425. 426. 427.

These sounds seem to have been spoken with aspiration for a time in some districts, especially in Attica. Owing however to the inexactness and inconsistency of the written language it is impossible to determine accurately how far this tendency extended.

Rem. Many of the cases, where the aspiration was formerly regarded as being purely phonetic, are rather new formations made by analogy, e. g. ὄλυμπο 'I anoint with oil' (beside līna, Skr. līmpānas), δίχομαι 'I receive' (beside Ion. Dor. Lesb. δίκομαι), perf. τέρεσθα τερεσταταί (to τερέω 'I turn'). See Osthoff Zur Gesch. d. Perf. 284 ff. In the same manner mediae also came into the place of tenues, as κελεβθείς (Messen.) to κλεπ- 'steal', ὧργηγεν to ὧρμεν. See Osthoff in the above work.


Tenuis became media before media. ἐγ-δίδωμι fr. ἐκ+δίδωμι (cp. Cret. ἐκδήλου with ἐδ fr. γ-δ, cp. ἐκτεί § 384), ἐγ-βάλλω, ἐγ-γων-ς, ὑπ-βάλλω. The etymological orthography was frequently used, ἐκ-δίδωμι etc., and probably it was also pronounced -x- etc.


§ 488. πι mostly became μι, Lešb. πν. ὑμία 'eye' fr. *ὁμία, Lešb. pl. ὑματα. κεκαμμια 'I am bent' from *κεκαμμ-μαι *κεκαμπ-μαι, cp. 3. sg. κέκαμπται.
When ἄ in the combination τρὰ underwent openthesis (cp. τεκτάω etc. §§ 130. 639), τ became assimilated to the υ and disappeared. δύσ-πονα 'mistress of the house' fr. *-πον-να beside πότινα = *ποτ-να. Cp. ὄλυνθοι fr. *ὁλυνθοῖο § 492.

§ 489. ἐς ὑ became a geminated spirant (ὕῆ?) in prim. Greek; this sound was represented by -ττ- medially in Böeot., Thess., Att., and in the other dialects by -σ-, but initially universally, as it seems, by σ-. On account of the vowel-length in ἅλττον (§ 479) it must be assumed that ττ, and σσ arose first from a geminated spirant, since αυ would not have been subjected to the process of compensation lengthening before an explosive. Cp. § 427 d. μάσσων 'longer' (to μακρό-ς) : A.v. μας-γά 'greater'. πᾶσαλο-ς 'plug, nail', rt. πᾶκ- (Skr. μᾶσα-s 'string, sling'). πῶσω πέττω 'I cook', rt. πέχ. ὀπεῖ 'both eyes': Lith. akk-s. Hom. σεῦ (ἐ-σενε) 'he drove, hunted, scared' : Skr. cyava-cuya- 'put in motion'. Mogar. σά 'tīve' fr. ἐς-α beside ἀ-σα ἀ-τα (on ἄ- s. § 654). In Att. τεναῦσαμι 'I pursue' and τενάω 'I busy myself eagerly with something', in case they are from the same root as Hom. σεῦ, the initial τ may have come from the augmented and reduplicated forms.


Rem. 1. The regular representatives of ēς ὑ mostly appear for tῆ ὑ, e.g. Att. ἐμίτω (ἐμίω) fr. ἐμι- like γελίτεω (γελίω) from γελᾶ-, κρίτεω (κρίσωσ) fr. κρίω- like ἥττων (ὁσών) from ἥ-τω-. These were probably new formations after the analogy of those with original ēς ὑ. Cp. the author’s Grieche. Gramm. p. 36 note 1.

Rem. 2. The combination *-ti was frequently retained in Bœot., Pamphy. and Dor., where the other dialects had *-m, as Dor. διόνας πλαύσιο-ς. But also in those dialects, which show *-m, *-m occurs besides this, as Ion. Att. ἐριτι, αἰτιο-ς (cp. *πλαύσιο-ς), ἄριτ, χίριτι, ἔφη-ς (cp. φάκμ-ς). Form-transference may be assumed in many cases, e. g. χίριτι after χίριτος etc.; πανίσι-ς after πανικό-ς; ἐφίσι-ς μαχητίο-ς μαχητί-ς after the cases with -τις. Cp. Hom. Ἀχαιαὶ Ἀρκείαν Ἀτρακάνος Λακ. Ποδηλάτος with σ instead of τ (Bœot. Ποδηλάτος Ποδηλάτως) after Ποδηλάτος in Hom. Ἀχαιαὶ Ἀρκείαν etc. Nevertheless this does not clear the matter up satisfactorily. It is questionable, whether *-m did not already arise, to a certain extent, in prim. Gρeek. Such a great antiquity is especially to be conjectured for the *-m in nouns like βάθυ-ς, since these also occur with σ in Bœotian and the whole of Doric.

In Læc. and Cypr. σ = *tj, in Cypr. at the same time the σ of *-σι = *-tj passed into h: Læc. part. σει-ήβωνίς, Cypr. 3. pl. conj. φρονότις. This σ became ο in Eretria: part. fem. ὦμενόφαρας, 3. pl. conj. παρα-βαλόνυς.


§ 491. In most dialects, e. g. Ion.-Att., the mediae were voiced explosives in the oldest monuments.

b. φιόγγος 'foreign': Skr. balbalā-karōmi. See § 334.
d. δίκα 'ten': Skr. dāśa. See § 364.
g. γευσ 'I let taste': Av. suusahaan- 'favour, kindness', rt. ḍeus-.

See § 385.

g. ἵειγομαι 'I spit out': Lith. vāgin, rt. ṭuug-. ῥοῖς 'bullock': Skr. gāū-§, Indg. *gū-s. δελφο-ς 'womb': Skr. gārbha-s, rt. gelbh-. See §§ 425, 426, 428.

The voiced mediae became voiced spirants. We may conclude that β had already become b in Lac. and El. before the beginning of the Roman period, from the fact that γ (f) was represented in these dialects by β. In the oldest El. monuments δ appears as ζ i.e. δ, e. g. ζέ, ζειμ, ζειν, which: this affection, so far as we can see, did not take place in the other dialects until later. Forms like νυγώνις, Σαρακηγνως, κλαίγω, occurring in the second century B.C., exhibit the transition of γ into the spirant j (in any combination whatever). The γ, which here represents the consonantal j, is only conceivable on the supposition that it denoted elsewhere a spirantal sound; the loss of γ after i in Boeot. ioîn = ἵγών, Tarent. and elsewhere ὀλλος = ὀλλος etc., also points to this change.

In Arcad. ζ was also written for δ = Indg. g, e. g. ζέλλω beside δέλλω 'I throw'. Hence a spirant was also spoken here. Cp. § 428 b.

§ 492. βν, βμ became μν, μμ in prim. Greek. νάομαι 'I woo to wife' from νῶ- 'wife', Indg. *guā-, see § 428 a. στίμο-ς adjectival part. to σίμομαι 'I feel awa', rt. ῥεγ-, see § 428 a. τρίμμα (τριμμα) 'that which is rubbed', perf. mid. τρίμμαμαι, to τρίμμω 'I rub'.

In like manner gn, gm probably became swm, ἵκμι in the same period. γί-γν-ο-μαι 'am born' i. e. γίωνομαι. στίν-νό-ς

1) For the grounds on which this theory is based see Ebel Kuhn's Ztschr. XIII 264, Westphal Method. Gramm. I 1, 17, the author in Curtius' Stud. IV 103 f., L. Havet Mém. de la soc. de lingu. IV 278.
§ 492—495. Indg. tenues, mediae and mediae asp. in Greek.

'hated' i. e. *stýgamos. ino became in in Dor., Thess., Boeot. and later Att., as Dor. γενόμει γενόμενοι (ep. § 618). ág-mó-ς 'breakage' i. e. *sparmos. wgm became wgm (written γμ) through the intermediate stage wgm, just as mpw became mpw through mpmp (§ 488): ἐγεργήμα, ἐλέγκημα beside -γμ -γκμ.


Lac. ἐλλάδ 'seat' fr. *ἴδ-λα, see § 364.

§ 493. ði, ði, gi became one sound, which was mostly written ζ. ζεύ-ς: Skr. dyáti-ς; πεύ-ς 'on foot', to πεῦ πέδον ἀγίαμ 'I stand in awe of', to ἀγίας, Av. yazuši, rt. jag-. ζή 'lives' fr. *γερι, to Av. yātī-, stem gī-, niō 'I wash', to πνεύ-νυ, rt. neig- (ep. § 428 d).

οδ was also written for ζ in Lesb., e. g. έδώδω. -ςδ-, for which, initially, δ-, appears in Lac., Gortyn, Boeot., and Megar., e. g. the verbal endings -άδων -άδω = -άζω ε-ζω, ἄεις = ζεις, δων = ζως. Seldom τ = ζ in Cret., as Τύνα = Ζύνα, also Τυνα.

Owing to the uncertainty which exists regarding the value of these different letters, it is impossible to determine accurately the course of development, which the prim. Gr. combinations ðι, gi, gί passed through.

Rem. ζ was probably pronounced ð in Ion.-Att.; cp. O Balg. ðl fr. ðl § 147 rem. 1. ðs might possibly go back first of all to zd — or zd —. See the author’s Griech. Gramm. § 52 with addendum to p. 47, G. Meyer Gr. Gr. 2 274 f.

§ 494. ἵθι i. e. isthi arose fr. Indg. *yid’dhi 'know' imper. (ep. Skr. viddhi, § 476). Whether the intermediate stage was *yid’dhi or *yitsthi, remains doubtful. Gr. κύσθο-ς 'a hollow, pudenda mulicbria' was probably a similar case (§ 489, 5).

§ 495. The mediae aspiratae bh, dh, gh, gh became tenues aspiratae in prim. Greek. These then probably remained unchanged in most dialects, certainly e. g. in Ion.-Att., down to historic times.

bh. ὀφοῦ-ς 'eye-brow': Skr. bhrū-ς. See § 335.
§ 496—498. Indg. tenues, mediae and mediane asp. in Gr. and Italic. 365

θοις: τριχ-ος and θεός-ων: πάοο-ς (§ 429 b) = Skr. dhatsé: dadhé, see § 480 rem. 2. Hence forms like πνέομαι πνέος, πνεω πνεος (rt. beghost-) are shown to be new formations for *πνέομαι etc.; cp. fut. ανθω for regular ανθω § 564.

The remark, made in § 480 rem. 1 on Skr. vra-trahbhīḥ ahih-bhūti-ḥ, also holds good for the forms ἐχέων (ἐω 'I pour out'), θεόμο-ς Locr. 'statute' beside τεθυό-ς Pind., θίθεθι Cret. Gort. = τοθοθετι, ἀμφί-γαλο-ς 'having a double comb', ἀμφί-ἐω 'I pour around', παχύ-χεμο-ς 'with thick juices' etc.

It is difficult to ascertain in what manner the law of the dissimilation of aspirates operated in cases where three or more aspirates followed one after the other (cp. πνευΜοθε, prim. Gr. *phe-phojth-e, τεθωρι prim. Gr. *the-thē-thi). Only so much is as yet clear, that the regular operation had been crossed in many ways by analogical formations. Cp. Osthoff's attempt in his Zur Gesch. d. Perf. 305.

§ 497. Indg. dhi, ghj, gḥ as thi, kḥ, ḳḥ ḳḥ fell together in prim. Gr. with ṭḥ, ḳḥ ḳḥ and accordingly experienced the same treatment as these (§ 480).

μίσος-ς μέσος-ς 'medius' (Skr. mádhya-s) like τόσο-ς τόσο-ς. ἀσσον 'nearer' (ἄγχυ, root angh-) like μάσον.

ἐλάσσων ἐλάττων 'less' (ἐλαχύ-ς : Skr. laghi-ḥ) like πέσω πέττω.

Italic.

§ 498. The tenues remained unshifted on the whole.


t. Lat. tovo-s tuo-s, Umbr. tover 'tui', Osc. tuvai 'tuae': Skr. táva. See § 366.

k. Lat. clt-nō, Umbr. kle-tram 'lecticam': Skr. śrāy-ati. See § 387.

q. Lat. canō, Umbr. kanetu 'canito': Skr. kāñ-kan-t. Lat. qui-s, Umbr. Osc. pi-s 'quis': Av. ci-s. See §§ 430. 431.
Where shifting of the tenuos happened through sound-change, in combinations, it is frequently not evident — owing to the scantiness of the Umbr.-Sann. monuments — whether this change is to be regarded as having taken place in prim. Italic or only in single dialects.


Lat. Umbr. g from c in the combination -vikl-. Lat. angulu-s, Umbr. anglon-e ‘in anglum’ fr. *aroklo- (§ 269), to Lat. ancus-uncu-s. Lat. singulu-s fr. *sem-klo- (§ 269). The cause of the same change is less clear in septin-gentī non-gentī beside ducentī (Gr. ἰπτα-χόσιος); vigintī beside vicēsinus no doubt owed its g to form-transference. Cp. Thurneysen Kuhn’s Ztschr. XXVI 312 f.


§ 500—501. Indg. tenues, mediae and mediae asp. in Italic.

Lat. **mn** fr. **pm.** summum-s: superior. So also Umbr. _somus_ 'summum'.

Lat. **nm** (written **gm**) fr. **cm.** segmentum-m: secare. Cp. **nm** fr. **gm** with original _g_, § 506.

§ 501. The change of _ts_ to _ss_ seems to have been prim. Italic. After a long syllable and finally _ss_ became _s_ in Lat.


Umbr. zeōref _serse_ 'sedens', kutef 'cautus' ('cauteus', as it were), Volsc. osif 'incendens, adulens flammis'. _-f_ first of all fr. _-f_, further fr. _-ns_ = _-nts_, see § 209.

Where _ts_ (z) appears in Umbr.-Sann., it was of later origin: in Umbr. piazh 'piatus' Osc. húrz 'hortus' etc.; in Osc. az 'ad', an extension of _ad_ after the analogy of Ital. _aps_, _ops_, _eks_; in Umbr. _-nts_ fr. _-ns_—(§ 209).

The change of _ts_ to _ss_ was repeated in Latin. _possum_ fr. _*pot-sum_, which was either a new formation after _potest_ (fr. _pote est_) or had arisen by syncope (§ 633) fr. _*pote-sum_.

Rom. 1. Compounds like _assegnezor_ fr. _*ategnezor_ (ad _segnezor_) were formed at various periods of the language. It is difficult to say, in which examples _ss_ had arisen regularly, and in which by analogy.


1) And except finally? Cp. Lat. _est_ 'eats' from rt. _ed_.

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Rem. 2. Lat. ēsīs ēde (rt. ed- ) for ēsis ęse after the forms of other verbs in -tū - tr. com-ĕstu-s for and beside com-ĕsu-s after forms like gres-tu-s, etc.


On the other hand tētr became str. pedestri-s : pedīt-ēs, assestrīx, ēstrīx to sed-, ed-. Umbr.-Samm. examples are wanting.

Rem. 3. That the course of development was not here sar — ar — str, as some maintain, but that the t e. g. in ēs-trī-x, was the same as that in vic-trī-x, follows from the fact that ar did not become str but fr — br (§ 570).

The Italian treatment of Indg. tē was precisely parallel to that of the Germanic. See § 527.

On initial s- fr. pe- and x- see § 568, 2.

Lat. ff from pf : offerō, sufferō.

Osc. meddīsūs meddīs 'meddix', cp. Lat. jū-dex; nom. pl. meddīs beside muđdež fr. *-dik(os)s. Umbr. osatu 'operato, facito' oseto 'facta' beside Osc. úpsannam 'operandum, faciandum'.


The combination kt arose anew in Umbr.-Samm. by vowel syncope (§ 633) and was now treated differently from prim. Italian kt. Osc. factud 'facito', actud 'agito'. Umbr. feitu fetu feelu 'facito', aitu 'agito', to which ar-veitu ares-veitu 'advehito' (rt. yeğh-) joined itself.
Rem. Prim. Italic *k* = Indg. *q* seems to have remained an explosive both where it was followed by a *t* in prim. Italic, and where it later came together with *t* by syncope. Osc. *Praqtus; Quintius*, Indg. *pentpt- ‘quintus’. Umbr. *nìntu* ‘ninguito’ (cp. § 570), *fìktu* ‘sgito’ (O.Lat. *fìscere* beside *fìgere*, *fìbula* fr. *fì[g]me-blà*). um tu ‘unguito’ in the first instance from *sumptô*.

*k* became *s* before *e-* and *i-*vowels in Umbrian, e. g. *fàsia* ‘faciat’. See § 387. How the form *fsia* beside *fasia* is to be explained, I am unable to say. Cp. *mucto* ‘muttimum’, where *i* seems to express a voiced spirant (§ 508).


§ 503. Loss of tenues in consonantal groups.


*x-nîntio* *-mergô* *ê-ligô ê-dô* fr. *ex-nûntio* etc. (cf. *di-numerô* *di-moveô* *di-luô* *di-dûcô* fr. *dis-numerô* etc.). Cp. § 570.


*â* from *spl*- *stl-* through the intermediate stage *sl*- *lien*: Gr. *slûn. locu-s, lîs* fr. O.Lat. *stlocu-s, stûs*. The stage *slûs* is found twice on inscriptions. On *ulico* cp. § 570.


Bragmann, Elements. 24
§ 504. The mediae generally retained their form of articulation.

b. Lat. bibō : Skr. pībāmi. See § 387.

d. Lat. dicō, Umbr. deitu ‘dico’ Osc. defkum ‘dicere’: Skr. diśāmi. See § 368.

g. Lat. gen-us, Osc. Genetai ‘Genetrici’ : Skr. jan- Av. zan-. See § 388.

See §§ 480. 482.

In the Italic branch other sounds — in Lat. especially the Indg. med. asp. — fell together with the Indg. mediae. Some of the changes of articulation, discussed in the following sections, equally concerned these other sounds.

That Lat. b ( = Indg. b, dū, bh, dh, gh) was spoken as b from the second century onwards, seems to follow from such inscriptive forms as quicus for quibus and cibes for cives (Corssen Ausspr. I 131 ff., Seelmann Ausspr. 239 f.).


mn (written gn) from gn already in prehistoric times. lignu-m fr. *legno-m : legō, see § 65 p. 58. benīgnum-s. *ad-gnōscō became *aggōnscō, further aonōscō, written agnoscō. ngn became ın : īgnōscō i. e. ınōnscō fr. *ino-gnōscō; cōgnōscō i. e. cōnōscō fr. *cono-gnōscō. mn became n initially, probably at the same time as the mn which had arisen from cn (§ 500); this change took place about 150 B. C. : gnātu-s nātu-s, gnōscier nōscō. So also Umbr. naratu ‘declarato’, to Lat. gnārū-s nārū-s.

Rem. 1. The n instead of gn in renum, propunatorī etc., on inscriptions under the Empire, is also to be explained from the pronunciation mn.
§ 506—507. Indg. tenues, mediae and mediae asp. in Italio.

rom from gm. agmen i. e. *romen from *agmen. From exāmen beside agmen, the former of which points to *agmen with originally long ā (cp. amb-ágēs, co-agulum) — *exámen would have become *exegmen, see § 97 — we may conclude that the simplification of gm to m took place regularly only before orig. long vowels, or diphthongs. With this also agree con-tamin-ō: con-tāgiu-m and jūmen-tu-m : Gr. ζεύγυμα Lat. jāger-a. Cp. wm from cm § 500.

m from dm. caementu-m : caēdō. rāmentu-m : rādō. flāmen to Goth. blōtan ‘to honour (the deity) with offerings’ or to flagrāre? cacāmen fr. *cacūdmen? : Skr. kākud- ‘top’.

Rem 2. I do not venture to express an opinion as to the treatment of ān in Latin, but merely refer to the conjectures by W. Meyer Kuhn’s Ztschr. XXVIII 164 f.

nd (which had partly arisen from ml) became mn, n in Umbr.-Samn. Umbr. ponne pone Osc. pūn ‘quom’ fr. *pon-de; Umbr. panne Osc. pān ‘quam’ = Lat. quan-de, see § 207. Umbr. an-penes ‘impenderes’, pihaner ‘piandi’. Osc. ुpsannam ‘operandam’. This change was older than that of nt to nd in Umbr. ander ‘inter’ (§ 499).


Rem 3. The ī in the Umbr. fut. ex. ēn-telust ‘intenderit’ and ā-pelus ‘impenderit’ ē-pelust ‘impenderit’ is unexplained. That the ī goes back to ndī (Bücheler), is incredible to me; the composition of a partitive stem *intendālo- with fust (Bechtel Bezaehn. Beitr. VII 7) is impossible.


Lat. v fr. gy = Indg. g. bivō-s : Osc. bivus ‘vivi’, Skr. jivā-s etc. See § 432 b.


24*
Rem. For Lat. *crēdō, first of all from *kreṣṭā (op. pēdō fr. *peṣṭā, § 594), it would hardly be right to assume a *kredāhē-, even in Indg. since in Skr. the two members of the compound, *kred 'heart' and rt. dēhē, were not yet fused into an inseparable unity (cp. e. g. śradd asmāi dhatta 'believe in him' ṛg. II 12, 5). We must nevertheless start out from a prim. Ital. *kre(d)ēhē-, op. § 521 on O.Fr. *cretiu 'credō'. It may be assumed that in Italic, as in Sanskrit, the feeling for the connexion with the other forms of rt. dēhē- was not yet extinct, and that d for regular p was thus introduced after con-dō ab-dō etc. (cp. W. Meyer Kuhn's Ztschr. XXVIII 166), just as nōbēs stood for regular *noepīs (§ 594).

§ 508. l from d in Lat. lēvir : Skr. dēvār- and others. See § 369.

r, rs from d in Umbrian between vowels and finally, e. g. te-rā di-rsā 'det.' See § 369.

In Umbr. muieto 'muttitum' beside mugalute imper. 'muttito' (Lat. māgīnor 'I murmur') i probably represents a voiced spirant. It may be conjectured that palatal vowels had a similar influence upon a preceding g as they had upon a preceding k (§ 502).

§ 509. The mediae aspiratae became tenues asp. in prim. Ital., then voiceless affricatae, and lastly voiceless spirants: f, b, x, xʷ. Probably in the same period p was further shifted to t after s and the non-labialised x to h except after and before nasals and before r and l.

This state of the form of articulation generally remained: in Umbr.-Sann., whereas medially the spirants were developed to mediae in Lat.: b fr. f = older f (§ 338) p (§ 370) xʷ (§ 433c); d fr. b = older p (§ 370); g fr. x = older x (§§ 389, 430); ngu (negu) fr. νxʷ = older νxʷ (§ 433a); gu (whence v) between vowels from xʷ = older xʷ (§ 433b). Further, initially, g from x before r (§ 430).

1. Initially.


Prim. Italic $h$ (Lat. U.-S. $h$) = Indg. $gh$ except before $r$. Lat. $humus$, Umbr. $hendra$ Osc. $huntru$ 'infra': Gr. $\chi$αμαλ, Indg. $gh$. Lat. $hostis$ : O.Bulg. $goste$, Indg. $gh$. A dialectical (Sabine) pronunciation of the $h$ was represented by $f$: $folus$, $fostis$. See §§ 389, 430.


Prim. It. $f$ (Lat. $f$) from $\chi^n$ = Indg. $gh$. Lat. formus : Skr. $gharma$-s, Goth. varmnjan. See § 433c.

2. Medially.


Prim. It. $p$ (Lat. $d$, Osc. $f$) = Indg. $dh$ except before and after $r$ (however in the combination $r\hat{p}u$), before $l$ and after $u$ ($y$), perhaps also after $m$. Lat. medius, Osc. mefiāf 'in media': Skr. $mådhya$-s. See § 370.

Prim. It. $f$ (Lat. $b$, U.-S. $f$) = Indg. $dh$ before and after $r$ (except the combination $r\hat{p}u$), before $l$ and after $u$ ($y$), perhaps also after $m$. Lat. rubro-, Umbr. rufru 'rubros': Gr. $\epsilon\nu\theta\rho\nu$-$\varsigma$. See § 370.


Prim. It. $h$ (Lat. U.-S. $h$) = Indg. $gh$ except after and before nasals and before $l$. Lat. vehō, Osc. vehia 'plaustrum': Skr. $våhmi$. See § 389. This early weakening of $\chi$ to $h$, in this position, explains why the explosive $g$ does not appear in Latin.


Rem. 1. The $g$ (instead of $h$) in magis and ligūriš was perhaps transferred from $mågnu$-s and lingō. But whence the $g$ in ad-$ågiu$-m, prōd-$igiu$-m, to $ajō$ (§ 510)?
Prim. It. χʷ (Lat. gh) = Indg. gh after s. Lat. ninguit:
Lith. snižga. See § 433 a.

Prim. It. χʷ (Lat. *gh, whence v) = Indg. gh between sonantal vowels. Lat. nir-em : Gr. νηρ-α. See § 433 b.

Rem. 2. The forms levi-s (Skr. loghú-s, Gr. ἔλεγχος, Goth. laihts, Lith. leigas-as) and brevis (Gr. βολής) still remain obscure.


§ 510. The fricative sound of h was reduced to a minimum in the Italic languages. In certain positions the sound was entirely dropped.

The weakness of articulation betrays itself in Latin through the doubt which existed as to where h should be written, and where not, e. g. hālāre for ālāre (§ 208 p. 176), ānser for hānsor (Gr. χίνεν).

h disappeared uniformly before i. major fr. *mahíör (beside mānu-s) : Skr. māhiyas- 'greater'. ājō fr. *ahījo or *ahīo (beside axaře 'to call to, nominare') : Skr. dha 'he spoke'. Further, often between vowels, especially after i-vowels (accentual relations also formed a factor). lien : Skr. plīhān- 'spleen' Gr. σναίγγραφ 'entrails'. mējo probably from *mejho : Skr. mēhami 'I make water'. bim-s fr. *bi-himu-s. nēmō fr. *ne-hemō. Further nil = nihil, prēndō = prehendo, praebeō = praehibeō, cōrs = coëhrōs, prōbō = prōhibeō etc., which stand on a level with désse = désse, coeptī = coëptī.

Cp. also diribeō = dis+habeo with the same r from s as dir-imō etc. (§ 569).

The same fluctuation in the writing of h- exists in Umbr.- Samn. as in Lat. Umbr. eretu part. pass. to heri 'vulc', conversely he- for e- 'ex' in he-bet-af-e beside e-bet-rafe-e 'in exitus' (to Lat. baetere, cp. § 432 rem. 1). Osc. Herukinae 'Erycinae, "Eoukyn".'

It was dropped medially in Osc. mais 'magis' maimas gen. 'maximae' beside Mahi[s] 'Magius'.
§ 511. In Lat. the b, d, g, which arose from voiceless spirants, underwent the same treatment as the corresponding original mediae. grallae 'stilts' fr. *grad-iae, see § 369. amnii-s fr. *abni-s, along with O.Ir. abann 'river' is probably to be connected with Skr. abhrá- 'thunder-cloud'; Samniu-m beside Sabínú-s Oeo. Sabinim 'Samnitium', see § 506.

Old Irish.

§ 512. The tenues except p were generally retained in prim. Kelt. p disappeared at that period in all positions except before consonants and before consonants it became a spirant. t, c appear in Irish as the successors of prim. Kelt. t, k ky (Indg. t, k g) in absolute initiality and after spirants and r, l. temen 'dark-gray': Skr. támás-. tiagaim 'I stride, go': Gr. στράξ, rt. steigh-. ocht 'eight': Gr. ὀχθ. t-pret. al-t 'educavit'. See § 371.


§ 513. t, c became voiced mediae after nasals, then the nasal disappeared (with compensation lengthening). The letters t, c were retained in the O.Ir. period. It was not until a later period that the orthography was set straight by the introduction of d, g. cēt 'hundred': Cymr. cant, Lat. centu-m. òac òc 'young': Cymr. euanc, Lat. juvencu-s. See § 212.

§ 514. After vowels t c became p, χ, which were written th, ch. Hence d, g in unaccented syllables (except finally). These were written d, g, like the voiced spirants which had arisen from original mediae (§ 522). d, g however occur consistently only for the palatalised d, g.
māthir 'mother': Lat. māter. cath 'fight': Gall. catu- (in prop. names), OHG. hadu- 'fight'. cloth 'renowned': Gr. πλέον. 2. pl. carthe, no charid, to caraim 'I love'; op. the personal endings Gr. -rei Lat. -tīs. 3. sg. pass. car-thir 'amatur' midi-dir 'judicatur': op. Lat. -tur. beothu 'life' gen. bethad dat. bethid, suffix *-tīt-: Lat. -tūt-.

fiche 'twenty': O.Cymr. uceint, Skr. viṣati-. sechur 'sequor' rt. seq-. marc-ach 'equester': Cymr. march-auc, Gall. Ben-ācu-s; cumacht-ach 'potens', 1. sg. cumacht-aigim 'potior'. cathr-ach gen., cathr-aig acc., to nom. cathir 'town'.

On the like origin of voiceless spirants in conditional initiality, e. g. a thuath 'O folk', see § 658, 1.

Rem. 1. On mae 'son', muce 'pig', caeo 'dirt', lēicim 'I leave', whose 'status durus' is remarkable, see § 496 rem.

Rem. 2. The spirants of the prepositions aith- 'against' (Gall. att-') and frith- 'towards' became assimilated to the initial consonant of the following word, when the preposition had the chief accent. tht to tt: ni frittuīt 'non obeisunt'. the to ce (c): tecommocuir 'accedit' fr. *to-aith-comnocuir, frecndaire 'present' fr. *frith-con-daibre. thg to gg (written c or cc, op. § 519): frērē 'responsum' from *frith-gaibre, ōcē 'cognitio, sapientia' fr. *aith-gāne (op. Thurneysen Revue Celt. VI 820). taccair taccair 'congrue', deceas fr. *to-aith-gaibre. thb to bb (written p, op. §§ 519, 524): epert 'speech' fr. *aith-bert.


Indg. pn in O.Ir. suan Cymr. hun 'sleep': Skr. svāpna-s Gr. ἱπνο-ς etc. It is highly probable that p was here also no longer an explosive in prim. Kelt., see § 339 rem.

§ 516. tk became sk in Kelt. O.Ir. sesc 'barren Cymr. hyšp 'dry', fr. *siško-s: Lat. sicco-s, orig. form *sitqo-s. O.Ir. mesc 'intoxicating, drunk': Skr. māda- 'drunkenness'. lesc 'piger': Goth. lāts 'lazy'. uisce 'water': Skr. udān- udākā- 'water'. Here belongs also O.Ir. brisc Brst. bresk 'brittle', in case it comes from the rt. bherdēh-, § 298. Op. Av. ḫk, sc from prim. Artk, tc § 473, 2 and Germ. sk fr. tk § 527. From the Gallic belong perhaps also here Pruscia Prudca (d’Arbois de Jubainville Études grammaticales sur les langues celtiques I p. 31* ff.).
§ 516–518. Indg. tenues, mediae and mediae asp. in O.Irish.

The Þ in the latter form denotes here, as also elsewhere, a voiceless spirant.

ss (whence further also s) from ts in the prim. Kelt. period. O.Ir. 1. pl. of the s-fut. messimim to midium 'I judge'. Fut. ro-fessur 'I shall know', rt. yejít-. Future stem ssís- i.e. *syend+s- (syend-'drive, hunt') 1. sg. cu-du-se[s]-sa, fut. sec. 1. sg. du-sésaimn (Thurneysen Kuhn's Ztschr. XXVIII 148).

ss from t't. inf. mess 'a judging', orig. form *met'tu- i.e. med+tu-. Inf. fiss 'a knowing' i.e. *yid+tu-. It is uncertain whether this change be prim. Kelt., because of the Gallic spellings with Ð, as MEÐDVLYS beside Mesulcus (to O.Ir. mess).

O.Ir. -ss- fr. -st-. ro chloss 'was heard' fr. *klus-to-, cluas 'ear' fr. *kleys-ta- or *kloys-ta-, to cloor 'I hear', cp. Skr. śruś-ṛ-ḥ 'compliance', OHG. hlos-ein 'to listen' OS. klus-t 'a hearing'; O.Bulg. sluchē 'a hearing'. ais aês (gen. aiso aisa) 'age' fr. *aijes-tu-: cp. Gr. aîcç 'always'. is 'is': Gr. ἵστατι, tar-issiur I stand, stand still, sessam 'a standing': Gr. ἵστατι 'I place', Lat. sisto.

§ 517. kt became cht (χt) in prim. Kelt. O.Ir. ocht Cymr. wyth Corn. eath Bret. eiz 'eight': Skr. aṣṭa, Gr. ἑκτός 'right' as-rōracht 'surrexit': Lat. rōctu-s, rt. reg-. ro iar-facht 'he asked' (pres. iarmi-fog 'he asks') : Gr. ἵστατι, Lat. vōx, rt. yeq-. in-nocht 'laced noste': Lith. naktis.

Rem. ct was often written instead of cht in O.Ir.: oct rect etc. That cht (χt) was nevertheless spoken, is shown by Thurneysen Keltoromanisches p. 14 f., where the stage cht is also found for Gallic in the name Lucterius on coins (written Lucterius in Caesar).

ks = O.Ir. ss, s, Brit. ch, prim. Kelt. probably chs (χs). O.Ir. sessed O.Cymr. chuecheth 'sextus': Gr. ἵς, orig. f. *syeks. O.Ir. dess Cymr. deheu 'dexter': Goth. taíhsva, Indg. *deks-O.Ir. òs uas Cymr. uch 'above': Lith. ãuksz-ta-s 'high', rt. aug.-no tes 'effugiam' s-fut. to techim 'fugio', Lith. tekû 'I run', rt. teg.- x, xs, probably to be read as χs, appears in Gall.: Uxello-dánum 'Hightown', to O.Ir. òs uas; Dextiva, to O.Ir. dess.

§ 518. t and c were dropped before liquids and nasals (with 'compensation lengthening' after short vowels, § 620). cênl 'race': O.Cymr., cênl, suffix -tlo- (§ 110 p. 104). -andl 'breath':

rec (rcht) was simplified to rt : ro ort 'delevit', part. timm-orte 'compressus', to orgun 'occisio' (rt. ergh-, cp. § 552).

Correspondingly rcs to rs, whence rr (cp. § 574) : 3. sg. of the s-fut. orr, of the same verb.

§ 519. The mediae generally preserved their form of articulation in prim. Kelt. In O.Ir. they remained mediae in absolute initiality likewise after r and l, g also after nasals. These medial mediae were also written (bb), dd, gg or (p), t, c after r and l, in order to indicate that they were not to be spoken as spirants (§ 522) 1).

d. dër 'tear': O.Bret. dacr, Gr. δάχυς. cerd cerdd cert 'artist, smith': Cyth. cerdd 'art', Gr. κέρδος 'gain', Lat. cerdō 'workman'. See § 372.

g, g. gein 'birth': Cymr. geni, Skr. jin- Av. zan-, rt. jen- gair 'call': Cymr. gawr, Skr. gir-, rt. gar-. biu 'alive': Cymr. byw, Goth. gius Lith. gýva-s, Indg. *gi-u-s. garg gargsg 'rough, wild': Gr. γόγγος 'spirited, wild'. sarg sargg sere 'a passing away, decay, illness': according to Windisch to OS. svercan 'to become obscure, gloomy'. ferg fere 'anger': Gr. ὕπνοι 'impulse, feeling, disposition'. bongaim 'I break, reap': Skr. babhánja 'he broke'. See §§ 391. 434. 437.

g remained also after d = Indg. s, see § 521.

§ 520. The media d in the prep. ad- = Lat. ad was assimilated to a following voiceless consonant, e. g. -acciu 'I see' fr. ad+ciu.

mb, nd became mm, nn. The O.Ir. monuments frequently preserve mb, nd beside mm, nn, probably contrary to the then living pronunciation. camm 'crooked': Cymr. cam 'crooked' Bret. kamm 'crooked' Gall. cambo-, Gr. σκαμβός-

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1) An example for ë, ëë, p = Indg. b is wanting. But cp. orbe with Indg. ëh § 524.

§ 521. O.Ir. *net nett Cymr. *nyth 'nest' fr. *nizdo- through the intermediate stage *neddo-. Cp. medy Cymr. *maid 'whey', fr. *medgyá, older *mesgyá, Gallo-Lat. mesga 'whey', according to Thurneysen Kuhn's Ztschr. XXVIII 152 to Slav. možgú etc., hence uncertain, whether Indg. *zg or *zgh (§ 450). See § 595. It seems to follow from Cymr. *cred that Indg. *kred dē-, which is to be presupposed for crel-lim 'credo' and the Skr. and Lat. related forms (§ 507 rem.), had not passed through *kreda-to *krezd- in prim. Kelt., but that the nearest older form *kredd-rather came direct from *kred *d(h)-.

Here may further be mentioned *ro-sétar 'I have experienced, know' fr. rt. *yeid-, which Thurneysen Kuhn's Ztschr. XXVII 174, XXVIII 151 regards as an s-aorist: *yides-ar gave rise to *fedśar (§ 634), and this to fetar, since d remained an explosive before s, or h (§ 576).

§ 522. b, d, g became spirants after vowels: ã, ð, ã. The letters b, d, g were generally retained for these (bh, dh, gh in the modern orthography), on the other hand a double media or tenuis was written in cases where the sound had remained explosive (§ 519). ph f, th, ch were more seldom used to express b, d, ã (Zeuss-Ebel' Gr. C. p. 62 sq.).


*ng* = Indg. *nog* had been dropped before *n* in *buain* 'a harvesting, reaping', inf. to *bongaim* 'I break, reap’ (§ 519).

Assimilation of *ng* to following *m* with lengthening of the preceding vowel. *cēnum* ‘a striding, step’, to *cingim* ‘I stride’ (to *Gr. σχισσω* ‘I limp’?). Analogously *grēnum* ‘progressus’, to *in-grennim* ‘I pursue’ fr. *grend-* with original *dh,* § 526.

§ 524. The mediae aspiratae fell together with the mediae in prim. Keltic, as in Iranian (§ 481) and in Baltic-Slavonic (§§ 542, 549). The laws, which obtain for the Indg. mediae (§§ 519—523), thus operated here also.

Media appears initially after *r* and *l,* *g* also after *n* (*ŋ*):


§ 525. Ir. mm, nn from mb, nd = Indg. mbh, ndh, cp. § 520. imm, imb 'about, around': Gall. ambi-, Gr. ἀμβι-: imm 'umbilicus': Gr. ὅμῳλος Lat. umbilicus-: in-grennim 'I pursue': O.Bulg. гърда Goth. gridi-. It is doubtful whether honn bond 'solea' belongs here or to § 520, since this word seems to have had in prim. Indg. partly dh (Skr. buddh-ā-s) and partly d (Gr. πῦνδαξ) (§ 469, 8). mm fr. mb = Indg. weg in imm imb 'butter', see § 438 b.

A sure example for nn fr. bn = Indg. bhn (or ghn) is unknown to me. tamam 'stem' may belong to Skr. stambh-, with which it is generally connected, but the root had in prim. Indg. partly bh, and partly b (see § 469, 8), besides we probably ought to start out here from an original mb(h)n (cp. buain with weg § 523).

To the form net 'nest' (§ 521) corresponds brot 'prick' fr. prim. Kelt. *broso-s, the d of which was Indg. dh, as is shown by Agr. brord O.Icel. broddr 'prick'. See § 595.

§ 526. b, d, g as spirants, cp. § 522.

bh. tri-b 'tribus': Skr. -bhiṣ. See § 341.

dh. riad 'a riding': O.Icel. rída. See § 373.

gh, gh. ligur 'tongue': Lith. liši, rt. leigž-, lige 'bed': O.Bulg. lega, rt. legž-. snigid 'it drops': Gr. ντετ, rt. sneigž-. See §§ 392. 434. 438.

Dropping of b, g, as in § 523. Reduplic. fut. do-bér (do-biur 'I give', rt. bher- 'carry, bear') fr. *bebr-. nel 'cloud' fr. *neblæ- : OHG. nebula O.Icel. nis-, Gr. νεφέλην. fen 'waggon, cart' : O.Icel. vagn 'waggon', rt. veð-.

græimm fr. *grend-men has already been mentioned in § 523.

Germanic.

§ 527. History of the tenues.

p, k (kμ) before t and s became f, χ (χν) in prim. Germ. similarly as in Iran. (§ 473), Umbr.-Samn. (§ 502) and Keltic (§§ 339, 515, 517 1).

1) Cp. also Mod.Gr. ἑρτα χάφτα, ἑχτα νότα.
Indg. tenues, mediae and medine asp. in Germ. § 527.


The shifting of ts and tēt began simultaneously or even earlier; we put the latter for the prim. Germ. period in place of tēt, see § 469, 4.


tēt became ss except before r, whence s after a long syllable. Goth. ga-gissi- (nom. ga-giss) 'agreement', to qifan. Goth. us-viss- 'unbound', to qifan. OHG. gi-wis 'certain, sure' adv. gi-wioso : Gr. α-νορος 'unseen, unknown', cfp. *yis'to-s i. e. *yid+to-, rt. yejd-. Ags. O.Icel. sess m. 'seat' : part. Skr. sattā-Av. hasta- Lat. ob-sessu-s, Indg. *set'to-s, rt. sed-. Goth. missa-in missa-dēps 'misdeed', OHG. misen O.Icel. missa 'to miss', to OHG. mīdan 'to avoid, intermit' : Lat. mīto fr. *mītō (§ 612), part. missus.

s from ss after long syllables. Goth. un-veis (gen. -veisis) 'unknowing', OHG. wīs O.Icel. vīs-s 'wise' : Lat. vīs-us, 'orig. form *yīt'to-e, rt. yejd-. OHG. as n. 'carrion' : Lat. ēsun-m, orig. f. *ēl'to-, rt. ed- 'eat'. 
The proper names Chattus (with Lat. ending) OHG. Hassi Hasso (to Skr. ād- 'to distinguish oneself, Gr. Dor. ἐκκαθήμενος?') and Lango-Bard. Tatuo Tasso i.e. ‘regulator, distributor’ (Goth. ungatass ‘disordered’ Ags. tass ‘acervus, congeries frugum’, Gr. διάρειομαι) seem to show that tḥt had become ss, s through the intermediate stage tḥ.

st arose before r. Goth. blōstreis ‘sacrificer’ OHG. bluostar ‘sacrifice’, to Goth. blōtan ‘to sacrifice’. Ags. föstor O.Icel. fōstr ‘maintenance, support’, to Goth. fōðjan ‘to feed, nourish’, Gr. παρείμαι ‘I eat’. The course of development seems to have been tḥt, ṭḥt, st.

Rem. 2. The Lat. development (cp. § 501 rem. 8) renders it improbable that the course was ssr, sr, str (cp. § 580), as is assumed by Kluge Paul-Braun’s Beitr. IX 150. 157.

Rem. 3. Where st occurs in other positions than before r, they are new formations, e. g. Goth. kąnpasta pret. of kąnpatjan ‘to box one’s ears’, OHG. wista beside wissä ‘I knew’, wursät ‘sausage’ from rt. gerti-‘turn’ (after viriusi ‘loosa’ etc.). Cp. § 501 rem. 2.


§ 528. A general shifting of the still remaining tenues to voiceless spirants, e. g. Indg. *potér- ‘father’ to *father-, and *peku ‘cattle’ to *fexu, probably did not take place until after
the tenues had modified their original manner of articulation in the position before \( t, s \) (\( p \)) and \( k \) (§ 527).

The only exception to this law is that the tenues stood in combination with preceding spirants: \( sp, st \) (\( = \text{Indg. } st \) and \( = \text{Indg. } t\!t \) before \( r \), see § 527), \( ft \) (\( = \text{Indg. } pt \) and \( qt \), see § 527), \( \chi t \) (\( = \text{Indg. } kt \) and \( qt \), see § 527), \( sk \) (\( = \text{Indg. } sk, sq \) and \( \text{Indg. } tg \), see § 527). Cp.: 


Rem. 1. The combination skr- probably lost its k already in the prim. Germ. period. OHG. slōgan 'to shut' O.S. slūtil 'key': Gr. κλεῖς etc., see § 425.


It is however quite possible that the tenues first underwent the same affection after spirants as in other cases and then after that became explosives again; that is Indg. *ēsti became *iṣṭi and then *isti (Goth. ist). Cp. 2. sg. last (lisan 'to collect, gather') fr. *las-þa (§ 541, 7), OHG. cumft fr. *kmfti- (§§ 214. 529) and Goth. huzd 'treasure' fr. *huza-da-n (§ 538).

§ 529. The voiceless spirants in *faþér 'father' etc., which had arisen according to § 528, remained voiceless spirants initially in prim. Germ., and also medially if the sonant next preceding
received the principal accent (according to the old Indg. accentuation, § 686). The fricative sound of χ was reduced initially before vowels, and perhaps also medially under certain circumstances (not before consonants).

Gothic.


German.

$f$ remained. OHG. fater ‘father’. OHG. nēfo, op. Ags. nēfa O.Icel. nēfe nēfi ‘relation, nephew’ : Skr. nāpāt ‘descendant’, Indg. *nēpōt-. $b$ became $d$, this remained down to the time of the OHG. monuments, and was represented by th (more rarely dh). In the course of the OHG. period however it was developed to $d$ in different parts at different times (first in Bavaria during the eighth century). OHG. thorn dorn : Goth. ḫuṁnu-s, O.Bulg. trīnu. OHG. brōther bruoder ‘brother’.

The letter $h$ appears for prim. Germ. χ in HG., as in Goth. The sound was merely an aspirate in every case initially, and medially certainly at least between vowels. OHG. hūnt ‘hundred’. OHG. fahan ‘to catch’ : Goth. fahan, prim. Germ. *fahxana-n (ep. § 214 p. 182). The $h$ in initial hu, hr, hl, hn disappeared from the eighth century onwards, earliest in hu, e. g. hwaʒ weʒ ‘what’ : Goth. weja; hilimmunt hilimmant ‘renown’ : Goth. Minna m.
‘hearing’, rt. *kle−. Spellings like Chlodovichus (Hludwīg) show that the value χ still prevailed in the fifth and sixth centuries.

West Germanic consonant lengthening (gemination) through following ë. OHG heffen OS. hebbaia ‘to raise’; Goth. hafjan, Lat. capio. OHG klählen Ags. klīhhan ‘to laugh’; Goth. klāhjan. Cp. §§ 532, 535, 540 and the similar doubling of nasals and l §§ 216, 277.

węb seems to have become mwfb mft. OHG. cmuft ‘a coming’ (Goth. ga-quant-), numuft ‘a taking’, ramuft ‘edge’, MHG. bruuft ‘rutting time of the red-deer’ (nu from mu). Cp. §§ 214, 528.


§ 530. Medial f, b, χ (χw) became b, d, ʒ (ʒw) in prim. Germ. — and at the same time s became z (§ 581) —, when the next preceding sonant did not have the principal accent (§ 529) or t, s directly followed (§ 527). This phenomenon is called ‘Verner’s law’ (see Kuhn’s Ztschr. XXIII 97 ff.). The Indg. tenues, which were thus affected, fell together with Indg. bh, dh, gh, gh (§ 538) and underwent all further developments in common with these.

b, d, ʒ (ʒw) became b, d, g (gu) after nasals, very probably in the prim. Germ. period, and ʒw became s after vowels (§ 444 c).

These voiced spirants also became mediae after r, l in Gothic, while in other cases they remained spirants, but were not distinguished from mediae in writing.

The West Germanic dialects changed every other remaining ë to d. Then in Upper Germany and East Franconia d became ɭ (which partly suffered further affections that need not be taken into consideration here), elsewhere it remained. b and ʒ became b and y in HG. (while they remained spirants in other West Germ. dialects), and these became p and k in Upper Germany, but not universally.

Ags. be-līfe (f is to be read as b). OHG. noba 'festival' uobo 'colonus', to Skr. āpas- 'religious work' Lat. opus.


Verner's law is of special importance for the proper understanding of the 'grammatical change' in the verb. In this respect the West Germ. dialects show a variety of more archaic relations.
than Gothic, since the regular differences had been levelled out in this language by form-transference. To Skr. várthi 1. sg. pres., vavártha perf. indic. 3. sg., vantartha 1. pl., vantartha-part. from rt. vart- 'turn' corresponded prim. Germ. *wérþo, *wérpi, *wurðumi, *wurðaná-. From these regularly Ags. weord, weard, wurdon, worden OHG. wirdu, wurd (wirthu, wirth), wurtum, wortan. On the other hand Goth. wairþa, varþ, vaírþum, vaírþans, regular á (cp. fra-vardjan) having been supplanted by h in the two last forms. OHG. regularly ziuhu, zōh, zugum, zogan (rt. deiuk- 'draw'), but Goth. tiuha, tâuh, taíhum, taíhans, the two last for *tugum, *tugans (3), etc.

On prim. Germ. (3)u = Indg. 9 in Goth. siun OS. siun 'countenance', OHG. part. -liucan 'lent' etc. see §§ 441. 444 c.


The nasal in these intensives was the nasal of the present stem-suffix -nd (Gr. δύκν-νδο μη etc.). On the other hand e.g. OHG. smoccho Ags. smocc O.Icel. smokkr 'underdress' (beside the'intens. MHG. smücken 'to bevel, dress, adorn' to MHG smiegen 'to press tightly' O.Icel. smjúga 'to creep through': Lith. smukti 'to slide, glide' O.Bulg. smyktati se 'to creep') contained a nominal weak stem-form *smuq-n- (cp. Gr. ὁδόν- 'ram', Skr. ud-n- 'water'),
which underwent various transformations by analogy, after the strong forms *smug-βn- etc. had died out (s. Kluge in Paul-Braune’s Beitr. IX 169). Cp. §§ 214. 534. 538.

§ 531. The voiced spirants, which had been received from prim. Germ., passed into the corresponding voiceless spirants in Goth., when they came to stand finally or before s. Nom. masc. tamīps ‘domitus’ neut. tamīp ‘domitum’ beside gen. tamīdis (d) ‘domiti’ etc. 3. sg. pres. bairīp ‘bears’ fr. *birid(i): Skr. bhrātī. of beside ab-u with b (-u interrogative particle). 3. sg. pret. bi-lājī (bi-leība [b] ‘I remain’) fr. *-lād(i), a new formation for prim. Germ. *lājī = Indg. *le-lōj-p-s. The letter g was retained to express χ, see § 539.

b, d, g, which are to be read as mediae after consonants, probably became tenues in the same position, but this change was not represented in writing. Part. nom. nasjandles acc. nasjand ‘saviour’ from prim. Germ. *-andu-z *anda-n. 3. pl. nasjand ‘they rescue’ prim. Germ. *-andi. Nom. alds ‘age’ prim. Germ. *ald-s. Nom. masc. juggs neut. jugg ‘young’ prim. Germ. *wogá-s *-wogá-n.

§ 533. History of the mediae.
These became tenues in prim. Germanic, except d in the Indg. combination d’dh.

Gothic like the other Germ. languages, except High German, retained these tenues.

b. diups ‘deep’: Lith. dubû-s, rt. dheyb-. See § 343.

The character of these sounds remained unchanged in West Germanic in the period of the prim. community. In HG. however they underwent further shiftings.

In Upper and Middle German dialects p became pf (written pf and ph) initially and after consonants, but ff (f) between vowels. This pf became f (ff) initially in certain dialects and in most of them medially after consonants. OHG. pflegan flegan (Renish-Franconian plegan) ‘to care for’: OS. plegan ‘to promise, pledge’, perhaps to Gr. βλέπων ‘eyelid’ (Kluge Et. Wörterb.). OHG. werpfan werfan ‘to throw’: OS. werpan, Goth. wairpan with p fr. Indg. g, see above. OHG. slaf (gen. staffles) ‘slack, lax’: Du. slap; OHG. slaffan slafan ‘to sleep’: OS. slapan, Goth. slöpan, O.Bulg. slabû ‘slack, weak’, rt. slēb-. OHG. scaffon ‘do, make’: O.Icel. skapa (beside this OHG. scepfen ‘to scoop’: OS. skeppian, see § 535); this category has been ascribed to the rt. sqab- in Lith. skabû-s ‘cutting etc. (§ 346), the intermediate meaning being regarded as ‘to bring to pass by hollowing out’.

t became z, that is ts, in HG. initially (except before r) and after consonants (except after s); after vowels it became the voiceless spirant žž (ʒ), see § 375. OHG. siohan ‘to draw, pull’: OS. tiohan, Goth. tiuhan. OHG. herza ‘heart’: OS. herta, Goth. håirtō. OHG. smelzan ‘to smelt, melt, become liquid’ smalt n. ‘grease’: Ags. smolt ‘soft, quiet’, Gr. μέλλω ‘I soften,’
melt'. OHG. wizzan 'to know' wiez 'I know': OS. witan weiz, Goth. vitan vát.

Initially OHG. tr- = Goth. tr- : trinuca 'fidelity': Goth. triugeva, Pruss. druwi (§ 375); on the spelling dr- for tr- in Franc. sources, as druuna, see Kögel Keron. Gloss. 70 f., Zu den Murbacher Denkm. (Leipz. 1883) 13 ff.


< OHG. quívalón beside zweifalón 'to doubt': Goth. zweiflís.

See § 375.

k became kx (written cch, ch etc.) in Upper German initially and after consonants (except s), whilst it remained k in Middle Germ. It became χχ, χ (kk, k) universally between vowels. OHG. chorn korn 'corn': Goth. kaúrn. chniu kniú 'knee': Goth. kniú. chweuman queman 'to come': Goth. qiman. werch werk: OS. werć, Gr. γώγο-ν. Dunn thank 'thought, thanks': OS. thanc, Goth. þagcs, Lat. tengo 'I know'. wakhén 'to wake': OS. wakóñ, Goth. vakan, Skr. vajáyati 'urges on, drives on'. dah, gen. dahhes, 'roof': O.Icel. þak, Lat. tegó.

OHG. masca OS. màska 'mesh, stitch': Ags. masce, O.Icel. mòskve mòskvi, Lith. mezyt 'I knit' màzgas 'knot', rt. meźg-

§ 534. bn, dn, gn became bb, dd, gg before the principal accent in prim. Germ., thence by § 533 pp, tt, kk, which were further treated just the same as the pp, tt, kk (§§ 530. 538) which had arisen from Indg. pn, tn, ën gn and from Indg. bhñ, dhñ, ghn ghn. OHG. topfo 'top' MHG. topf 'pot' (Rhenish-Franco. topp), Ags. doppa 'mergus', to Goth. þiups, rt. dhegb-. MHG. rufsen röpfen 'to pluck' (Rhenish-Franco. roppe), to OHG. roufen Goth. ráupjan 'to pluck, tear out'; rt reýb- (§ 343). MHG. slutzén 'to push (with the horns), start back', to OHG. stózan Goth. stáutan 'to push', Skr. tuddami, Lat. tundó. MHG. slitten 'to slit', to OHG. stízan OS. Ags. slitán 'slit, split', rt. sleød-. OHG. loc loch (pl. loccha) MHG. loc (pl. locke) 'lock, ringlet', Ags. locc O.Icel. lokkr =. Lith. lugna-s 'pliable', to Gr. lévo-s 'pliant twig or rod' láyó 'I bend, tie' OHG. slúccho,
slukko 'glutton' MHG. slucken 'to gulp, have hiccup', to Gr. λύγω λυγυγόμαι 'I have the hiccup'.

§ 535. The prim. Germ. tenues, which had arisen from Indg. mediae, became pp, ut, kk (gemination) in West German. not only before ʒ, but also before r, l and w. pp became pf (Rhenish-Franc. pp) in HG.; tt became zz before ʒ, but remained before r, kk became kx in Upper German, but remained in Middle German. OHG. scsepfen 'to scoop' (Rhenish-Franc. schepp), OS. skeppian, see § 533. OHG. lezzan MHG. letzan 'hinder, hurt', OS. lettian Ags. lettan: Goth. latjan, rt. löd- 'leave, let'. OHG. ottar 'otter' (on the anaptyctic a in this and the following forms see §§ 277, 628): O.Icel. otr pl. otrar, Skr. udra-s 'water animal', Gr. ὑδρο-ς ὑδρα 'water serpent'. OHG. OS. bittar 'bitter': Goth. bitr (ablaut difference *bhidro-:*bhojdro-), to Goth. bitan 'to bite'. OHG. hättar 'clear, pure', Ags. hitätor: Goth. hättr, Gr. κλύσω fr. *κλυτ-ω 'I wash out, clean'. OHG. wocchen woken to wake', OS. wekkian: Goth. wakjan, O.Icel. vekju, to OHG. wahhen etc., see § 533. OHG. acchar accar 'acre, field', OS. accar: Goth. akr, Gr. ἀκρό-ς. OHG. facchlu facchala faccala 'torch', it is doubtful whether it was borrowed from Lat. facula...OHG. nacchot naccot 'naked': Goth. naqaps, Lat. nādus fr. *no(g)yedo-s, Skr. nagnā-s (§ 432 e). OHG. chuccher quekker infl. adj. form 'alive, quick' : O.Icel. kykr acc. kykean, prim. Germ. *kyikya-, beside Goth. guj-s (st. giwa-). On the loss of the w after medial k in OHG. see § 180. Cp. §§ 529, 532, 540.

§ 536. The d in dzdh became assimilated to the following z'in prim. Germ. Goth. huzd 'treasure' OHG. hort, Indg. *kuādho-. Perhaps also Goth. gads 'sting, prick' OHG. gart 'rod, switch' O.Icel. gaddr 'sting': Lat. hasta. See §§ 469, 5. 507, 538.

Rem. Osthoff (Morph. IV 262 f.) attempts to adjust Goth. uz- OHG. ur-ar- (Mod.HG. ur-er- in ur-teilest er-teilen) to Skr. ud and Goth. .GetInstance OHG. əg 'out' by assuming that the form arose regularly in compounds like Goth. uz-dreiban (for *uz-dreiban) 'to drive out'. Cp. Av. uz § 476. OHG. ort OS. ord O.Icel. oddr 'point, top', fr. *ud-ōðhē 'put up, lift up'?

The z in Goth. uz- became assimilated to a following r, as ur-reisan 'to rise up'.

§ 537. History of the mediae aspiratae.

In prim. Germ. they first became the voiced spirants b, d, ʒ (ʒw).
1. Initially. In the course of the individual dialects they were shifted to medieae; in Gothic all three in prehistoric times; in West Germanic b and d in all branches likewise in prehistoric times, whilst ʒ remained as ʒ in OS. and Ags. down to historic times; in the period of the oldest runic monuments all three were still spirants in Norse. In HIG. b and g were further shifted to p and k in Upper Germany, d was shifted to t both there and in East Franconia.


dh-. Goth. dags 'day', OHG. Rhenish-Franc. dag East Frane. and Upper Germ. tag OS. dag Ags. dæg, O.Icel. dayr runic. dagr (read dagær): Lith. dėga-s, rt. dheg-. See § 376.

gh gh. Goth. *gans 'goose' (from which Span. ganso was borrowed), OHG. gans Upper Germ. kans Ags. ʒōs, O.Icel. gās: Lith. ęqis-s. Goth. gasts 'guest', OHG. gast Upper Germ. cast OS. gast (ʒ) Ags. ʒiest, O.Icel. gestr runic. gastik (ʒ): Lat. hostis O.Bulg. gostī. In ʒu- (= Indg. gh- ʒ-) was dropped already in prim. Germ.: Goth. varmnian 'to warm', OHG. warm O.Icel. varmr 'warm': Skr. ghrmā-s. See §§ 395. 439. 443.

§ 538. 2. Medially. The Indg. medieae aspiratae, through their being developed to voiced spirants, fell together with the Indg. tenues according to § 530, and thus the laws given in §§ 530—532 operated here also.

The following forms, in the first place, are to be judged of by § 530.

bh. Goth. liuba- (b) 'dear', OHG. liubo adv. 'with pleasure' Ags. leōfost 'dearest' (ʃ is b), O.Icel. lyfr 'dear' (ʃ is b): Skr. lābhyati 'fosters a vehement longings', rt. leubh-. Goth. kalbō 'female calf', OHG. chalba f. chalb n., Ags. cealb (b) n., O.Icel. kalfr (b): Gr. δελφός δελφιν 'womb' δέλφις 'pig'. OHG. chamb (gen. chambes) 'toothed instrument, comb', Ags. comb : Skr. jāmbha-s 'tooth', Gr. γομφος 'plug, peg, pin, nail', O.Bulg. zabū 'tooth'.

dh. Goth. ana-biudan (d) 'bid, command', OHG. biutan


On prim. Germ. (ʒ)u in Goth. suavies fr. orig. *snoigho-s and similar forms see §§ 443. 444 b. In the cases there quoted prim. Germ. ʒu was the labialised form of Indg. gh. The same loss of a suffix at -u- occurs in prim. Germ. *ma(ʒ)u-ā 'girl' (Goth. mani, gen. màui̯ds), to masc. Goth. magu-s 'boy, child, servant' = O.Ir. mu̯g 'slave, servant'; cp. Skr. sṿād-u-ā fem. to svād-ā-ṣ 'suavis'.


§ 539. A change of b, d, ʒ to f, ʒ, x (g) in Gothic, cp. § 531. Masc. nom. liufs acc. liuf 'dear' beside gen. liubis
§ 539—541. Indg. tenses, mediae and mediae asp. in Germ. 9

(b). ráuþs ráuþ ‘red’ beside gen. ráudis (d), rt. reyðh-. vigs vig (χ) ‘way’ beside vigans (ʒ), rt. yegg-

Pret. svarb to scairban ‘to wipe from’, rt. syerbh-; prot. band, to bindan, rt. bheudh-; gild n. ‘tax’, to fra-gildan ‘to requite’, rt. gheldh-; gagg sagg ‘way’, street; láuma-vargs ‘unthankful man’ -varg are parallel to the forms like nasjands nasjand etc. in § 531. The forms gazds, huzd (st. gazda-, huzda-) were accordingly possibly pronounced with st.


§ 541. Chronology of the prim. Germ. shiftings of the explosives. The following is probably the order in which the chief acts of the prim. Germ. shifting of the Indg. explosives took place; we include at the same time the history of the Indg. tenses aspiratac, which will be more fully discussed in § 553.

Act 1 (or 2). The aspirates become spirants. bh, dh, gh become b, d, ʒ, e. g. *bheudhō becomes *beydō (Goth. biuda), see § 537. ph, th, kh become f, ð, ɣ, e. g. 2. sg. perf. *le-lós-tha (rt. les- ‘gather together’) becomes *(le)-lasþa (Goth. last), *nokh-ló- ‘nail’ becomes *naglę- (OIHG. nagal), see § 553.

Act 2 (or 1). p, k become f, ɣ before t and s, e. g. *rekto-s ‘right’ becomes *rekto-s (Goth. rahtis), see § 527.

Falling together of the tenses asp. with a portion of the tenses.

Act 3. The tenses become voiceless spirants elsewhere, p, t, k become f, ð, ɣ, e. g. *petēr, *brēðōr become *frēþr *frēþr (Goth.فادar, brōfar), see § 528.
Falling together of a further portion of the tenues (eventually of all tenues, see the end of § 528) with the tenues asp.

Act 4. The voiceless spirants become voiced by Verner's law, f, ň, ř become b, ď, ž, e. g. *nažlá- becomes *nadjá-, *fačér becomes *fáčér, see § 530.

Falling together of tenues asp. and tenues with the mediae asp.

Act 5. The b, ď, ž, which had arisen from mediae asp. and tenues, assimilate a following n before the principal accent: bb, dd, źź, e. g. pres. stem *liž-nó- 'lick' (Indg. *liž-nó-) becomes *ližnó- (O. Sc. leçrón), noun stem (weak) *smus-n- 'dress' (Indg. *smus-n-) becomes *smusn-, (O. Icel. smokkr). Indg. b, ď, g with a following n simultaneously become bb, dd, gg when the accent is in the same position, e. g. *lug-nó- 'lock, ringlet' (Indg. *lug-nó-) becomes *läggu- (O. Icel. lokkr). Then bb, dd źź become bb, dd, gg: *ližnó- *smusn- become *löggu- *smugg-. See §§ 530. 534. 538.

Falling together of mediae with tenues and tenues asp.

Act 6. The mediae become tenues, b, ď, g become p, t, k, e. g. *deyśō 'I draw' (rt. deyk-) becomes *teyšo (Goth. tiuha), *azda- 'branch' becomes *asta- (Goth. asts), *löggo-, *smugg-, *lugga- (see 5.) become *likkō-, *smukk-, *lukka-. See § 533.

Act 7. šp, zd, mb, nd, wq become st, zd, mb, nd, wq, e. g. *(le-)laspa (1.) becomes *lasta (Goth. last), *mizdō- 'pay, reward' becomes *mizdō- (Goth. mizdōn-), *(be-)bande 'he bound' becomes *bande (Goth. band). See §§ 530. 538.

Rem. That šp first became st at this period, is only deduced from the change of zd to zd, which cannot have taken place earlier. Here belongs eventually also the origin of the tenuis in Goth. speiwan, ists etc., see § 528 (end) and 3 above.

Baltic-Slavonic.

§ 542. The Indg. tenues and mediae remained in the period of the Balt.-Slav. prim. community, while the mediae aspiratae, as in Iran. (§ 481) and Kelt. (524), became mediae and thus fell together with the Indg. mediae.
Indg. š, ž, ʒ were š-sounds in this period. See § 412.

§ 543. History of the tenues, prim. Balt.-Slav. p, t, k and š. These sounds generally remained unshifted.

p. Lith. plūna-s O.Bulg. plūnui 'full': Av. per'na-, rt. pel-.
See § 345.

Lith. tė O.Bulg. tě 'the' acc. : Skr. tā-m. See § 377.
q. Lith. kū-s O.Bulg. kū-to 'who?': Skr. kā-s. See § 462.

Lith. svit-či O.Bulg. svit-či 'to shine': Skr. śvīt-rā-s, rt. kyejt-.
See § 413.

§ 544. The assimilation of Indg. ts to ss, of Indg. t' to st and of Indg. ės to ės seems to have been effected in the period of the Balt.-Slav. prim. community.

ts to ss. Lith. ėsiu 'I shall eat': cp. Skr. fut. atsyāmi, O.Bulg. 2. sg. ėsul 'thou eatest': cp. Skr. ėtsi, O.Bulg. aor. ėsul 'I ate' fr. *ēt-s-o-m, pl. ėsuls 'manger' fr. *ēt-slo-, rt. ed- 'eat'. Lith. mēsiu fut. to metū 'I throw'. Lith. kiši Waiting fut. to kertū 'I hew sharply': cp. Skr. kartasyāmi 'I shall cut', rt. gert-. Lith. krisla-s 'crumb, scrap', tc krīntū (pret. krītatt) 'I fall'. O.Bulg. čisul s-aorist 'I counted' čislo čismu 'number', to čitq 'I count'. Lith. part. vež̄s 'vehens' fr. *męḡhont-s = Skr. vāhan; the corresponding forms of O.Bulg. probably also came from Indg. *ont-s, as vezy 'vehens' spējā 'hastening', cp. acc. pl. vež̄ky 'lupus', konjč 'equos' from *-ons (§§ 84. 219).

It may be concluded that this ss = ts had not yet entirely fallen together with Indg. s in prim. Slav., since s = ts did not become ch as was the case with Indg. s (§ 588, 2). Forms like 1. sg. jachū 1. pl. jachomū 3. pl. jas̄ post in jasul jasonū ėsul (s-aorist from rt. jad- 'eat') were later formations (§ 588 rem. 2).

t't to st. Lith. viš̄sti 'to fall down, change', O.Bulg. vrīsta 'state, condition': Lat. part. vorso-s, Skr. vṛttā-m 'state, situation', Indg. *vṛt'tū-, rt. vṛtt-.

Lith. ėst O.Bulg. jastā 'eats': cp. Lat. ėst Skr. ėtti. Lith. dūst O.Bulg. dūstī 'gives': cp. Skr. 3. sg. mid. dattē, from the reduplic. root dā- 'give'. Lith. pėsčias 'being on foot' first of all from *pėstia-s (§ 147), to pėdu 'foot-
step'; on the East Lith. form *pëščia-s see § 587, 3. O.Bulg. čisti 'honour', to čitq 'I count, reckon, honour'.

ks became šš. Lith. ašši-s O.Bulg. osči 'axis': Lat. axi-s. Lith. deszinę 'right hand' O.Bulg. deszini 'dexter': Skr. ákṣiṇa-Av. dāśina-. See § 414.

With the reduction of ss to s and šš to Lith. ss O.Bulg. s, compare that of prim. Balt.-Slav. ss = Indg. ss to Lith. O.Bulg. s, as Lith. lėsiu fr. *les-siv, fut. to lešū 'I pick up, peek at', O.Bulg. otiți-trc-s, fr. *trc-s, s-aorist to otiți-trcštq 'I shake off'. See § 585, 3.

Further the loss of the dental in Lith. ašzma-s 'octave', Pruss. asma-n acc., O.Bulg. osmyti might also be prim. Balt.-Slav.: cp. Skr. aştamā- O.Ir. otrzymał.

Lithuanian. In forms like partic. pres. act. āpda-ma-s (liptū 'I climb, mount'), vilkda-ma-s (velkū 'I trail, drag') the pronunciation has apparently fluctuated for centuries between pd, kd and bd, gd in some parts of Lithuania. Analogously mėnda-ma-s and 'mėzdama-s. to metū 'I throw'. This phenomenon is easily explained from the fact that the constant striving after assimilation has been again and again counteracted by the feeling of relationship between kindred forms, e.g. šipti ĺpsių etc., vilkti vilksiu etc., mėsti etc. Cp. the fluctuation between pšių and pėsių § 218 : rem.

Rem. 1. The change between āugi (inf.) āugsiu (fut.) and āukti āuksiu (pres. āugu 'I grow'), between dirtō dirbsiu and dirpī dirpsiu (pres. dirbū 'I work') etc. in Lithuanian writings is merely of an orthographical nature, only kt ks pt ps is spoken everywhere. Cp the phonetically inexact Mod.HG. spellings like sāge, rauēte, slūgs.

The simplification of consonantal groups is rare, as desziniš beside desziņts 'ten'.

Rem. 2. It is not certain whether naktōju 'I pass the night with', naktēnë 'night quarters' belong here, since naktōju, naktēnē, existing side by side of these and regarded as the original forms, might have got their t from naktē-' an older stem *nogtu- is by no means proved for certain through Lat. noctū (see the author in Ber. d. sächs. Ges. der Wiss. 1883 p. 192).

sztr from szr in asztrē-s 'sharp' beside aszru-s (Dowkont): O.Bulg. ostrī 'sharp' from *osrī (§ 545), Skr. áśri-ś 'corner',
Gr. ἀκοῖς 'pointed'. It is however questionable whether the Lith. word has not acquired its t through the influence of the corresponding Slav. word.

§ 545. Slavonic. On prim. Slav. ě, ě from k = Indg. g, prim. Slav. тɔ' (O.Bulg. št) from kt = Indg. qt, prim. Slav. x (ch) from ks = Indg. qg see § 462.

Loss of tenues before following consonants (cp. § 281 rem. 3):

p disappeared before t, n, s in the prim. Slav. period. O.Bulg. netiʃy 'nephew, cousin' fr. *nepiʃy (§ 36) = Gr. ἀνεψιός, cpf. *nept-iʃ-o-s. po-ćrėti 'lade, scoop' fr. *ćerti *ćerpti, to 1. sg. pres. po-ćripq. Correspondingly greti 'to scrape, scratch' fr. *greetpti, to 1. sg. grebq with b = Indg. bh (§ 552). The forms po-ćrėstī -cristī -ćripstī and greti grebsti, met with in later monuments, were new formations, which seem to have arisen from a dislike — also met with elsewhere — for infinitive forms with short stem-syllable; the s was transferred from plesi nisi etc. sūnī 'sleep' from *sūmpū = Gr. ἕνυς-Γ. pri-šiŋq 'I stick to' from *-šiŋq, cp. pri-šiptī 'to stick to'; pri-šiŋq, which occurs beside pri-šiŋq in the literary monuments, had borrowed p anew from form-association. vosa 'wasp' fr. *uopūs = Lith. vapsa 'gad-fly', osina 'aspen-tree': Lett. apse Pruss. anse. Cp. also the s-aorist gresū, to grebq 'I scrape, scratch'.

t disappeared before l, n. O.Bulg. part. pret. pleli fr. *plet-li, to plelaq 'I twist'. This disappearance before l, like that of c before l (§ 548), seems to be old only in the southern and eastern dialects; in the western dialects prim. Slav. tl seems to have prevailed down to historical times, e. g. Upper Sorabian pletl = O.Bulg. pleli. Examples for the disappearance of t before n occur in all branches, as O.Bulg. o-svinatī 'to become light' fr. *svit-nati (cp. sviteti 'to shine'), Servian sranuti. Nevertheless I do not know whether this dropping of t is to be regarded as prim. Slav. Cp. dn § 548

k disappeared in the prim. Slav. period in pęlt ‘five’ = Skr. panakti-ś ‘the number five’ (cp. Av. panaṣṭha- ‘fifth part’ beside panca ‘five’, Lat. quintus beside quīnquē). This
reduction of *reqt to *rxt must be older than the change of
kt to *ttx'. K disappeared also in the prim. Slav. period in -kst-
(Indg. -qst-). 2. pl. of the s-aorist těste, to 1. sg. těču
= orig. *tēq-s-o-m (§ 462). In like manner plesi 'to twist'
from *plekstā i. e. *plekt+i (cp. Lat. plectō, OHG. flehtan),
gave the impulse to the new formations pres. plekn noun ploćā 'twist, plait' etc., forms, in which t cannot be
explained as having arisen phonetically from kt.

Loss of tenues between s+conson. O.Bulg. słožena słožena
'spleen': Gr. ἀπλήν ἀπλάγγραν. plesna ti 'to clap' fr. *plesk-naţi,
to pleskati 'to clap'.

Development of t as glide in sr = Indg. žr in prim.
Slavonic. O.Bulg. ostriţ 'sharp': Gr. ἅρρος etc., see end of § 544.
pōstrā 'variegated' fr. orig. *pik-ro-s: Skr. pōśmi 'I adorn, shape',
Gr. ἀνωκλη-ς 'variegated'. The same development occurs also
at a later period, e. g. O.Bulg. strīšen-ţi beside srīšen-ţi 'hornet,
gad-fly': Lat. crābrō (§ 303). Cp. Slav. str = Indg. sr,
§ 558, 2.

§ 546. History of the mediae, prim. Baltic-Slav. b, d, g and ż.

b. Lith. dūbūs 'deep, hollow', O.Bulg. dūbrē 'ravine, valley':
Goth. diups. See § 346.

d. Lith. dū-ti O.Bulg. da-ti 'to give': Lat. dōs dōtis. See
§ 378.

g. Lith. gliria 'forest', O.Bulg. gora 'mountain': Skr. giri-.
See § 463.

ę. Lith. šrni-s 'pea', O.Bulg. zrīno 'corn': Goth. kaūrn.
See § 415.

§ 547. The transition of diū(h) to zd(h) and of dm to m
seems to belong to the period of the Baltic-Slav. prim.
community.

The 2. sg. imper. O.Bulg. vēzdī 'see', vēzdī 'know', jaždī
'eat' from *yēzdī, *yēzdī, *ēzdī; the ĺ instead of ū arose from
a contamination with the optative forms which had -ē-
and were used imperatively (see Osthoff Morph. Unt. IV 387 and
the accidence). *yēzdī = O.Lith. vēzū(s) 'see'. The cpf. was
§ 547—548. Indg. tenuis, mediae and mediae asp. in Baltic-Slav.

*yējādi fr. *yējā*-dhi (with different, older root-vocalism Gr. ἔος and Skr. viddhi).

Rem. 1. O.Lith. veizā (s) coming to be on a level with forms like leidā (s) sedā (s), the z forced its way into the remaining forms of the verbal system also (first of all into the imper. pl.), hence veizāmī veizāžin instead of *veiðami *veiðšin, lastly into noun formations also, hence e. g. ap-*veižda-s 'providence' beside veiža-s 'face, countenance'.

It is doubtful whether O.Bulg. dažā 'give' imper. also belongs here, since it might possibly stand for *dāžā and along with O.Lith. dāži dād represent an orig. *dā-dhi. Cp. the accidence.


Rem. 2. The loss of the labial in O.Bulg. seďmyit 'septimus' must be younger than this dropping of d. It may however have been effected already in the Baltic-Slav. prim. language, since by § 468, 3 the tenuis in Lith. sēkma-s (first of all from *sepma-s or from *setma-s? § 345) and Pruss. septma-s sepna-s seem to be due to a new formation after the analogy of the cardinal number.

Rem. 3. The apparent dropping of d before the suffix of the 1. du. in Lith. dāva O.Bulg. dase jase etc. has probably arisen from analogy with the 1. sg. and 1. pl. The regular form may be retained in Lith. ėdva and this might have aided in the creation of ėmī ėdme.

§ 548. No further changes, which need to be mentioned here, took place in Lithuanian.

Slavonic. On prim. Slav. dž dz fr. g = Indg. g see § 468.

Loss of the mediae b d before following consonants. We also take into account here the mediae which had arisen from Indg. mediae aspiratae.

b disappeared before n in prim. Slavonic. O.Bulg. džno 'ground, bottom' fr. * Można, beside Lith. dūgna-s (§ 346), to dūnī 'ravine, valley', rt. dheyb-, see § 325. O.Bulg. sū-giną 'I fold' fr. *gilu-na, to sū-gybatì 'to fold', Lith. del-guba-s 'two-fold, double'. gyva beside gvb-ają 'I sink, go to ruin'; b has been restored in gybuą like the p in pri-nipą (§ 545).
d disappeared before l, n. O.Bulg. part. pulũ fr. *pud-ũ, to padq 'I fall', rt. ped-. šilo 'awl' fr. *štũ-duto, rulo 'plough' fr. *rũ-dulo, šelo 'point, prick' fr. *šɛ-duto with suffix -duto- from Indg. -du-to- (Gr. -tho-, Ital. -fio-). jela 'fir': Pruss. adde Lith. ėglė fr. *edė (§ 378). This loss of d before l is old only in the southern and eastern dialects, it was retained in the western dialects, as Czech šidlo Sorab. šidlo Polish szydło 'awl', Polish šadło 'edge' jodła 'fir'. Examples for the loss of d before n occur in all branches, as O.Bulg. za-ganũ 'coniektura assequorum' fr. *gad-naq, to gad-aq 'conicio' O.Icel. geta 'to get, hit upon, guess', rt. ghed- (§ 425); vūz-bñeq 'I awake', to būdēti 'to wake, be awake', Skr. bhūb-, rt. bheyuḍh-; u-v-nq 'I become withered', to u-vad-aq 'I become withered'; the d in padnaq 'I fall' (beside padq padafaq) etc. had been restored by form-association. It is however questionable whether the dropping of d before n took place so early as the prim. Slav. period. Op. tn § 545.

§ 549. History of the mediae aspiratae. They fell together with the mediae in the period of the Balt.-Slav. prim. community, as was the case also in Iranian (§ 481) and Keltic (§ 524). The laws, which have been laid down for the Indg. mediae (§§ 546—548), therefore held good also here.

bh. Lith. bįjotĩ-s O.Bulg. bɔjatũ s' to be afraid': Skr. bhāy-a-tē. See § 347.


gh. Lith. sněqa-s O.Bulg. sněgũ 'snow': Gr. νίνα, rt. sneγh-. See § 464.

gh. Lith. ėmã O.Bulg. zima 'winter': Gr. χειμῶν. See § 416.

§ 550. Prim. Baltic-Slav. change. dm became m: O.Lith. demi, O.Bulg. vymũ, see § 547.

§ 552. The combination media aspirata + t, s.

§ 552. It has already been remarked in § 469, 6 that a sure answer has not yet been found to the question how the combination media asp. + t or s was pronounced at the time just before the dissolution of the Indg. prim. community.

In Aryan we must hold as the regular continuations of the Indg. prim. forms such forms as Skr. ḍṛddhā- Av. derʿudā-, Skr. ḍīpsāti Av. divaśuṭīyāt, which yield for the Ar. prim. community bh in the continuation of bh+t and bzh as that of bh+s etc. The history of these Ar. groups is treated in § 482.

All the European languages have for the original combinations the same representations as for Indg. pt ps, tʿt ts, kt ks, qʿt qs. Examples:

Greek ὑπτό-ς 'sipped, supped', to ὕππεω, Lith. šrėbū 'I sip', rt. šrebū-. ā-प्रत्य-्त 'not heard of' (प्रत्योपम), Skr. buddhā-s; niવोत 'he will search, inquire': Skr. bhōtsyātē, rt. bhewīh-. āv-ixtō-s 'bearable' (驷i): Skr. sādha-s fr. *sādha-s; fut. ქw : Skr. 1. sg. aor. mid. დsākhi, rt. segh-. სixto, უxomai (ixoxwma 'I supplicate, pray'): Av. 6. sg. aog'da, 2. sg. aogxhā, rt. ugh- (§ 482). ὑτῖρε 'it snowed' (ὑτιρε), rt. sneigh-.

Italic. Lat. nuptum nāpsī, to nūbō Gr. νίμη (Fick Vergl. Wörterb. I 3 648). ab-sorpst, to ab-sorbeō (σφρή), Gr. ὑπεέω, see above. gressu-s, to grādior, Goth. gridi-. jussu-s, perf. jussī, to joubeō, see § 370. di-visu-s, perf. di-vest, to di-vidō, Skr. vivhyāmi 'I pierce through'. vectum vector, vēxī (vehō): Skr. vōdhum Av. vaḍrī-ś, Skr. vāḵat, rt. megh- (§ 482). forcīs fortis: Skr. ḍṛddhā-s 'fastened, fast', rt. ahergh-. anctu-s anxius-s, to ango angor, rt. angh-. lectus 'couch', to Gr. λέχος, rt. legh.- ničto co-nicī, to co-nicew, rt. knegh-. nīx ninxī, to ninxw, rt. sneigh-. Old Irish. tachtō (*to-achtā) 'augustus', rt. angh-. snechta 'snow', rt. sneigh-. for-tiāsum 1. pl. of the s-fut. to for-tiāgaim 'I help', cp. Gr. οτρεῖξομεν, rt. steigh-.

Germanic. MHG. wifst 'fine thread' OHG. wifsten 'texere' O.Icel. veft, vept 'weft', to OHG. weban O.Icel. veia 'to
The combination media asp. + t, s. § 552.


Rem. 1. I do not know any examples from Armenian which belong to this class. By § 467, 1 the word ānstr does not come under consideration.

The question now remains, is this representation of the original sound-combinations in the European languages the regular continuation of the Indg. forms, or have new formations arisen of the nature of Av. dapta- for *dubhu- = Skr. dabadhā- etc. (§ 482 rem. 1)?

Some scholars have come to the conclusion that the latter is the case at least as regards the combination media asp. + t, because they thought that they had also found in the European languages an aspect differing from Indg. tenuis + t, which is to be regarded as the regular development. Nevertheless all
the cases, which have been brought forward, also admit of a different decision regarding them.

Rem. 2. Bartholomae (Kuhn's Ztschr. XXVII 206) explains Gr. θυγπατο on the ground of a presupposed prim. Gr. double form *dhugphater- and *dhugdhar-. But the form may also belong to the class ἡφι μητς etc. (§ 469, 8). Gr. εὐδιο-ε Goth. hued Lat. custōs need not contain *kudh+ɛ- (cp. Bartholomae Ar. Forsch. I 176, Kluge in Paul-Braune's Beitr. IX, 153), but admit of being traced back to *kudh+ɛ-. So, too, Goth. ge-hugdiri- 'understanding' to *ēuq+āh- whence *ēugdā- (cp. §§ 469, 5. 507. 536. 538). Still more uncertain is the material which W. Meyer in Kuhn's Ztschr. XXVIII 166 f. has brought forward from Lat. and Kelt. beside custōs.

Therefore the possibility still remains, that forms like Gr. ἄντο-ɛ etc. exhibit the regular continuation of the Indg. prim. forms.

Rem. 3. Osthoff Zur Gesch. d. Perf. p. 320 f. regards bēh, with voiced media b, as being the form which was in existence in the last stage of the Indg. prim. language, from which was regularly developed on the one hand Skr. bēh, and on the other hand Gr. πτ etc. This is however not very probable from a phonetic point of view.

The Indg. tenues aspiratae.

§ 553. It is less doubtful that the Indg. prim. language possessed tenues aspiratae than, to what extent it possessed this mode of articulation. Of late there has been a tendency to regard all or almost all of the Ar. tenues asp. (§ 474) as being old inherited, according to which e. g. *sthā-no- 'stand' (noun), not *stā-no- would have to be put down as the Indg. form (Skr. sthāna- Gr. θάντο-ɛ Lith. stona-s). But in my opinion we have no right, with the present state of our knowledge, to put down the Indg. prim. forms with ten. asp. in such cases where only Aryan points to tenuis asp., but the other languages to tenuis. For the question would be asked in vain, why e. g. in Greek does not an *ésathn, but σαρυ (Skr. āsthām) stand beside such cases as ἄτα ἀλα with Indg. sth, t' th (see below), and why do not *nātho-ɛ *nātho-ɛ, but. πάτο-ɛ πάντο-ɛ correspond to Skr. path- pānthā- 'path, way'.

Therefore prim. Indg. tenuis asp. can, as yet, only be put down with any degree of probability in such words, where the
languages outside the Aryan group exhibit an aspirate or a sound which can be traced back to an aspirate. Such forms are the following:

1. Suffix of the 2. sg. perf. Indg. *-tha. Indg. *yoj'tha 'knowest' fr. rt. yeid-, Skr. vētha Av. Gāp. vōistā Gr. ὑστα Gr. ὑστα ἔστα 'wast' (originally a perf. form, see the accidence), Skr. āsīthā. Lat. dix-ti dīx-is-ti (for the vowel of the suffix see the accidence). Goth. last (lisa 'I gather together'), slōht (slaha 'I strike'), hlaf(t) (hlifā 'I steal'); after such forms arose qast (qīpa 'I say') hathāist (hātta 'I name') etc., in which -ss was the regular ending (cp. kāuspasta for *kāupassa etc., § 527 rem. 3), then also bart (baira 'I bear'), for *barpā, etc. 1).

2. Skr. skhālāmi 'I stumble, stick fast, go wrong' Av. skārayant- 'leaping, letting leap' (in the proper name skārayapa-raha-), Arm. saxal 'I go wrong, stumble, err, sin', Gr. σφάλματι 'I stumble, fail, suffer a disaster' (also Lat. scelus 'crime, impious action' and OHG. sculd 'guilt' Goth. skulan 'to owe, shall?'), rt. sgel-.

3. chinād-mi 'I cut off, tear' Av. opt. perf. hi-siād-yāp, Gr. σχίζω 'I split' σχηδαλοῦς 'a piece of cleft wood, splinter', Lat. scindō caedō, Goth. skaidan 'to divide, separate' OHG. scintan 'to flay' rt. skhajt- skhaid-.  

4. Skr. sanskhā-s 'muscle, shell' Gr. κάγχος, Lat. conicus.

5. Skr. nakhā-s Mod. Pers. naxun Osset. nār 'nail', Armen. magil 'claw, talon' (whence m- for n-?), Gr. ὁνυχ-ς gen. to ὁνυχ 'nail, talon', Lat. unguis, Mid.Ir. uinga O.Cymr. eguin Mod.Cymr. eun 'nail, talon', Goth. naglijan 'to nail', Lith. nāga-s O.Bulg. noqūl 'nail, talon'.

Without representation in Aryan are:

6. Armen. durgn 'potter's wheel', Gr. τραχός 'wheel, potter's wheel' roxe 'I run' fut. τραχεοῦμαι, Goth. brage 'I run' OHG.  

1) Cp. the ending of the 2. du. act. Goth. -ts = Skr. -thas or -tās. We must assume that original -ts stood regularly only in forms like perf. *lēts, *lōts, *slōhte, *hlōfīs (transformed into lētsus, lōtsus, slōhtus, hlofuts) and in the pres. *e-tae or *e-tis (Skr. sthās 'ye two are') and then was transferred to the other verbs. See the accidence.
drigil 'servant' (runner), rt. thregh-. It is doubtful whether O.Ir. traig 'foot' Gall. ver-trago-s name of a kind of dog (= 'great foot, swift runner?') belong here; cp. O.Ir. droch 'wheel'.

7. Lat. habeō, Goth. habaiβ 'has' common stem form *khabbhē-

The Indg. tenues asp. fell together with the Indg. mediae asp. in Greek and Italic (see §§ 495. 509), and with the Indg. tenues in Germanic (see §§ 528–530. 509). The voiceless spirants, which arose after s in Lat. and Germanic, passed into tenues (cp. §§ 507. 528 end. 541, 7). Tenues arose after s in Balt.-Slav., elsewhere the tenues asp. fell together with the mediae asp. in this branch also, just1) as in Armen. If O.Ir. traig belongs to the rt. thregh-, it follows that Indg. initial th- was treated differently in Kelt. before r from Indg. gh after ŋ (ingu).

THE SPIRANTS.

§ 554. Spirants are produced by the mouth channel being narrowed at one part in such a manner that the expiratory current gives rise to a grating noise on the edges of the narrowed part.

The following spirants are to be ascribed to the Indg. prim. language:

1. A voiceless s-sound, whose place of articulation cannot be exactly defined (cp. the various s-sounds in Sievers' Phonet.3 p. 122 ff.).

2. The voicod sound z, corresponding to this s.

Rem. 1. As a hypothesis which is at any rate worth noticing, we may mention here that Bartholomae (Ar. Forsch. I 18 ff. II 54 ff.) ascribes aspirated s und z (zh and zh) also to the Indg. prim. language. E.g., he puts down gehek- as the rt. for Skr. khidenti 'ruins' Gr. φθίνω, and žhom-, žhm- (the latter with less of z) as the stem forms for Skr. kṣām- Av. acc. zām gen. zām-ō Gr. χθέω O.Bulg. zemlja 'earth'. Cp. also prim. Ar. and perhaps Indg. bsāk from ba+s etc. §§ 469, 6. 470. 482. 552. 589, 4.

1) According to this it would also be possible to trace the suffix Slav. -dio- Gr. -dio- Ital. -dio- back to Indg. -thlo-, as has been done.
3. The palatal spirant \( j \), strictly to be distinguished from consonantal \( i \) (\( i \)).

To these is probably to be added:

4. The labial spirant \( v \), strictly to be distinguished from consonantal \( u \) (\( u \)). \( v \) and \( u \) have fallen together in most languages, and as was already mentioned in § 117 it is often difficult to decide whether the one sound or the other is to be assigned to the Indg. prim. form. The surest criterion for Indg. \( v \) is want of an old inherited weak grade form, in which \( p \) was fused with the neighbouring vowel to sonantal \( u \), e.g. rt. ves- 'clothe' (§ 555).

Rem. 2. The question of the separation of Indg. \( v \) and \( u \) is so involved and still so little investigated that we must content ourselves here with having referred to it generally.

It has been conjectured that the sound, from which Skr. \( h \) Gr. Lat. \( g \) in cases like Skr. ahám Gr. ἕγοι Lat. ego 'I' have arisen, was a spirant which closely resembled \( j \). Attention has already been drawn to the uncertainty of this hypothesis in § 460 rem.

Lastly the question may still be raised whether a sibilant was not spoken after the \( k \)-sound in words in which a Gr. \( xf \) stands opposite to a Skr. \( kh \), as in tákhya- ἱκχίαν 'carpenter ἱκχίαν- ἱκχίαν' 'bear', and whether it differed from the Indg. \( s \)-sound which is to be presupposed for cases like Skr. ákṣa- s Gr. ἀζων 'axle' Skr. dákṣina- s Gr. δεξιός 'dexter', and was perhaps a \( b \). For it has not hitherto been possible to discover a law by which the difference \( xf : s \) might have arisen specially in Greek.

Indg. \( s \).

Prim. Indg. period.

§ 555. *septum 'seven'; Skr. saptá sápta, Arm. evh, Gr. ἑπτά, Lat. septem, O.Ir. secht u-, Goth. sibun, Lith. septynę O.Bulg. sedmę. *senvo 'old': Skr. sána-s, Arm. hin, Gr. fem. ἥνη, Lat. senex, O.Ir. sen, Goth. superl. sinista, Lith. sėna-s. Reflexive pronoun *svo- *svo-: Skr. svā-s 'own' Gr. ὅς 'own' ὅς 'se', Goth. evēs (gen. evēs) O.Bulg. svojti 'own'. Rt. sneigh- 'to snow': Av. snajžaiti Gr. velæi 'snows' ἀγα-ννόμος 'much snowed upon'.
Lat. níngui, O.Ir. snechta Goth. snáïpás Lith. sněga-s O.Bulg. sněgū 'snow'. Rt. srey- 'flow': Skr. śráv-a-ti Gr. πίει 'flows', O.Ir. sruth OHG. stróum 'stream', Lith. srauž 'a flowing, bleeding'. O.Bulg. o-strořů 'island'. Rt. stá- stá- 'stand': Skr. sthi-ti-y śr. stá-n-oc 'a standing', Lat. statū, O.Ir. -tan 'sun' from *stá-ijó, Goth. stāfás 'steal', Lith. stōn-s O.Bulg. stănů 'stand' (noun). Rt. ves- 'clothe': Skr. vás-tō 'puts on' (perf. ev-vas-tē), vās-ana-m vās-tru-m cloak, dress' vās-man- 'cover', Arm. z-gešt (gen. z-yest) 'dress' z-ge-nu-m 'I dress myself' (z- prefix), Gr. Hom. aer. ἵσσαντο ἵσσαν 'they put on' ἵσσα-θος 'clothing' ἵσσα Leob. ἵσσα 'dress', Lat. vesti-s, Goth. ga-va-s-jaun 'to dress' MHG. wester 'baptismal robe'. Rt. dhrēs- 'dare': Skr. dhrāyi-ami 'I dare', Gr. θάρσο-ς 'boldness Θρήσ-ς ἄρσ ἀρσ prop. name ('bold one'), Goth. ga-dars 'I dare', Lith. drūs-ti 'to dare' (§ 285 rem.). *aks(i)- 'axis': Skr. āksha-s, Gr. ἀκοφ, Lat. axi-s, OHG. ahsa, Lith. aksel-s O.Bulg. ošč.

s a frequent suffixal element. -sjo- future and -s aerost suffix: Skr. dha-syā-mi ā-dhā-s-am from rt. dhē- 'put, place', dēk-ṣyā-mi ā-dik-ṣ-ata (3. pl. mid.) from rt. deik- 'show', ā-sakhi-ṣ-ata from rt. sekh- 'subdue'; Gr. ἵσσα-ς, ἵσσα (on the function of the latter cp. the accidence); Lat. dix-t, fux-t-s, vider-t-s; O.Ir. aer. conj. (= fut.) 2. sg. for-tēis, 2. pl. for-tēsind from *tēsis, *tēsit(e), prim. f. *steigh+s+s+s, -te, to pres. for-tēgaim 'I help' (cp. Gr. στείγω); Lith. fut. dō-siu from rt. dhē-, vilk-siu from rt. yēlo- 'tail, drag', O.Bulg. part. fut. byščiste-je 'to méllow' (to Lith. bū-siu 'I shall be'), aer. dēchū, 2. pl. dē-s-te, from rt. dhē-. Personal ending of the 2. sg. -s as in *bhāroj-s 'feras' *s-ijē-s *s-ijē-s 'sis': Skr. bhārē-ṣ syā-s, Gr. κήποι-ς κήπ-, Lat. ferē-s sē-s sē-s, Goth. baivarī-s OHG. sē-s, O.Bulg. beri (from *berē-s). Noun-stem suffix -es- (as *gēn-es- neut. 'genus'): gen. sg. Skr. jān-as-as, Gr. γένε-ως γένος, Lat. gen-er-is, O.Ir. tige 'of the house' = Gr. στιγ-ως τῆγ-ως, Goth. riq-iz-a-neut. 'darkness' (cp. Skr. rāj-as-), Lith. nom. deb-es-i-s 'cloud', O.Bulg. gen. neb-es-e 'of the sky' = Skr. nābhas-as. Sign of the nominative -s (as in *dhyo-s 'equus'): Skr. áśva-s Gr. ἀνος Lat. equo-s, Gall. tara-s 'bull', Goth. wulf-s Lith. vilka-s 'wolf'.

§ 555. Prim. Indg. s. 409
§ 556. Indg. s experienced several changes in the period of the Aryan primitive community.

1. s passed into š and ss into šš after i i and u ū, j and u (as second component of diphthongs), ū ū r, ū ē. By this means Indg. st and kt, sy and ēk and probably also ss and ēs fell together at that period, see §§ 393, 399, 401.

This š remained in Iranian, but in Sanskrit it was further changed to cerebral š, and ūũ (= Indg. ss and ēs) became ēš (as ss became ts, see § 557, 1).


1) Some assume that Skr. š also regularly stands for s after i, ū, e. g. riś-ānti 'they pound'; Lat. pinēō; then the forms 'pinē-ti etc. for *pinaš-mi etc. would have been formed after the analogy of piš- (ep. Av. cinaḥ-mi 'I announce' 3. sg. cina-mi, from rāp). I consider not only pinaš-mi but also piš-ānti as a new formation (after pipēśa, pištā- etc.). For in the period of the Ar. prim. community, when s became š, the preceding


Rem. 1. The Av. combination xš became voiced in the dat. abl. pl. rāxš-byō which was formed anew from the nom. sg. Cp. avō-dāta-§ 658, 2.


3. Final s in prim. Ar. -aś and -as underwent a change which gave to these endings the form -o and -a in Skr., ṥ and -a (Gāp. -a) in Av., e.g. nom. sg. Skr. āsvō Av. aspō = prim. Ar. *aṣya-s, nom. pl. Skr. āsva Av. uspa (aspā) = prim. Ar. *aṣyās. This change cannot have taken place before voiceless dentals and palatais, as is shown by the combinations Skr. oṣaṣas taḍ, aṣvā ṇa etc.-and Av. aspas ca etc., also not in pausa, as clearly follows from the Skr. usual forms āsvah, āsvah (Av. aspā, the more rare secondary form of aspa, seems to be most closely related to āsvahl). It may however belong to Skr. -ḥ from Indg. -s in as much as -aḥ -aḥ might both be regarded as the previous stages of Skr. -o, -a Av. -o, -a. It is not improbable that the -aḥ, -aḥ, which arose in pausa in prim. Ar., forced their way at that period into the place of -aś, -as before voiced explosives and spirants and of -as, -as before vowels; and whilst they were now retained in pausa down to the time of nasals cannot at that time have been so absorbed in the vowels, that only a nasal vowel was spoken, and the latter would in all appearance be the necessary presupposition for the influence of the i or u on the s-sound. -Cp. § 199 rem. 1. ḍsantī 'they injure', niṣantī 'they kiss', gen. puṃs-ās 'of the man' show the regular development.
the Skr. separate development, where they settled also before k, p, and -āḥ became -ā in Av., they regularly passed into -ō, -a before voiced sounds, and these two stages might have been reached already in the prim. Ar. period. When -ō came to stand before other vowels than a in Skr., it became shortened to a, e.g. aśva upa; whereas *uṣḍā api became uṣḍō 'pi. Cp. Bloomfield in the American Journal of Philology III 25 ff., Osthoff Zur Gesch. d. Perf. 36 ff., furthermore §§ 646. 647, 1 and 6. 649, 7.


§ 557. The Indg. s, which had come over from prim. Ar., mostly remained unchanged in Sanskrit, e.g. saptā 'septem', āsti 'est', jānas-as 'generis'. Changes took place in the following cases:

1. Prim. Ar. -śs- became -ts-, just as prim. Ar. -śś- led to -śś- (§§ 401, 556, 1) and probably prim. Ar. -śś- to -tś- (2 below). vatsyāmi from *vas-syāmi fut. from vas- 'clothe' (cp. Gr. fut. ἤσσω). vatsyāmi fut., āvatsam nor. from vas- 'stay, dwell' (cp. Gr. ἤσω). Loc. pl. vid-vātsu from *vid-vas-su, to acc. sg. vid-vāś-am instr. sg. vid-āś-a, part. to vēda 'I know'. -āvatsu loc. pl. to -āvats- 'falling', the final member of compounds. The t of the form tānt acc. pl. masc. 'tho', which appears before s-, had perhaps also arisen from s (cp. tās before t-. elsewhere generally tān). Av. -s- corresponded to this -ts-.

Rem. The ss in the loc. rāvessa (rāvassa- 'word', cp. Gr. ῥήμα, ῥῆμα), māhīyassa (māhīyasa- 'greator' cp. Gr. μεγάλον), māsasu (mās 'moon, month') is due to analogy. In like manner also āssa 'thou sittest' (Gr. ἰσόμαι) for *āses after āsē etc. vidvāsas in union with vidvābhiṣaḥ and the other bh-cases, in which ãbh arose from ãbh (§ 591), produced the form vidvāṣa. Cp. the accidence.

2. Indg. śk appears as ch (cch) = Iran. s. gá-chā-mi (gáchāmī) 'I go': Av. ja-sā-mi, Gr. βᾶ-σω, Indg. *gṛ-skō. See § 400. ss was probably spoken in the prim. Aryan period. ss passed into tś in Skr. (cp. ts from ss above), and this into ch, as in pachās (pachās) 'pada by pada' from *pat-šas from pad- (§ 551). tānchatrūn acc. 'these enemies' = tān(s) + ātrūn is
perhaps also to be traced back to *tāntśatrūn with transition of ṣ to t̄. Cp. tānt before s- above.

3. s was dropped between t or p and following explosive or spirant. áchāntu from *a-chānt-s-ta 2. pl. of the s-aorist from chand- 'shine'; utthā- 'rise' from *ut-sthā-, e.g. inf. utthātum; correspondingly sattā- = Av. hasta- from prim. Ar. *satśā-Indg.. *setśā-, part. from rt. sed- 'sit' (§ 469, 4). átāpta from *a-tāp-s-ta 2. pl. of the s-aorist to tāpatī 'is warm'. Cp. the analogous treatment of z at the end of § 591.

4. s became ṣ, if ṣ or ś stood at the beginning of the next syllable.

ścāšura- 'father-in-law' from *svaśura-, cp. Av. xvasura-Gr. ἱερός Goth. svaihra. śmaśru- 'moustache': O.Ir. snech Lith. smakrū 'chin' (§ 467, 2), perhaps also Lat. maxilla. śa-śvant- 'complete, whole, each' fr. *sa-śvant-, ep. Gr. ἀ-νάς (§ 166).

śuśkā- 'dry' śuśyati 'drys in' fut. śośyati (from *sośyati, § 556, 1): Av. huška- O.Pers. uška- 'dry', rt. says-. The change of the initial s might have taken place here at the time when the root-final s was already an s-sound, but had not yet acquired the cerebral articulation (§).

The same assimilation as in ścāśura-, only in the opposite direction, seems to exist in śaśās 'hare': OHG. haso Ags. hara (r from z, § 581) Pruss. sašm-i-s 'hare'.

Cp. the analogous assimilation in Lith., § 587, 2.

§ 558. Prim. Ar. s was retained in Iranian before n, p, t, k and after t. It became š after p (f). In other cases it either became an aspirate or disappeared.

1. Retention of s. Av. snoešaiti 'snows': Goth. snáis 'snow', rt. snejgh-. Av. sas-na- 'a teaching': Skr. śdś-ana- 'assignment'. Av. spas- 'spy': Skr. spāś- Lat. au-spex. Av. as-ti O.Pers. as-tī 'is': Skr. ás-ti Gr. ὁ-τι. Av. śkemba- 'pillar': Skr. śkambhā-. s along with a preceding t became ss, whence s, as in Av. masya- 'fish' = Skr. mātsya-, see § 473, 2 p. 349.

2. š from s after f (cp. § 473), except when r, tr followed, in which case s remained (Bartholomae Handb. § 149 rem. 1). Av. draʃa- 'drop': Skr. drapesā- 'drop'. afś (ace. aϕ-em) 'water':
Skr. *āp from *āps (§ 647, 7). With *āfī the new formation au̱ē-data- 'resting in the water', where *fī had become voiced, cp. vāyīzan-byō § 556 rem. 1.

3. Aspirates from s.

Initially.

Av. O.Pers. *h before prim. Ar. a, a, i, i, y. Av. O.Pers. hama- 'equal': Skr. sumā-. Av. huṇa- O.Pers. huṇa- 'army': Skr. sēnā-. Av. hindu- ś O.Pers. hīch-ś (§ 197 rem.) 'country of the Indus': Skr. śindhū-ś 'river, Indus'. Av. opt. hyāp 'it may be': Skr. syāt. O.Pers. hya 'qui' (relat.): Skr. syā 'that'. In Av. also before u, ū, and in the Gāpā dialect before v. hu- 'well, very, rich': Skr. su-. Gāp. hva- 'own': Skr. svā-.

For hy- Gāp. also ēy-. For Gāp. ēv- Late Av. ēv-. See its treatment medially.

In O.Pers. *h is wanting before u and uy = y. u- 'well': Av. hu- Skr. su-. uva- 'own': Av. Gāp. hva- Skr. svā-. Cp. medially.

Prim. Ar. sm- = Av. m- (intermediate stage *hm-): maraiti 'is mindful': Skr. smārati; mahi 'sumus': Skr. smāsi. Prim: Ar. sr- = O.Pers. r- : rānta neut. 'river': Skr. srōtās neut. It cannot be decided whether s had also disappeared in O.Pers. before m and in Av. before r.

Medially.

Av. *h after prim. Ar. a-vowels before i, u, ū. 2. sg. bara-li (Gāp. bara-li) 'fars': Skr. bhāra-si Goth. bairi-s O.Bulg. bere-si. ahura- 'master': Skr. āsura- 'alive, spiritual, spirit'. yahu loc. pl. from stem yā- 'quae': Skr. yā-su.

Av. əh between a-vowels. Sg. instr. manah-ə dat. manah-g gen. manah-g (manah- neut. 'sense, mind', Gr. meνoς) = Skr. mānas-ə, -a, -o, prim. Ar. *manus-ə, -a, -as; cp. loc. manah- = Skr. mānas-ı. Conj. 3. sg. awh-əp from ah- 'be': Skr. ásat Lat. erit. yāhəm gen. pl. from yā-: Skr. yā-səm, cp. Av. loc. yā-əhu.

O.Pers. *h corresponded to this Av. ə and əh except before u. 2. sg. conj. bava-hy 'sis': Av. bavā-hi Skr. bhāvā-si.
nāha-m acc. 'nose': Av. nānkhā- Skr. nāsa-. h is wanting before u, as initially (see above). aura-muzdāh- Ormazd : Av. ahura-. It is improbable that h was here also entirely unpronounced, op. below on uv = prim. Ar. sy.

Rem. 1. h remained here and there unwritten in O.Pers. also before other vowels than u, e. g. imperf. u-ištātā 'he placed himself', op. Av. pres. kāštāt; pātīy (probably to be read pōtīy) for pāhātiy 'he announces' beside imperf. 3. sg. apāhā.

Av. vō before v (also written w, wg, wh). ha-sāvra- 'thousand': Skr. sa-hāsvra- Gr. Lesb. χίλιοι, Indg. *gheslo-.


Prim. Ar. sy became Av. xw and wh. haraxwait- = Skr. sārasvat-i- prop. name, ep. initial xw, as xva- 'own' = Gāp. hva-.

2. sg. imper. mid. bara-xvha = Skr. bhāra-xva, rt. bher- 'bear'. The duality xw: xvha was originally probably such that xw made its appearance under the conditions by which s without y passed into h, but xvha, where s, without y had become wh. Also for medial sy in Gāpā hv: imper. gūs-hvā 'bear', ep. hva- 'own'. In O.Pers. uv from sy. 2. sg. imper. pati-paya-uvā 'protect thyself': Skr. -śva, ep. uvā- 'own'. The pronunciation of this uv is not clear, it follows however from Gr. Xpiarouala = O.Pers. unāraziš- and similar forms, that a spirantal element was not wanting. Op. § 159 p. 143.

4. Aryan final -s was entirely lost in O.Pers. (but not so -š, cp. kūrū-š Cyrus). Nom. sg. aniya 'alius' (stem aniya-): Av. anyas(-ca) anyāy Skr. anyās anyāy. Nom. acc. sg. neut. rauca 'day' (st. raucah-): Av. rauca(-ca) raocē. 2. sg. impf. gauula 'thou concealedst': Av. -ayas(-ca) -ayō. It is not clear whether prim. Iran. -s was dropped here or whether we have to do
with the offspring of an already prim. Ar. further development of -as (see § 556, 3).

Rem. 2. If it were certain that the nom. Ṽapā 'grand-child' had arisen from *vapiš and were identical with Skr. ναπά from *nepāts, the form aniya would be supported as the regular continuation of prim. Pers. *anyas.

Armenian.

§ 559. s was retained before t, x, in combination with s and after (dropped) n, m. astl (gen. ustel) 'star': Skr. sti- Gr. ιστη Lat. stella Goth. stairnō 'star'. sterj 'barren' (of animals): Skr. stārj- Gr. στηρξα Lat. sterili-s 'unfruitful', Goth. stairō 'barren woman'. z-gest 'dress': Lat. ves-ti-s etc., see § 555. sxalem 'I go astray, err': Skr. škalāmi 'I stumble', Gr. σφαλλωμ I stumble, fail', rt. sghele-. 2. sg. es 'art' from *es-iš: Gr. Hom. ἐς. amis (gen. amsoy) 'month': Gr. Lesb. gen. sg. µην-ος from *µην-ος, Lat. mens-i-s, O.Ir. gen. mēs, epf. *mēns-. Acc. pl. eris 'three' from *tr-iš: Goth. fri-ns (gen. uso) 'shoulder': Skr. ḍṣa-s 'shoulder', Umbr. onse loc. in umero', Goth. ąms m. 'shoulder', Indg. *onmso-.

§ 560. Initial s disappeared before sonantal vowels and before nasals. al 'salt': Gr. ἀλ-ς Lat. sāl O.Ir. salann Goth. salt O.Bulg. soli 'salt'. etuin 'seven': Skr. saptā etc., see § 555. atarī 'summer' OHG. O.Icel. sumar 'summer' (§ 232). m-i (gen. m-iō) 'one' from *sin- : Gr. µία 'one' fem. from *σιμ-ia, µινδ 'with single unclowed hoof' from *σιμ-ωνδ, Indg. *sin-weak stem-form beside sem- (Gr. ἕν). mi (gen. muoy) 'daughter-in-law' Skr. snuṣā- OHG. snur O.Bulg. snuča 'daughter-in-law'. neard (gen. nerdi) 'nerve, sinew': Skr. snavā- 'string, sinew': Av. snāvar 'sinew'. h- occurs however before vowels in two words at least without any apparent reason: hin 'old': Skr. śana-s etc., see § 555; h- from *hu- prefix, e. g. h-lu 'obedient': Skr. su- O.Ir. so- su- 'well, very'.

p- probably from sp- in poič 'noudeš'. t- from sp- probably in Ṽuč 'spatle' e-Ṽuč 'he spat': Gr. ντεβ from *(a)nto-ew Lat. spuō Lith. spiau-ju 'I spit' (cp. § 149).

e- from sy- (cp. ge(y) from y, § 162). koir 'sister': Skr. svāsār- Lat. soror from *syesör (§ 172, 3) Cymr. chwechar Goth.

Rem. If vech 'six' in Armen. arose from *večk, the duality t- and r- = su- must probably be placed on a level with the duality y and v in logumem and kor (§ 102). But it may also represent a pre-Armenian form *več, see § 589, 3.

§ 561. Medially and Finally.

ephem 'I cook' to Gr. ἑπέμ αὐτό-v with orig. ps?

c = Indg. ks and sk. neč 'six': Gr. Κ Lith. szesz-l (cp. § 500 rem.). harč 'quaresto' harč-ane-m 'I ask': Skr. pṛchāmi, Lat. poscō, OHG. forscac, prim. f. *pṛ(k)-sk-. See § 408.

The s in gišer 'night' is not clear: Gr. ἱσδεῖα Lat. vesper O.Ir. fescor Cymr. ucher Lith. vākara-s O.Bulg. ečerī 'evening'.

The f in arf 'bear' (Skr. fka-s Gr. Ἀκρός Lat. ursus) probably arose from c (p. 358 footnote 1), but on account of Gr. Ἀκρός, it is questionable whether the Indg. prim. form contained s, cp. § 554.

-y- from -sj-. Gen. mardo-y (mard 'man, homo'): Skr. mṛdā-sya, Gr. Hom. βορόδο from *o-ado.

Intervocalic s disappeared. Eor 'sister', pl. Eor-E: Skr. svāsā svāsā-as. nu 'daughter-in-law': Skr. svuṣād.

s disappeared between a vowel and k (Indg. q), r, m, n. mukn (gen. mkan) 'mouse, muscel': Skr. mū̄kā-kā 'testicle' muṣka-s muṣika- 'rat, mouse', Lat. musculus-s, O.Bulg. myšica 'arm'. bok 'bare footed' prim. form *bhos-go-s: OHG. bar 'naked, only' prim. Germ. *bāsā-s, O.Bulg. dosi 'bare footed'. Gen. Eor 'soror': Goth. svistrs, prim. f. *svesr-os or -es. em 'I am': Skr. ásmi, Indg. ás-mi. Pronominal dative ending -um, e. g. im-im 'to my or-im-um 'to which': cp. Skr. -a-smāi in tā-smāi 'to the', Pruss. -e-smu in ste-smu 'to this'. z-ge-mu-m 'I dress': Gr. Ion. sīrīmu from *sīrī-ī-mu (§ 565), rt. ves-, see § 555.

s disappeared after r (probably only under certain conditions).
i ver 'up, above, over', i veroy 'above': Skr. vārśīyas- 'higher' Lith. virsž-ū-s 'the upper part, point' (Hübschmann Ztschr. d. deutsch. morg. Ges. XXXVI 121). tar-am-im 'I cause to fade, dry up': Skr. tarṣ-a-s thirst'. Gr. τέρσωμαι, 'I become dry', Lat. torreō, Goth. ga-pairsan 'to be arid, gape from dryness', rt. ters-. But beside this appears also taršam-im, the relation of which to taršam-im is not clear to me.


§ 562. Indg. s seems to have been assimilated to the è at the beginning of the following syllable in skesur (gen. skesri) 'mother-in-law': Gr. ἱννόα, Goth. swigar, Indg. *suekrā; sk-thus = hê, see § 162. Cp. Skr. śvaśrā—§ 557, 4 and Lith. szessura-s § 587, 2.

Greek.

§ 563. s was preserved down to historical times in the following cases:


Rem. 1. For the rt in tētor 'carpenter, ἐπερ-τ 'bear, mettre-τ 'a founding' (Bzr. tākšā ἐφε-τ kē-τ-τ) etc. see § 554.
2. In combination with σ. Hom. aor. ζέο-σ-α, to ζέω 'I seeeth, bubble': Skr. yás-ámi 'I bubble seeeth, boil', OHG. jesan 'to ferment, froth', rt. jês-. Hom. loc. pl. ἥπεο-σ-ι (ἕπος 'word'): cp. Skr. védas-su, § 557 rem. This σ became σ at the same time with the σσ = τσ (above n. 1 and § 490) and σσ = τι the (§ 489). Hom. already ἥπεο etc., Att. only σ, ἤπεο ἥπεισ.

3. With preceding ρ (Indg. ρ, ῥ, ῥ, ρ). Aeolic θέρσος (cp. ἕρωτης) Att. θάρσος 'boldness', rt. dier-, see § 555. σ-aorist Hom. ἔβασθος (φθεῖσο I destroy): cp. Skr. ábhārṣam (bhār̥mi 'I bear'). ἔρη 'dew': Skr. varṣ-ā- 'rain'. ἄρην Ionic ἐρῆν 'masculine': cp. Skr. gṛ-ábhā- 'masculine, bull' Av. arṣan- O.Pers. -arṣan- 'man, male' or Skr. ὑγίαν- 'masculine, bull'. κόρο-η 'head, temple': Skr. sīrṣ-ā-m 'head', Indg. ἐτς-, see § 306. Probably also with λ. τέλω-ν- 'boundary', which either represents the weakest stem-form of τέλος (τελεσ-) with ο extension or, what is more probable, belongs to Skr. kāṛṣ-āmi 'I furrow, plough (rt. golas-, § 427b) and was only popularly connected with τέλος. Hom. aor. ἐκλέω, to pres. κέλλω 'I move, drive'.

ρο. from ρσ in later Attic: θάρσος, ἄρον, κόρη.

Rem. 2. Hom. ἔκλεισι, Att. ἐκθέται ἔκλεισi beside Hom. ἔκλεισα ἐκθέσα ἐκλείσα were new forms, made after the analogy of forms like ἐκτείνω ἐκτίνα (from nasal aorists),

4. In the combination ἐκ, whence σσ. πτέλω from *πτελω-σο 'I bruise, pound': Lat. pínscio pínscē, Skr. 3. pl. píṣ-ānti 'they pound' 1. sg. pínásīmi (cp. p. 410. footnote 1). νί σ o hān from *νί-σο-σ-μου 'I go away, return home' beside νέκμα from *νεο-σ-μαi: Skr. nás-ámi 'I approach some one, I unite myself to some one', OHG. gi-nesa 'to recover, remain alive'.


6. In the initial combination sm. ἁμφιδέλπο-ς 'terrible': OHG. smezzo 'pain' Mid. Engl. smerte 'sharp, bitter'. Besides these also the assimilation of the σ to μ, as in ἠέλθομι 'to
§ 563—564.

smile' φιλο-μυειδής, to Skr. smáy-a-ti 'he smiles'; μια 'una' from *σμ-ια fem., to év neut. from *σεμ; which is to be explained from the different conditions of sandhi (cp. § 589, 3).

§ 7. It is not quite certain that initial sy became συ, σ. The following comparisons have been made. ἵσσο-ς ἵσσο-ς Cret. Ἰσα-ος 'equal' with Skr. viṣu 'in both directions' viṣu-a-m 'aequinoctium'1) and Arcad. ἴμισ-σος-ς 'half' with Av. pri-stana- 'third part' (on ἴμισ-ς see Osthoff Morph. Unt. IV 187).

Rem. 3. Imper. ἴσσον ἴσσου not = Skr. dhára-san, but = Av. burasa-ḥ Indg. ḍhára-so. ἴσσο-ς 'arrow' to Skr. ifa-ś 'arrow', but it did not arise from *leśo-ς, but either o- and n-stem existed side by side from the beginning, or ἴσσο-ς had been carried over into the o-declension from *leś-ς, cp. niś-ς: Lat. nux-νς, viś-ς beside vis-ς.

If the above comparisons are right, it would then be possible to explain the initial σ- = sy- instead of ὅ- λ- (§§ 166, 564) in certain words, e. g. in σάλος 'groundswell, fluctuation' : OHG. swellan 'to swell'; σώματι 'I rob' : OHG. swuman 'to disappear'; στῆ 'silence' : OHG. swigēn 'to keep silent' (rt. suwakastic swakastic). The σ would have its regular position only medially (in the inner part of the sentence), cp. κοιν-καλός, ὁ σάλος, ἐς σάλων, ἐσώμον. Cp. Osthoff Morph. Unt. IV 359.

Rem. 4. We thus arrive at an explanation of σώς beside ὅς 'pig'. Corresponding to σάλος-ς 'fat hog' from *σαλ-καλός-ς (cp. Goth. su-ein 'pig', O.Bulg. su-imū 'sullius') there existed once the form *σώ-ς-s beside ὅ-ς (cp. Goth. sv-ein as opposed to Lat. su-inum-, like Ved. deś beside dued 'two'), the σ of which was retained in the inner part of the sentence and then was transferred to ὅς ὅς. Cp. Osthoff loc. cit.

§ 564. σ became λ in prim. Greek initially before sonants and between sonants, and then in the latter case disappeared altogether.

ὁ 'the': Skr. sā Goth. sa. ἴμας 'stap, rein': Skr. si-mán- 'parting, boundary', OS. si-mo 'cord, rope', O.Bulg. si-lo 'cord

1) Bechtel (Philol. Anz. 1886 p. 15) puts *σώ-ς-ς σά-ς down as the prim. form, which he connects with ἰδωματί 'r resemble some one'. This would do very well as regards meaning, but the assumed suffix formation is not justifiable.


Rem. 1. Sometimes ἦ seems to have remained unaffected between vowels, as in ἰερ-ς-ς beside φέω-ς-ς, aor. Att. ἰερος beside El. ἰερος. On this point see the accidence.


Rem. 2. αὐω beside αὐω and Att. (inscript.) ἐχω beside ἐχω were formed after αὐω, ἐχω. Conversely αὐω for αὐω, παῦομαι for *μποῦμαι (§ 496). In like manner each of the two forms ἦ- and ἦ- ‘with’ went beyond its original sphere, e.g. ἦ-μεν-ς-ς after ἦ-νας etc., conversely ἦ-μεν-ς-ς after ἦ-μεν-ς-ς ἦ-μεν-ς-ς etc. Cp. rem. 3.

Initial sy- became voiceless s-, and this became ἦ-. Ἰς Ἰς, οἱ ‘sibi, se’ : Skr. svā-. Cp. § 563, 7 on ódōs etc.


Prim. Gr. ἦ- ( = indg. ś-, sw-, sj- and j-, § 129) was lost in Lesbian according to the testimony of the old grammarians: ἦ = o etc. (Meister Griech. Dial. I 100 ff.). ἦ- seems to have been reduced in Ionic-Attic at an early period. It disappeared altogether in the Christian era.

Rem. 3. Besides the forms quoted in rem. 2 there are still many others with ἦ- where the spiritus asper might be expected. In some cases it
seems to be merely a question of inexactness in the representation of the sound. In other cases it is more or less clear that they have been formed by analogy. Thus Att. ἄλκατοψ 'kingfisher' beside ἄλκατος (Lat. alecto), after ἄλκα from *awlai (de Saussure's comparison of ἄλκατος with OHG. saulaca, Mém. de la soc. de lingu. VI 75, does not convince me); Dor. ἄμεις Att. ἄμεις (Skr. asma-) after ἄμεις ἄμεις from *amama- (to Skr. yūṣm-. § 129); ὥσις 'sits' (Skr. ṣadv) after forms from ὅ- 'sit' Indg. ṣadd; Ἡρακ. ὅτα 'eight' (Lat. octō) after ὅτα 'septem'. Further ἰπομένη for * bénéficην (from ἵ-[(l)]επιμήν) after ἰπομέν ἐπιμένα, and many others.

§ 565. Initial s before n became assimilated to this in prim. Greek, e. g. νίς-α acc. 'snow': Lith. sneda-s etc., see § 555. The fuller initial was still preserved in ἄγα-νμο-ς 'deeply covered with snow' ἤ-νη 'nebat' (O.Ir. sn₄-the 'filum', OHG. snuor 'thread, string') (§ 654, 4).

s, between a sonant and following nasal or between a nasal and following sonant, became assimilated to the nasal in prim. Greek. The stage of assimilation remained in Lesbian and North Thessalian, whilst in the other dialects a reduction of the nasal, partly with 'compensation lengthening' (cp. § 618), took place. *φας-νο-ς 'shining', to φανς: Lesb. φάννο-ς, Ion. φανων-ς, Dor. φανων-ς. *ἐς-μι 'I am' (Skr. ásmi): Lesb. ēmmi, Att. ēmmi, Dor. ēmmi. ἱδμα 'girdle' from *ἰως-μα: Lith. įs-mi 'girdle', rt. įs-. Aor. *ἰμε-σα 'I remained' *ἰμε-σα 'I allotted': Lesb. ἵμενα ἵμεμα, Att. ἵμενα ἵμεμα, Dor. ἵμηνα ἵμημα. Gen. *μηνο-ς 'of the month' (O.Ir. mi₄s): Lesb. μῆνα-ς (Thess. ὑστερο-μεν-ια), Att. Dor. μην-ός.

σ frequently came to stand before μ and ν again by form-association. Thus were formed ἐσμεν 'sumus' beside regular ἐμεν after ἵτε ἐστι, ἦμερ-εσμαι 'I am dressed' (rt. ves-) beside regular ἐμαι after ἦμερ-εσται etc. This σμ as well as that which arose from ἵτις (as in ἐσμενο-ς 'rejoicing' from *ςφαι-ς-μεν-ς, to ἦδομαι, see § 566; ὡμη 'smell' = *otmn, that is, *ωδ-σμα, beside ὁδ-μη) passed into σμ, which is shown by the spelling ζμ and Cret. κόμο-ς = κόμμο-ς, the ε of which in the first instance arose from ζ (cp. Θεορφάσεις-ς, § 593). On the other hand the new ςν became νν. Thus in Att. *ἰσνωμι took the place of the regular (Ion.) εἴνωμι.'I dress' after the forms ἵσ-θήμα etc., and this became
§ 565—566. Indg. σ in Greek.

**σ** probably at the same time when Πελοπόννησος arose from *Πελοπόννησος*. In like manner Att. ζωνίμου from *ζωονί-μου, a new formation for regular *ζωνί-μου, cp. ζώνη 'belt' from *ζωον-να, rt. ἄνα-, and others of the same kind.

σρ became voiceless ρο in prim. Greek, which underwent simplification initially. Hom. ἐ-οφείς ἔδω 'flewed': Skr. á-sraṇ-ā-t śráv-ā-t. Cp. § 266. It is doubtful whether such ρο was anywhere medically reduced to ρ with 'compensation lengthening'.

σλ became λλ, initially λ, at the same period. α-λληκτο-ς μετα-λληκτα (Π. I 157), λήμμω 'I cease': OHG. slach O.Icel slakr 'slack, lazy', rt. slög-. Lesb. χέλλω, Ion. Att. χελλα (beside χήλω, the ε of which has not yet been satisfactorily explained), Dor. χήλω 'thousand', from *χιλ-λω-: Skr. sa-hāsra- sa-hasthīya-, Indg. *gheslo- *ghesl-i-jo-.

§ 566. Transposition of σ seldom took place, as in ἴφος Lesb. σφίφος 'sword', Syrac. ψέ Ion. σφέ 'so'.

Assimilation of σ to following explosives or spirants, whereby the σt, which had arisen from ἵτ (§ 490), stood equal to original σt. Lao. á-ττασί 'ἀνα-στηρί Hesych., ἀχυρό = ἀχος' 'leather bag'. Cret. Gortyn μεχές 'up to' from *μεσές, which may be regarded as μεστε-ς (cp. μέχρις ἄνευς etc.) or as μεστ' ες (cp. μέστι, μιστα). Boeot. εττί = ἴττί 'till', that is, ες τς, ἴττω = ἴτομ 'let him know'. Cret. θθ from σθ, as δάδοθω = διάδοθα πρόθθα = πρόσθα, Boeot. τθ, as ὀπτθερίτθ 'cuttle fish'. These θθ and τθ are probably both to be read ββ; σβ became ββ. Cret. ἰδθάντι (θθαντι?) = Att. ἰστάοι shows the development st βt ββ.

Disappearance of σ in combinations of three consonants. πνίρα 'heel, foot': Skr. párīpa-ς OHG. OS. fersna 'heel'. πνίω 'I spit' from *σπον-ιο-ς (§ 131 p. 119), in case the dropping of the σ does not come under § 589, 3 (cp. O.Bulg. πφι-я 'I spit'). πνάρνουμα 'I sneeze' from *πναρ-α-, rt. pater-, Lat. sternuo. 3. sg. of the σ-aorist πάλω (act. ἰπνα 'I swung'), λέξε (act. δλεξ 'I read') from *παλ-α-τα, *λεξ-σ-τα, formed like ἀσμιν-ς 'rejoicing' from *σπαρ-σ-μνο-ς (§ 565); cp. the accidence. Cp. also ἐκκαίνεξα, ἐκμηνο-ς etc., with ες 'six'
§ 567. Some of the changes, which s underwent within Italic itself, belong to the development of the separate dialects, as is shown either by Latin or the Umbr.-Samn. dialects, e. g. Lat. aēnu-s from prim. Lat. *a(es)-no-s, cp. Umbr. ahesnes 'aēnis'.

In other cases the agreement of the Ital. languages, as evinced by their monuments, justifies our ascribing the change to the period of the Ital. prim. community, e. g. x from s between vowels may be regarded as prim. Italic.

There are other affections where we are unable to say how old they are, because the material is too limited, e. g. Lat. -br- from -sr-.

§ 568. s was retained in all dialects:
1. Initially before vowels (including y). Lat. s-unt, Umbr. s-ent Osc. s-et 'sunt': Skr. s-anti Goth. s-ind, rt. es- 'be'. Lat. sē, soos-s suoo-s, Umbr. seso 'sibi' svesu 'sum' Osc. sifēi 'sibi' sūvad abl. 'sua': Skr. svā- 'own'. Lat. suāvi-s : Skr. svādū-§ Gr. ἱσῷ- OHG. swuazi Indg. *syād-u- 'sweet, lovely'. Lat. soror from *syesōr : Skr. svāsā etc., see § 560.

2. In combination with explosives and s. Lat. spectō, Umbr. speture 'spectori' : Skr. spāś- 'spy, watchman', rt. -mēk-. 'Lat. stō, Umbr. stahituto 'stanto', Osc. stahint stant' : Gr. στᾶσ- etc., see § 555. Lat. est estōd, Umbr. est Osc. ist estud : Gr. ἵστῃ ἵστω, rt. es- 'be'. Lat. pistu-m pistor, Umbr. pistu 'pistum': Skr. pištā- 'rubbed, ground'. Lat. scabō : Goth. skaba 'I scrape', Lith. skabėti 'to cut', cp. § 346. Lat. gnō-scō no-scō : Gr. γνω-σω 'I get to know'. Lat. serpē : Skr. á-sarp-ś-am and á-srāps-am (pres. sārpāmi 'I creep, crawl'), Gr. σπῆςa (ἐγω I creep, go'). Proposition prim. Ital. *ops : Lat. os-trūdō read opstrūdō, os-tendō, Umbr. os-tendu 'estendito'. Initial ps- seems to have become s : Lat. sabulū-m according to Osthoff from *psaflom : Gr. ψάμμο-ς 'sand' from *ψακ-μο-ς, to ψηφο-ς 'small stone'). Lat. con-cussī from *cutst, to con-cutiō, see § 501.

1) It is not probable that pe- has become p- in palpāre and others (Stolz Lat. Gr. § 68, 2).
Lat. *diēx̂i* : Skr. mid. *iddhīṣi* (*idiṣṭi* 'I direct, show'), Gr. *idian* (*dīkā*). Nom. Lat. *vōx* : Av. *vaź*ē, Indg. *yōgs* 'voice, word'; Osc. meddīs *moddīx*. Initial *ks-* has perhaps been simplified to *s-* in Lat. *su-b* *super*, Umbr. *s-omo* 'sumnum', to Gr. *k-k νηπόθς* (for other quite as uncertain or still more uncertain examples see Osthoff Morph. Unt. IV 266, Zur Gesch. d. Perf. 612). Lat. *ges-sē* beside *ges-το-*, *house* beside *haus-tu-s*. From prim. Ital. *is-so* *is-sā* or *es-so* *es-sā* 'iste, ista'*) comes the Umbr. Osc. stem *is(s)̂o*—*es(s)̂o*, as in Umbr. *isso-c eso-c 'sic* essū esu abl. 'hoc' exa 'haec', Osc. escī loc. 'in eo'.


So also original *s* after original *m*. Lat. *sūmptē* with excrecent *p* (§ 228). Umbr. *uçe onse* loc. 'in unermo' : (loth. *ams* 'shoulder').

Rém. It is however questionable whether orig. *ns-* had not become *ns-* in prim. Italic, just as *m-* became *nt-* (§ 207), so that these examples would not come into consideration for the prim. Indg. combination *ns-*. Lat. *sūmptē* may have been a new formation like *συμπτυ-ν- τη*. Lat. *umer-s* can scarcely come from a prim. Italic. *om-ss-* and the Umbr. word may have arisen from this by syncope (§ 683). The same relation would follow for Osc. *Niumsia aths 'Numeruii' beside Lat. *numerus*. Cp. §§ 209, 269 rem. and § 570 rem. 2 on tendēbrae.


§ 569. *s* between sonantal vowels became *r* in Latin at the beginning of the historical period; *s* is still found in the

2) Neut. nom. acc. *is-tōd* or *es-tōd*, masc. acc. *is-tim* or *es-tim*. The first part of the compound was related to the *s-* in Fruss. *s-lesse* etc. *t* was carried over to the nom. sg. masc. fem. in Lat., *iste, ista*, conversely in the other dialects *s* was carried over from these cases into the others. Cp. Danielsson Pauli's Allital. Stud. III 158 ff. and the accidence.
oldest period. In Umbr.  

nor and  

in Osc.  

and  

(= French, Slav.  

arose everywhere first of all from  

(cp. Lat.  

§594), and  

in the old Ital. monuments is an inexact expression for  

The change to  

was probably completed in the prim. Ital. period.

Lat.  

O.Lat.  

conj. (fut.) to  

sun: Skr.  

Gr.  

Acc.  

mūr-em (nom.  

mūs): Skr.  

OHG.  

mūs ‘mouse’.  

aur-ō-r-a: Skr.  

uṣ-ās- Gr. Lesb.  

āv-ος ‘dawn’. Gen.  

gener-is: Skr.  

jānas-as, Gr.  

γένος γένος. vīder-a-m: op. Skr.  

ā-vēdi-ām  

Gr.  

yōs-a. With  

s, inscript. Lases beside Lares, in grammarians besides  

also  

āsa: āra, arborem: arborem etc. Cp. further  

ār-ō: ut-su-s; quer-or: ques-su-s; quae-ō: quae-s-tor quae-s(t) (from  

*quaes-sō); honōr-is: honōs hones-su-s; dir-inō: dis-tīneō dis-sīliō.

Rem. 1. The process of rhotacism was at an end at the time of  

Appius Claudius (Censor 442 U. C.). From the report that he removed  

from the alphabet the letter  

we may conclude that  

was also written in Lat., as in Osc., for the voiced sibilant.

Umbr.  

and  

eru erom ‘esse’, rt.  

es-.  

fu-r-ent ‘erunt’, cp.  

fu-s-t ‘erit’. hapinaru gen. pl. fem. ‘ovium’: Skr.  

āsām ‘harum’.  

āsa  

asa abl. ‘ara’. The spelling of the latter word  

with  

s was a graphic archaism, or it was borrowed from another dialect without rhotacism. On the change between  

s and  

r finally see § 655, 9.

Osc.  

and  

ezum ‘esse’, Umbr.  

erom.  


fu-rent.  


aaas pl. ‘arae’. To which Pelign.  

coisatens ‘curaverunt’, Lat.  

coirāre  

coerāre, perhaps to Gr.  

εἰσιν-μένο-ς ‘sorrowful, troubled’,  

r(o)- from  

*qis- (§ 427, b).

In Lat.  

s also before  

y.  

Minerva from  

*Menes-μα, cp.  

Skr.  

mānas- Gr.  

μένος- ‘sense, mind’.  

furvo-s beside  

fuscus-s, in case the latter has not arisen from  

*furco-s.  

lárra (lárra) possibly connected with  

Lares (Lases).

Rem. 2. In Lat.  

s often came through analogy into positions, especially finally in which it could not have arisen regularly.  

honor beside  

honōs, arbor beside  

arbōs, mājor for  

*mājōs, after  

honōr-is etc. Cp. also
veternu-s veterrimu-s, to vetus -eris = Gr. ἑρῆς -ος, through association with hibernu-s ããrrimu-s etc. with old r. pūberla-s to pūbēs -eris, after ūberlās with old r.

Rem. 3. After the conclusion of the process of rhotacism s often came to stand again between vowels and now remained unaffected, e.g. quaeš from *quaes-šo, housi from *hous-ši. The assumption is unsatisfactory that nāsu-s (cp. nār-ēs nārum, nās-turtium, Skr. nās- OHG. nase 'nose', Ags. nās-ůvría 'nostrils', Lith. nūši-s 'nose') was formed anew from a nom. sg. *nās (cp. aurūr-o etc.); the s in Slav. nosù is also strange (§ 588, 2); did a arise in both languages from a form with -ə-s- (stem *nās(a)-, cp. Skr. vate-d-)?

§ 570. s before nasals and liquids.

sn. s disappeared in Lat., but was retained in Umbrian. Lat. nāre, Umbr. snāta 'umecta': Skr. snād-mi 'I bathe, wash, water', O.Ir. snám 'a swimming'. Lat. ninguit nīx : Lith. snēga-s 'snow'; if Umbr. ninctu is really related to ninguitō, we have here a different treatment of initial sn- which may possibly depend on different conditions of sandhi. Lat. nuru-s : Skr. snuṣa OHG. snura 'daughter-in-law'. aēnu-s aēna-s, Umbr. aehesne 'aēnis', to aēs aēris, Skr. āyas- neut. 'metal, iron'. Lat. pēnī-s from *pes-ni-s : Skr. pās-as neut. Gr. πείς neut. 'penis'. Lat. dē-gunō beside dē-gus-tō, rt. ĝeus-. di-numerō from *dis-n. In satis-ne potis-ne, vidu abin from vidēs-ne abis-ne the long vowel was shortened after the dropping of the s and the final -ē.

sn. lūna, O.Lat. inscript. losna, from *louc-sna : Av. rauxēna- 'shining'. sēnī from *sex-nī. ēnintō from *ex-n. peonna, O.Lat. pesna, from *pet-sna, rt. pel- 'fly'.

sm. s disappeared in Lat., but was retained mediately in Umbr.-Samn. Lat. merda 'dirt': Lith. smirdēti 'to stink'. mi-rus 'wonderful': Skr. smāy-a-tē 'smiles'. prīmus, Peliag. prīsmu 'primo' or 'primum'. Lat. di-moveō from *dis-m. Umbr. puśme 'cuí': Skr. kā-smāi 'to whom?'; do the Lat. adverbs quom cum and quam also belong here? Osc. posmo-m 'postremum', cp. Lat. pōne from *pos-ne.

Rem. 1. It is uncertain whether Cosmēna = Cosmēna and dumō = dumē (dúsmo in loco) in Paul. Fest. are examples of the retention in Lat. t self of s in this combination sm. Corssen Krit. Beitr. 431 regards
emergō from *ex-m.

xl, tsl. ala from *aulā, to axilla, OHG. ahsla 'axle.'

emergō from *ex-m. 

According to some scholars (see Kuhn’s Ztschr. XXVII 328, XXVIII 270) s disappeared in Lat. before nasals and before l without compensation lengthening (or with later shortening of the lengthened vowel), if the vowel was unaccented. The least doubtful examples are Camēna (rem. 1), o-mittō from *omittō, corpulentus from *corpus-lentus, collūna cutūna from *co(c)u-lūna. It is here a question of later Lat. accentuation (§ 681), and on account of o-mittō it would have to be assumed that a short vowel had regularly arisen in dī-nūmerō ē-mergō etc., quoted above, and that the long vowel was due to the analogy of forms with dī-ē.

Initial s also disappeared in cases where it came to stand before l after the dropping of t, but not until a later period. stilis, sitis, litis. stlocus, locus. Cp. also lien: Gr. σαλήν 'spleen.' See § 503. L. Havet, Mém. de la soc. de lingu. V 229 f., derives tīcō from *in slocō, like pilu-m from *pinslo-m § 208, 2.

sr became pr, further fr, whence medially Lat. br. Examples only in Latin. frīgus: Gr. ἀγχός 'frost,' cpl. *arīgos. frāgu-m: Gr. ἀχος -γος 'berry.' sobrīnus from *syēsr-ino-s, to soror: Skr. vvasar- vvasar-, Indg. *syēsor- *syēsr-. cerebru-m from *ceres-ro-m, to Skr. śiras- 'head.' fūnebrī-s from *fūnēs-ri-s, to fūnus -eris, fūnēs-tus. crābrō from *cras-ro: Lith. szirš-ā etc., see §§ 303, 306. membru-m from *mēns-ro-: O.Ir. mār 'a piece of flesh' (§ 574); *mēns-ro- became in Ital. first of all *mensro- (§§ 207
612), hence *menbro- *membro- membro- tenebrae: Skr. tāmisrā-
tamisra-m 'dark, dark night'.

Rem. 2. The n for m in the last word is best explained by assum-
ing an orig. double from *tenevā, whence *tenevā (cp. OHG. dimat-
'dark' from prim. Germ. *dimam(t)ar- and Lith. dimaro-s 'like a sorrel-horse'),
and *tenevarā. The n in the first form was transferred to the latter.

Rem. 3. dīruš was formed after dī-luš dī-moecē etc. or arose
regularly through -ur-( -xur-) being treated differently at a later period than
in the cases mentioned above. In the latter manner the difficult form rēr
sēm (to Gr. ἐκ Lith. samorā etc.) might also be explained by assuming,
along with L. Havet (Mém. de la soc. de lingu. V 447), that a stem-form
*yer- *yer- = Indg. *ures-r- was transformed to *yeras-*(yeras) after the
analogy of the nom. acc. *yēser *(yēsēr) and that from this arose rēr,- which,
being carried over from the oblique cases, gave rise to the nom. acc rēr.
Or does rēr belong to O.Ioel. sār 'spring'? 

§ 571. rs, ls. In Lat. s became, if it was not protected
by a following consonant (tostus from *tors-tu-s), assimilated
to the liquid, probably after it had first become x. rs was pre-
served in Umbr.

rs. Lat. terreō, Umbr. tursītu 'terreto': Skr. trásami 'I
false at', Gr. τρέω (aor. Hom. τρέσε-sw) 'I tremble, flee'
τρερόσαντ εἰσόπτρασ Hesych., O.Ir. tarr-ach 'timid' (?!); the root form
ters- instead of tres- seems to be a secondary formation after
the analogy of the form tēs- (Umbr. turs-). Lat. fār-farris,
farren-m, Umbr. farsio 'farrea'; stem fars- to Germ. *bar-iz-
'barley' (O.Ioel. barr neut., Goth. baris-eins). Lat. errō: Goth.
airzeis OHG. irri 'astray'. errēs: Lith. vežs- 'calm', Skr.
vēṣa-s 'bull', rt. yers-. Lat. verrō O.Lat. verō: O.Bulg. verčēq
'I thresh', rt. yers-. Lat. ferre from *fer-se, cp. es-se. terreō
beside tostus: Gr. τέρομαι 'I become dry'.

Rem. Observe that rs = rt-, rta, rka remained in Lat. torus-s:
Skr. opitā-s, Indg. *opitā-s. orsi to ardeo. urus-s: Skr. ujos-s (cp.

ls. Lat. collu-m 'neck': hals (stem halsu-') 'neck'. velle from
*vei-se, cp. es-se.

Lat. run in from ren isn. cernuo-s from *cers-nuo-s, to
cerebru-w (§ 570). alnu-s from *als-nu-s, probably to Lith.
elka-ni-s m. 'alder' (with excrescent k), further OHG. elira Aga.
olor (r from v) O.Bulg. jelica 'alder'.
§ 572. -ss- == Indg. -ss- remained after short syllables, but, like ss == t't ts (§ 501), became s after long syllables, e. g. haest from *haes-st (haered) beside ges-st (gerō).

differō from *dis-ferō.

Old Irish.

§ 573. Initial s was retained before sonantal vowels; as so, too, in Gallic, while in Britann. — first probably only after final vowels — it became h.' sy- so- 'bene', e. g. su-thain 'perpetuus' (tan 'time'), Gall. Su-caru-s (prop. name) Cymr. hy-gar Bret. ke-gar 'comis, benignus, amicus': Skr. su-. set 'way', Cymr. hynt Bret. hent : Goth. sinīs 'way, course, time'. samail 'resemblance', Cymr. hafal 'similar' (§ 243, 4): Skr. samā- 'even, equal', Gr. iverō together iverō 'at once', Lat. simili-s, Goth. sama 'the same', O.Bulg. sq- 'with' samī 'self'.

sy appears initially as s, as siur 'sister': Cymr. chwoer, Skr. svāsar-, medially as f (b), as perf. 3. sg. do-sefainn 'I hunted, drove', rt. syend-. See § 175 p. 154.

§ 574. sm- sm- sr- sl- were retained initially. snaim 'I swim': Skr. snā-mi. snechta 'snow': Goth. snāivs, rt. snevigh., smir 'marrow': Goth. smairpr 'fat, fatness' OHG. smero (gen. smerwes) 'fat, grease'. smech 'chin': Lith. smakrūd 'chin' (§ 557). strīth 'stream': Skr. strā-c-tī 'flows' etc., see § 555. ro slech 'destructor est', cp. perf. ro se[š]lach 'I struck down': Goth. slaha 'I strike' (§ 576 p. 431).


mīr 'a piece of flesh', according to Thurneysen from prim. Kelt. *mēnsr-, to Lat. membru-m, Skr. māsā- etc., see §§ 570. 585 rem. 3.

s remained, except when originally final (§ 576), after nasals which themselves disappeared (§ 212). gēis (gen. du. Mid. Ir. gēi) 'swan': Skr. hāsā-s OHG. gans 'goose'. Gen. sg. mīs (nom. mīr) 'of a month': Lat. mens-is.
s became assimilated to a preceding r. err (gen. erre).
'tail': OHG. arcs 'rump', tlr. ę✓e-ų 'tail, rump'. Cp. also err from *or(c)-s § 518.

§ 575. s in combination with explosives and s.
It disappeared initially before t. tiagaim 'I stride, go':
Skr. stighnutē 'leaps upon, climbs up' (not found), Gr. στίγμω 'I stride, go', Goth. steiga 'I climb', Lith. staigytis 'to hasten'.
-tau 'I am': Lat. stō etc., see § 555. Cp. on the other hand O.Bret. strouis 'stravi': Goth. strāuja 'I strew, spread out'; Bret. sterenn 'stella' Corn. steyr 'stellae'. Skr. śṝ- 'star' etc., see § 559.

Medial st and ts became ss (s). ro closs 'I was heard' fr. *clus-to. s-fut. ro fessur 'I shall know' fr. *yil-s-, rt. yej.'d.
See § 516.

sc. scaraim 'I separate, sever': Lith. skiriu 'I separate, sever'. ro se-scaind 'he leap': Skr. ca-skānda. cum-masc 'a mixing, mixing oneself' con-meschatar 'miscentur': Lat. miscē, OHG. miskan 'to mix'.

ks became ss (prim. Kelt. probably χs). dess 'on the right hand': Goth. tahlssva Gr. δεξιός. s-fut. 1. pl. for-tiasam 'shall help', to tiagaim, cp. Gr. στίγμω. See § 517.

ss. -accastar, that is, *äd-cis-s-a-thar 3. sg. of the pass. s-conjunctive of ad-ciū 'I see'; cp. ad-chess 'visum est', the ss of which arose from st.

§ 576. s was dropped between sonantal vowels, the intermediate stage was h. This phenomenon occurs also in Britannic.
siur 'sistor', Cymr. chwaer, prim. f. *syesūr. O.Ir. iarn, O.Cymr. hear (the h prefixed from the inner part of the word — *isarn *eharn —?) 'iron', prim. Kelt. *isarno- in the place name Isarnodori i.e. 'forrei ostii': Goth. ciasarn 'iron' a Keltic loan-word.

s was treated in the same manner after vowels before liquids and nasals. Perf. ro selaiag 'he struck down' i.e. seslaig, see § 574. senaich 'stillavit' i.e. sesnaich, to snigid 'it drops'.
Every final *s* was dropped, both orig. postvocalic *s* and the *s* which arose from *-ks, -ts, -ns*. This dropping of *s* was late, since the Ogam inscriptions still have final *s*, as this also is still found in Gall. O.Ir. *Luigdech* = Ogam inscript. *Lugudecas*, gen. sg. to nom. sg. *Lugaid* = *Lugudem* (e-stem); O.Ir. *tarb 'bullock' = Gall. *tave-s*. *bō 'cow': Skr. *gaحداث* Gr. *bòς 'bullock'. *rī* (gen. *rīg 'king' Gall. *Dubno-rīx* : Lat. *rēx. se 'six' = Lat. *sex, beside secessō 'sextus'. *oentū* (dat. oentid) 'unitas' from *-tūt-s* : ep. Lat. *servīās* (gen. *-tūt-is*). *mē* (gen. *mēs* 'month' from *mēns* : Gr. *μεσ* from *μῆν* (§ 611)). Acce. pl. *frūv 'viros' (nom. sg. *fer') : Goth. *vaira-nas*. This loss of final *s* was later than the change of initial explosives to spirants which was caused by a preceding vowel; for the latter change does not show itself in cases where *s* was final (§ 658, 1).

Germanic.

§ 577. *s* was generally still intact in prim. Germanic. The only changes, which it underwent in this period, are the change of it to *z* by Verner's law and the assimilation of *sm* to *mm.*

§ 578. Initial *s*.


Goth. slitpan 'to sleep' OHG. slaf 'slack' slafan 'to sleep': O.Bulg. slabû 'slack'. OHG. stlangan 'to wind to and fro' slango 'snake': Lith. slenkû 'I crawl' O.Bulg. slakû 'bent'. sr- became, as medially (§ 580), str-. OHG. strumun O.Icel. straunr 'stream': Skr. srâv-a-ti 'flows'.

sp, st, sk. Goth. speivan OHG. spulcan 'to spit, vomit': Lith. spiâu-ju 'I spit'. OHG. spuon 'to succeed, have success': Skr. spâyâmi 'I swell, thrive', O.Bulg. spêjâ 'I succeed'. Goth. stiks 'point of time' OHG. stik 'point': Gr. στιχ 'I prick', Lat. in-stigâre. Goth. us-skâus 'provident, sober' OHG. scouroûn 'to look, view': Gr. θεο-σκο-ει 'sacrificing priest'. Goth. skel-man OHG. sci-man 'to shine': Gr. σκι 'shadow'.

§ 579. s in combination with Indg. voiceless explosives medially and finally.

OHG. aspa 'aspen-tree': Lett. aypse Pruss. abse O.Bulg. osina (from *opstina, § 545); it is uncertain whether the original order was sp or ps. O.Ilg. wafts 'wasp': Lith. vapû 'gad-fly'. OHG. refsen 'to chastise, blame, punish' prim. Germ. 1. sg. pres. *rafsejô: Skr. rápas- neut. 'bodily injury'.


Goth. fiskus OHG. fisr 'fish': Lat. piscí-s O.Ir. iasc 'fish'. OHG. forscon 'to ask': Lat. poeço. Goth. aíhsa O.Ilg. ohso 'ox': Skr. ukadh 'ox'. Goth. saíhs O.Ilg. seh 'six': Gr. ηξ Lat. sex.

So also s in combination with Indg. s probably remained unchanged in prim. Germanic.

Rem. I do not know any sure examples. Goth. is 'thou art' may represent either *is(ê) (Gr. ἠÎμεν Armen. ex) or *is(u) (Skr. ãm Gr. î). Does the genitive -s of n-stems (Goth. culfu OHG. wolfs O.Icel. ulfs 'wolves', Norse run. godafus proper name) go back to -sa-R?

§ 580. Medial sr, like initial sr (§ 578), probably became str before Verner's law came into operation (see § 581). Goth. stem-form, svistr- O.Icel. systr- 'sister' (gen. svistrs etc.) = Skr. svstr- Lat. sobr- (§ 570) O.Bulg. sestr- (§ 585, 2), Indg. *systr-;
from here t was carried over into the forms, in which s and r were not in direct combination, hence e. g. nom. sg. Goth. svistar O.Icel. syster systir OHG. OS. swestar. OHG. dinstar Mid. Du. deemster 'dark': Skr. tamisra-m 'darkness', Lat. tenoblum, see § 570.

§ 581. In prim. Germ. s became z except in combination with voiceless explosives and spirants, if the sonant, directly preceding it, did not bear the principal accent of the word. This process of changing voiceless into voiced sounds concerned at the same time the spirants f, ð, x, see § 530. z remained in Goth. but in the other dialects mostly became r.

R. e. m. Thus Indg. s partly fell together with Indg. z. See § 596.


Gothic, by levelling out, mostly gave up again the grammatical change s : z(r) in the verb. To Skr. jōṣāmi 1. sg. pres., jujjāṣa pf. indic. 3. sg. jujuṣmā 1. pl., jujuṣaṇā- partic. corresponded in prim. Germ. *kěṣō, *kăysi, *kuzumī, *kuzanā-. Hence regularly OHG. chiusu, chōs, churum, choram, O.Icel. kys, kaus, korrum, korrn. On the other hand Goth. kiusa kaus, kusum, kusans with s in stead of z in the two last forms, an innovation, which at a later period also made its appearance in the other dialects. Correspondingly Goth. nasjan 'to rescue' with s for z after nisan as opposed to OHG. Ags. nerian, prim. Germ. 1. sg. *nōzjō.

The contrast, between Goth. äusō 'ear' MHG. æse 'ear' and OHG. òra 'ear', and between OHG. haso and Ags. hara 'hare' etc., was also caused by an old difference of accentuation.

Goth. regularly passed into s, if it came to stand finally,
§ 581—582. Indg. s in Germanic.

cp. § 531. 2. sg. *bairis from *bairiz(i) = Skr. bhārasi, cp. O.Icel. ber-r. Nom. riqis from *riqiz(-a-n) beside gen. riqiz-is (the spelling riqiz is inexact, just as Mod.HG. raub instead of raup, after raubes etc., Lat. urbs instead of urbs, after urbis etc.). Adv. diris 'earlier' beside nom. sg. diriz-a.

§ 582. The change of s, mentioned in § 581, can also be traced in the combinations rs, ls, sl, sn, ms. The differences, which had regularly arisen in prim. Germ., were obliterated here also partly by levelling out and partly by processes of assimilation.


Rem. 1. Goth. 1. pl. ga-daúrsam 'we dare' for *daúrsam (= OHG. gis-meru, Skr. dadhāyama) after sg. ga-dārz (Skr. dadhrās), like kswm for *kswm (§ 581). Goth. poúron-s 'parched, dry' for *poúruz-s after
ga-hairsan etc., cp. O.Icel. ðurr O.Swed. þurr OHG. durri 'withered, dry', Skr. ṭṛṣṭ-ṛṣ 'greedy, gaping with thirst'.

ls and iz (West Germ. ili). Goth. hals, gen. halsis, OHG. hals 'neck' prim. Germ. *halsa- : Lat. collu-m from *coles-m. Goth. ga-talzjan 'to teach, instruct', to un-tala- (nom. untals) 'disobedient'; talz- may represent a nominal -es-stem. OHG. bellan 'to bark' Ags. bellan 'to bark, scream, howl' Low German bulle 'bull' point to a prim. Germ. pres. *bélso pret. pl. *bélzuni : Lith. balsu-s 'voice, sound', Skr. bhāṣāmi 'I bark' (cp. § 259), Indg. *bhelse; the ili in bullun 'barked' etc. had crushed out the regular ls of the pres. and sg. pret.

sl and iz (ili). I do not know an example for sl'). zl in MHG. krol, gen. krolles, 'curled, curled in locks' krolle 'curl, lock' Mid. English crullen 'to curl', prim. Germ. *kruz-lá-, to MHG. krüs 'crisp, curled' Mid. English crūs 'crisp, angry'. Cp. also O.Icel. krolla to tremble, quake beside hrjösa 'to shudder', to Gr. xρονζε, 'awful, causing shudder' xρον-ταιρω 'I make to freeze'.

sn and zn (OHG. wn). Goth. asneis OHG. esni Ags. esne 'day-labourer' prim. Germ. *ás-niṣa-, as opposed to OHG. arn (gen. arni) 'harvest' O.Icel. qnn 'season for working in the field' from prim. Germ. forms with unaccented root-syllable; cp. Goth. asans 'harvest, summer'. Goth. razn O.Icel. rann Ags. ørn (from *ærzn, and this from *ræzn) 'house' prim. Germ. *raz-nái, to OHG. ras-ta rest, repose, a certain distance' Goth. ras-ta 'a certain distance'. OHG. lirnēn lernēn Ags. leornian OS. linōn (cp. OS. mēda § 596) 'to learn', would have been in Goth. *leznan pret. *leznōda, to Goth. lāis 'I know' OHG. lēren 'to teach', rt. lejets-

ms and me. Goth. ams (st. amsa-) m. 'shoulder' : Skr. āṣa- 'shoulder'. Goth. mīnea- 'flesh' : Skr. māṣā-m Pruss. mensā menso O.Bulg. mēsa 'flesh'.

Rem. 2. Did the s in ns once become z? For nz I do not know any other examples besides Goth. acc. pl. hounz-unh 'all' ēanz-ei 'which',

1) The nominal suffix -sla- must be left out of the question, since this probably represents an Indg. -t+ilo-. See Kluge's Nominale Stammbildungslehre p. 84.
but -ss cannot have been prim. Germ. in this case (§ 583.) In numerous cases -ss appears on all sides where -ss or its further development might be expected, e. g. OHG. part. düssan 'swollen' (dūsana Goth. pīssan 'to draw, pull': Skr. īsāyāmi 'I pull to and fro, shake', Lith. tėsū 'I stretch by pulling', rt. tės-,). I conjecture that -ss had been developed to -ss (as in Umbr. in Lith. dialects and elsewhere) at the time when Verner's law operated. s could not become voiced with this articulation.

Owing to Goth. fassma 'to the', beside Skr. tāsmā tāsmāti Pruss. stezmə etc. Umbr. pusume 'ou!', and Goth. im O.Icel. ìm 'I am'. beside Skr. āsmi, it may be assumed that ss became mm in prim. Germ., im first of all from *imm. Otherwise, but not convincing to me, Osthoff Zur Gesch. d. Perf. 428.

§ 583. Final s (Indg. -s and -z — see § 645 finals 3 — may at that time partly or entirely have been levelled out to -s) was also subject to Verner's law. This law thus gave rise e. g. in the nom pl. of Germ. a- and õ-stems to -ōz beside -ōs (Skr. -ās), and in the gen. sg. of i-stems to -iž beside -āž (Skr. -āg). Such doublets were then treated differently in the separate dialects.

In Gothic, -z became s (ْمُلْفُز 'wolves' *ya-qunțǎis gen. 'of a meeting, synagogue' *batrāis opt. 'feras' became sulfsōs ga-qunțǎis batrāis) either at the same time with the z which became final at a later period (e. g. *batrīz(i) 'thou bearest', § 581 p. 534 f.) and thus fell together again with the s which had remained unchanged (mundōs nom. 'existimatae' = Skr. mūtās, Indg. *mūtās). Or else, before the dropping of the final short vowels (§ 660, 1), a generalisation of the -z first took place, as in Norse, so that e. g. *mundaz was also spoken instead of regular *mundōs, and then later -z everywhere became -s. I am in favour of the latter assumption. For thus can be best explained why z regularly appears for original final s, when a particle is attached to it (e. g. is 'he': iz-ēi; veis 'we': veiz-uħ; hwas 'who?': hwaz-uḥ; vīleis 'velis': vīleiz-u), whilst s appears in vās-uḥ beside vās 'he was', where s had only become final at a later period (*vāsi, prim. form *ye-mūs-s).

-z, as absolute final, was dropped in West Germanic, whilst -s was retained. -z had frequently been extended beyond its original sphere and had supplanted -s. Nom. pl. OHG. geba OS. gebau Ags. zīfa 'gifts' = Goth. gībōs. Nom. sg. OHG. OS.
Ags. *sunu 'son' = Goth. *sunu-s. In OHG. the z-form was
generalised in the nom. pl. of α-stems, taga, in OS. and Ags.
the s-form, OS. dagos Ags. dağas. Likewise the -s in the OS.
gen. sg. burges nahtes kustes etc. is probably to be regarded
as Indg. final -s. OHG. nom. sā 'sow' from *sāz for older
*sā-s. Where r = z occurs in West Germ., as OHG. ir er
(Goth. ēs), wir (Goth. veis), zar- zer- zir- (Goth. tez-), this mode
of treating the z was occasioned by the close connexion with
following words and by the different stress which the pronouns
and particles had in the sentence and in compounds. Cp. Paul
in Paul-Braune’s Beitr. VI 550 ff.

Prim. Germ. -z was generalised in Norse, whence -r, e. g.
sýr 'sow' (dat. acc. sū), ulfar 'wolves', gjafar 'gifts'.

Nothing prevents our assuming that -z became generalised
in the nom. sg. in the prim. Germ. period.

Baltic-Slavonic.

§ 584. Indg. s remained generally intact in the period
of the Balt.-Slav. primitive community.

The changes in this period were:
ks became ᵇs, whence Lith. sz, O.Bulg. s. Lith. assi-s
O.Bulg. osī 'axle': Lat. axi-s, opf. *aksi-. See § 414. 544 p. 398.

Primitive Balt.-Slav. ᵇs = Indg. sk is less certain, as Lith.
maiszūti O.Bulg. mēsitī 'to mingle, mix'. See § 414 rem.

§ 585. s remained unchanged in BALT. and Slav. in the
following positions:

1. Initially before sonants and consonants (except sj). Lith.
septyni O.Bulg. sedmī 'seven': Skr. saptā. Lith. sūnū-s O.Bulg.
synū 'son': Skr. sūnī-ṣ. Pruss. swai-s 'his' O.Bulg. svati 'rela-
tion' svojī 'own': Skr. svā-. Lith. sesū O.Bulg. sestr-a 'sister':
Skr. svāsār-. Lith. snēga-s O.Bulg. snēgū 'snow': Av. snaēkaiti
'it snows', rt. sneigh-. Lett. smē-ju 'I laugh' smai-da 'a smiling'
O.Bulg. smē-fa sē 'I laugh': Skr. smāy-a-tē 'he smiles'. Lith.
smuktī 'to slide' O.Bulg. snykati sē 'to creep, slip': MHG. smiegen
'to wind, bend'. Lith. srav-ā 'a flowing, bleeding' O.Bulg. stru-ja
a flowing': (with exccesent ţ, op. 2.): Skr. srāv-ā-ti 'flows'. Lith.
slenku 'I creep' O.Bulg. slątku 'crooked': OHG. slîgan 'to wind tc and fro' slango 'snake'. Lith. spėju 'I have time, leisure' O.Bulg. spėja 'I have success': Skr. śpáyāmi 'I swell, thrive'. Lith. staigyti-s 'to hasten' O.Bulg. stignati 'to come somewhere': Gr. στῇχω 'I stride, go'. Lith. skabėti 'to cut' O.Bulg. skobit 'radula': Lat. scabē.


**su**. Lith. es-va O.Bulg. jes-vě 1. du. 'we two are': ep. Skr. s-vās.

**sm.** es-mī O.Bulg. jes-mī 'I am': Skr. ās-mi. Lith. ju-s-mi 'I gird' jūs-mī 'girdle': cp. Gr. ζώμα from *ζω-μα (§ 565), rt. jōs-. Lith. ges-mē 'a low glimmering fire', to gēsti (pret. gēsai) 'to expire, go out'. O.Bulg. kosmē 'hair' beside kosa 'hair' (cp. § 588 rem. 4): OHG. hār 'hair' from prim. Germ. *χεζā-?

Rem. 1. The datives Lith. tēsmui tām and O.Bulg. tōsmī to the' beside Pruss. s-tēsmū Skr. tēsmāi have not lost their s regularly, but are new formations after the analogy of other cases with m-suffixes without s. See the accordance.

**sn.** Lith. prus-nā 'mouth' (praus-iū 'I wash my face') O.Bulg. pris-na 'spargo': Skr. pruś-ṇu-tē 'squirts, trickles, wets'. Lith. po-klus-nū-s 'obedient' (cp. Pruss. po-klus-ma-n acc. 'obedient'), to klauša 'obedience': O.Bulg. sluchū 'a hearing, obedience', Indg. klieys; on the initial Lith. k cp. § 467, 2. Lett. sausmi-s 'a dried up tree', to Lith. sausa-s 'dry', rt. saus-. O.Bulg. ves-na 'spring' beside Lith. vasarā 'summer', Skr. vas-antā-s 'spring'. O.Bulg. gasna 'I expire' beside Lith. gēsa. 'I extinguish; to which Skr. ghas- 'consume'? O.Bulg. po-jas-mī girdle': cp. Gr. ζώνη 'girdle' from *ζω-να (§ 565), rt. jōs-

Rem. 2. Slav. -čh- in dučhņati etc. has arisen by analogy. See § 588 rem. 2.

**sr** became str (cp. str from ėr § 545) in Slavonic universally, in Lithuanian only partially. O.Bulg. sestr-a 'sister from *sesr-a : Skr. svasr-. Lith. timera-s 'sorrel': Skr. tamiśra-ṇ 'darkness' etc., see §§ 570. 580. Lith. nas-rai nastrai pl. 'throat', to nōsi-s nose'. Correspondingly srovē and strovē 'a flowing' (cp. 1.) etc. It is not clear in what parts of Lith. and to what extent the excrescent consonant made its appearance.
Rem. 3. O.Bulg. nozdri pl. 'nostrils, nose' has been directly connected with Lith. nasrūl, as if *zd- had arisen from *zr. It is probably better to divide the word into noz-dṛi and to regard the second part as a noun belonging to the root der-, cp. O.Bulg. dîra dēra 'slit', Skr. dārā 'slit, hole'. Also mezūra 'fine skin on a fresh wound, the fleshy part on a thing', which has been connected with Lat. membrum-m membrīna (kor-from -sr-, § 570) and O.Ir. mēr 'piece of flesh' (§ 570), and regarded as a further formation of mēsō 'flesh' (Skr. māsā- Goth. mīns-) may be compounded of *mems+dṛa- (from the same root der-: with *mems- cp. the Skr. stem mās- instr sg. mās-ā compound mās-pācana- 'serving for the cooking of the flesh') and have originally signified 'a skinning of the flesh'.

st. Lith. veislē 'brood' veislū-s 'fertile', to veisiu 'I propagate'. Lett. truslis translis 'fragile', to trush 'I become bristly', Lith. triūsai pl. 'the long feathers in the tail of a cock'. O.Bulg. trešlū part. pret. to tresp i 'I shake'.

Rem. 4. Slav. -čh- in u-sčchū etc. has arisen by analogy. See § 588 rem. 2.

st. Lith. ės-ti O.Bulg. jes-ti 'is': Skr. ės-ti. Lith. jūs-ta-s girded': Av. yās-ta- Gr. ζωστό-ς 'girded'. O.Bulg. 2. pl. of the s-aorist dé-s-te, to dé-ti 'to put, place': Skr. dhā-s-ta.

3. In the medial combinations ms, ns, ls, ts, ss.

ms. Pruss. mensā menso O.Bulg. m.so 'flesh': Goth. mīnsţa- Skr. māsā- 'flesh'. Lith. fut. imsu, to imū 'I take', O.Bulg. aor. ėsū, to imq 'I take': cp. Gr. ἑκατό from *e-neu-sa (§ 565).

ns. Lith. fut. pisu, to pīnū 'I plait, twist', O.Bulg. aor. pūsū, to pīnq 'I strain, hang'. Lith. ęsū-s 'goose': OHG. gans. Lith. ėsūi 'I stretch' tāsū-s 'extensible': Goth. at-pinsan 'to draw towards'. O.Bulg. tresp i 'I shake' from tres- (Gr. Hom. τρέσ-σα) with 'nasalinfix' or from *tren-s- (cp. Lat. tremō)? Old Czech loc. pl. Poláš (proper name, see Miklosich Vergl. Gramm. III 16), to nom. pl. O.Bulg. poljān-e 'field inhabitants', according to Leskien for prim. Slav. *poljā-sū (*poljān-sū) after the analogy of poljā-mi -mū (with regular loss of the n' before m, § 219); in other cases, after vowels, Slav. -čhī = Skr. -su, § 588, 2.

Rem. 5. Forms like pčchū, beside pčsū, were new formations. See § 588 rem. 2.
ls. Lith. bulsas 'voice, tone'; OHG. bellan 'to bark', Skr. bhūṣāmi, see § 582 p. 436. Lith. skelsiu 'I drive away, reach out'; delsia 'I tarry, delay'. Lith. fut. kelšiu, to kelsiu 'I raise'. O.Bulg. glasi 'tone, note, voice' from prim. Slav. *golsi, to O.Icel. kalla (ll from lz? § 582) 'to name, call'.

is became s through the intermediate stage ss in both language divisions. Lith. ésin 'I shall eat'. O.Bulg. jasi 'thou eatest' aor. jasū : cp. Skr. fut. atsayāmi 2. sg. pres. ātis, rt. ed-. See § 544.

Rem. 6. Forms like jachū, beside jasū, were new formations. See § 588 rem. 2.

ss became s in both language divisions. Lith. fut. lesiu, to lesū 'I pick up'. Goth. lisa 'I gather together'. Lith. fut. jūsiru, to jūs-mi 'I gird', cp. Gr. aor. ἱέσσα from * ἱέσσα, rt. jōs-. O.Bulg. s-norist otū-trisū, to otū-trasq 'I shake off'. O.Bulg. jesi 'thou art': cp. Gr. Hom. ἵσι. nasū (gen. loc. pl. to my 'we') from *nās-sī, cp. the possessive pronoun nasū from *nās-ī (§ 588. 2. 3).

§ 586. Besides the cases mentioned in § 585 Indg. s also regularly remained in Lithuanian in the following cases:

1. After vowels and diphthongs before sonantal vowels, lesū 'I pick up': Goth. lisa. sauša-s 'dry': Skr. śośa-s 'drying up, parching' (§ 557, 4), rt. saus-. Part. perf. act. fem. āugus-ī, to āugu 'I grow': cp. Skr. vidūṣ-ī (indic. vēda 'I know').

Rem. 1 ss frequently appears where we should expect s. Concerning maisugī etc. see § 414 remark. maissu-s 'large sack, hay net', which has been regarded as a genuine Lith. word and brought together with Pruss. moasis 'bellows' O.Bulg. mēchū 'hide, leather bag', might have been borrowed from German (OHG. meiss 'a frame for carrying on the back', O.Icel. meiss 'food basket'), with the same substitution of ss for Germ. s as in āzīla-s beside āzīla-s 'ass' from Germ. (Goth.) asīlu-s. Cp. further § 587 rem. 2.


3. in qs. Fut. āksiu 'I shall leave': cp. Skr. rēkṣyāmi.

Rem. 2. Such futures with ks are not quite reliable examples, since s may have been introduced by analogy just as in ĝēsīu (§ 587 rem. 1). *Akssiu can hardly be regarded as the regular form, even if
âuksza-s 'high' is related to Gr. ἀὖξσ Lat. auxilium m O.Ir. òs was Cymr. òch (§ 434).


§ 587. Changes of s in Lithuanian.

1. rs became rs. mafsza-s 'a forgetting' mirszañ I forgot': Skr. marya-s 'a patient enduring' nyṣyातmi 'I forget. bear patiently'. vėrszi-s m. 'calf': Lat. verrēs from *versēs (§ 571), Skr. vṛṣa-s 'bullock'. vīrsu-s 'top, point': Skr. vārṣīyas- 'higher', perhaps also Lat. verrūca 'lump, wart'.

Rem. 1. Fut. gérēiš had been formed after the analogy of kélisiu dūsiu etc. Leskien (Der Ablaut der Wurzelsilben im Lit. 85) explains ganšu-s 'noise' as coming from *gur̥das-s, to gerdēti 'to hear'. versē 'flake' is a borrowed word, see Brückner Litu-Slav. Stud. I 151.

2. sz for s through assimilation to the sz of a neighbouring syllable. srezura-s 'father-in-law' from *seszura-s: Gr. ἕσπο-ς, Indg. *syēkura-s. sza-szlavýna-s beside sq-szl. 'heap of sweepings': O.Bulg. sq- Skr. sam- 'with'. Assimilation in the opposite direction probably in szása-s 'scurf': O.Bulg. socha 'piece of wood' o-sošiti 'abscondere', Skr. sāsāmi 'I cut, slaughter'. Cp. the analogous assimilation in Skr. § 557, 4.

3. sz(i) from stj became sczz(i) in East Lithuanian dialects. Opt. kláuszcziáu (kláuszcze) from kláuszcziáu, to indic. kláusiu 'I ask'. Cp. pészczia-s from pészcia-s i.e. *pézd-tja-s, § 544 p. 397 f. sz is pronounced softened (sz), the course of development was stzi — štšz — sztsz.

4. kláusdamas beside kláusdaman (part. of kláusiu 'I ask'), just as mězdama-s beside měsdama-s. See § 544 p. 398.

Rem. 2. Has sk become szk in pure Lith. words? jèskėtī 'to seek' (O.Bulg. iskići 'to seek' OHG. eisćōn 'to seek') and the suffix -isska-s e.g. tēs-isska-s 'fatherly' (O.Bulg. žen-isskū 'womanish', Goth. barm-icks 'childish') have the suspicion of being borrowed from Germanic. Cp. § 414 rem.

§ 588. Prim. Balt. Slav. s did not remain unchanged in Slavonic in any of the positions, in which it was preserved in Lith. (§ 586), nor in those in which it underwent a change in Lith. (§ 587); the case in § 587, 2 excepted.

1. ch (χ) from s after k (Indg. g) and r.
ks became chch, further ch. Aor. těchű 'I ran' prim. f. *těq-s-o-m, to pres. tekq. See § 462.

rch. vrachů 'a threshing' from *yorchů, vrčchů 'I thresh' from *yřchů: Lat. vrrō vrrō, rt. yers-. vrčchů 'top': Lith. vėrsėi-s Skr. vārśyas-, see § 587, 1. s-aorist trčchů, to līrq 'I rub'.

This ch became š and s under the same conditions as those by which k passed into ď and c, see §§ 461. 462. vršēt 3. sg. to vrčchů. vrīš-en-y 'hornet, horse-fly' from *vrirch-en-: Lith. szirsz-ū, prim f. *kys-en- (§ 582). vrīsi nom. pl. to vrčchů 'top' (stem vrčcho-). vrēšēte 2. pl. opt. to vrčchů.

Rom. 1. The inf. vrčhti 'to thresh' must be explained from *yorchšt, more precisely *yercšt, see § 462 rem. Cp. with it however trište from *trište 2. pl. to trčchů. Which of the two forms represents the regular treatment of rst?

2. Further ch (š, s) for Indg. s between vowels; numerous sure examples for ch especially after u- and i-vowels. snūcha 'daughter-in-law' snūšinū 'like a daughter-in-law': Skr. snuṣṭ, Indg. *snuṣṭ-. mūčhū 'moss': Lith. pl. mūsaś 'mould', OHG. mōs 'moss'. myšt 'mouse': Lat. mūs OHG. mōs. jucha 'soup': Pruss. juse 'broth', Skr. yāśa- 'sauce', Lat. īsa. duchū (voc. sg. duše nom. pl. dusi) 'breath', duša 'soul' from *dachja : Lith. daŭsos pl. 'upper air'. Part. pret. fem. nom. sg. pekuši (pekq 'I cook') from *učti, acc. sg. -ušq from *učtiq : Skr. -uṣ-i-uṣ-ya-. pichati 'to push, stamp, strike', indic. pres. pūśq from *pūchqś: Lith. pūs-tă 'stamping vessel' pāgisūti 'to strike the swans off harley': Lat. pūns-ō. lēcha 'beet root' prim. f. *lojs-a : Lith. lūsé 'beet', Lat. līra, MHG. leis leise 'trace, track'. socha 'piece of wood' o-sošiti 'abscondere': Skr. sāsāni '1 cut, slaughter'. Aorist ending 1. sg. -čhū 3. pl. -šć (cp. Skr. -s-am-): da-čhū to da-ti 'to give', dé-čhū to dé-ti 'to place', by-čhū to by-ti 'to be', plu-čhū to plu-ti 'to sail', vi-čhū to viti 'to wind'. Suffix of the loc. pl. -čhū = Skr. -su : šenā-čhū to šena 'woman', vlūče-čhū to vličkū 'wolf', pāt-čhū to pāti 'way'. Gen. pl. tēchū to tū 'the': Skr. tē-sam O.Icek ĺeί-rā (Goth. pi-zē blindāi-zē). Ending of the 2. sg. -šć from *-čhū (not = mid. Skr. -sē Gr. -α)w; for prím. Slav. *-choj
would have become *-si; here-ši to berq; cp. beside this justi 'thou eatest' from *etstā, jesī 'thou art' from *essi § 585, 3.

Rem. 2. Through new formation ch frequently came into positions where it could not have arisen regularly. chā : dūkhomati 'to breathe', sūkh-nāti 'to become dry'. chā : n-sūkhi 'dry' sūkhi f 'dry wood'. ch after nasal vowels: nor perchā beside perē; acharī 'to smell' instead of *çasāti (*mā-sā, to ron-ju 'smell' cp. Lat. abu-m (h)dāvē from "anasita-" §§ 208, 570) through association with ja-chati 'revē' (Skr. yā-mi 'I drive' Lith. jā-ju 'I ride') ma-chāti 'agitare, vestilare' (beside ma-ja 'vibrō'). ch for s = ts : nor. jochā beside jasā 'I ato' (§ 543). Cp. § 585 with rem. 2. 4. 5 6.

Rem. 3. ch appears often initially before vowels and r, l, v. Most of the words are unfortunately not etymologically clear. Some are undoubtedly borrowed words and the ch in them has nothing to do with s, as chudē 'coolness, dew' from Germ. (Goth.) hulds 'cold'.

choččā 'incessus, iter' has been regarded as a pure Slav. word and connected with Gr. ká-s-s - Skr. á-snd- 'reach, attain', so, also, chrōmē 'lame' to Skr. srāmā-s 'lame'. I know nothing which helps to explain their ch.

s often appears where, from what has been said above, we should expect ch (or š). Examples: nosū 'nose': OHG. nasa. hosū 'bare footed': Lith. básas OHG. bar. po-jasū 'girdle'. gasiti 'to extinguish': Lith. gesūti. bēšū 'demon': Lith. baisa 'fright'. rosa 'dew': Lith. rasū 'dew'. Skr. rāsā 'that which is wet, fluid', Lat. rās rāris. kosa 'hair': OHG. hār? Gen. sloves-e (nom. slovo 'word'); Skr. śravas-ah Gr. xlé(÷)e-oę. I cannot find any special reason (vicinity of sounds etc.) which should have prevented s from passing into ch in these examples. I conjecture that none of these words had an s at the time s became ch.

Rem. 4. For some cases a plausible explanation lies close at hand. po-jasū after po-jasū, gasiti after gasmati, kosa after kosmē or similar forms, in which s regularly remained. sloves-e sloves-i etc. may be explained, if we take into account that for sloves-ēmē-tēmē-tēmē there once existed *sloves-mē-tēmē etc. and for sloves-ichē *sloves(e)šē (cp. poja-mē from *poskā-mē etc. § 585, 3); *sloves could also have formed a factor, if s had not already been dropped at that time (7). On nosū cp. § 569 rem. 3. The whole question requires a thorough investigation.

3. Prim. Slav. š = Indg. ši had, as we saw under 2., passed through the stage ch, in duša piša etc. On the other hand ši is to be traced directly back to š in šiti 'to sew' from *šīti *šiš-ti = Lith. siū-ti and in such cases as gaša. I ex-
tistinguish' beside 2. sg. gasiši etc. (2.). This latter, younger change took place at the same time with the transition of si = Indg. ėj into š, as in nošq 'I carry' from root nek-, pišq 'I write' from root pešk- (§ 147). gašq: gasiši = nošq: nosiši.

4. stj, strj, skj, slj, snj became O.Bulg. št, štrj, št, šlj, šnj. gošša 'I take as guest' from *gostijaj, inf. gostiti, to gosti 'guest': Lat. hosti-s, Goth. gaetics. tūšši 'empty' from *tūskij: Skr. tūchād- 'empty'. See § 147.

5. If s came to stand before mediae, it passed into z. zborū fr. s(ū)-borū 'a bringing together, a uniting'. zdělati fr. s(ū)-dělati 'to carry out, complete'. zdravšū fr. s(ū)-dravišū 'healthy'. Here eventually also nozdri, see § 585 rem. 3.


7. Final s was dropped. nebo 'sky': Skr. nābhās, Gr. νεβος. Other examples in § 665, 4.

Primitive Indg. changes of s.

§ 569. The following modifications of s may be regarded as prim. Indg.

1. s became z before voiced explosives and spirants, e. g. *z-dhi 'be' imper. from rt. es-, *menex-bhi(s) instr. from mene- 'sense'. See § 590. Cp. Indg. -bd- from -pd- etc. § 469, 2.

2. ssk became sk. *iškó i. e. *is+škó pres. from rt. ajs- 'seek': Skr. ichdāni 'I seek, wish', cp. OHG. eiscon 'to seek'.

Rem. 1. There is little foundation for the assumption that intervocalic ss has also become s in secondary accented syllables, as *reś 'thou art' (Skr. ṛśi Gr. ἢ) from *res-ṛ (Osthoff Z. Gesch. d. Perf. 18), and that ss has become ts under certain conditions (J. Schmidt Kuhn's Ztschr. XXVI 343 ff. XXVII 339 ff.).

3. Initial s was dropped under certain conditions before consonants, possibly e. g. after s at the end of words, so that this reduction would be identical with the one mentioned under 2. (Cp. Skr. duṣṭati-ś 'bad song of praise' = duṣṭaṇṭati-ś, Gr. δογματικος = δογματικος, Corthyn inscript. ταυταγμος = ταυτις.

It is certain that s- often first disappeared in the separate developments of the Indg. languages, as in Skr. uttātum inf. ‘to rise’ from *ul-sthātum (§ 557), Lat. nāre from *snāre (§ 570), O.Ir. -tau ‘am’ from *sta-ją (§ 575), and it is not possible everywhere to separate this loss from that in the parent Indg.

4. It is probable that the combinations bh, dh, gh, gh+s, which are etymologically to be presupposed for words like Skr. dipsati, had experienced a change of articulation in the prim. Indg. period. But it is not yet determined what this change was. bh, dh etc. are to be assumed for prim. Aryan. See §§ 469, 470, 482, 552.

Rem. 2. That ẹ was dropped between explosives already in prim. Indg., is an uncertain conjecture. This theory is based on OHG. seheto O.Icel. sētte stötī Gr. ẹττο- ‘sextus’. I grant an Indg. *seketō-ẹ. But it is quite possible that this form had never had the final -s of *seka. For the present it seems to me wisest to regard the loss of s between explosives as a process carried out in the separate languages.


\[ \text{Indg.}\ x. \]

\[ \S\ 590. \text{Primitive Indg. period. So far as can be seen } x \text{ occurred only in combination with following mediae or mediae aspiratae.} \]

Before mediae. \[*ni-\text{zd-o-} \text{ ‘place of rest’ (ni- ‘down’, rt. sed- ‘sit’)}*\] Skr. \(nīḍā-s\) ‘place of rest, nest’, Armen. \(nist ‘seat, possession’\) Lat. \(nīḍā-s\), O.Ir. \(nēt ‘nest’\), OHG. \(nēst ‘nest’\). \[*oxdo-s \text{ ‘branch, twig’*}\] Armen. \(ost\), Gr. \(οξό-\), Goth. \(uṣts\). Rt. \(mezg- \text{ ‘tie knots’*}\]

\(ŚHG. māśqa ‘mash, loop’, O.Icel. \(mǫskve \text{ mo}skvi ‘loop’, Lith. mezgū ‘I tie in knots, knot; māzg̱a-s ‘knot’.*\]

Before mediae aspiratae. \[*z\-dhī \text{ ‘be’ imper. from rt. es-be’*}\] Av. Gāp. \(zdī\), Gr. \(īōth\). Instr. in \(-zdhih\) from \(s\)-stems: Skr. \(uṣāḍbhīś\) from \(uṣās- ‘dawn of day’, Gr. \(ἐρέσσαί\) from \(ἐρέσσα– ‘darkness’.*\]

Root forms \(mezg\)- and \(mezgh\)- ‘duck, sink down’ (cp. \(stem-)\) and \(stembh-\) etc. \(§\ 469, 8\): Skr. \(mājjaṁ ‘I duck under’ māḍgū-\) a water fowl \(mājjān- ‘marrow’ (g) Av. mazgā- ‘marrow’ (g or gh), Lat. meryō mery-\)us (g), Gallo-Lat. \(mēsya ‘whey’\) (g or gh, cp. \(§\ 521\)), OHG. Os. \(mazg ‘marrow’ (gh), Lith. mazgōti ‘to wash’ O.Bulg. \(mozgū ‘marrow’ (g or gh).\]

\(x\) probably occurred finally before voiced explosives, but we are no longer able to follow it in detail (\(§\ 645, 3\)).

\[ \S\ 591. \text{Aryan. Indg. } zd(h) \text{ fell together with Indg. } d'd(h) \text{ in prim. Aryan, see } §\ 476. \text{At the same time Indg. } x \text{ became } ĕ \text{ under the same conditions as } s \text{ became } š, \text{ and then } ĕ \text{ became } ř \text{ in Skr., as } š \text{ became } ř, \text{ see } §\ 556, 1. \text{In consequence of this change to ĕ, Indg. } zdh, zhk \text{ fell together with } ĕdhab, ĕbh, \text{ see } §§\ 404. 482.\]

Prim. Ar. \(ażd(h) \equiv \text{ Skr. } ēd(h) \text{ ad(h), Iran. } ażd \text{ ad.} \text{ Reduplic. stem Skr. } sēd- \text{ Av. hazd- from rt. sed- ‘sit’,} 3. \text{ sg. opt. perf. } sēd-yā-t, \text{ hazd-yā-h, Skr. } sēd-ī-ś ‘a weakening’: Lat. \(sēd-imus sēd-ēs sēd-āre\), Indg. \(sezd-\). Skr. \(nēd-īyas- \text{ Av. naizz-yaḥ- ‘nearer’ from prim. Ar. } *na-žd- \text{ from the same root sed-, properly } ἐπιψων, προοψενο-‘. \text{ Skr. } zdhī ‘be’ imper. from prim. Ar. \(azdhi beside Av. Gāp. zdī, cp. } §\ 313 \text{ p. 252.} \text{ Skr.} \]


Rem. 1. 2. sg. imper. ēvāḍhī (to indic. deṣ-mi 'I hate') instead of *deṣṭhi was a new formation of the same kind as diṇḍīḥi (to didēśmi 'I show'). See § 404 rem. 2.

Prim. Ar. zh(h) = Skr. ḍḥ(h) (Iran. ḍb, not found). Skr. instr. pl. uśādhiṣṭ, vidvādhiṣṭ, madhhiṣṭ from uṣās- 'dawn, daybreak', vidvās- 'knowing', mās- 'moon, month'.

Rem. 2. The endings of the instr. pl. of stems in -us- Skr. -ṛ-bhiṣ Av. -ṛ-ḥiṣ O.Pers. -a-biṣ were new formations. See the accidence.


Rem. 3. The Skr. endings of the instr. pl. of stems in -ṛ- and -uṛ- -bir-bhiṣ and -uṛ-bhiṣ were new formations. See the accidence.

Prim. Ar. azg = Skr. adg Av. azg. Skr. madgū-ṣ, a water fowl, Av. mazga- 'marrow', rt. meṣg-, see § 590. But
prim. Ar. aṣj passed through adi into aṣ in Skr. (op. ujjiti-ṣ ‘victory’ from *ud-jiti-ṣ, § 355). mājjami ‘I duck’ maffjan-ṣmarrow from the same root meṣg-. sajjatē ‘clings to something’ from *sa-sj-a- redupl. (op. sa-sc-a-ti ‘follows’ from sac-): op. Lth. segu ‘I fasten’.

z was dropped between explosives and spirants (op. § 557, 3). Skr. ámugdhvam i. e. *amugzdhvam 2. pl. mid. of the s-aorist (3. pl. ámukṣata) from muc- ‘loosen’. In sd-gāhi-ṣ ‘a common meal’ i. e. *sa-gzdhi- gzdḥ was = ghst (ghas- ‘eat’), and in the 3. du. babdham from *ba-bzdham bzdḥ was = bhst (3. sg. indic. pres. bā-bhas-ti ‘chews’), op. § 589, 4. From the fact that we have here gdh, not gdh, it cannot without further consideration be concluded that the dropping of the sibilant was older than the prim. Ar. transition of z to ē. gēdh may have existed in prim. Ar. and have become gdh in the Skr. separate development, before prim. Ar. and prim. Skr. ē and ū acquired the cerebral articulation (ē, ū).

§ 592. Armenian. The only sure examples seem to be nist ‘a lying, nest’ and ost ‘branch’, see § 590. On the sound-shifting cp. §§ 361, 484.

§ 593. Greek. z was retained in combination with mediae; in writing it was not sufficiently distinguished from s.

oβενημι ‘I quench, put out’ aor. εσβην, probably from a weak-grade root form zg-, of which the strong-grade seg- exists in Lat. sēgni-s. πρέσ-με-ς πρέσ-γη-ς ‘old’, the origin of which is not quite clear (op. § 428 c). The voiced pronunciation of the σ is vouched for in these words by the appearance of ζ (ξένημι πρεζημηνις), which came into use during the Hellenic period.

zd appears as ζ, Lesb. σδ. ζε-ζ Lesb. ζοδ-ζ ‘branch’: Goth. asts, see § 590. Τζω ‘I set’ Lesb. παι-λοδο: Lat. sidō, Indg. *si-zd-ζ, fr. root sed-; for Skr. sddāmi, which cannot be separated from these presents, we should expect *siddāmi; this verb probably had d for ζ through association with sddāmi sasdda etc. It remains doubtful whether ξομα arose from *σε-σο-μαι or *σεθ-θ-μαι. Cp. further Διοζοτο-ς Διοζοτο-ς ‘god given’.
(Δος- gen. sg.) and Ἀθήνας 'to Athens' = Ἀθήνας-ς. Ion. Att. ζ was probably only the graphic representative of zd, cp. § 493 rem.

z before mediae became dialectically ρ, as Thess. Ἑαο-δόρεο-ς beside Ion. etc., Ἑαο-δόρο-ς (new formation after Δος-δόρο-ς); cp. Erettr. δυνοοφάς § 489, Cret. κύριος-ς § 565, El. τιπ § 653, 6.


§ 594. Italic. Sure examples are found in Latin only.

zg became rg (cp. 569). mergu-s from rt. mezg-, see § 590.

z was dropped before d, with 'compensation lengthening' after short vowels. nǐdu-s fr. Indg. *ni-zd-o-s, see § 590. pēdō pōdex from *pezdō *poldex: Gr. βδῶ 'I break wind' from *βzd-iō (cp. § 334), Sloven. pedeti 'to break wind'. With sīdō (see § 593) Bucheler connects Umbr. sistu, as being sīditū; but this explanation of the form is very doubtful. Cp. further trēdecim fr. *trēz-decim, jūdex fr. *jouv-dex, quīdam fr. *quz-dam: the s in cūjusdam ējusdem ēisdem etc. and doubtless also the s in isdem = ēdem had been introduced by analogy, just as m for n before d, see § 207.

rzd became rd in hordeum, prim. f. *ghrzedeo-m: OHG. gersta 'barley' (Gr. νῦθη is to be separated from it), and in turd-s turdēla : O.Icel. þrōstr MHG. dröste Lith. strāzda-s 'thrush'. We are not, however, certain whether we have Indg. zd or d'd in these words.

Lat. sp, st, sc are to be expected as the regular representatives of original zdh, zdh, zgh, cp. st from d'dh § 507. Perhaps here belong also hasta (see § 507) and fastīginu-m (see § 595).

nōbīs nōbīs from *nozbīs *vōzbīs or *nōzbīs *vōzbīs with Indg.
bh-suffix (see page 123 foot note), cp. nos-ter, vos-ter and O.Bulg. gen. loc. nasü from *nas-sü; but these forms with E were not the regular continuation of the Indg. original forms, cp. crědō, which had probably taken the place of regular *crestō (§ 507 rem.).

§ 595. Old Irish. ɔ before mediae became ã in Irish and Britannic. Gallo-Lat. mesga 'whey', which is to be read mezego, became first of all in those branches *medga, thence O.Ir. medg Mod.Ir. meidhg, Cymr. maidd (from *medja). *niždo-s (§ 550) became Ir. Brit. *neddo-s, thence O.Ir. net Cymr. nth (from *nydd) Bret. neiz. Cp. § 521.

In like manner O.Ir. brot 'sting, prick' from prim. Kelt. *brozdo-s, *borzdo-s (cp. frass § 274). The root is bhraezrs- (Skr. bhṛṣṭi-ṣ ‘point, prong’), and OHG. brort ‘edge’ Ags. brord ‘sting, prick’ O.Icel. broddr ‘point’ and O.Bulg. brazda ‘furrow’ show that the Indg. form contained zdh. With these is also related Lat. fastigiūm from *farst-; it cannot however be determined, whether its st was Indg. zdh or Indg. st (cp. Skr. bhṛṣṭi-ṣ).

§ 596. Germanic. ɔ + media became s + tenuis in prim. Germ. (§ 541, 6). OHG. masca ‘mesh’ OHG. nest Goth. asts (§ 590), OHG. mast ‘a feeding’ (§ 591), OHG. gersta MHG. drostel (§ 594) have already been mentioned. In addition to these possibly OHG. nestīlo ‘loop of riband’ to Lat. notu-s; OHG. geist ‘spirit’ to Skr. heda-s ‘anger’ hūd- ‘be angry’ (3. sg. perf. mid. ji-hūd-), to which perhaps also Av. zūndiśta- superlative with the meaning ‘very bad’ (v. Bradke Kuhn’s Ztschr. XXVIII 295 ff.); OHG. mast ‘ship’s mast’ to Lat. mālu-s, if this arose from *mādo-s (§ 369).

ɔ + media asp. became ɔ + voiced spirant in prim. Germ., further ɔ + media (§ 541, 7). The transition of ɔ to r in West Germ. and Norse was mentioned already under the prim. Germ. ɔ which arose from Indg. s (§ 581). OHG. OS. murg Ags. mearg O.Icel. mergr ‘medulla’, Goth. *mazga- : O.Bulg. mozgu etc., see § 590. OHG. brort ‘edge’ etc. : O.Bulg. brazda, see § 595. Goth. ražda ‘pronunciation, language’ OHG. rarta Ags. reord O.Icel. róða ‘voice, language from original *raz-uk-, to rt. raż-s-:
Skr. rásatē résatī 'sounds, screams'. Ags. heord O.Icel. haddr 'hair' beside O.Bulg. kosa 'hair' Lith. kasa 'braid of hair'. Goth. misdō f. 'pay, reward' OHG. mēta miata (cp. § 75 rem. 2) OS. mēda Ags. mēd and mœord 'pay, rent': Skr. mśdha- 'prize of battle, combat' Av. mśda- 'reward', Gr. μασθός O.Bulg. mśda 'pay'; with compensation lengthening in West Germ. comes OS. līnon beside OHG. līrēn (§ 582 p. 436 § 621).

§ 597. Baltic-Slavonic. x + media and z + media asp. must have fallen together, as in Iran. and Celtic.

Lith. režgu 'I knot': Skr. rājjus- 'string, rope'. Lith. mezgu 'I knot, knit': OHG. masca, see § 590. Sloven. pesdēti Little Russ. pesdīty bzdīty Czech bzdīti 'to break wind': Lat. pēdō, see § 594. It is doubtful whether Lith. strāzda- 'thrust' belongs here, see § 594. Cp. further O.Bulg. noz-dri 'nostrils' and mez-dra 'fine skin', § 585 rem. 3.

O.Bulg. mśda 'pay': Goth. misdō, see § 596.

It is doubtful whether O.Bulg. moxgū 'marrow' contains Indg. zg or zgh, see § 590.

Indg. j.

§ 598. This spirant can be established as Indg. with most certainty initially before vowels.

Rt. jēug- 'yoke': Skr. yugā-m Gr. ζυγόν Lat. jgu-m Goth. juk Lith. jūnga-s O.Bulg. iго (from *iго, § 145) 'yoke'. Rt. jōs- 'gird': Av. yās-ta- Gr. ζωοτός Lith. jōs-ta-s 'girded', O.Bulg. po-jas-ni 'girdle'. Rt. jēs- : Skr. yēs-am 'I bubble', Gr. ζέω 'I seethe, bubble', OHG. jesan 'to ferment, foam'. Skr. yāva- 'corn, barley'; Gr. ζειαί 'spelt', Lith. javai pl. 'corn'. Skr. yūs- 'sauce, broth', Gr. ζυμη 'leaven', Lat. jūs jūsculum jūre-us, O.Bulg. jucha 'sauce, soup'.

Greek alone kept initial ĵ- and ĵ- apart, the former being represented by ζ, the latter by the spiritus asper (§ 129). j- fell together with Indg. di- in prim. Greek, hence ζυγόν like Ζει-ς, ἴγον like Ἀεί-ς, τῶνα (ζ'ον) like Τῶνα (Ζῶνα), see § 493. In the other Indg. languages the two sounds fell together in ĵ. But here, too, the original difference can still be
recognised, in so far as an old inherited weak-grade form
with i or ī (as representative of j + a-vowel) is wanting in
roots beginning with j-. Cp. e.g. Skr. perf. mid. yēṣ-e from
*je-ja-, part. pass. yas-tā- from yas- = Indg. jes- 'bubble' (Gr.
ζηνο) as contrasted with ūj-e iṣ-pā- from yaj- = Indg. jaj-
'respect, honour' (Gr. αἰνο-ς).

It is less certain that j stood beside j medially also in the
period of the prim. Indg. community. The assumption of a
rt. koj- 'lie' for Skr. śē-tē (part. perf. sasay-anā-) Gr. κεῖ-ται
and of a rt. tjēg- 'leave, withdraw' for Skr. tyaktā-s Gr. θερτό-ς
(on o- see § 489) is nevertheless not improbable. Cp. § 117.

OTHER COMBINATORY SOUND-CHANGES.

§ 598. In the first Section (§§ 28—598) we considered the
history of sounds by taking each of the prim. Indg. sounds, so
far as was possible by itself, and following its development
through the separate languages. There thus remains a number of
change-processes which could hardly be fully and sufficiently
discussed, because in these either a great number of different
sounds would be concerned in quite the same manner, or be-
cause there are more complicated changes which a rather large
series of elements underwent at the same time within a pho-
netic unity (word-unity or sentence-unity).

These processes are as follow:

CONTRACTION (HIATUS, ELISION).

§ 600. By contraction we understand the uniting together
under one syllabic accent, of two vowels or sonants generally,
which come directly together and are pronounced with a separate
expiratory impulse. In this way arise either simple long vowels
(Gr. ἄδικον from ἄδικον) or diphthongs (Gr. πάς from πάς).

We saw in §§ 111—116 that contractions took place even
in the period of the prim. Indg. community.
There is sufficient reason for assuming that all cases of hiatus, caused by the addition of stem-forming or flexional elements, were removed already in the Indg. prim. period, so that every historic word-form containing one root only, which exhibits medial hiatus, did not assume this state until the period of the separate developments. Cp. § 111 rem.

Rem. No hiatus existed from the very first in the sonantal combinations ia, va, ya, ra in the interior of such unitary word forms. i, y, n, r were here pronounced as glides from the prim. Indg. period onward, e. g. *patr-iyo-s = Skr. pIter-iya-s Gr. πατρ-ι-α-ς; Lat. patr-in-s, *is-pro-s = Skr. is-ir-s Gr. Κορογρ. ι-ιρ-ζ. See § 117.

On the other hand hiatus might still have occurred at the point of junction in compounds at the period of the dissolution of the prim. Indg. community, e. g. *jugto-ekyo- (*jugto- 'yoked; *ekyo- 'horse'). In Vedic we have yuktāasa-, in Av. yuctaaspa-, in O.Bulg. dobrookũ 'beautiful-eyed' etc., and though it may be in itself highly possible that all such compound forms with hiatus are due to composition in the individual languages, yet the fact, that the pure compounds in the separate languages go hand in hand with the generally later juxtaposita as regards the treatment of the junction, speaks strongly in favour of the assumption of an open *jugtoekyo- directly inherited from the Indg. primitive language. In Sanskrit contraction took place: class. Skr. yuktāsas see above, pṛatika- 'implements' from pṛa+artha-, apaṅga- 'outer corner of the eye' from apa+anṛga-, suktā- 'beautifully spoken' (Ved. su-uktā-). Elision in Greek: ἵππαγωγό-ς 'carrying horses', ἀνάγω I lead away; beside these ἄϕαγω-ς ἄϕαγῳ. Elision in Latin also: mult'angulus, ap'erīō (§ 499), ab'īgō. Hiatus in O.Bulg.: dobrookũ see above, poorati 'to plough'.

Opportunity for contractions in the individual developments was given

1. through two originally independent words, the first originally ending in and the second originally beginning with a sonant, entering into a fixed combination;

2. through forms with hiatus having been newly made
after the type of forms without old inherited hiatus (e.g. Hom. ανήμαν διόμεν);

3. through a consonant or combination of consonants disappearing between sonants in the body of a simple word or in the junction of two words drawn near together.

§ 601. Aryan. Contraction seems not to have taken place in the old Aryan dialects when a consonant was dropped in the body of a word.


Contraction however was frequent through the fusion of two stems of a compound or of two words. But, on the one hand, it is difficult here to separate that which has arisen phonetically from that which is merely due to the imitation of older type-forms on the other hand; it can hardly be determined how far the natural language was ruled by the constraint of metre and by grammatical reflexion. In Vedie and Avestic the contracted and uncontracted forms, the latter recognisable as such through the metre, existed side by side without any perceptible differences. In classical Sanskrit the contracted forms with few exceptions became the rule.


§ 602. Armenian. Contraction after the loss of s in koiir 'sister' pl. kor-k, see § 561; after loss of t in hair 'father' pl. har-k, see § 483; after loss of u in kea-n-k 'life', kea- (monosyllabic) from *kua- = *ḡ̥w- *ḡ̥wa-, see §§ 421, etc.

§ 603. Greek. Very many contractions in consequence of the dropping of intersonantal ī, u (F), s ( §§ 130. 165. 564).
Examples: Att. ἄφω 'I carry' from ἀφέω, older ἄφετεω; παίς 'boy' from παῖς, older *παῖτες; γένους 'generis' from γένος, older *γένιος-ος; ἵππον 'equi' from ἵππος, older *ἵππο-ας. Since the loss of consonants took place at different times — partly in prim. Greek (ς, ς), partly in the course of the individual dialects (υ and ι as remnant of ις, cp. § 639) — , the contractions took place at various periods. Most of them did not happen until after the dialectical variation was already considerably developed. The uncontracted forms were most completely put aside in Attic, while Ionic preserved the full forms to the greatest extent.

When the components of contraction were qualitatively equal, simple long vowels uniformly arose, e. g. Att. Ἀθηνᾶ from Ἀθηνᾶς, βασιλῆς 'kings' from βασιλῆς Cypr. βασιλῆς ης; El. and elsewhere Ἀτ from (Att.) Ατι, older Αἰτι. ςς and οο gave in Ion.-Attic., partly in the Dor. dialects as also in North West Greek, close ι (written ει) and close ο, which was further weakened to ι (written οε), e. g. τρεῖς 'tres' from *τρεῖ-ες Skr. τρί-ας, gen. Hom. ηοῦς from *ηος-ος cp. Skr. gen. उष्द-अς Lat. aurōr-ा. These were no more no more real diphthongs than the ι and ος (§ 618) which had arisen by compensation lengthening.

If a monophthong arose from two vowels having a different quality, the levelling was sometimes progressive, e. g. Att. ἄκουν 'unwilling' from ἄκον, older *ά-κον, Dor. gen. sg. ἄτρείδα from (Hom.) ἄτρειδα, gen. pl. fem. τὰν 'of the' from (Hom.) τὰν (Skr. tāsām, Lat. istārum), Att. Δαιμόνια from (Hom.) Δαιμόνια, older *-ες-α, Att. ἡλικός Dor. ἡλίκος pl. 'smaller' from -ο(ς)-ς, cp. Lat. pl. μα-γόρ-ες (ος after complete assimilation of the ι to ο was treated like original ος) sometimes regressive, e. g. Att. gen. pl. fem. τῶν = Dor. τῶν, gen. sg. γένους from γένος, *-ες-ς (ς became ο by attraction to the ο which was pronounced close, and this gave rise to ο).

So-called diphthongs arose if the second element was ι or ω, and the first an α-, ο- or o-vowel, as παίνε from πά(ς)ις, ολός 'sheep' from ο(ς)ις, άλ Θου art' from *λ(ς)μ, δαιμό-ς 'thick, shaggy' from *δαιμός-ος cp. δασύς 'densus'. Furthermore, ος from σο
in Lesb., Ion., Rhod., as ἁρποῦντα from ἁρπίοντα, gen. βέλευς 'of an arrow, dart' from βέλεως, and -αυ (ἄν?) from -ἀο in Arcad.-Cypr., as gen. Ἀπολλονίας.

If the first of the vowels in the contraction was long, it was frequently shortened before the proper contraction, see § 611.

Hiatus rarely arose through new formation in non-compounded words. The treatment was the same as the hiatus which was produced through the loss of consonants. Conj. Hom. στήμεν, δόμεν, Att. στάμεν δάμεν; στήμεν stands in contrast with Arcad. ἱστάοις, notwithstanding the clearer development of the original elements of the formation, just as later new formations like e. g. Lat. coagito as opposed to cogito (§ 604). Hom. ζωές was a new formation for older ζωῆς. Such new creations did not come into existence until after hiatus had arisen in many cases in the body of a word through loss of i etc.

Compounds with old inherited hiatus and the union of two words, the one beginning and the other ending in a vowel. Elision is seen e. g. in ἵππαγωγός, ἀκάγω, λιμ'αυτόν. Hiatus remained in προ-ἀγο προ-ἀγωγός. It cannot be decided whether in forms like πολυκάρπος βιοτάνυμα περίσσι there was spoken in prim. Greek and later in the comissure -μα- ἰδ- (hiatus) or -μα- -ία- 1). Prim. Greek contraction e. g. in ταῦτα from *τα ὦ τα, ὕβ[θος] from ὅ ὢ = Skr. sa u; ὦ = Skr. ὦ is a particle. In individual dialects e. g. in Att. τάλλα = τα ἄλλα.

§ 604. Italic. Most contractions after the loss of medial i (see § 134). A part of them may be prim. Italian. Lat. tresp from *treps, Umbr. puntes (s) 'pontes' from *pontes, cp. Skr. trāy-as. Lat. monēte from *monēte, cp. Skr. māṇāyā. Lat. stū from *sta-iō, amū from *ama-iō, Umbr. suboco 'adoro' (cp. perf. subocavu). Lat. stat from *sta-je-t, Pelign. incubat 'incubat'. Lat. amēs from *ama-īs (Indg. *-iōs), cp. cap-iēs.

The combinations ὑδ, ἐδ, ἀδ remained uncontracted in Latin. moneō: Skr. māṇāyāni. eam 'her': Goth. ija. aēnu-s: Umbr. ahesnes 'aēnis', cp. Skr. āyas; on the other hand aer-īs =

1) Osthoff's remarks (Morph. Unt. IV 383) on forms of this kind, are quite uncertain.
Skr. *āya-s-as 1), after which the nom. acc. *ās or *ās. Cp. also Umbr. eam 'eam', Osc. i-o-k 'ea'.

Vowel contraction after the loss of k. Lat. nōmō from *ne-hemō, bīnu-s from *hi-hinn-s, praebē beside praeb-hibē Umbr. pre-habia 'praebat'. See § 510. Cp. Umbr. mes-tru 'maior', Osc. mais 'magis'; Lat. magis major.

Old inherited hiatus and hiatus which had arisen anew through new compounds. Elision: e.g. mult'angulu-s, for which multiaangulu-s came into existence at a later period after the analogy of multi-form-s etc.; noenum (nōm) from ne+oenom 'not one'; nullus-s from ne+āllu-s. Contraction: dēgō from *de-agō, cognō from *co-agō, copula from *co-apula, prōmō from *pro-emō, copia from *co-opia. Such contraction did not take place however if the second vowel was long and had the principal accentu: co-āctu-s, co-ēgī, co-āgulu-m, thus the same case as abēnus beside aer-is.

Rem. 1. The exception coēpī beside coēpi (Lucretius) I explain with Osthoff (Zur Gesch. d. Perf. 158) by assuming that contraction took place regularly in co-*episti co-*perāmnus etc. and that this form of the stem became generalised. That in the form-system coēpī forms like *coepisti had to give way, was due to the uncompounded form ēgī.

Forms like co-agitō co-alēscō were created at a later period and remained uncontracted; cp. older cognō cognitō.

Rem. 2. I do not venture an opinion on the relation of the dissyllabic neuter to the trisyllabic ne-uter and of both to nullus-s etc. A plausible explanation must first be given for the initial sound in uter etc., of which we have already spoken in § 431 rem. 3.

§ 605. Old Irish. Very many contractions in consequence of the disappearance of intersonantal p (§ 339, the loss belongs to the prim. Kelt. period), ĵ (§ 138), y (§ 174) and s (§ 576). tré (pl. téirt) 'hot' from *te(p)ent-. -tau -tō 'am' from *sta-īō, rt.

1) The contraction of *a(i)er- to aer- did not occur until after the later Lat. accentuation came into being (§ 681). For if it had already taken place in the period of the older, *āsno-s would in all probability have become *āsno-s. The accentuation *āsno-s preserved this form from contraction.
§ 605—606. Contraction in Germanic.

sta- 'stand'. biid and later bid, gen. of biad 'nourishment' (prim. Kelt. *biyoto-n), Gr. βιορο-ς. δ from prim. Ir. oy underwent fusion with the following vowel, ǝc, later ǝc 'youth': Cymr. ienanc (§§ 212. 243); gen. pl. bō n- 'boum': Gr. βο(φ)-ωρ. beri 'fors' from prim. Kelt. *bere(s)yi.

Contraction takes place after the loss of f: tōr- tuar- from to-for, tō- tā from to-fo-. The same phenomenon also frequently appears where words meet together having prefixes beginning with or ending in a vowel, e. g. forōcrad 'indicatus est' = *fo-ro-od-garad. In this case elision also appears elsewhere, as e. g. lar- from to-ar-, tess- from to-ess-, tind- from to-ind-.

§ 606. Germanic. Processes of contraction from prim. Germanic, Gothic and OHG. are unknown to me.

Rem. In Goth. salbōm OHG. salbōmiš 'we anoint' there is no contraction of -a(1)a- to ǝ-, see the occurrence. Goth. bairiu (1. sg. opt. to bair 'fero') hardly from *bera(1)w(u), see § 142. Phenomena like prim.-Germ. *eiz-a- 'ore, metal' from *ajiz-a-, OHG. eidehsa 'lizard' from ejidehsa are rather to be regarded as examples of syncope than of contraction, see § 635.

Hiatus, which had arisen in word-forms through new formations made by analogy and at the point of junction in compounds was partly permitted and partly removed by elision.

Goth. atāuk sg. pret. of ǝukan 'to increase'; salzōum (trisyllabic) pl. pret. of saian 'to sow'. ga-arman 'to pity', fra-tan 'to consume', ga-unleďjan 'to make poor', sa-ei relat. 'qui'. On the other hand nist 'is not' from n(i)-ist, sei 'quae' from s(i)-ei, karist 'it troubles' from kar(a)-ist, pammuh 'to this' from pamm-(a)-uh.

OHG. ka-augen ke-aucken gi-ougen 'to bring before one's eyes, show' be-unverdēn 'to appear despicable', MHG. misse-ahten 'to despise'. On the other hand galtiro (beside giaitiro) 'contemporary', nein 'no' from n(i)-ein, MHG. binnen 'within' from b(i)-innan.

That hiatus remained at one time, and that at another elision took place, is due to the various influences of sentence accentuation. That elision occurred already in prim. Germ., is
rendered probable by Goth. frēt OHG. frāz 'ate' (of lower animals); prim. Germ. 3. sg. *frēti from *fra-ēti. With this cp. OHG. fr-avili 'outrageous' to OHG. avālon 'to trouble oneself' O.Icel. af n. 'power, strength'.

§ 607. Baltic-Slavonic. The commissure of compounds only comes under consideration.

In Lithuanian hiatus is generally permitted or there is elision pri-ištį 'to accept' (prijištį is also heard). pā-ausi-s 'the part about the ears'. pa-ēti 'to go away'. be-aūsi-s 'one without ears'. be-urēdi-s 'one without office'. On the other hand tateĭ 'he may come' from te-at-ēit. timē 'he may take' from te-imē-natimē 'do not take away' from ne-at-imē. neik 'do not go' from ne-ēik. pasištį 'to take up' from pa-si-ištį. Differences of sentence accentuation have been at work also here (cp. § 606).

Older East Lithuanian shows a real contraction, as there ne 'not' along with the a- of some prepositions appears as no-, e.g. notamenu 'I do not remember' = ne ata-menu. In the first instance ne- had probably become na- by assimilation. See Garbe Lit. und Lett. Drucke des 16. und 17. Jahrh., B. IV. p. XXV.

In Old Bulgarian partly hiatus, partly contraction. dobro-otki 'німбірасимко'. golo-qșū 'beardless' (golo- 'naked', bare'). mūnogo-učenū 'нолмуна'. po-orati 'to plough'. pro-iti 'to go through'. pri-iti 'to go to'. pra-ofitec 'grandfather'. Imperf. zēlachū to zēlēja 'I wish', dēlachū to dēlafā 'I do'; the second member is *ēchū *fachū 'eram', see the accidence. Forms of the compounded adjectival inflexion: gen. sg. novaago from nova jego, loc. sg. novēčmē from novē+jemē, dat. sg. novumu from novu+jemu (novū 'new', stem novo-); beside this loc. sg. dobbiimē from dobbi+jemē (dobbć 'brave', stem dobble-, cp. § 84). Beside these also contracted forms already in the oldest monuments: priti, zēlēchū, dēlachū, novago, novēmē, novumu. dobbimē. Similarly instr. sg. novymē from novy-(j)imē.

A very old contraction seems to occur in nēmē 'am not' nēsi 'art not' etc. = *ne-esmē *ne-esi etc., dating back to the period when initial e- had not yet become je- (jesmē), see § 666, 1.
SHORTENING OF LONG VOWELS.

§ 608. Simple long vowels may be shortened under very different relations and from very different causes. We treat here only the most important phenomena of vowel shortening.

Shortenings happened already in the period of the Indog. prim. community under the influence of the chief accent on the following syllable, as *stotó-s (Skr. sthitá-s Gr. στατός) from *uesta-tos. See §§ 310. 316.

§ 609. Aryan. Shortening in Avestic in final syllables, as brata 'brother' = Skr. bhrata, see § 649, 1.

§ 610. Armenian. The long vowels had undergone shortening in most cases (if not in all) in prehistoric times. This can be controlled with the greatest certainty in original final syllables and in those syllables which preceded the penultimate syllable. For the dropping of vowels, which happened here, concerned the original long vowels as much as the short. Thus the former must have been shortened, e. g. dustr 'daughter' from *dustir, older *dustor : Gr. θυγατήρ; l-nu-m 'I fill' from *li-nu-m older *(p)lē : Lat. ex-plē-nunt, O.Ir. li-naim 'I fill'. Cp. §§ 632. 651, 1. 675.

§ 611. Greek. Shortening before u, i, nasal, liquid + explosive orspirant in prim. Greek. Zeu̱s from *dyeu̱s : Skr. dyau̱ś 'sky'. bova̱ 'bullock' from *gova̱s : Skr. ga̱u̱-ś plevxo̱-ś 'plurimus' from *plejc̱- i. e. *ple̱- + comparative suffix -is-, cp. O.Icel. flestr from *fleis̱tr and compar. fleire § 614; the same *plejc̱- also in Hom. plēc̱s plēc̱s Cret. plēc̱s plēc̱s; *plejc̱-s -as became *plejc̱-s -as, and then plēc̱s plēc̱s. Instr. pl. ἵππως (ἵππος 'horse') from *o̱j̱s : Skr. ṣvāj̱s (§ 115). Part. ἀει- 'blowing' (indic. ἀειμι) from *a̱e̱j̱- : Skr. vanta- ; 3. pl. aor. ἀειμεν (1. sg. ἀειμην 'I mixed myself') from ἀει-μεν-ερ. στράνμεν 'I spread' from *στρομ-εμεν beside στρομ-τε-ς, from sty̱- (rt. ster-); Lesb. βόλλομαι 'I am willing', older *bolnoc̱, from *bol-no-mu̱, from *boḻ (rt. geḻ), see §§ 306. 312. Perhaps also here belong s-aorists like ἐσμενα ἔτασα ἐκερα, cp. Skr. abhāutaṃ etc., see § 314 p. 253.
The operation of this law of shortening was later than the transition of -νς- to -νν-. This is shown by μην-ός Lesb. μηνν-ός from *μηνο-ος gen. = O.Ir. mīs Lat. mēnsis-s (§ 565); cp. beside this the nom. sg. μελζ from *μελνς with regular shortening. But it was older than the dropping of final τ (§ 652, 5). This is shown by ἔμιγνυ from *ἐμιγνυ-ντ.

Rem. Certain exceptions to this sound-law were caused by new formations, e. g. Ion. νῆς 'ship' formed after νῆ(ν)-ός etc. beside regular Att. νῦς; 3. pl. conj. act. γίγαλλει (Dor.), γίγαλλον for *γίγαλλει, *γίγαλλος after γίγαλλον etc. (in order to distinguish the conj. from the indica.).

Long vowels remained, if the same sound-combination arose in a later period through regular transformation, e. g. ἠγκρο-ς (x = ἄ) from ἠγκρο-τς 'easiest', ἠκροτις 'videntes' from ἠκροτης.

Shortening of long vowels before vowels. Hom. ἱφοος = ἱφωος 'of the hero', βέβλεα = βέβληαι 'art hit', Herod. νεος from νη(ν)-ες 'naves', ξον = ξον τ 'life', Att. νεων from νη(ν)-νων 'navium'. In such cases it is probably a question to some extent of medium long vowels, which could not be represented as such.

The so-called quantitative metathesis in Ionic and Attic is connected with this latter reduction of quantity, e. g. Ion. part. perf. ἡμεώτες 'stantes' from ἡσση(ν)-ότ-ες, τεθυμώτες 'mortui' from τεθυν(ν)-ότ-ες, Att. gen. στεάς-ος 'of standing fat' from *στεή-(ν)αρ-ος (§ 165), Att. gen. ἵππεως acc. ἵππεα (ἵππευς 'horseman') from ἵππη(ν)-ος ἵππη(ν)-α. This phenomenon sometimes formed the stage previous to contraction, as Ion. gen. Παγκίω beside Παλλίδεω cp. Hom. Παγκίον; Att. gen. Περιφαίως acc. Περιφαί from -έως -έα.

§ 612. Italic. In Latin (it cannot be determined whether also in the other dialects) shortening before ἰ, ὲ, nasal, liquid + explosive or sonant. oloes illis from *-οἶσ, see § 81 p. 74, § 115; cp. Pelign. cuatois 'gnatiae, filius'. nau-fragus from *nau-fr. or *nau(i)-fr.; claudo from *clau(i)do, to clavi-s Gr. κλη(ν)-ις; gaudeo beside gauē-sus, Gr. γαυέω from *γαφ-ειω, cp. § 633. ventus-s from *γεντο-ο-ς, cp. Gr. ἄνερ- § 611. membru-s from *mēms-ρο-, see § 570. In mēnsi-s (Gr. Lesb. gen. μῆνν-ος, O.Ir. gen. mēs) ἶ may have been shortened and then lenghened
again in accordance with § 619. Lat. ars artis from *arti-, prim. fr. *fati-, see § 306.

Rem. 1. The nom. bōs must be left out of the question, since it is probably not a pure Latin word (§ 432 rem. 1).

Shortening of long vowels before vowels in Latin. neō from *nē(j)ō : OHG. nāan 'to saw'. reī, fideī from reī, fideī, cp. also dieī. illius from illius. Shortening of dē-, sē- in deorsu- m seorsu- m etc. The forms with shortening got more and more the upper hand in the poets. We do not know in detail by what laws shortening took place and did not take place in the naive common language.

Long vowels in final syllables were shorted to a great extent in Latin, e. g. equam = Skr. āśvām, see § 655, 4.

In the same language shortening frequently took place under the influence of the sharply cut tone, in this case the quantity, taken from the vowel, was transferred to the following consonant; hence this was also written double. cuppa (and cupa) : Skr. kāpa- s 'hole, hollow'. Juppiter (and Jupiter) voc., = Gr. ζέν νάρες (L. Havet Mém. de la soc. de lingu. V 230 f.). mitō from *mitō : OHG. midan 'to let go, avoid'. lettera (and litera, inscrip. also leitera). muccus (and mucu-s) : Gr. ἀμο-μίκους 'I blow my nose' from *μυκ-ῖς (§ 489). allūcinārī (and alācinārī) : Gr. ἀληῶ 'I am troubled, ill at ease' ἤλεῑς 'bewildered'. narrāre from *gnāvāre. parricida (and purricida). There are about 12 more cases which may be regarded as certain or probable. The fluctuation of the orthography in most of the examples met with, seems to be not so much due to a retention of old literary forms after completion of the process, as to the fact that a difference in pronunciation existed between these geminated consonants and other double consonants (cp. e. g. cuppa with suppetō).

§ 613. Old Irish. Shortening took place in all except chief accented syllables, e. g. the form of the feminine suffix -a- in pl. nom. tuatha dat. tuathaib i. e. tuath-ib by § 640 (nom. sg. tuath 'folk') and in pl. nom. mnd dat. mndib (nom. sg. ben 'woman'); nom. beo-thu 'life' gen. be-thath, from *-tā(t)s *-tāt-os (Cymr. -tit, as duiuittit 'deitas', Zeuss-Ebel G. C. 844): Lat. -tāt-i-, Goth. -dāp-i- (Lat. vir-tās, Goth. gamāin-dāps 'community'). These reduced vowels remained, if the syllable in question was the last of the word, as in the examples given above. They generally disappeared altogether, if one or more syllables still followed. See § 634.

It is not clear to me how far vowel shortening had happened either in chief accented syllables both before the appearance of the above named reductions or in the other syllables. That no vowel shortening took place before -ns-, is shown by mī mīs 'month', which can only be explained from *mēns-, not from *mens-, and mīr 'piece of flesh', only from *mēnsr-, not from *mensr-.

§ 614. Germanic. Vowels seem to have been shortened in prim. Germanic before n+explosive or spirant. Goth. vinds OHG. wint : Lat. ventu-s, Skr. vānt-, see §§ 611. 612. Less certain are Goth. mīns (stem mīnza-). 'flesh': Skr. māśā- (cp. O.Bulg. mēso, § 615), and Goth. juggs OHG jung O.Icel. ungr 'young' from *iunγa-z, older *iunγa-z (§ 179); whether the latter word belongs here, is uncertain, because we do not the quantity of the Goth. u. The same reduction before i+explosive or spirant is seen in O.Icel. fleire fleiri (compar. to marrg 'many a') from prim. Germ. *flāis-z from *pleis-, cp. Gr. πλείσο-ς § 611. Cp. also Goth. gibāi from *zēbōi and other examples in § 659, 3.

Vowel shortening took place in Goth. and OHG. in final syllables only, as Goth. baira OHG. biru 'fero' from prim. Germ. *berō, see §§ 660. 661. But towards the end of the OHG. period the shortening of vowels in syllables without the chief accent began and this became characteristic for MHG. and Mod.HG. This shortening gradually spread more and more and in the Mod.HG.
period brought about relations which, in some respects, resemble Irish: e. g. OHG. *salbōn, MHG. salben, Mod.HG. salbī, salbay; OHG. friuntīth, MHG. vriuntīch, Mod.HG. freundīch.

§ 615. Baltic-Slavonic.

Shortening before i or Nasal + explosive or spirant. Lith. instr. pl. vikais 'with the wolves' from *-öjs: Skr. *vākās, see § 115. Gerundive jëszkant from *-önt, cp. 2. pl. indic. jëszko-šte 'ye seek'. Acc. pl. fem. O.Lith. rankanš 'hands' (the older form for rankas) from *-öns, cp. instr. pl. rañko-mis (cp. also Pruss. genanus 'feminas'). Correspondingly O.Bulg. räky, which in the first instance is derived from *ronkons (§ 219 p. 187), may also be traced back to an older *ronkans, see the accidence. Here perhaps also belongs O.Bulg. meso 'flesh': Skr. mäṣā- (cp. Goth. minūs § 614).

The quantity of the vowels in the O.Bulg. period is not determined. ĕ, a, i, y must once have been long in the prim. Slav. period, since they with Lith. ė, ē ū, y, ū represent the continuation of Indg. ē, a ū, ī, ū (i also = Indg. ēi), so too ū, since it took the place of older oŋ (Lith. au). In the modern Slav. developments where we are able to control the relations of quantity, these vowels often appear as short and conversely O.Bulg. ē, o = Indg. e, u o and the representatives of O.Bulg. ī, ū = Indg. ī, ū as long. These changes were undoubted due in a great measure to the relations of accentuation. It has not yet been settled how far the shortenings of the modern dialects had already taken place in the O.Bulg. period or in the period of the Slav. prim. community.

In Lith. the long vowels frequently suffered reduction in the final syllables, e. g. nom. algā 'reward' = Gr. ἀλγη. See § 664, 3.

LENTHEXING OF SHORT VOWELS.


Bragmann, Elements.
§ 617. Armenian. 'Compensation lengthening' had in all probability once taken place in the forms in which *m and *n disappeared after short vowels before s, as *us 'shoulder' (Goth. ans), acc. pl. eris 'three' (Goth. prin). Cp. §§ 202. 610.


It may be remarked once more here (§ 205 rem. 3) that the *e and *ov, which arose by 'compensation lengthening', were not diphthongs any more than the *e and *o which had arisen by contraction from *ei and *oo (§ 603).


Rom. 1. In many cases, where vowel lengthening was formerly assumed in Latin, they are much rather pre-Italic long vowels, or diphthongs. e. g. ësus fr. *ëssus = i. c. *ës-sô (§ 501), rîdus-s, ëmpîn-s etc. It is immaterial here whether the long vowels in the cases in question had been handed down from the Indg. prim. period or whether they had arisen by new formation.
Rem. 2. The long vowels in *quique quintu-, *ördo etc. are not clear to me.

§ 620. Old Irish. 'Compensation lengthening' exists in sēt 'way' = Cymr. hynit Bret. hent, cenēl 'race' = O.Cymr. cenetl, dēr 'tear' = O.Bret. dacr, am 'manus hostium' fr. *agmen etc. See §§ 212. 518. 523. 526. The name-forms in -agni (Dalaggni, Corbagni) on the Irish Ogam inscriptions, as the predecessors of the later in -ain (Ultain, gen. of Ultan).

§ 621. Germanic. 'Compensation lengthening' exists in prim. Germ. before *οχ, e. g. *fōχō 'I seize, catch' (Goth. fōha) fr. *fawχō, see § 214.

Such lengthenings did not take place in Gothic.

In West Germ. OHG. mēta OS. mēda 'hire': Goth. mixdo; OS. lýnon 'to learn': OHG. līrnēn. See § 538 p. 394. § 582. p. 436 § 596.

Many lengthenings in High German in the later phases of the language, as Alemanic säft 'soft', ûsir 'our'.

Cp. further O.Icel. gás Ags. ðóð = OHG. gans 'goose', O.Icel. húsl Ags. húsl = Goth. husl 'offering', Ags. sif 'five' = Goth. fīmf, Ags. øðer 'other' = Goth. anþar, O.Icel. tær 'tear' from *tahr- (OHG. zuhar Goth. tagr), Ags. rīman 'to rain' = Goth. rignjan.

§ 622. Baltic-Slavonic.

In Lithuanian 'compensation lengthening' exists in žasi-s (written žasi-s) 'goose' = OHG. gans etc., see § 219.

a and e, too, were often lengthened elsewhere in this language, but it remains to be determined by what laws.


Rem. * According to Baranowski and II. Weber Ostlit. Texte I p. XXII sqq. h is here everywhere a question not of real long, but only of medium
long vowels. In dē-ga dē-rič the second mora of the medium long vowel has the accent, in kāl-nas āy-gu the first. Cp. § 691 rem.

in, un became ĕ, ā (O.Bulg. i, y) before explosives and spirants in Slavonic in the period of the prim. community, e. g. O.Bulg. acc. gōsti 'guests' = Goth. gāstīns, syny 'sons' cp. Goth. sun-ns, see § 219.

O.Bulg. vlēka 'I draw' from *velkā, vlakū 'draught' from *yolku etc., show another kind of origin of long vowels

Vowel lengthening in O.Bulg. through following ĕ in ĕj from ýj, új from új, see §§ 36. 84.

Lengthenings (date still unknown) through the influence of accentual relations can be proved in the modern phases of the language, concerning which see § 615.

ANAPTYXIS FROM CONSONANTS.

§ 623. It is here a question of the development of a short or reduced vowel from a voiced consonant, namely medially before or after another consonant, initially (prothetic anaptyxis, prothesis) and finally.

If anaptyxis takes places medially after a consonant preceded by a sonant, the syllable must be pronounced with a double pointed accent. This prepares the way for the development of two syllables from one, e. g. OHG. berac 'mountain' from berāc. If the vowel is developed from the second consonant, the latter becomes sonantal in the first instance, e. g. French canif from Low Germ. kuif through the intermediate stage *k(n)if (-n-) represents the consonantal glide).

How far the development of vowels initially and finally (in the latter case exceedingly rare) was caused by the relations of word-position in the sentence (sandhi), is left out of question here.

Rom. 1. The transition of *k(n)if to canif is the same process as that by which Indg. *gōnā- became Skr. tānā- Gr. τάνα- etc. and Indg. *gru- became Skr. gurā- Gr. βαρα- etc. (§§ 227. 257). The latter cases do not however belong here, because it cannot be proved that these Indg. forms originally had a shape, shorter by one syllable, corresponding to kuif, cp. §§ 312. 313.
For comparison may also be mentioned here the case where a vowel is developed from a sonant liquid or nasal between consonants or finally after a consonant, thus e. g. Gr. ἄπρος-τι ἄγρος-τι 'skinned' from Indg. *dvina-, o unfolds 'udder' from Indg. *anudār-, Lat. lenun- s fr. Indg. *pyno-s, decem fr. Indg. *dekm (§§ 223, 224, 284, 285). *agros- 'field' became in prim. Ital. *agyns, thence *agers *ager : Lat. ager Umbr. ager Osc. Fructer (cp. §§ 633, 655, 9). Nom. sg. *brē-trē f. 'word' (gen. brēthra) became *brēth in Irish, thence briaathar, cp. also eriathar 'stove'; here belong also omum 'fear' ess-amin 'fearless': Gall. Exobnu-s; jo-domoin 'deep' (compar. *jo-donnu): Cymr. dofwn 'deep', Luth. doži-s 'deep', both with -mu- from -bu- (§ 520). Cp. § 634. Lastly OHG. acihar 'field', fogal 'fowl', eban 'even' (Goth. okra, fugls, ibns), concerning which see §§ 215, 277. 680, 1. 661, 2.

Rom. 2. One speaks also of anaptic prothesis before voiceless consonants, e. g. Gr. ἰστρι beside ἰστρι- 'weasel', ἰστρια beside ἰστρια 'I struggle convulsively', Late Lat. ispuritus- isatua, Prākrit. itthi- (Gāp. istrī-) = Skr. strī- 'wife'. So far as it is here really a question of a pure phonetic product — in many of the cases brought under this head the vowel has an etymological value (remnant of a prefix etc.) — it is always a process of sandhi. The vowel was developed from the close of preceding words.

§ 324. Aryan.

Sanskrit. Medial anaptyxis made its appearance first in the Prākrit dialects, e. g. harisa- = Skr harṣa- 'joy', paduma- = Skr. padma- 'water-rose', sumarasmi = Skr. smārani 'I think of', sineha- = Skr. snaha- 'attachment', while prothesis appears already in Vedic in irājyati 'puts in order', iradhatē 'seeks to win', ilaya- 'resting' (beside laya- 'rest'), ulōkā- (beside lokā-) 'free space, world'. These forms were possibly taken from some vulgar dialect.

Anaptic vowels were very frequent in Avestic. The orthography fluctuated considerably, and these vowels are almost without exception of no importance for the metre. It is thus not a question of a full vowel. The development of a vowel takes place most frequently before and after r, uniformly before initial r-rule, ru and after final r. It is generally represented by e, sometimes by a, ē, o and i, u, the latter especially initially. Examples for anaptyxis from r, as dādar'sa 'rista-antara', see §§ 157, 260. From other voiceless consonants : y-na- 'murder': Skr. ghnā- Gāp. dā'mahī 'we give': Skr. dā'māsi; Gāp. dā'bitya- 'the second': Skr. dā'śya-.
Only *u* between *d-r* and *g-d*, can be established with certainty as anaptyxis in Old Persian. The following or preceding syllable contains an *u*-sound in all the examples met with, *dārūjīya-ṇīyī* 'mention': Skr. part, *drūhyant-* 'injuring in a cunning manner'. *sugūdā*- *sugūdā* - Sogdiana: Av. *suvādā*. *u* is to be read as *u*, see p. 25.

§ 625. Armenian. Prothesis before initial liquids, e. g. *erek* 'evening': Skr. *rājus*-*. See § 263.

§ 626. Greek. A vowel between consonants is regarded as anaptic in many words (see among others Curtius Gründz. § 727 ff., G. Meyer Gr. Gr. 95 ff., 2. edition p. 105 ff.), but only few cases are certain, 1) as e. g. *Lcsb. μετροφο-ς* from *μετροφο-ς* = Att. *μέτρον-ς* 'within measure' from *μέτρον-ν* 'measure' (§ 131 p. 119).

On the other hand prothesis is certain in many cases. Most frequently before liquids, as *δρυνό-ς* 'red' = Lat. *ruber*, *ἐλαρρό-ς* 'nimble' = OHG. *langar*, see § 266. Before *f* in Ionic: Hom. *ά(f)ροη* Cret. *αίρα* 'dew beside *έρα* *ονα*: Skr. *parśu-ς* 'rain'; Hom. *ά(f)κοσι* beside *(f)κοσι* 'twenty' Lao. *μέizati* Bceot. *φίατι*, Lat. *vīgenti*. Before nasals probably e. g. in *άμελλω* 'I milk': Lith. *mėlėn*; *ομίχλη* 'fog' (Att. *ομίχλη* through association with *ομο-*, cp. § 584 rem. 3) *ομίχλω* 'I make water', inf. aor. *άμεισα* in Hesyych.: Lith. *miglō* 'fog', Lat. *mīngō*; *άνεμο-ς* 'first cousin': O.Bulg. *netjīy*

That prothesis sometimes appears, and sometimes not (cp. *δρυμος* and *ρύμος*, *άλεγμω* and *λίπα-, *μόσαργόμω* and μόσαργμό-ι, *άντιςα-ς* and *άντιςοςις*) seems partly to be due to difference of dialect, and partly to be explained from various kinds of sandhi-relations.

The development of the *ί*- in *ioph* 'be' imper. = Av. *Gāp. zdr*, Indg. *z-ohl*, see §§ 590. 593, is older than the development of the ton. asp. from med. asp. (§ 495). Prothesis perhaps also in *εχθύ-ς* 'fish' and *εχθές* 'yesterday'

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1) Curtius and Meyer use the term anaptyxis in a wider sense, according to which it includes the phenomena discussed in § 623 rem. 1. Many of the forms, brought forward by both these scholars, certainly contain no development of a vowel either in the stricter or wider sense, e. g. *ίε-γ-ωνς* in Curtius, *άλ-ί-νυ* xol-ω-νς in Meyer.
§ 627. Italic.

Medial anapyxis in Latin with liquids and nasals, the vowel thus developed usually taking the timbre of the vowel in the following syllable. pō-co-ło-m pō-cu-lu-m from pō-clu-m, sta-bu-lu-m from *sta-blo-m, sta-bi-li-s from *sta-bli-s, sin-ju-lu-s from *sem-clo-s, see § 269. Acc. fami-liu-m probably from *fam-lo-m, familia from *fam-li-a.

Rem. 1. In the forms with -l- the frequent fluctuation in the orthography (cp. also saeci-lu-m beside saeci-lum, popi-lu-s beside popu-lus, dis-ci-plin-a beside dis-ci-pli-na etc.) probably points partly to different influence of the accent in the various cases, and partly to the fact that at first only [l] or [l] (say dis-ci-plin-a or dis-ci-pli-na) was spoken beside l and that this sound was written sometimes ı, sometimes u, the latter at least in the oldest period of historic Latinity. Cp. rem. 3.

Inscript. (ca. 218 B. C.) Tere-bio-nio = Trebō-nio. Late Lat. acc. magi-stor-ātu-m = magi-strātu-m, carā-brō = crā-brō (Italian calabrone) etc.

Anapyxis with nasals can be established with the greatest certainty in loan-words, as Teremēssa, drachuma, mina, techina.

Rem. 2. sumus, humus, homō, hemō, numerus and numerus hardly belong here, see § 269 rem. 568 rem. I come to no decision with regard to termin-us and similar forms, see § 241.

Anapyxis seems to have been foreign to Umbrian. We find it all the more frequently in Oscan. Examples for the development of a vowel from liquids as aragetud ‘argentu’ see § 271. From nasals: aknei from *ak-nei ‘in fundo’ or ‘in agone’; Patanei dat. sg. from *Patnei; Liganak-dikei dat. sg. from *Lignak-d.

From the material brought forward by Thurneysen Kuhn’s Ztschr. XXVII 181 ff., it is probable that anapyxis only took place regularly in the combinations tr, kr, tl, kl, tn, kn, if the preceding syllable was short. Cp. e. g. maatreis ‘matris’ Fun-trei ‘Genetrici’ with paterrei ‘patri’; sakarāklum ‘sacrum’ with Pukalatūf (to pūklo-).

Rem. 3. The Osc. leaden tablet (published by F. Bücheler, Frankf. a. M. 1877) does not contain these inserted vowels, e. g. sak rim ‘sacrum’ against a-kāpo ‘sacrum’ sak arater ‘sacratur’ elsewhere. Hence it is probable that at first only the weak glide vowel was spoken or after consonants at first only sonant liquids and nasals, thus ar-gatud, ak-nei or ak-nei. Cp. rem. 1.
Anaptyxis also in Peltur., as in Ałafis 'Alfius', see § 271.

§ 628. Germanic. Goth. miluks OHG. miluk Ags. meolof. O.Icel. mjólk (fr. *meluk by so-called 'fracture'), connected with OHG. melchan Lith. méžu etc., seem to be an example of primitive Germanic anaptyxis. If it be maintained along with Paul that liquid + explosive in final syllables gave rise to anaptyxis in prim. Germ., then OHG. hiruz beside hirz might also be understood (cp. § 533). Both words must have been consonantal stems.

Goth. Anaptyxis perhaps in filigrja- (Luke XIX, 46 filigrja-) n. 'a hiding, hole', to filhan 'to hide'. Here comes into consideration the inconvenience of the combination lgrj, but at the same time also the possibility of a popular association with ligrs 'couch'.

Frequent anaptyxis in West Germ., especially in OHG. With r+i, e. g. herige 'to the army': Goth. harja § 143 p. 129. With cons. +  }), e. g. zesawēr zesewēr 'dexter': Goth. taihsaa, see § 180 p. 157. With cons. + nas., e. g. wahsamo m. 'growth' beside wahsamo, see § 215. With liqu. + h and other letters, e. g. ferah 'soul, life': Goth. farhen-sem 'world', see § 277.

§ 629. Baltic-Slavonic.

In Lithuanian appear frequent attempts at anaptyxis, which may be represented somewhat in this way: įrūseti 'to return' k'ruama-s 'shrub', suk'nè 'dress', sär'stýti 'to scrape', mar'gēlē (mergēlē) 'girl', bal'dōti 'to knock', něn'drē 'reed'. In the case of vowel development from liquids and nasals after consonants it is mostly merely a question of the consonants becoming sonants. Observe that the phenomenon has nothing to do with the contrast between slurred and broken accentuation (něn'drē). Cp. Bezzenberger Z. Gesch. d. lit Spr. 87 f., Brückner Litu-slav. Stud. I 49, Leskien-Brugmann Lit. Volksl. u. März. 290.

In Slavonic, anaptyxis was connected with the process of transformation of prim. Slav. or, ol, or. el, before consonants, cp. Russ. porosjá 'sucking-pig': Lith. pāsža-s etc., see § 281.
VOWEL ABSORPTION.

§ 630. Vowel absorption often happens in languages with predominantly expiratory accentuation. The stronger the chief accent of the word, the more easily loss of vowel takes place in syllables which have not the chief accent.

If the absorption happens between consonants in such a way that the word loses one of its syllables, the loss of vowel is called syncope, e.g. Lat. caldu-s fr. calidu-s. We have besides loss initially before consonants (aphaeresis) and finally after consonants (apocope); in the latter cases it is often difficult to say whether the changes were caused by the relations of accentuation only of the word in question, or whether they were due to relations of sandhi.

If the absorption happens in such a manner that the syllable retains its value as a syllable, which is only possible, if another sound is able to undertake the part as bearer of the syllabic accent, we call the process samprasāraṇa (after the Indian grammarians).


§ 632. Armenian. i and u only remained in final syllables between consonants, in other syllables they were dropped. gtnem 'I find' from *git-one-m : aor. s-git. Gen. dster 'of a daughter' from *duster : nom. dustr. See §§ 31. 47.

§ 633. Italic. Syncope frequently occurred in all dialects, and it may be conjectured that it was partly completed during the period of the Ital. prim. community, just as the samprasāraṇa (§§ 33. 623 rem. 1) in the transition of *ágro-s 'field' to *agrás
(hist. Lat. ager), of *agro-lo-s (cp. porculu-s, filiolu-s) to *agro-lo-s (hist. Lat. agellu-s), of *sacro-dō(l)s to *sarchō(l)s (hist. Lat. sacerdōs), of *scē-crinō to *scērnō (hist. Lat. scērnō) etc.

Syncope shows itself in Latin in the syllable immediately following the one which had the chief accent (according to prim. Lat. accentuation, see § 680), if one or more syllables followed this. *reppulī, rethulī, recidī from *ré-pulūlī, *ré-tetūlī, *ré-recidī. Correspondingly dēcīdī, attigī, incurrī from *dē-cecidī, *át-tetigī, *in-cecurrī. Ceste from *cé-dite, muttu-s from *mūdīto-s, see § 501 rem. 2. hospes from *hostpes *hosti-pes (§ 81 p. 73). claudō from *claùvidō, cp. § 612. āndecim from *ānu(s)decim, quīndecim from *quīnquadececin. prīncps, manceps, vīndēmia from *prīmi-cepse etc. surgo from *sūb-regō, surpī from *sūb-rapū. calāu-s, soldū-s, valdē beside calidū-s, solidū-s, validū-s. ārdū-s (Lucil.), ardeō beside aridū-s. It is questionable whether the spelling should be trusted in the case of certain examples of syncope which are found on inscriptions only, as decmus- vicesma (acc. sg. fem.), viglias.


Short vowels were also syncopated in final syllables in this Ital. branch (except some cases, where syncopation was prevented by double consonants, as 3. pl. furent ‘erunt’ cp. Lat. fuerint). Nom. sg. Umbr. pihaz ‘piatus’ fratreks ‘fraticius’, Osc. hūrz hortus’ tūvtīks ‘tuticus, publicus’. Umbr. Osc. fust ‘erit’ cp. Lat. fuerit. Cp. § 655, 5.

§ 634. Old Irish. The syllable, immediately following the one with the chief accent, was the least accented in the
word (as in Ital.), and its vowel became reduced and disappeared, if one or more syllables followed, thus having either syncope or samprasaṇa. On the retention of the vowel in final syllables see § 613.

Syncope. From the stem *föllessu- 'clear, manifest' was formed nom. pl. fölísi with the derivatives fem. fölísė 'clearness' and the verb fölísigim 'I show'; the middle syllable of the stem *föllessu- had experienced syncope here, while the nom. sg. fölísus retained the same syllable, as a syllable, which had become final after the loss of the end syllable. From *bëromi, older *béro-me(n)s-i (1. pl. indic. pres. from bër= Indg. bher- 'ferre'), arose bërme (-e was caused by the o which was dropped; beside this 3. pl. bérît from *bëront(i). menne, dat. menmain, 'sense' from prim. f. *men-a-men-, see § 110 p. 104. From the stem *cárět-'friend' (from *cárun-, see § 212 and cp. Gall. Carantonus Carantillus, Cymr. pl. cœranta) pl. dat. cáirtib acc. cáirteu, but sg. nom. córe vára gen. cúrat dat. córit. Instructive for this process are also the Lat. loan-words, e.g. péccad 'peccatum' gen. pécětho, idíal 'idoláム' dat. pl. tillaib.

Samprasaṇa. Beside nom. sg. só-nírt só-nírt 'strong, brave (nert 'strength') stood dat. pl. só-nartaib compar. só-norti 'stronger' and the derived substantive só-nírté só-nírte 'strength, firmness'. In the latter forms the syllable -nert- had become -nrt-, the timbre of rt was conditioned by the vowel in the following syllable; r then generated a reduced vowel. So also du-fú-tharrcair 'voluit' goes back in the first place to *du-fú-thraicair, this to -thraicair (cf. dà-thracht 'will'). Cp. §§ 66. 208. Here belong also cases like bria-thar: the course of development was -tra, -tr (r with a-timbre), -tar, cp. § 623 rem. 1.


§ 635. Germanic.

Prim. Germanic syncopeation. *dźiz-a- 'ore, metal' (Goth. dîza-, OHG. ér) from *dżiz-a-, cp. Skr. áyas-. So probably also *máiz-o 'maior' (Goth. màiza OHG. méro) in the first instance from *máijū. Further *ármējdl(i) 'he has compassion on' (Goth. armāip
Vowel absorption in Germanic. § 635.

OHG. *irmo-ji-di and *frīōid(i) 'he treats lovingly' (Goth. frijōb) fr. *frīō-ji-di, see § 142. This syncopation, which did not take place if an i directly preceded the ji, belongs to the later prim. Germ. changes. For it presupposes the new Germanic accentuation (§ 687).

Syncopation in Gothic in final syllables, e. g. *ulfaz 'wolf' fr. prim. Goth. *ulfa-z. See § 660, 1. Whether forms like ibns 'even' akrs 'acre' were pronounced as monosyllables or dissyllables (ibns akrs), is not clear, cp. §§ 215. 277 (p. 221 foot-note 1). 660, 1. Here may also be placed the transition of i to į after consonants, as in satja 'I set' from prim. Germ. *aliō, hairdīōs nom. pl. 'shepherds' from prim. Germ. *zirdīōz (nom. sg. hairdeis from *zirdīi-z).

Rem. Some regard this latter process as prim. Germanic. But then the 2. sg. imper. sati (Indg. *sodiē) could not well be explained. For *sati would certainly also have become *sati in prim. Germ., and this would have led to *sati.

In West Germanic a law of syncope operated which Paul (Paul-Braune's Beitr. VI 144) has formulated in the following manner: — Short vowels were dropped in open syllables 1. after chief accented syllables, if these were long, 2. after a secondary accented syllable following the one with the chief accent, whether this was long or short. The operations of this law are in many cases not evident and clear, because the secondary tone and the long tone also changed their position in the same word according to logical principles and many levellings took place by analogy. OHG. hōrta 'I heard' for hōrita = Goth. háusida, branta 'I burnt' for brannita = Goth. brannida. OHG. OS. hērro 'master', compar. of hēr 'high', sublime', from *hēriro (Goth. *hēriza), OHG. OS. jungro 'younger' from *jūngiro, cp. Goth. jēhiza. OHG. andres gen. of ander 'alius', unsres gen. of unser 'our'. OHG. sēula OS. sēula 'soul' = sēula: Goth. sēivala. OHG. ësnīn 'iron' adj. from ësan 'iron'. OS. mahtigro from *māhtigro gen. dat. sg. fem. and gen. pl. of mahtig 'mighty', cp. Goth. gen. bīzōs. Forms like OHG. zimbarta 'built' (§ 310 rem.) 'acchar 'field' fogal 'bird' eban 'even' had experienced samprasārana, see §§ 215. 277. 623 rem. 1.
For the activity of the West Germ. law of syncope in final syllables, see § 661, 2.

§ 636. Baltic-Slavonic. ɪ experienced syncopation in unaccented syllables in Lithuanian. I am not in a position to say how far the phenomenon, which can only be proved for a comparatively small number of words, is dialectical and how far it was dependent on various grades of accent-stress or similar factors. Examples: szūnięs beside szūnięs ‘well, spring’; mótna beside mótna ‘mother’ (also mótnu); fut. 2. pl. ársče beside ársče, 1. du. ársča beside ársča, from arici ‘I plough’.

*Vowels were dropped in final syllables by syncope, e. g. pl. dūkters ‘daughters’ fr. *dūkter-es (Gr. δυνατίς), gen. sg. dūkteršs fr. *dūkter-es (O.Bulg. dūšter-e). Cp. § 664.

ɪ and ʊ, which were reduced vowels already in the prim. Slav. period, disappeared in Slavonic medially in open syllables. In the O.Bulg. monuments e. g. vși beside vısı gen. of vısı ‘vicus’, rekšu beside rekššu dat. sg. of the part. perf. of rekš ‘I say’. See §§ 36. 52.

PALATALISATION AND LABIALISATION WITH EPENTHESSIS.

§ 637. Consonants are often palatalised by sonant and consonant ɪ- and ʊ-sounds following them, through the mouth-articulation anticipating the ɪ or ʊ. In like manner ə- and ɑ-sounds cause labialisation.

If any other vowel but an ɪ or ʊ precedes a consonant or group of consonants thus palatalised or labialised, this often becomes an ɪ-, or ʊ-diphthong, e. g. aɪlɪ if from aɪlɪ- (where ' indicates the palatalisation of the l). The ɪ- or ʊ-articulation thus extends still further than the specific articulation of the consonants. This phenomenon is called epenthesis. It occurs in the older phases of the Indg. languages only in the case where postconsonantal ɪ or ʊ was consonantal. This ɪ and ʊ then disappeared in the preceding consonant, a result of the intensity of the process of palatalisation or labialisation.
Rem. The phenomena, which are denoted as umlaut, fracture, vowel-harmony etc., do not differ materially from epenthesis, e.g. OHG. *nerian = Goth. *nezian § 83, O.fr. *fer 'man' fr. *ýrvo-§ 84, O.Bulg. *tebojáInstr. beside tebe gen., tebē dat. loc. of ty 'thou'.

§ 638. Aryan. Simple consonants and ut appear palatalised in Avestic before i, ï, y, ë, ik (from Ar. ái, § 558, 3 p. 415) after a, á, u, á, ë, o, ö, oc, ao; the palatalisation was indicated by an i written before the consonant. aípi 'up, on, in' = O.Pers. apíy Skr. ápi. báraini 'they bear' = O.Pers. báránitíy Skr. bháranti. per'sáií tì 3. sg. conj. of per'sámi 'I ask' = O.Pers. parsáitíy Skr. párcháti, stúdhi 2. sg. imper. of stāomi 'I praise'; Skr. stú-hí. kēr'nůiti 'he makes' = Skr. kēr'nú-ti. bér'zátim, acc. sg. fem. of bér'zant- 'great, high', = Skr. bhratim. aebíśi instr. pl., aeybhū dat. pl. to aćni 'this', = Skr. ēbhíś, ēbhayās. dāđ-māde, 1. pl. mid. to dāđáni 'I place', = Skr. dāđhi-māhe. bér'zátí, dat. sg. masc. of bér'zant-, = Skr. bhratí. ainhā, gen. sg. fem. to aćni, = Skr. aśyās.

r appears labialised before u, ú, ō, after a, á, o; an u written before the r marked the labialisation. auruṣa- 'white, glittering' = Skr. aruṣá. dāuru 'wood, spear' = Skr. dāru. pouru (also written pauru-) 'much' = O.Pers. poru- Skr. purú- (§ 290). aurvanta- 'quick, strong' = Skr. árvanta-.

Rem. The metre proves that diphthongs were not spoken in forms like aiπi pouru. This mode of writing is to be explained from the fact that the transition from the a, á etc. to the i or u-position of the palatalised or labialised consonant gave the impression as if an i or u was heard before the consonant.

Hence it is quite out of the question to speak of a triphthong in forms like aebiś etc.

Op. the similar mode of writing in Irish, § 640.

In Bartholomae’s Handb. d. ir. dial. this i and u, just as the ana-pytetic vowels (§ 624), are placed above the other letters in small type, e.g. a'pi a'bhyū, a'rūńa-.

§ 639. Greek. Epenthesis of i and probably also of u took place in the period of the primitive community.

Epenthesis of i. The palatalised consonant was single or double : r, rv, rv, rv, dr, χμ, qι, σ, f. qaino 'I show' from *qain-ko, kaino-ς 'common' fr. *kain-ko-ς (§ 204). tekaino 'I make, fabricate' fr. *tekain-ko, older *tekain-ko (§§ 130– 234)
§ 639—640. Palatalisation, labialisation and openth. in C. and O.Irish. 479


Rem. Epenthesis of i has been wrongly assumed in κρε-τον 'stronger' beside Ιον. κρε-τον, prim. Gr. *κρε-τον, and in με-τον 'greater' beside Ιον. με-τον, prim. Gr. *με-τον. इ had taken the place of ए here through analogical association with चेतो 'inferior in strength etc.' चेतो 'better' चेतो 'smaller'. Epenthesis of i has also been wrongly sought in κρε-τो 'I kill', κρε-τον, Hom. κρ 'in', κρेटिफ 'I destroy', चेतो, Hom. चेति 'over'. In the first instance assimilation took place in these cases (ep. -एल- from -एल- in एल्लो, then 'compensation lengthening'. See §§ 131. 618

Cypr. अलो-ङ्ङ 'beside Arcad. अलो-ङ्ङ 'alias' is very strange. It stands too isolated to be able to establish with certainty a process of epenthesis for the period of the separate dialects. Cp. Spitzer Lautl. des Arcad. Dial. 34.

Epenthesis of आ in Greek is entirely denied by some scholars, and it is clear that most of the examples brought forward are certainly or probably false. The following are less doubtful: तेत-स 'bull' beside Gall. तेत-स and केत्र-स (Kέτρ- for *Κेत्र-स, which is to be presupposed by § 496, through popular association with तेत-स, or तेत-स, or both at the same time).

In the transformation, which guttural and dental explosives experienced through a following इ or उ in prim. Greek or in the period of the separate dialects, as -उन- fr. -क़- -इ-. -उ- fr. उ- (§§ 131. 489. 493), it was in all cases a question of palatalisation.

§ 640. Old Irish. Palatalisation and labialisation took place extensively. At the end of chief accented syllables, in
which the original vowel-differences were kept apart, the palatal
timbre of the consonant was denoted by placing an i before
it, and in like manner the labial by an u or o. We have thus no
more to do with proper diphthongs or triphthongs here than
in Avestic (§ 633). The vowels following the chief accented
syllable, which had imparted their timbre to the preceding con-
sonants, were mostly dropped according to the laws for unac-
cented syllables, so that no trace of their existence was left
except in the colouring of the preceding consonants. In Keltic
grammars this process is called infection.

For the sake of clearness we give here in small type the
vowels which serve only to indicate the timbre of the con-
sonant (cp. § 24 p. 27).

Palatalisation. Gen. e’ch ‘of a horse’ fr. prim. Kelt. *ekyī,
to nom. ech. su’des ‘seat’ fr. *sodio-m, rt. sed-. Gen. ma’ce ‘of
a son’ fr. maqī (Ir. Ogam inscript.), to nom. sg. mace. a’le
rā’u ‘secret’ fr. *rānin, to nom. rān fr. *rānā. for-te’s ‘thou
wilt help’ fr. *tēssil(s) with e = Indg. ej. Cp. §§ 58. 66. 82.
98. 106.

Labialisation. Dat. no’rt fr. *urti *nertī, stem nerto-
‘strength’. Dat. e’ch fr. *echi *ekyō, st. echo- ‘horse’. ad-ga’r

If the vowel of the syllable which had not the chief accent
was still present only as an irrational vowel, its colouring was
dependent on the timbre of the following consonant, e. g. (ni) ēpur
(fr. *ēd-bur) beside at-bi’r ‘dicto’, both from the same original form,
but with different accentuation according to the connexion, so,
too, nom. biad gen. biul (‘victus’) fr. *biyot(o-m) *biyot(ī). See
§§ 66. 82. In like manner the irrational vowel, which was
developed in Keltic itself from sonant liquid, assumed the
quality of the following consonants, e. g. só-nīrte beside nērt
‘strength’. See § 634.

Where a diphthong is written in unaccented syllables, the
second vowel was properly the syllabic vowel and the first
really only shows the timbre of the preceding consonant. Hence
we may write epiur, which occurs beside epur, as ép'ur. Correspondingly só-nírite beside só-nírte, rér'sig 'direxit', dat. túath'ib beside túathib 'populis' (cp. mnál'h from ben 'woman'), 1. sg. cár'ím beside cárim 'I love'. In general this colouring of the consonant is the quality of the vowel which originally followed the consonant, cp. e. g. ép'ur with at-dh'r and 3. sg. ad-cón-d'irc (Gr. δεδορξε) with 1. sg. ad-cón-darc (Gr. δεδορξα).

Rem. If two consonants with different timbre came together through loss of the vowel, the second became assimilated (with certain exceptions) to the first, e. g. in *fédligetho 'of persistence' (nom. fédligud, to fédligim 'I continue, hold out') a palatal s and a dark th came together after the loss of the c in the last syllable but one. The latter then also became palatal, hence the form fédligetho. The timbre of the preceding consonants had influence upon final vowels partly even in O.Irish, but especially in Mid.Irish. E. g. sú'dligtho 'of setting' became sú'dligthe; nom. pl. gu'lво'i 'deeds' (also written gu'liini) without indication of the timbre of the w, nom. sg. gu'lwi became gu'lwi or gu'lwx gu'li (all these spellings exist side by side of each other). — According to Thurneysen. Op. also § 657 rem.

§ 641. Germanic. Until recently a prim. Germ. epenthesis of i was universally assumed in a series of words, as Goth. háils OHG. heil 'whole', which is said to be related to Skr. kalya-s 'healthy, pleasant'; Goth. hráwa- (in hráwa dáho) OHG. hre'ó (gen. hréwes) 'corpse', said to be connected with Skr. krvaya-m 'raw flesh'. See Scherer Z. Gesch. d. deutsch. Spr. 2 74, J. Schmidt Vocal. II 474 ff., Osthoff Kuhn's Ztschr. XXIII 427 f. I am by no means convinced of the correctness of this assumption; on háils op. § 480.


Original rž, ¼, ŋi appear in O.Bulg. as palatalised r, l, n; i had been absorbed in the preceding consonant. Palatalisation was also the first stage in the development of k'é ke to ã ǽ, of chi che to ã ǽ etc. See § 147.

LOSS OF SYLLABLE BY DISSIMILATION.

§ 643. When two modal syllables with the same or similar initial sound follow each other, one of the two is often
lost. When a person reproduces sounds from impressions on
the memory and repeats their order in speaking, the syllables
with the same initial sounds run into one another, and thus
after the production of the initial sound of the first syllable he
at once passes over to the production of the sounds following
the second, e. g. Gr. τέτραχφυν ‘four drachmae’ = τετρά[δφ]αρχυν.
Such hurrying over one part of the sounds of the body of a
word does not always become chronic and universal, hence the
frequent co-existence of the full and the shortened form in
languages closely related together.

In languages with preponderating expiratory accentuation
it was probably always syllables which had not the chief accent
which were affected by this act of dissimilation.

Aryan. Vedic īrādhyaī inf. ‘to try to gain’ = *iradh[a-dh]-
yāī, cp. 3. pl. mid. īradhanta. Avestic. dūraoša- ‘shining
far’ = *dūr[a-r]aοša-. ame[r]tāt- beside ame[r]tā- tāt- ‘immortality’.
maidyaīrya-, name of a feast, fr. *maidya[a-y]αr[y]a- (maidya-
‘modius’, yār ‘year’).

Greek. αμφορεύς beside αμφυρομύζ ‘jar with two handles’.
ημέδυμνον beside ημη-μέδυμνον ‘half a bushel’. xoμεδύδασκαλος-
beside xoμροδο-διδόσκαλος ‘comic poet’. λιπώδα ‘intermittant
fever’ = *λυμ[α-]νυά. στόμαχογος ‘talkative’ = *στομ[ο-μ]αγγος
or *στομ[α-μ]αγγος. ονυθιναρ ‘back of the hand’ = *ονυθ[ο-θ]-
ναρ. κέτυφ ‘goader’ = *κετη[η-τ]ος from κεντησ. θάρσονος-

Italic. Latin. sēnmodiius beside sēm-modi-us. sēmāstrī-s
‘semi-monthly’ = *sēm[i-μ]ēstris. trucidāre fr. *truc[i-c]idāre. an-
testāri = *ant[e-c]estārī. lāculentiam acc. beside lāculentī-tātēm.
dēbiltāre = dēbili-t[at]-āre. hēreditārius = *hērēdi-t[at]-āriu-s.
calamitōsus = *calami-t[at]-ōsus. dentiō = *dent[i-η]-ō. nātrix
= *natri-[η-τ]-iā. Umbrian suront beside sururont ‘item’.

Rem. 1. From what has been said above it is probable that forms
like dēbiliāmus dēbiliātāssem, nātrīcis nātrīcāmus, dentīonis were already
created in Latin at the time *dēbiliātīō (1. sg.), *nātrītrīx, *dentītīō were
still spoken. The shortening of the latter forms was due to the analogy
of the first through a dēbiliātīō being created to dēbiliātāmus etc.


Germanic. Goth. avistr n., OHG. ewist m. awista f. 'sheep fold' = *av[i-v]istr, *ew[i-w]ista, the second part to OHG. wist 'stay, dwelling place'. In like manner *navistr = *nav[i-v]istr 'abode of the dead' which is to be deduced from Goth. ga-navistrōn 'bury'.

Possibly also Goth. dīnohun 'ullum' = *dīn[an]ō-hun. The spelling dīnō-hun is due to an attempt of the writer to take a middle course between the form actually spoken by him and the form dictated to him by his grammatical feeling.

Baltic-Slavonic. Lith. akěta-s beside akēštā-s ‘away’ (from akēta-s ‘awn’). Loc. sg. fem. gerojioi = *geroj[e-jo]je, to nom. gero-ji, definite form of gera 'bona'. O.Bulg. fem. gen. dobroje = *doby-jej, dat. dobrojī = *dobrē-jej, instr. dobroja = *dobroj[a-jo]ja and this = *dobroja-jaj, to nom. dobraja, definite form of dobra 'bona'. With the last named double shortening cp. Lat. voluntarius = *volunt[at]arius and this = *volunt[i-t]arius.

SANDHI (SATZPHONETIK).

§ 644. Words, united together so as to form a single thought, are mostly also spoken in a connected manner, so that the whole sentence, or at least a member of it consisting of several words, forms a complete phonetic unity. The sounds of the

1) The first consonant was dropped in Irish in such cases, and the vowels, thus brought together, were contracted: e. g. *aroð-ær-nasa became aroð-rónase 'I have betrothed you' (nascein 'I bind'), where *oi is to be read as a pure diphthong (Thorpey's Cæs. Celt. VI 323 f.).
word are dependent on the varying position of the word in the sentence. It makes a difference whether a word with this or that set of sounds precedes or follows another, whether the word begins or ends the sentence, whether it has the chief accent of the sentence or not. As a word has generally life in connected speech only, it develops itself phonetically also in connexion, and those variations of position are often at the same time the active cause which produces the change. Thus e. g. in Skr. tat phālam 'this fruit' and tad datrām 'this gift' the difference of the final sound of the first word was caused by the difference of the initial sound of the second word, in śucīś tvām 'splendidus tu' and suhhrāś tvām 'nitidus tu' the difference of the initial sound of the second word was occasioned by that of the final sound of the preceding word. The shortening of prim. Balt. -ā in the Lith. nom. sg. fem. gerū 'bona' was brought about by the position at the end of a sentence (absolute finality, position in pause), and the reduction of ṝe- = Indg. sṛ- to ṝ- in Gr. ṝei 'flows' (Skr. sravati, op. ṝceti 'flowed' Skr. đravat) by the position at the beginning of the sentence (absolute initiality). OHG. mo 'to him' nan 'him' beside,ino inan arose from the fact that they were used unaccented (enclitically) in the sentence as a whole; when preceded by the chief accent they became subject to the law of syncope (§ 635).

Those changes, which absolutely initial and final sounds underwent and which were caused by such positions of the word, may generally be separated as forming a special category of phonology.

But the sound-affectations, which a word suffered through its connexion with a preceding or following word, are not to be separated from those, which were caused through the connexion of the sounds and syllables of the same word as a whole. In many cases no one even thinks of making such a separation. Thus no one treats under the laws of sandhi the Att. η = prim. Gr. α in τμνι or in ἥγον, which is of the same nature as that in μηγέρας. But e. g. in the acc. pl. like νυμότες, νυμοις (in several dialects equal to Att. νυμιμας, νυμους), in
Att. κατὶ Dor. κηπὶ = καὶ ἐπὶ, in τὸλ λόγον = τὸν λόγον, ἀπὸ Ρόδων = ἐπὶ Ρόδων, καὶ πόμον = κατ πόμον, in Hom. ὀττὶ (Att. ὀτὶ) = *σὲ τι (§ 363) etc. we can also only speak of such laws as generally held good for the sound-combinations in question. νύμφας arose from νύμφανς in combinations like νύμφανξαλάς according to the same law as that by which *κυντός became κεντός (§ 204 p. 171). κατὶ κηπὶ from *κα(λ)ει like τιμάτε τιμήτε from *τιμα(λ)ετε (§ 603). As regards τὸλ λόγον etc. and ὀττὶ, such assimilations, it is true, did not take place at the same time in the body of a word — we take the term word here in its narrowest sense, thus we do not regard compounds like πάλλεσο-ς παραγελά as one word —, but it was only because the sound-groups in question did not occur in the body of the word at the time when the change took place1).

The latter is just as much a secondary consideration for the sound-change itself, as it is immaterial for the changes which take place in a word when isolated, if the sound-group in question at the time of the change occurred in the isolated word only as e. g. in the transition of -νκ- to -σσ- or of -γκ- to -ζ- in Greek.

The following circumstance also does not occasion an exceptional condition for the laws of sandhi in question. After the ending of a word has assumed a different shape caused by the varying nature of the following initial sound and the activity of the respective sound-law or of the respective sound-laws has become extinct, the different forms are often used promiscuously, irrespective of the conditions by which the difference was brought about, or at least one of the different forms goes beyond its original sphere. Thus in Greek νύμφας came to be used also before vowels while νύμφας, which had arisen in combinations like νύμφανξαλάς (ep. πάσα from πάνσα) and when absolutely final, appeared before consonants2. The same holds good with regard

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1) On account of κατ πόμον observe that the syllabic division κατ πόμον was in opposition e. g. to φάταφα.

2) On the newly found inscription of Gortyn the old phonetic division still shows itself in preferring especially the article form τὸν before vowels and the sister form τὸς before consonants.
to initial sounds. Double forms like Gr. στέγος: τέγος 'roof' were originally dependent on the varying form of the end of the preceding word (§ 589, 3). But both forms then became generalised in use. Now this fluctuation did not for the most part stop here. One of the different forms gained the mastery and entirely suppressed the other or the others. Thus in the Attic dialect the accusative forms νέυματας, τάς, νόμως, τούς came to be the only forms in use, νέυματας, τάς, νόμως, τός became extinct); in Latin stẽg- entirely gave way to teg- (tegō toga). It is here everywhere merely a question of the effects of analogy, which followed after the regular change had taken place, and the case is essentially the same as if e.g. in OHG. jungro had arisen by syncopation beside bezziro etc. and jungiro had then been formed after the latter and similar forms (§ 635). The latter new formation is parallel to the younger τόνς παιδας (τονς παιδας) instead of the regular τός παιδας.

If, in sandhi-changes, transformations of finals through the following initials are much more frequent than transformations of initials through the preceding finals, it fully corresponds also to what we may observe with regard to the changes in the body of a word, namely that transforming operations are far more frequent in a regressive direction (anticipations) than those in a progressive direction.

In the so-called laws of finals and initials it is not merely a question of the last or the first sound in the body of the word, but often also of the medial sounds. The important part is that the cause of transformation lay outside the body of the word, in the first case in the following, in the second case in the preceding word. The most striking examples

1) The existence side by side of αις and ις (older ις and ις, originally ις only) is the same as τάς and τάς, τοις and τος. If in Attic the fluctuation between αις and ις continued long after the victory of τάς τος was decided (see the author Ber. d. sächs. Ges. der Wiss. 1883 p. 186 f.), this is to be explained from the fact that the accusatives with compensation lengthening were the regular, often used pause-forms, while the preposition was generally pronounced only in close connexion with following words and αις only occurred rarely as pause-form.
are the Skr. combinations like prá hanyate, agnér dvema, where ṛ took the place of n through the influence of the r in the preceding word (§ 648, 3). The expressions laws of finals and initials are thus too limited. We retain them however in default of a more appropriate short name.

On the basis of the above explanation we ought, in the discussion of sound change, to separate from all other changes, those which happened in the beginning and end of a sentence and were caused by this position of the sounds. With the present state of our science, this is unfortunately impossible in an exposition of the history of sounds, which everywhere starts from the prim. Indg. sounds: the cases are too numerous, in which we do not know whether the word has obtained its present form when absolutely initial or final respectively or conditionally so i.e. in the juxta-position with the sounds of other words. Every thing, which preceded in the prehistoric periods of the separate developments, is known to us by induction only. But processes certainly happened even then, quite as complicated as those we can so often observe in the later phases of language: conflict of the pause-forms and the forms at the beginning of the sentence with the medial forms and of the latter with one another, utter loss, without leaving any trace, of one or several of the different forms which had arisen phonetically, etc. We are mostly not in a position to reconstruct these prehistoric processes in their course with any certainty. And even where we work on the basis of historic records we are often badly off from the fact that the written exposition, as regards the formation of the final and initial parts of words, is generally still less a faithful picture of the living speech than as regards the medial syllables, since they had arisen by sound-laws which operated independently of the connexion in the sentence. In writing one generally recalled to mind the isolated word as an independent whole and either overlooked the sandhi-operations altogether or only imperfectly paid regard to them. In this point, it is true, the exposition of the Sanskrit forms a brilliant exception. But what in the
other languages is too little, is too much here. The sandhi-
system of the Hindoos is not free from various pedantic
niceties and exaggerated generalisations; it is quite inconceivable
that the naive speech, uninfluenced by grammatical theorising
should always have moved in the track, which the grammarians
prescribe, and which became the normal for the written ex-
position of the language. The fettered language of the Vedas
already furnishes the proof that the sandhi-system of the classical
Sanskrit is not a thing of natural growth. —
In face of the overwhelming difficulties we shall therefore
not undertake the theoretical division mentioned above. But
it seemed to me necessary to point out here at least the aim,
which a more searching investigation of details should have
specially in view in the future even more than hitherto.

Rem. Cp. among others Schuchardt Romania III 1 ff., Sweet
Transact. of the Philolog soc., London 1875—76 p. 470 ff., Curtius
Paul Princip, der Sprachgesch. p. 100 ff. and elsewhere, Neumann
Ztschr. f. roman. Phil. VIII 243 ff., Holthausen Die Soester Mundart,
1886, § 44 f. §§ 204—222.

Prim. Indg. period.

§ 645. Only a few changes can be established with pro-
bability in conditionally final and initial sounds.

Finally.
1. -ṣṣ became -ṣ before certain consonants in the nom.
acc. du. of o-stems, say *dusā sūndā ‘two sons’ beside *dusū ḍhuṣū
‘two horses’. This is shown by the fact that the Vedic has
mostly -ā, rarely -āu, before consonants, and -āu rather more
frequently than -ā before vowels.

In classical Sanskrit the forms in -āu came to be the only
ones in use. Conversely in the European languages the forms
in -ṣ almost entirely supplanted those in -ṣṣ: Gr. ḍo-sēna, ḍnnu,
Lat. duō, O.Ir. ḍá, Lith. ďū from *ďuā, gerū from *gerū
(§§ 184. 664, 3), O.Bulg. ďoa, nūka. -ṣṣ was retained in O.Ir.
Meringer, Kuhn’s Ztschr. X X V I I 217 ff.

From this it may be assumed that -oḥ once interchanged with -o in the loc. sg. in -oḥ also as *sūnōḥ = Skr. sūnāḥ etc. (§ 85).

Compare Indg. *gōm acc. sg. 'bullock', which probably arose from *gōy-ṃ, § 188.

It is more doubtful whether -ēḥ interchanged with -ē in a similar manner. Vedic loc. sg. agnēḥ of agnē-ṣ 'fire' suggests the conjecture that there existed in prim. Indg. a loc. sg. in -ē, which had arisen from -ēḥ. The latter form is said to be represented by Goth. anstdi (stem anstih-). Cp. the accidence.

Compare the hypothesis according to which Indg. *rēs 'res' arose from *rēh-s, § 150.

Rem. 1. That nominatives like Gr. ἰπθεύδ and Skr. sākhe (pl. sāk-hēy-us) represent an Indg. -o from -ōḥ, as has been maintained, seems to me very doubtful.

2. -i and -u were pronounced as consonants before sonants. E. g. *prōṭi beside *prōti 'against' (Skr. prāty and prati, Gr. πρός and προῖ, cp. πρόςσον from *προξησμ), the former e. g. in Skr. praty-abharan = Gr. προξικάφηον. *upēri beside *upēri 'over' (Skr. upāry and upāri, Gr. Hom. ὑπέρ and ὑπέρ, cp. Hom. eiβ and eβi, § 131 p. 119). *médhy and *médhu 'honey', the latter e. g. in Skr. mādvā asti 'mel est'. Cp. §§ 122. 156.

In like manner -y and -m probably interchanged, e. g. acc. sg. *bhrētor-y (Gr. φράτορα) and *bhrētorm (Goth. brōbar). Cp. § 192. 231 rem.

Rem. 2. On the accusative forms like *dēm (Skr. dyām) see § 188. If the conjecture given there is right, there existed between *dēm and *ndēm (Hom. νδήm Lat. nāvem) the same relation as between *bhrētorm and *bhrētorm.

3. Voiceless explosives and spirants became voiced before voiced explosives and spirant, say *ēdōdbhrētraḥi = *ēdōt+bhrētraḥi 'he gave to the brother' (Skr. ādād bhrētrē); *tāςgiḥs = *tās+giḥs 'these sinews' (cp. Skr. tā fyā). Cp. *-bd- from *-pd-, *dyābhīs = *dty+bhīs § 469, 2, *dēhi = *s+dhi § 589, 1. Conversely voiced explosives and spirants became voiceless before voiceless explosives and spirants, say *yitōtīplu = *yitōd+pīlū 'know thou (let him know) much' (Skr. vītāt purū),
Sanskrit and Greek especially point to such assimilations.

4. Bremer (Paul-Braune’s Beitr. XI 38 f.) assigns it to this also, that the nom. endings sg. masc. fem. of n- and r-stems sometimes have -n and -r, sometimes not, e. g. Gr. ἀφήων, πανίο, but Skr. असद, पिटा (see § 92). The duality was formerly frequently explained by assuming that the forms without -n and -r were once the only ones in use and that the final consonant was transferred from the other cases. In the n-stems one might also imagine that the forms with -όν- without gradation like Gr. ἐναῷον—Goth. rōfōn—O.Bulg. poljān—(§§ 210 extr. 311. 585, 3) had originally the nominative with -n, the others without -n and that then intermixture took place. The uncertainty however prevents anything being here definitely arrived at.

Initially.
1. ointment disappeared before consonants after -s, perhaps also after other consonants, hence the double forms like steg- and teg- ‘cover’. See § 589, 3.
3. Double forms like *sje m and *siśem ‘sim’ *dyō and *duyo *mrįjėtaį and *mrįjėtaį ‘moritur’ were due to a varying construction of the preceding syllable. See § 120 p. 112 § 153 p. 138 f.

Aryan.

§ 646. Prim. Aryan.

Finally. 1. Nasals adjusted themselves to the organ of the following consonants, so that e. g. -n and -m became -w before k-, and -n before c-.
2. The ending -am attained complete supremacy in the acc. sg. of most consonant stems, the origin of which must apparently be explained from sandhi relations. Analogously -am in preterites like द्व- ‘eram’. See §§ 231 rem. 645 p. 489.
3. The explosives and spirants, which had become voiced before initial voiced explosives and spirants, remained voiced;
correspondingly those, which had become voiceless before initial voiceless sounds, remained voiceless (§ 645 finals 3). t and ḍ occurred most frequently finally. The aspirates, from of old rare finally, may have then lost the aspiration in this position. -s stood beside -s, -ṭ beside -ṣ; -ṅ and -ṅ = Indg. -ṝ and -ṅ were rare (§ 396).

-as and -ās, when absolutely final, passed into -ah and -āh (Skr.) or groups similar to these, and it seems that these forms, introduced also into the position before voiced explosives and spirants and before vowels, became here -ō and -ā already in prim. Aryan. See § 556, 3.

Initially. 1. kt- became (when absolutely initial?) t-: Skr. tūrya- Av. tūrya- 'quartus' from *ktur-, cp. Av. ṛxtūrya- 'four times repeated'. See § 471.

2. s- became s- after -i, -u etc. (§ 556, 1), whence Skr. ś-. Hence such combinations as hī śāh, hī śma, diś śha, nā śthirām.

Rem. Since we are not justified in assuming that the transition of s to ś (ṣ) was still active in the Sanskrit separate development, this phenomenon of sandhi must be referred back to the prim. Aryan period. It is immaterial whether in individual cases we have to deal with a prim. Ar.-word-combination or with one which had first come into being in Sanskrit itself. In the latter case it is a question of imitation of older models.

§ 647. Sanskrit. Finals.

1. The -ॅ, which arose from prim. Ar. -॑ when absolutely final and before consonants, was also introduced if the next word began with a sonant, e.g. -ॅ a- for regular -ay a-, cp. Av. zastay-ā O.Pers. dostay-ā 'into the hand', loc. sg. + a 'towards a thing'. Before a-, which for its part disappeared, -ॅ remained, before other sonants it was shortened to -a. vānē 'smīn from vānē asmīn loc. 'in this forest'. vāna āsit from vānē āsit 'he was in the forest'. This loss of a- was in its first beginnings in the Vedic period.

The -ो which had taken the place of -as (§ 646) was treated in like manner. anyō 'nyām 'one to the other'. rānā uvāca 'Rama spoke'.
-ay became -a before sonants. striptnauditt 'he gave to the woman'.

2. The assimilation of the nasals to following consonants (§ 646), remained e. g. táv kapóm 'this sage', táv dêvám 'this god'. -m passed into the so-called 'Anuvāra' before sibilants, h and r. e. g. té sikhám 'this lion' (cp. § 199 rem. 1).

3. -r became -h when absolutely final. Voc. médh 'mother' = Av. mātrē Gr. μητήρ. 3. pl. perf. as-dh = Av. ásor-h from Ar. as- 'be' (§ 200).

The r, which had first become final in Sanskrit (by 7), also underwent this change. ákah = ákar 'thou madest, he made', when 2. sg. arose from *u-kar-ṣ, when 3. sg. from *u-kar-t.

4. Absolutely final explosives and spirants were pronounced voiceless only, hence here e. g. tát 'this' from *ta-d, Indg. *tó-d.

The law, inherited from the pre-Aryan period, that explosives and spirants were pronounced voiceless before voiced and voiceless before voiceless explosives and spirants (§ 645 finals 3), was followed by an analogical innovation. They said tát phálam 'this fruit', tád dātrám 'this gift' (prim. f. *tód) and ábhārat phálam, ábhārad dātrám (prim. f. *ébharēt 'he brought'), but tád ánnam (food), tád viśṟam (dress), tád madhu (‘honey’) opposed to *ábhārat ánnam, -viśṟam, -madhu. The latter state was levelled out and ábhārad ánnam etc. introduced.

ábhārad ánnam for regular *ábhārat ánnam after ábhārad dātrám and tád ánnam may be compared with śagnē- 'powerful, helpful', for regular *śakmē- after śudhi and tiymē-, see § 472 rem.

-t remained in the old combination bhārat-u 'let him bring' (injunctive bhārat + particle u), because it was felt as a single word. See Osthoff Z. Gesch. des Perf. 42.

5. -t e- became -cc-, as ádācca 'dabatque', -t á- became -ch- (-cch-), as ádachatäm 'dabat centum'. Cp. §§ 352, 355. Cp. also § 557, 2 on tādchātrān acc. 'these enemies'.

6. The endings -as and -ās have been treated in § 556, 3. 646, 647, 1.
§ 64. Sandhi in Aryan.

h appears in pausa for the ś which arose from Indg. s prim. Ar. after i- and u-vowels (§ 556, 1), e.g. dvīh ‘sheep’, sānūḥ ‘son’. It is uncertain whether the transition to h was phonetically developed or whether it is a question of analogy after dāvah = dāpa etc. -ś was retained in Vedic before p- and k-, e.g. dyaś pitaś (= Zrāç navēt), but the pause-form in -h forced its way in also before these initial sounds, just as there still appears the older ending -us (e.g. yus pātih ‘qui dominus’) in Vedic before p- and k-, but beside this already also -aḥ. -ś too is s ill Vedic before t-, where t- was pronounced cerebral (§ 352), e.g. sūcīś tvāṁ ‘splendidus tu’. But beside this also sūcīś tvāṁ, a new formation after the analogy of -as t-.

h for -s and - ś also where these did not become final until after the loss of a following consonant (7.), e.g. dhū ‘he was’ = tś(t), dūḍś ‘he overcame’ = *udaiś(f); cp. dkaś = *akart abo 3. Also -t = -tś, e.g. 3. sg. injunct. aor. nāt = *naś-t from nas- ‘to attain’ (cp. 3. sg. vaśti ‘he is willing’ from vaś-, § 8 9).

Original -is, -us had become -iś, -uś in prim. Aryan before voiced explosives and spirants, e.g. *patiś dadati ‘the master gives’. -ś (≈ Sr br. -ś) already at an early period, peraps in the Aryan prim. community (cp. Av. duś-ita- ‘difficult of access’ duś-vacah- ‘speaking badly’), came to stand also before vowels, liquids and nasals through generalisation by analogy and here passed into -r in Sanskrit, e.g. brīr iyām ‘thi splendidour’ from *brīr. This -r then came to be used by analogy also before voiced explosives and spirants, e.g. patīr daś tī ‘the master gives’, sānīr daddātī ‘the son gives’, patīr bhāvati ‘the master brings’: the regular forms had been *patīr daś tī, *sānīr dadātī (cp. daś-ābhāś- ‘impious’, § 591) and *patīr bhāvati (cp. devīdīhiś ibid.). r was even also transferred to the ending -as in Vedic, as dīcar ‘horse’ brutar ‘renowned’.

7. Of two or more final consonants (except j and y as the second components of diphthongs before consonants) the first on was preserved. dūharaṇ ‘they brought’ from *a-bharaṇ-nt. dkaś ‘he made’ from *a-kar-t: Av. cor ś (prim. Ar. *kar-t, Indg.
§ 647—648.

*ger-t). ḍs 'he was' from *ās-t. ā-jāīṣ 'he overcame' from *a-jāi-ṣ-ṭ: Av. cōiṣṭ 'he made known' from caes-. āp 'water' from *āp-s: Av. afś. dēvā-tāt 'divine service' from *-tāt-s: Av. a-mer'ta-tās 'immortality'. dik 'region of the sky' from *dikś, prim. f. *dīk-s (§ 401 rem. 2). vāk 'speech' from *vaksā: Av. vāks Lat. vox, Indg. *yog-s (§ 556, 1).

ābhār 'he brought' from *a-bhār-ṣ-ṭ (s-aorist). Nom. sg. prāṇ 'turned forwards' from *prānak-ṣ. Nom. sg. tudān 'tundens' from *tudānty-s.

-nn appears instead of -n after short vowels, as ābhārann, tudānn.

The simplification of final consonant groups was older than the origin of short nasal vowels from short vowel + nasal before s. This is shown by the gen. sg. dān (dānn) from *dāns, 2. sg. ághan (ágann) from *a-gans. See § 199.

If a long vowel preceded the nasal + s, -n stood in only absolute finality, in conditioned finality a long nasal vowel was pronounced and -s had the same form as after non-nasalised long vowels. dśvan 'equos' in pause, but dśvāṣ t-, dśvāṣ c-, dśvāḥ p-, dśvāḥ a-. śūnān 'filios' in pause, but śūnāḥ p-, śūnār a-. vidēdn 'knowing' in pause, but vidēvāṣ t- etc. ātān 'he stretched' (s-aorist, from *a-taṇ-s(-t), 1. sg. ātāṣ-am) in pause, but ātā a-.

Rem. From this it seems to follow that n, after long vowels before -s not ending the sentence, had become with the preceding vowel a nasal vowel earlier than elsewhere. Of course in this question there comes into consideration the fact that the long vowels in the accusative endings -ān -ām -in have not yet been satisfactorily explained (the last attempt at an explanation by Hansen in Kuhn's Zeitschr. XXVII 615), and that the nom. vidēdn was a new formation for *vidēdās (cp. Av. vidēdā, Gr. eōdē). Thus the ending long vowel + n + s is not proved as old inherited in any of the cases here.


1. On the loss of -a after -ē, -ō, see § 647, 1.
2. -ch- (-cth-) fr. -t ś-, see § 647, 5.
3. r also caused cerebralisation of a following n, if the two sounds belonged to different words. In Vedic pārī nas,
vār nāma, prá hanyatē, indra śnam, agnēr āvena. Cp. bhāramāna-s in § 199 and the phonetic explanation of its origin given there.


Rem. On hī dūḥ etc. see § 646 initials 2.

§ 649. Iranian. Finals.

1. In late Avestic final -ā, -ē, -a were shortened in polysyllabic words. Nom. sg. haena 'army': Skr. sēnā. Nom. sg. brāta 'brother': Skr. bhārāta. Nom. du. puḥra 'the two sons': Skr. puṭrā. Nom. sg. berzaitī 'alta': Skr. byhatī. Nom. du. paitī 'the two masters': Skr. pātī. mainyu 'the two spirits': Skr. manyā. On the other hand e. g. z'mā instr. to zā 'earth': Skr. jmā.

All final vowels are written as long in Gāpā, not only haena mainyu, but also e. g. barā 2. sg. imper. = Skr. bhāra Gr. φίλες, āstē 3. sg. indic. = Skr. āstī Gr. εἰρέ. It is probably rightly assumed that these longs are due to a later transformation on the part of redactors and that they were pronounced short — perhaps with a few exceptions — in the same manner as elsewhere, at the time of the origin of the hymns. See Bartholomae Die Gāpā's p. 67 ff., Handbuch p. 3.

In Old Persian the deviations from the quantity, which is to be expected by the prim. Ar. sound-laws, are likewise only of a graphic nature, e. g. 3. sg. akūtā 'he made himself': Skr. ākṛta; abara(n)tā: Skr. ábharanta Gr. ἀφθονοντ; amīy 'I am': Skr. ásmi Gr. eiμι; pātāv 'let him protect': Skr. pātāu. Cp. § 21.

2. Late Av. -ē fr. -iā -iā, as ye-he = Skr. yā-sya. See § 125 p. 115.

Av. -ē from -aī, as aspē = Skr. áścē. See §§ 62 rem. 75, 94.

3. Av. -ē (written -q, -an, -qm) from -am -ān, as ūqūgm = Skr. tvām. See § 200.

4. Av. -r' fr. -r, as antar' = O.Pers. a(n)ter Skr. antār. See §§ 260, 624. The anaptyctic vowel arose before initial consonants, at the same time perhaps in absolute finality.
5. Final combinations of consonants were mostly permitted. Cp. the Av. forms cor'ḥ, cōiṣṭ, ąfṡ, ąvaś in § 647, 7. Exceptions under 6.

6. Prim. Ar. -t and -d after vowels (also anapticly) fell together in Av. in -ḥ. This sound or a similar one, in any case a consonantal element, was also spoken in O.Pers., since -a appears for prim. Ar. -at and -ad. If the sound -a had ended the word, this vocalic finality would have been expressed by the addition of the a-sign (in the transcription -ā). See § 21 rem. 3. sg. Av. ābaraḥ O.Pers. ābara 'he brought': Skr. ābhārat. Av. cīḍ O.Pers. cīy, indefinite particle: Skr. cid, Lat. quid.

-t appears unchanged in Av. in -st = prim. Ar. -ṣt prim. Indg. -ṭṭ, as hūṣast, and in -ṣt = prim. Ar. -ṣt prim. Indg. -st, as cōiṣṭ. On the other hand -s from prim. Ar. prim. Indg. -ṣt, as ąs. See § 474 rem. 2.

-t was dropped after n in prim. Iran.: 3. pl. Av. abaren O.Pers. ābara: Skr. ābhāvan ābhāram, Indg. *ēbheront, rt. bher-'bear'.


Ar. -as appears in Av. as -ā: nom. pl. fem. yā 'quae' = Skr. yās, 2. sg. conj. bārā 'feras' = Skr. bhārās. Beside this -a (from older -a, see 1): nom. pl. aspā 'equi' = Skr. ādētas, -ā probably corresponds to Skr. -alī, and -ā to Skr. -ā. The ending -as-ca (ca 'and'), as in yās-ca, seems to be a transformation of regular *-as-ca after -ā. Only -a occurs in O.Pers., e.g. nom. pl. mārtya 'men', which may also correspond to Av. -ā and -a. Cp. § 556, 3.

Opposed to Skr. acc. pl. tān (§ 647, 7) and Gr. προς Goth. ąpans stands in Av. tā (also written tān, tām).

Prim. Ar. -ś = Indg. -ś (§ 556, 1) was, as it seems, the rule in every connexion in both Iranian languages. Av. āśi-š 'dragon': Skr. dhi-ś; mainyu-ś 'spirit': Skr. manyu-ś. O.Pers. fravarti-š Phraortes, kārā-š Cyrus. Sanskrit relations of sandhi (see 647, 6), which certainly partly represent prim. Ar. differences
of finals, show that the Iran. -š did not stand regularly in all
word-combinations.

§ 650. Iranian. Initials.
1. The development of anaptyctic vowels in Av., as *rista-,
and the metathesis of vr-, connected with it, as *večta-, may
regularly have taken place partly in absolute initiality and
partly after certain consonants. See §§ 157. 260. 624.
2. So also the transition of prim. Ar. sm- (through the
intermediate stage hm-) to m-, in Av. mahi ‘sumus’ = Skr.
smáti etc. See § 558, 3.

Armenian.

§ 651. Finals.
1. The vowels in the originally final syllables of poly-
syllabic words disappeared, whether they themselves, or consonants
following them, ended the word. em ‘I am’: Skr. ásmi. mardoy
of man’: Skr. mytásya. Nom. dustr ‘daughter’ fr. *dustir, older
*dustēr; Gr. θυγάτηρ, asth. ‘star’; Gr. áστηρ. Nom. acc. mard
Gr. εὐκρώς. haur ‘of a father’: Gr. παρός. dster ‘of a daughter’:
νόμον-ης.

Monosyllables retained the vowel. mi ‘lest’: Gr. μη. Nom.
šun ‘dog’ from *lyōn (§ 87), but akan (see above). Acc.
eris ‘three’ from *ris, *trins = Goth. hrins, but sirts from
*sirtins from stem sirti- ‘heart’.
2. -m disappeared: acc. mard = Skr. mytá-m (§ 202). -n
remained: nom. šun, akan.

Rem. Therefore tosn ‘ten’ cannot be derived regularly from Indg.
*deqā (Skr. dāka Lat. decem). We must start, as in the case of Goth.
taikUn, from *dequn : the labial nasal became dental before -t, *tusant be-
came tosn. Or did the word receive its -n from šun ‘nine’ = *emyun, as
Lat. novem conversely took the place of *noven after decem?

3. -s disappeared after vowels: nom. mard = Skr. mytá-s;
gen. haur = Gr. παρός. It remained, if a nasal preceded it:
Initials. $e$, $o$ or $a$ was prefixed to an initial liquid, as erēk 'evening' = Skr. rūjas. See §§ 263, 625.

Greek.

§ 652. Prim. Greek finals.

1. Short vowels often suffered elision before vowels. The elision, e. g., in ἀπαντῆτο, of διάλικτο etc. may be regarded as prim. Greek. See § 603 p. 457.

2. The contrast between προκε and *προκε (προκέ), ἔνι and *ἐν (ἐν) was inherited from the pre-Greek period. See § 645 final 2.

If a word ended in an $i$-diphthong and the following word began with a sonant, $i$ was dropped as elsewhere (§ 130), e. g. κα(τ) ἔνι, κα(τ) ἀγαθός = Att. κανί, καγαθός.

3. -m became -n, as τόν = Skr. tāṁ. See § 204 p. 171 f. This occurred in absolute finality and also before dentals. Cp. § 653 rem. 2.

4. ἁ became *-αι in absolute finality, as oὐθαρ 'udder' from *oυθύρ. See § 285.


The exceptions as Ἰομ. ἄττη from *σφός ττ, *ἀπινως from *σφός πως, ἤκ, where the consonant remained on account of the close connexion, show that this change belonged entirely or especially to the absolute finality.

6. -s and -z (e. g. *τίς ὡ and 'but who') had come over from the pre-Greek period. See § 645. final 3.

/ss became -s before consonants and when absolutely final. μῶς 'mouse' μῆς 'month' from *μῆς-ς *μῆς-ς. Dor. πῶς 'foot' Att. ρέοτης 'youth' from *ραύς *ραύο-τας, older *πότς *πάτς (§ 490).
§ 653. Finals in the separate dialects.

1. The prim. Gr. elision (§ 652, 1) was extended further. With this went contraction (crasis), as Att. ταλλα from τα ἄλλα, to which was joined aphæresis, a phenomenon differing from the former rather in the written representation than in reality, as Att. ἰμοῦ ἱάκωςαν.

The tendency to remove hiatus, was intentional in the literary language and in some works it is avoided altogether.

Rem. 1. The so-called ἑβδοκεντρίκος has not arisen from an attempt to get rid of hiatus. Its use in antiquity was not at all regulated according to the theory of later grammarians. The consonant rather had an original etymological value in some forms and then became further extended by analogy. See the author's Gr. Gr. § 64 rem. and the literature quoted there and G. Meyer Gr. 2 297 ff.

The contractions in cases like Att. κανὶ Dor. νημὶ from καὶ εἶπε belonged to the period of the separate dialects (§ 652, 2).

2. The loss of the -ι in -ηυ -ωυ -αι (-ηυ -φ -αι) as in Att. τιμηι τιμηι ἵππηρ χρημικι was effected in the same manner as medially. See § 132.

3. -ν (= Indg. -υ and -μ) was assimilated to following guttural and labial sounds, e. g. Att. γηγι καὶ, γημι πόλιμ, μεθοντευμι μνι. The omission of the nasal in writing in Cypr., e. g. πα-ο-το-τε = νυκ(ν) το(ν)δσ, permits our assuming that here, as medially, a nasal vowel only was spoken. Cp. § 205.

Rem. 2. χθοιν and χναίν, already discussed in § 204 p. 172, show that Indg. final -υ was not retained in του, τημ (cp. Skr. τα-μ, τα-μ) before labials. If Indg. -υ had been preserved before labials to any extent in prim. Greek, χθουςς χναυςς would not then have taken the place of *χθομ-οςς *χνομ-οςς. -ν = Indg. -υ had been once generalised in prim. Greek.

4. -φ became assimilated to ι̣ in Cret. (Gortyn), as ἄνηφ ι̣ = ἄνηφ ι̣.

5. The tendency, inherited from the pre-Greek period, to level explosives with different form of articulation (tenuis and media) operated further. ἐγ Βατταλιον Att., ἐγ Βασχιδαν Corinth. ἐγβαλλεις Paros, ἐγ Ἰακης Att., ἐγ βακτελουν Att. (ἐγ = ἐγ, cp. ἐκ ποιην Att.), ἐγυκαζω Chios, καδ δε Hom., καρπαλον Hom.

32*
Assimilation of the position of articulation: Hom. κατ πεδίων from κατ π., κάππεσον from *κάτ-πεσον Thess. ἃτ τᾶς from ἃτ τᾶς, Hom. καββαλον from *καβ-βαλον, Cret. ἐδώηαν from *ἐγίδηται.

6. -s and -z (§ 552, 6) became assimilated in Cret. (Gortyn) to θ, δ-, λ-, as τάθ θυγατέρας (cp. πρόθημα from πρόσθα, § 566), πέθαι δὲ, παραθά δόντος (cp. the verbal ending -α-δώ from *-αζώ; § 493 rem.), τοῦλ λελοσι.

-z passed into -φ in El., e. g. τίρ = τίς, τάφ = τᾶς, πεπολτευκόφ = πεπολτευκόφ. -s beside this existed in the older periods. But the old regular spheres of use of -φ and -ς were even then no longer kept apart (e. g. γαιρ τάφ . . . instead of γαίρ τάφ . . . ) and the forms in -ς were gradually driven out by those in -φ.

-φ from -ς also in the dialects of Laconia and Thera.

Cp. Thess. Ἑρωδότεις beside Ion. etc. ᵀได้อยοὔδορος i. e. Ἐὐάνδρος and ἷδορος, § 593.

§ 654. Initials in prim. Greek and later.

1. It was remarked in § 626 that doublets like ὁμόργυμι and μόργυμι (Skr. marji-) arose from differences of sandhi.

2. r-, s-, l always appear as ἁρ-, ἃρ- (before consonants), σλ- (before consonants), as ἁρκρός ‘bear’, ἃρθό-ς ‘upright’. This is undoubtedly the form for absolute initials. On the other hand the particle ἤ = Lith. in Indg. ἡ arose after consonants. Cp. §§ 292. 306.

3. On differences like στάγος and τέγος ‘roof’ from rt. στέγ-, σμερδαλίο-ς ‘terrible’ (OIH. smierzo) and μεθέμια ‘to smile’ (Skr. smayatē), which mostly seem to go back to the pre-Greek period, see §§ 563, 6. 589, 3.

4. Where double consonants had arisen by assimilation, they were simplified when absolutely initial, and probably also after consonants. φεί = στινώτι, beside έρρει (§ 565). μύρα beside ἀμύρμυρο-ς from rt. sneighi- (§ 595). μεθέμὶα beside φιλο-μεθέμια (see 3). στῦε beside ε-στῦε : Skr. σμίρα- (§ 489). The geminated consonants still appear in: Hom. τε ροζηζεν Μ. 198, as ἀ-ροξα; ὅτε σασκατρό P 463, as ἀ-σκατρό ἑ-σκατρό; Ionic. ὅποια σα, Att.
§ 654—655. Sandhi in Italic.

Italic.

§ 655. Finals. Owing to the scantiness of the Umbrian-Samnitic materials, handed down to us, it remains doubtful at what period certain processes of sandhi took place in Latin.

1. Prim. Ital. -i became in Lat. partly -e, and was partly dropped. The former: mare, animale, sedile, ante, loc. rure see § 33. The latter: aut: Osc. asti aut Umbr. ute oie 'aut'. tot: op. toti-dem. et: Gr. εἶ 'still', again'. per- (per-idoneu-s, per-magnu-s): Gr. πέρις animal, exemplar, etc. It is I believe no mere accident that the latter form of the final occurs especially in such words as seldom or never ended the sentence.

Prim. Ital. -e was in Latin partly retained and partly dropped. The former: equo, tegite, quinque, neque, neve. The latter: nec, neu, qui-n, sati-n, díc dic beside older dice díc. Umbr. pum-pe 'quamque' and nei-p ne-p 'neque, neve, non'. voc. Tefre. Osc. nei-p ne-p 'neque, neve'.

Prim. Italic. -o and -a became -e in Latin. sequere: Gr. δικα (§ 81). pede instr.: Gr. πεδά (§ 97 p. 91). Loss of -o: Lat. ap-erio (§ 499) and so ab ed etc., Pelign. ad-ded 'addidit': Gr. ἀπό; -o was retained in Lat. po-situs; where the already prim. Indg. loss of the initial a- preserved the < from disappearing.

Prim. Italic -i, -e, -o, -a had thus fallen together in -e in Latin. This was connected with the position in unaccented
syllables. Loss of the vowel occurred regularly before vowels, partly perhaps also by syncope (before consonants), see §§ 633. 679.

Rem. 1. It is doubtful whether the elision of vowels, which became the rule in Lat. verse (e.g. Lucret. I 234 *díque ante ácto*, four syllables), is directly connected historically with the loss before vowels. In any case however the custom of the poets, which extended itself to long final vowels also (e.g. *spatio dīque* in the same verse, four syllables), was founded on a stopping of hiatus in the ordinary language of the people.

2. The Romans began to shorten -ē -ā already in the pre-literary period. First of all in iambic words. The rest followed gradually, for the most part probably by form-transference. *dūo* : Gr. *δύο*; *ego* : Gr. *ἐγώ*; *modo* instr. sg. : cp. Lith. *gerūt*, *gerụ̄ju*; *fero* : *φέρω*; *homo* : cp. Skr. *āśma*; *equa* : Skr. *āśva*; *jūga* : Skr. Ved. *yugā*. In the poets the forms with long vowel still occur beside those with the shortened, and it is pretty easy to follow in them the course of development, which the shortening took; e.g. *ambō* beside *ambō* came into existence later than *duō*. Cp. Stadelmann *De quantitate vocantium Latinas voces terminantium*, Lucerne 1884 1). Especially instructive are the numerals as *trīgintā septuānginta*, old nom. acc. pl. neut. *-ā* remained here, because these words were early isolated from the connexion in thought with *jūga bona* etc. (cp. *trīgintā virī*). They prove that the shortening of neuters with non-iambic ending, *armenta* etc., was due to the analogy of *jūga* etc.

Contemporaneous shortening of -ē in locatives from *i*-stems as *peregre*, if it is true that these with Skr. loc. as *agnā* go back to Indg. -ē. See p. 489 and the accidence.

-ā -ē, which arose by contraction, also underwent shortening in iambic word-forms. In the dramatic poets imper. *roga putā mone habe* etc., originally *-ā-is* *-ēje* *-ē-je*. But no generalisation took place here (not imper. *plantā* etc.). In the classical period it was again (with few exceptions) *roga* etc.; the long

1) With reference to this treatise and other expositions of the vowel shortening in question, it does not seem superfluous to point out that *equad* cannot be the old vocative form (cp. Gr. *νεῦος*) nor *duō* identical with Gr. *δύο*. By 1. we should expect *eque* and *due*, like *pede* and *sequere*. 
vowels were thus restored again after the analogy of non- iambic forms like planta.

The relations of quantity cannot for the most part be controlled in Umbrian-Samnite. We saw in § 105 that -a in the nom. sg. fem. and nom. acc. pl. neut. had become an o-vowel in Umbr. and Oscan. Since this cannot be separated from the o in Umbr. pihos 'piatus', and this o was certainly long, it must be assumed that the final vowel was still long -a at the time the weakening took place.

3. From -ōj, -āj Lat. -ō, -ā, e. g. dat. equō, Matāta. See § 86.

Lat. loc. ʿūdā, Umbr. manuv-e 'in manu' contained Indg. -āy, if they were locatives like Skr. sānāū. See § 85.

4. Long vowels were shortened in Latin before -t, -m, -r, -l. This change belongs to the archaic period, in which poets still often have long vowels. siet siem beside siēs. amet amen amor beside amēs amēris. pater : Gr. πατέρα. erat eram beside erēs. loquar beside loquātur. equam : Skr. ʿāśam. exemplar animal beside exemplāre animāle (cp. 1.). clāmor beside clamōris. vīderim vīderit, sin sit beside vīderīmus, sīmus. The long vowels remained in monosyllabic words in -r, -l: fīr sōl.

Osc. paam acc. sg. 'quam'.

5. In Umbr.-Samn. short vowels were syncopated in final syllables ending in a consonant, as Umbr. pihaz 'piatus', Osc. hūr̥z hortus'. See § 633. The contrast between Umbr. Ikuvins 'Iguvinus' Osc. Pūmpaiiāns 'Pompeianus' on the one hand and Umbr. abrof 'apros' Osc. feifus 'fines', whose endings arose from *-ons (9.), on the other, proves that the former syncope was late; the -ns in the nom. sg. must have been restored again through the influence of form-system.


6. Final -m and -n may have been assimilated even in prim. Ital. to succeeding consonants produced by different organs e. g. *k̥ono k̥e from *k̥onem k̥e (Lat. quonque, Umbr. pumpe). See § 207. On -m in Lat. see § 208 p. 176. -n
was assimilated in the same language, as inscript. *im bello etc. shows. On -*m and -*n in Umbr.-Samn. see § 209.

On Umbr. -*r see § 270.

7. -*t, so far as it was not dropped, appears in Italic as -*t and -*d. Lat. *siet sient, erat erant; on archaic inscriptions feced fecid etc. Osc. fusid 'esset' (cf. Lat. conj. perf. fuerit), puitiad 'possit'. I am not satisfied with any of the various explanations of this duality (Bugge Kuhn's Ztschr. XXII 385 f., Ostnhoff Rhein. Mus. XXXVI 487 f., Stadelmann De quantitate etc. p. 64 sq., Danielsson in Pauli's Altit. Stud. III 148).

-*t disappeared in Latin after c, s, r. *lact; the form *lact in Varro was formed anew after the analogy of the other cases. os fr. *ost, cp. Av. gen. sg. ast-ū 'of a bone'. sem-per tantis-per etc. : Osc. petiro-pert 'quater', Gr. Pamphyl. πέρι-δώκε; was the cpf. *pertī?

8. -*d remained in Lat. after short vowels: *id, quid, quod, illud, ad. It disappeared after long vowels in the archaic period, from which many forms with -*d are handed down to us: abl. equō(d) equā(d) mē(d) tē(d), imper. estō(d)

Umbr. asam-ā asam-arī 'ad aram' (ī from d, § 369 p. 280). It was dropped everywhere after long vowels: abl. pihacīl 'piaculo', imper. sumtu 'sumito'.

Osc. pūd Paelign. pūd 'quid', Osc. pūd pod 'quod', abl. dolūd 'dolo' tontad 'civitate' akriūd 'acri', imper. estud 'esto' actud 'agito'.

-*d disappeared in Lat. or in prim. Italic after r : Lat. cor fr. *cord, op. cord-is.

9. -*s after explosives remained in absolute finality in all dialects. Lat. *ex, vōx, au-espex, pēs novitās from *pēts *novitās, aģēns from *agentis, con-cors from *corts, puls from *pults, nox from *noctis, abs i.e. aps. Umbr. fratreks fratrex 'fratricus', pihaz 'piatus'. Osc. meddīss meddīs 'meddix' from *-dīks, hūrz 'hortus', a 'ad' i.e. ad+s.

-*nts in Umbr. forms an exception: zeīref 'sedens', like abrof 'apros' (seq. below).
For conditional finality cp. Lat. e Umbr. eh (i. e. e) from eks, § 570.

-s after vowels. Lat. quo-s, genus. Umbr. puntes 'pontes'. Osc. scrifas pl. femin. 'scriptae', Lúvkanatoías gen. 'Lucanatis'.

-s is often wanting on Lat. archaic inscriptions, e. g. Cornelio = Cornélius, locus = locus, mino = minus. The archaic poets (as also Cicero in his juvenile poems) allowed the sound sometimes to make strong position, sometimes not, e. g. in dactylic hexameters imdgini(s) fórman, flúctibu(s) mándet. The writers of the classical period restored -s in all cases. It is frequently left out again on the inscriptions of the later imperial period. The conclusion drawn from these facts, that -s after vowels had throughout a weak articulation already several centuries B. C. which was retained in the vulgar language, while the full articulation was restored in the classical period in the language of cultured persons is unsatisfactory from the very fact that the sound has remained in some Romance developments down to modern times. It ought rather to be assumed that just as (like ə) disappeared medially before nasals, l and d (§§ 570, 594), it was also dropped before these consonants at the end of words; they said e. g. nom. manu laeva gen. manú laeuae (like corpulentu-s from corpuslento-s) beside manus parva etc.; the different forms were then used promiscuously, especially by the poets, to whom these sentence-doubles, in the case of final syllables with short vowel, afforded considerable ease; grammatical reflexion, regard for clearness of word-form, and regard to Greek (equos: ἐπος, genus: γίνος etc.) procured complete supremacy for the forms in -s in the literary language of the classical period.

Just as s had become ə medially between vowels (§ 569), -ə may also have arisen regularly finally before vowels. The -r, which is to be expected as its continuation, exists only in dir-imo and similar words.

In Umbr. nom. pl. Ikuvinus Ikuvin and Iovinur 'Iguvini', Indg. -ūs; the last form presupposes -s. What the sandhi processes were which gave rise to these differences remains
undetermined; it must be taken into account that s beside the voiceless sound perhaps represented the voiced sound also.

Rem. 2. The question of postvocalic -s in the Italic languages requires a thorough investigation, in which the next following initial sound in the texts handed down to us must carefully be taken into account. Our exposition given above is especially intended to suggest such an investigation.

-s after liquids had disappeared throughout the Italic branch. Cp. the nom. sg. Lat. par, fär, söl, ager (st. agro-), acer (st. acri-), famul (st. famulo-), Umbr. ager 'ager' (gon. agre), katel 'catulus' (acc. katlu), Osc. Frunter 'Frunter', famel, Mutul 'Mutilus'. We may assume that the changes *agers in *agyrs *agrs ager and *akris *akrs *akers aker were effected in the period of the prim. Ital. community. Cp. Lat. sacerdós from *sacro-dós and sécerno from *sécrinó. See § 33. 623 rem. 1. 633.


§ 656. Initials.

1. In the vowel elision mentioned in § 655, 1, the e- was lost in est, which was attached enclitically: itast, sitast = ita est, sita est. These forms being felt as ita'st, sita'st, there were formed after them also automst, situst, situmst, etc.

2. q-, p- appear in Latin as an-, ur-, as antae, arduos. See §§ 253. 306. They were the forms of absolute initiality.

3. f = Indg. bh dh gh maintained itself in Lat. only initially, as ferō fānu-s fōnu-s. See § 509. It was the form of absolute initiality.

4. Lat. stīts sitis its etc., see §§ 503. 570.

Old Irish.1

§ 657. Finals.

1. Final short vowels were dropped in polysyllabic words,

1) With my insufficient knowledge of the sound-laws of the Britann. dialects I am not in a position everywhere to keep apart properly what
except when ħ preceded. This loss was not effected until after the vowels had imparted their timbre (palatal, labial) to the preceding consonants (§ 640), and thus the quality of the dropped vowels is mostly still recognisable.

Voc. a maièc ‘son’ from *makyè: cp. Gr. αὐτός. Imper. sg. beir ‘bear’ from *bero: Gr. ἁέρ. Imper. berid ‘bear yo’ from *berete: Gr. ἁέρετε. ad-cón-daire ‘conspexit’ from *(de)-dore: Gr. διὸδος. berid ‘he bears’ from *beretì: O.Bulg. beretì. is ‘is’ from *esti: Gr. εἰσ. berit ‘they bear’ from *berontì (cp. § 212): Gr. Dor. ἁέροντα. Dat. (loc.) atri ‘patri’ from *(p)ater-i or *(p)atr-i (cp. briathar from *brêtrā, § 623 rem. 1): Gr. πατέρα πατρό. Cp. also imb- ‘around, about’: Gall. ambí- Gr. ἄμψι.

Pres. secund. 3. sg. no-bered no-berud ‘ferebat, foeret’ from *bereto: Gr. ἁέρετο Skr. bhárata. Also the 3. pl. pres. do-berat, which cannot be explained from *berontì, may be middle: Gr. ἁέροντα; for another explanation see § 82 p. 76. Loss of Indg. -a in the voc. a thuath ‘folk’? cp. Gr. νῆμα. suth n. ‘fetus’ fr. *suti: Gr. επιθυμεῖν.

2. Similarly long vowels disappeared, except when ħ preceded.


Nom. sg. fem. *brētrā ‘word’ became *brēt̩, then briathar. Gen. *cētî, dat. *cēlō (stem cēlō-‘song’ from *cautlo-, pl. nom. cēla dat. cēlaiò) became cētîl, cētul through an intermediate stage with l̩, which in the former case had an i- and in the latter an u-timbre. See §§ 623 rem. 1. 634.

is to be ascribed to the special Gaelic and what to the prim. Keltic period of development.
3. After i (ii) short vowels united with this and formed sonantal vowels (cp. pp. 124, 125) and long vowels were shortened.

Voc. a chéli (st. céilig- 'companion') beside a naic.

no ráidin 'I speak' beside as-buir. Dat. instr. aílin, célíu beside fúr. air-mitiú 'honour': Lat. mentió.

Rem. -jú further became -i. Hence e. g. dat. dúini beside dúnú 'hominis'. This phenomenon is parallel with the transition of gními to gúnma (§ 640 rem.).

4. i - diphthongs became monophthongic and were then treated like long vowels. Nom. pl. eích 'equi' from *èkù *èkùj, see § 82. Nom. acc. du. fem. tuaitth from *tòlī *teytāj, see § 98 cp. dt 'two' = Skr. dé. Dat. sg. tuaitth from *tòlī and older probably *teytāj : Gr. -q 1).

5. If a consonant followed a short final vowel in polysyllabic words, the vowel disappeared, where it was not preceded by i and had not become long by 'compensation lengthening'.


fer n-(aile) 'virum (alium)' from *yíron : Lat. viru-m. süil n-(aile) 'oculum (alium)' *from *súlin : cp. Lat. siti-m. fid n-(aile) 'arborem (aliam)' from *yídu-n : cp. Lat. fructu-m. deich m-(háí) 'ten (cows)' from *decen, Indg. *dékn. ainm n-(abstil) 'nomen (apostoli)' from *an-men, Indg. *-még.

no beir 'fert' from *beret : Gr. ρέπε Skr. bhárat.

In etir etir 'between' = Lat. inter *-ter had in the first instance become *-ty. Cp. criathar under 2.

A short vowel combined with preceding i (ii) and formed a sonantal vowel (cp. 3). Nom. aíle cēle acc. aíle n- cēle n- beside nom. fer acc. fer n-.

1) If this explanation of the dat. sg. tuaitth be right, the dat. fúr célíu, which we brought under 2. and 3. as instr. in original -ó, cannot at the same time be, as has been believed, the Indg. dat. form in -ój (Gr. -wo). For it is not probable that -ój should have become -ó, while -ój became -aj -i.
6. If a consonant (except -m, see 7.) still followed an original long final vowel, the vowel was shortened. So, too, were long vowels which had arisen by 'compensation lengthening'.

athair 'father' : Gr. naxiwp. siur 'sister' from *svi(s)ur : Lat. soror, older soror.

Nom. tuatha 'peoples' from *tölás *teytas : Goth. pindōs, Osc. scryptas ; cp. mnu 'women' = Skr. Ved. gndās. Voc. a furu 'viri' from *yirōs : Goth. vairōs, Osc. Nuvlānus. Compar. laigiu 'smaller' from *lag-iōs, see § 139.

Conj. -air-emn 'suscipiat' from *emāt : Lat. emit. Indic. no chara 'he loves' from *carāt, originally *-a-je-t; conj. ro-chara from *carāt, orig. *-a-jā-t.

Long vowels by compensation lengthening. Acc. pl. furu 'men' fathī 'poets' cruthu 'forms, shapes' from *-ōs *-ēs *-ēs, orig. *-o-ns *-i-ns *-u-ns. Nom. care cara 'friend' (gen. carat dat. carit) from *carent-s. fiche 'twenty' (gen. fichet dat. fichit) from *bicent-s, orig. stem-form *wikt- or *wikt-. trichā 'thirty' (gen. trichat dat. trichait trichit) from *tricont-s. Cp. § 212.

7. Long vowels seem to have been early shortened before nasals (cp. Latin § 655, 4) and then to have been treated by 5. Conj. do-ber 'afforam, dem' from *berām : Lat. feram O.Bulg. berb, cpf. *bhera-m. Gen. ech n-(aile) 'equorum (aliorum) from *ekyōn (Gr. ἐκών) or from *ekyōn (cp. O.Bulg. въкки)? cp. the accidence. —

All the vowel shortenings and loss of vowels discussed in 1.—7., were caused by the development of the strongly expiratory accent at the beginning of words. Cp. 634. 684. 685.

8. -m became -n in prim. Keltic. This was often retained at the beginning of the following word, before vowel or media. Examples under 5. and 7. and in § 211.

9. -t was dropped. no beir from *beret. for-tē s-fut. 'he will help' (1. pl. for-tiasam) from *stēkst i. e. *steith+s+t. Did the dental in original -nt remain? See § 76.

10. -s was dropped everywhere.

Vowel + s. fer 'man' from *yiro-s (5.). tuatha 'peoples' from *tölás, mnā 'women' from *bnās (6.).
-ns. firn 'viros' from *yiron-s (6.). mē 'month' (gen. mēs) from *mēns : Gr. μής.
-ts -nts. bothu 'life' (gen. bethud) from *tata-s, care cara 'friend' from *carents (6.).
-ks. rī 'king' (gen. rīg) from *rīs *rīks : Gall. -rīx, Lat. rīx. aul 'rock, stone' (gen. ailech dat. aulīg) from *aileks.

§ 658. Initials.

1. Just as t and c became p (written th) and x (ch) in the body of a word after vowels (§ 514), spirants also arose initially after words ending in a vowel. This affection took place, before the final consonants had been dropped (§ 657). For no spirants show themselves where a final consonant did not originally stand. Thus we arrive at the following important conclusion for the investigation of the history of sounds: word-forms, after which spirants generally make their appearance, originally ended in vowels, and those, after which the tenues remained, originally ended in consonants. To these were added various innovations by transference of forms, and the law can still be observed with any consistency in our monuments only in groups of words which are syntactically closely connected. a thuath 'O folk', a chara 'O friend': Gr. αου Lat. ĉ. dā charit 'two friends'; di thuath 'two peoples': Skr. dā, dē. ro charus s-pret. 'amavi', ro = Gr. παύ. Cp. the list of the forms, behind which spirants appear for the tenues, in Windisch's Ir. Gram. § 92. Compare also the initial sound after the members of compounds: enchossid 'one legged' from *oino- c., so-thengla 'eloquent' from *su-t.

   t became d in pre-accentual syllables, when absolutely initial, e. g. do-qair 'he calls', but tō-qairm 'a call'; do-māthir thy mother, but co-t-māthir 'with thy mother' t-ēs-ērge 'thy resurrection', cp. Skr. tānu Gr. τενο-ς). So also Mid. Cymr. dy welat 'thy land' (guelat), but yth welat 'in thy land'.

In the same positions where the tenues became spirants, s- passed into ō- (h-) and f- was dropped- (the muteness of the f is represented -y f). no sessam 'or standing': cp. Lat. sistō. a fir 'O man'. Compare the transition of medial s to h, see § 576, and the loss of medial y, see § 174.
§ 658. Sandhi in O.Irish.

We saw in § 522 that b, d, g had become b̂, d̂, ǧ after vowels, while the letters b, d, g were retained in Old Irish writings. That this change was also effected in conditional initiality, that e. g. a dē 'O god' was pronounced a dō, may be concluded from the modern orthography which also puts bh, dh, gh initially.

A similar relation existed between sir and fiur 'sister' from *Συς(s)ōr as between s- and ś-. The form with f- stands regularly after words ending in a vowel. Cp. § 175.

2. We saw in §§ 212, 513 that -nd- and -ne- became -nl- and -ng- and the nasal disappeared, e. g. čēl pronounced čōl (Mod.Ir. cōul) 'hundred' = Cymr. cant Lat. centum; čē pronounced čēg (Mod.Ir. cēg) 'death' = Bret. ancon. Further by § 520, that -nb- and -nd- became -nn- and -n- in O.Irish, e. g. čamm 'crooked' = Gall. cambo-. Both previous stages occur also in the junction of connected words.

From gen. pl. *inna n-cert 'of the rights', *inna n-tuath 'of the peoples' (cp. inna n-aumann 'of the names' etc. §§ 211, 657, 5. 7. 8) arose inna gert, inna tuath, generally written inna cert, inna tuath (like čē, čēl instead of čēg, čōl); it was only in few cases in the O.Ir. period that account was taken of the change which had taken place, by the writing of the media. In Mod.Ir. orthography they write gle-, dl-, e. g. na gceart = O.Ir. (in)na cert. This phenomenon is called eclipse destituens in Keltic grammar.

Gen. pl. inna m-bō 'of the cows' became inna mōō, inna mō, inna n-dath 'of the colours' became inna nhath, inna nath. The old spelling was however retained, and the spelling -mb- and -nd- also existed medially in the O.Ir. period beside the phonetic spelling. Cp. also athconnare beside athcondare 'I looked' (to Gr. ἀθέομαι). This phenomenon is called eclipse nasalis in Keltic grammar.

Gen. pl. inna sūle 'of the eyes' from *inna n-sāle, just as medial n disappeared before s, e. g. in gēis 'swan', see § 212.

3. s- disappeared before t, e. g. tiugaim 'I stride, go': Gr. στείγω. See § 575.

1. Final long and short vowels underwent no reduction at this period.

\*fežu n. 'cattle' Goth. fahu : Skr. pāśu. \*berizī 'thou bearest' \*beridī 'he bears' Goth. baīris baīrīs : Skr. bhārasi bhārati. \*uxsin-i loc. sg. of the st. \*uxsen- 'ox' Goth. aūhsin : cp. Skr. ukṣānu-i. \*vațī, older \*vațe 'he knows' Goth. vāit : Gr. olē. \*mulfī, older \*mulfē voc. 'wolf' Goth. vulf : Gr. λύκη. \*āda 'of, from' Goth. af (ab-u) : Gr. ἄπο.

Rem. Some assume that all short vowels except -a were already dropped in prim. Germ. in unaccented syllables. But then \*berizī beridī must necessarily appear in Goth. \*baīrs baīrīs and the 2. sg. imper. \*yordīi = Skr. carōyā Indg. \*yordēi as \*cārdi (whereas it is fru-cārdei 'destroy').


3. -ūj, -ūm became -ai, -am. Dat. sg. fem. \*žeboi 'to the gift' became \*žeboj Goth. gībōi : cp. Gr. χώρα (cp. also dat. sg. Goth. pizāi and Skr. tūsyāi). OIHG. wolfe (2) was also probably a dat. form, which arose from \*mulfōj : Gr. λίκω. \*aťōj 'eight' became \*aťōj Goth. ahtān OIHG. akto, Loc. sg. \*sunūj (sunu- 'son') became \*sunaj Goth. sunān. It is more uncertain whether Goth. anstāi (st. ansti- f. 'favour') came from \*anstāj (§ 645 finals 1.)

These shortenings were carried out in absolute finality and before initial consonants. Cp. \*flaizē (O.Icol. fleire) fr. \*flēizē § 614.

4. Vowels remained unshortened before nasals, liquida, ex-
plosives and spirants, e. g. nom. sg. *uulpax nom. pl. *uulpōx: Skr. ṣvkaḥ ṣvkaḥ.

5. -m became -n and thts fell together with Indg. -n. Acc. sg. *uulp-ān *sunu-n Goth. vulf sunu, cp. Goth. ḫan-a 'the': Skr. ṣvka-am sanā-m tām. Gen. pl. *zebōn (Goth. gibō): cp. Av. vanam 'of trees'. Indg. -n e. g. in nom. sg. *raßōn 'account' Goth. raḥōd: cp. Gr. μύκων 'poppy'. Later -n dropped out after short vowels, whereas it was only reduced in some way or other after long vowels. *uulp-ān *sunu-n became *uulp a *sunu, but *zebōn *raßōn became *zebō *raḥōd. Cp. § 214 p. 182.

-rm (through the intermediate stage -rn) probably became -r in prim. Germ. For Goth. acc. brōpar 'fratrem' probably arose from *bhrōtārm. See § 645, finals 2.

6. Explosives dropped out. It cannot be determined whether they had previously undergone all the stages of sound-shifting (§ 527 ff). If we assume that they disappeared after undergoing complete sound-shifting, the prim. Germ. changes are to be exhibited as follow: — 3. sg. opt. pres. *bērau(d) 'he may bear' Goth. bērače : Skr. bhūrēt Indg. *bhērōt. 3. sg. opt. pf. *bērēd(ā) Goth. bēri : cp. Lat. velēt; the ending -ē- was a new formation for Indg. -ē-t, see the accidence. 3. sg. *īdē(d) 'went', Goth. īdēja : Skr. īyāt. 3. pl. opt. pres. *bērau(d), probably a Germ. new formation, Goth. bātrau-n (the particle -n may have been first added after the dropping of the dental): cp. Gr. qēsau subsidiary form of qēsaur. 3. pl. opt. pf. *berēn(ā), certainly a Germ. new formation (see the accidence), Goth. bērein-n. 3. pl. indic. pf. *berēn(ā), Goth. berun; -nun(ā) = Indg. -yit, § 226. *tōsun(ā) 'ten', Goth. taihun : cp. Lith. st. dēsaimt; the same ending in Goth. niun 'nine', but this is probably a Germ. new formation after the word for ten, since judging from the other Indg. languages we should rather expect *niun (= *neyn) in Goth. (§ 179).

Goth. þamma 'to the' may have been ablative, prim. f. *tiuauō (cp. heimma-). In which case OHG. ðemn would be fr. *tismsōd : Skr. tāsmāt; but the prim. Germ. ending -ē-
might equally have been an instrumental ending, Indg. -ē -ō (Goth. instr. ē). The same doubt exists in the case of Goth. vulfa, which can be traced back to Indg. *uľgēd -ōd abl. and to *uľgē -ō instr. and possibly was a continuation of both Indg. cases at the same time. Cp. the accidence.

7. Indg. -s and -x may for the most part have been levelled to -s, when Verner’s law began to operate. By this law, the double endings like -ōx and -ōs in the nom. pl. of Indg. o- and ā-stems then arose. See § 583. Was -x in the nom. sg. already, at that period generalised?

-ts became -ss -s, -ks became -χs according to § 527. One said e. g. *fōss *fōs ‘foot’ (Gr. Dorm. πός, Indg. *pōts, stem ped-, cp. 311 p. 249) and *mel axis ‘milk’ fr. *melxs (§ 628); Goth. fōtus and miluks were new formations.

§ 659. Finals in Gothic.

1. With the exception of u all other prim. Indg. final short vowels, or short vowels which became final in prim. Germ. were dropped and also in the final syllables of polysyllabic words when followed by a single consonant other than i, y (§ 659, 1. 4. 5. 7).


For the different treatment of the y in trīn ‘stick, prop’ fr. *trī(y)(a-n) and lēy ‘opportunity’, fr. *lēy(a-n) cp. § 179 p. 156.


Rem. 1. The acc. brūpar would also form an exception, if -n was dropped already in prim. Germ. See § 659, 5.
Rem. 2. So far as the vowels in final syllables are concerned the language on Norse rune inscriptions is more archaic than Goth. Acc. sg. neut. horna 'horn' = Goth. haubr. Nom. sg. dagaz 'day' = Goth. dagaz. Nom. sg. gastiz 'guest' = Goth. gasts. Nom. pl. dohtir-is 'daughters'.

When Consonant + nas., liquid, i or y preceded the vowel, the nas., liquid, i, y became sonantal (Samprastāraṇa):

Nom. *ebna-x acc. *ebna(-n) 'even', nom. *mājphna-x acc. *mājphna(-n) 'present', nom. *akra-x acc. *akra(-n) 'acre', nom. *fuzla-x acc. *fuzla(-n) 'bird', respectively became ibhs ibh, mājphns mājphn, akrs akr, fuzls fuzl, in like manner gen. *fadrax 'father's', loc. fadrī ( = (ir. πατέρας πατέρα) became fadhzs fady. We do not know however whether these forms remained disyllabic in Goth. or whether they had become monosyllabic by further reduction (ibns ibn etc.). Cp. §§ 215. 277. 635.


Rem. 3. Nom. like harjis 'army', aljis 'alias' present difficulties. Forms in -jo-s and -ji-s had descended from pre-Germanic times, cf. Lith. naik-jas 'new' and mēdis 'tree' (fr. *ned-i-s § 147 p. 131). See § 84 rom. 1. I believe that both categories first of all regularly fell together: *alja-x (Lat. alius) became *alis and *alji-z (O.Lat. alia) became *alis (with the latter compare *pūny-s fr. *pūny-s § 180 p. 158). Goth. then re-introduced the i (aljis) after the gen. aljis on the analogy of the (regular) formal equality of the nom. sīlfeis ('wild') and gen. sīlfeis etc. Did niujis 'new' appear for *nīvis?

2. Prim. Indg. long final vowels, or those which became final in prim. Germ., were shortened in the final syllables of polysyllabic words (§ 659, 1. 6).


3. Prim. Germ. -aj = Indg. -oj -adj -ēj (? ) -ojē (§ 659, 2. 3. 6) and *prim. Germ. -ay = Indg. -ųy (659, 3) remained unchanged: blindāi, gībī, anstdī (?), bairdā, ahtāv.

Rem. 4. Acc. sg. giba was the nom. form which supplanted *gibō (cp. Skr. dhāra-m). 1. sg. tariđa ‘did’ was the form of the 3. sg. = prim. Germ. *-dō, which was supplanted by -dō fr. *-du-m (Norse run. tardido), in like manner also in Norse the real old 1. sg. in -du later gave way to the form of the 3. sg. in -dē di (Noreen Aisal. and Anorw. Gramm. § 449).


We conjectured in these passages that in like manner the voiced explosives became voiceless, even though the writing does not exhibit them as voiceless sounds, e.g. land ‘he bound’.

6. -rz became -rr -r. Nom. vair ‘man’ fr. *vir(a)-z (gen. vairis), correspondingly baur ‘son’ stiuir ‘bull’, kuissar ‘emperor’, aṣačar ‘second’, unsar ‘our’. Exceptions are adjectives like hörs ‘adulterous’ (Eph. V. 5) skears ‘clear’ in which the -s was restored to distinguish them from the neuter. Cp. footnote on p. 221.

Rem. 5. Compare on the other hand the adv. vairs ‘worse’ fr. *viris (adj. vairis-a).

§ 661. Finali in West Germ. especially in OHG.


2. After the completion of this process the West Germ. law of syncope operated (§ 635) according to which final short vowels or short vowels followed by a single consonant disappeared in the final syllable of disyllabic words (with the accent on the first syllable), when the first syllable was long; they likewise disappeared in trisyllabic and polysyllabic forms when the penult had the secondary accent. The purely regular relation was often disturbed through new formations made by levelling.

OHG. *sumu 'son' := Goth. *sum-s, *fihu 'cattle' := Goth. *falu, but *fluot 'tide' := Goth. *flódu-s; the forms *sun, *lid (Goth. *lithu-s 'member') etc. were new formations after forms like *fluot. OHG. *chumi 'a coming' := Goth. *qums prim. Germ. *kumi-z, but *gast 'guest' := Goth. *gasts prim. Germ. *gasti-z; *stat 'place, stead' := Goth. *stafs prim. Germ. *stadi-z (OS. still *stadi) etc. were new formations. Here are also to be compared the compounds like OHG. *situ-lith 'moral' (situ, Goth. *sidu-s) *witu-hopfo 'hoop' i.e. 'wood-hopper' (*witu 'wood') beside *lust-sam 'pleasant' := Goth. *lustu-sums 'wished for'; *steti-got 'genius loci' *slegi-rind 'a bullock to be killed' (OS. *slegi 'a slaying') beside *gast-hás 'inn' (cp. Goth. *gasti-gődei 'hospitality').

OHG. *wolf := Goth. *vulfs prim. Germ. *gylfa-z, *sce妃f 'sherriff', *drigil 'servant-boy', *irdin 'earthy' := Goth. *airpeins prim. Germ. *irpina-z etc. were regular, and after them were formed such as *tag 'day', *weg 'way'. In like manner also neut. *joh 'yoke' (prim. Germ. *juka(-n)) after *wort 'word' etc. Cp. *tago-líh *taga-líh 'daily' *wego-wiso *wega-wiso 'sign-post' with *vin-garto 'vineyard' himil-ríhhi 'kingdom of heaven'.

Prim. Germ. *gasti-i-z 'guests' regularly became *gasti-z, through the intermediate stage *gasti-z, (after this *pri-z 'three') which gave OHG. *gasti (5. 6.).

After *hilf 2. sg. 'help' fr. *hilfi were formed such as *bir 'bear' for *biri (Gr. φέρε); prim. Germ. *naziži 'make whole' (Goth. *nasel) became *nazi, thence (by 6.) nerii. After *bant 'he bound' (prim. Germ. *bandi, Skr. *bhándha) *chós 'he chose'
(prim. Germ. *kausi) etc. were formed such as was 'he was' nam 'he took'. 3. sg. indic. pres. birit fr. *biridi (Goth. bahriþ). Instr. pl. bintem 'blind' fr. *blindaj-mi (Goth. blindáim). aba 'from': Gr. ἁνο.

1. sg. biru 'I bear'; forms like hilfu were either formed after biru or had regularly remained unshortened before enclitics and then came to be used in other cases (cp. Paul in Paul-Braune's Beitr. VI 160). Instr. tagu; after this and the trisyllabic forms, in which the case endings had a secondary accent and therefore remained (§ 689), arose forms like sēeu (nom. sēo 'sea'); in the effort not to leave the form phonetically equal to that of the nom. and acc., might have formed a factor. Ags. preserved the regular double forms in the nom. sg. of the Germ. o-stems: giezfu 'gift' (Goth. giba), but sorz 'sorrow' (Goth. saúrga) fíren 'sin' (Goth. fátrina 'debt'); OHG. had the regular forms in buoz 'improvement' (Goth. bôta 'benefit') kuningin 'queen' adj. blint 'caeca' (Goth. blinda) etc.; the forms buoza kuninginna geba etc. beside these were accusatives. In the nom. acc. pl. neutr. the regular state shows itself in Ags. OS. fatu 'vats, vessels' against Ags.OS. word 'words' (Goth. vaúrda); on the other hand OHG. faz a new formation after wort. Ags.-don-e OS. than-a 'the'. Ags. hêa 'heath' = Goth. háiði, beside this OS. thiui 'maid' = Goth. pivi. OHG. 3. sg. opt. zigi, but also hulzi bari etc.; that the regular forms *hulf *bâr were put aside, was due to the influence of the other persons of the same mood (cp. the 3. sg. opt. of the Alemanic weak preterites like salbôti neriti mohtti, where the influence of the other persons is still clearer, cp. 2. sg. salbôtis 1. pl. -im(thes)).

In all the cases named it is a question of loss of a vowel by which the word lost one syllable. On the other hand forms like OHG. eban 'even' acchar 'acre, field' fogal 'bird' had experienced samprasāraṇa: the first form e. g. had passed through the stages *ednaz *ødaz *eðaz eban. See §§ 215. 277. 635. 660,1. Here perhaps also belong forms like nom. sg. masc. gelo 'yellow' (gen. gelaves) from *zelva- (cp. Lat. helvus), nom. acc. sg. neut. melo 'meal' (gen. melaves) from *melya(-n).
§ 661. Sandhi in Germanic.  

3. The -aʊ, which arose from -əʊ in prim. Germ. (659, 3), became -ő in West Germ. at the same time with the other aʊ in unaccented inflexional syllables. Hence OHG. OS. ahto ‘eight’ = Goth. ahtáu. The shortening of the -ő took place according to 6.


5. Of the prim. Germ. postvocalic -s and -z the former remained in West Germ., e. g. OS. dagos = Goth. dagōs. The latter was preserved as -r when closely connected with a following word, as in OHG. ir = Goth. is, in other cases it was dropped, e. g. OHG. OS. nom. suhsu = Goth. sumus. See § 583. On the shortening of the long vowels after the loss of the -z see 6.

Rem. The -s of the OHG. 2. sg. opt. berēs (prim. Germ. *bērās, Goth. bairēs) and of the 2. sg. indic. bīris (prim. Germ. *bērizi, Goth. bairēs) is due to the pronoun du prim. West Germ. *bīn being frequently attached enclitically. The sibilant was pronounced voiceless before ʊ- and ʊ- became ɪ- (cp. Goth. 2. sg. perf. last from *laʊpha, §§ 541, 1. 553, 1). Thus arose OHG berēstu, bīristu, correspondingly also opt. bairēstu and Indic. nairēstū. From these were then made by false etymological division bīristu du (thu) etc., in which process the 2. sg. bist, which had already previously come into existence for bis after the analogy of the preterite-presents kanst tarst, helped to set the model.

But beside these still appear in OHG. wēll = Goth. vīlēs (Lat. vēla), bārī = Goth. bērēs etc., which represent the undisturbed development of the West Germanic ending -iz (cp. von Fierlinger Kuhn’s Ztschr. XXVII 430 ff.).

6. Later than the shortening mentioned under 1. occurred the shortening which was experienced in polysyllabic words by the long vowel, after which -z (4.) or -s (5.) had been dropped, and by -ə and -ő (§ 83 p. 79) from -aţi and -aʊ, which were either already final in prim. Germ. or had become so after the loss of -z (5.), as well as by the -r (2.) which had arisen from -iţi. This shortening also, as, it seems, occurred already in the period of the West Germ. prim. community.
OHG. hano from *hanō(*). tago from *dagō(*). managi menigi from *managī(*); the form managī existing beside this had its -t after the analogy of the other cases (managīn).

OHG. 2. sg. will from *will(z). bāri from *bār(z). Nom. pl. gesti 'guests' from *gasti(z) prim. Germ. *gastijiz (Goth. gasteis); cp. beside this drī 'three' (Goth. þrei). Nom pl. masc. taga 'days' = Goth. dagōs. Nom. pl. geba 'gifts' = Goth. gibōs; I leave it undecided whether the form gebā had its long vowel from other cases with long vowel or from once present secondary (originally oxytoned) forms in -ōs (§ 583).

OHG. nom. pl. masc. blinte 'blind' = Goth. blīndāi; beside this dē 'the' = Goth. þāi; in andrē, which is met with twice, the -ē was transferred from dē. Loc. sg. tage from prim. Germ. *dazāj (cp. § 659, 2. 3). 3. sg. opt. bere 'he may bear' from prim. Germ. *berajī(d) = Goth. bātrāi. ed-do 'or': Goth. aip-pāu. ahto 'eight' = Goth. ahtāu Skr. aṣṭau. suno 'of the son' from prim. Germ. *sunauz = Goth. sunāus.


§ 662. Initial sounds.

1. Prim. Germ. x from k seems to have undergone the transition to h first initially before vowels, perhaps already in the prim. Germ. period. *hunda-n 'hundred' Goth. hund OHG. hunet etc. See § 529.

2. wr-, wl- became r-, l- and hw-, hr-, hl-, hn- became w-, r-, l-, n- in OHG., e. g. riz 'stroke' = Goth. wītō; waz older hwaz 'what' = Goth. hva. See §§ 178. 529.

3. Notker's († 1022) law of initials, the so-called canon Notkerianus. For d-, g-, b- (= prim. Germ. p-, z-, b-), which remained after vowels, liquids and nasals, were put t, k- (c-), p- after tenues, after voiceless -d, -g, -b and after voiceless spirants as well as in absolute initiality. eines tritten, dih tritten beside demo dritten. ih tih beside in dih. mag ter beside da das. gab cold, des coldes, dasz cold beside demo golde. stines pruoder beside min bruoder. sālig pin, ih pin beside da bist. Since d, g, b were pronounced voiceless and t, k, p without aspi-
ration, it is here merely a question of the various grades of stress with which the sounds were produced 1).

I cannot feel convinced that Nother's law only exhibits an arbitrary orthographical adaptation of fluctuating spelling (cp. Steinmeyer Ztschr. f. deutsch. Altert. XVI 139, Scherer Z. Gesch. d. d. Spr. 2 143), but believe that there existed a real observation of an actual difference.

**Baltic-Slavonic.**

The following changes seem to belong to this period.

1. -öm -ön became -un (cp. 2.), whence Lith. -ų O.Bulg. y, e. g. Lith. gen. pl. dėvų (dėvų) 'doorum', O.Bulg. nom. sg. kamy 'stone'. See § 92.

2. -m became -n, e. g. Lith. acc. sg. tū, dialectically tan tūn 'the', Indg. *to-m, O.Bulg. sūn-čsti 'comedere', Indg. *som. See §§ 217, 218, 219.

3. -t and -d were dropped. 3. sg. opt. Lith. te-vež̂ O.Bulg. vezi (Lith. vež̂ u O.Bulg. veẑq 'I drive, ride') = Skr. vāhēt Indg. *vegho-t. O.Bulg. 3. sg. aor. veẑ = Skr. vāhat Indg. *vegho-t, 3. pl. aor. veẑq = Skr. vāhan Indg. *vegho-n. Lith. nom. acc. sg. neut. vēž̂q (see Kurschat Gramm. d. lit. Spr. § 1345) from *vež̂ant, cp. Gr. qėv̂ from *qėv̂r. O.Bulg. to 'the' = Skr. tād Indg. *t̂o-d. It is less certain that the gen. sg. Lith. vilko O.Bulg. vilika 'of a wolf' corresponds to the abl. Skr. vṛkād Lat. lupō(d), see footnote to page 108.

Rem. The assumption of some scholars, that -r was dropped in the period of the Balt.-Slav. prim. community, is exceedingly uncertain. Lith. motė 'wife' O.Bulg. moti 'mother' and Lith. sesė 'sister' (Skr. mātā

1) With our sound-law is compared a law which obtains in the middle and south Italian dialects as also in Sardinian, according to which we have e. g. sos coser, but uma gosa (like commo : formiga), sos poveros, but su boero (like spingó : populi), sos tempos, but su dempu (like postu : setadu) (Schuchardt Verhandl. der Leipz. Philolog.-Versamml. 1872 p. 208 and Romania III 1 ff.). Cp. also French groz, which had arisen from *crassus after vowels (Neumann Ztschr. f. rom. Phil. VIII 255), and O.Ir. inna gert, inna duath (§ 658, 2).
Final short vowels, except -u, were dropped under certain conditions which are not clear. Lith. 3. sg. ėsti and ėst 'is': O.Bulg. jesti Gr. ἔστι. Instr. sg. aki-mi and aki-mi (nom. aki-s 'eye') : cp. O.Bulg. pâl-mi (pâl 'way') Skr. sâni-mi 'from of old, olim'. sukél-si and sukél-s 'I turn myself'. 2. pl. věža-te and věža-t 'ye drive, ride': O.Bulg. věze-te Gr. γέγρα; Voc. sg. môtyna and môtyn (nom. môtyna 'mother') : O.Bulg. ženo 'O wife' Gr. νέμπα. From pírm adv. 'before' arose the preposition pírm 'before'. The latter form shows that these shortenings took place in conditional finality.

-u suffered such a loss nowhere, as it seems. Neutr. gražū 'beautiful' (masc. gražū-s) : cp. Gr. ἄγο. O.Lith. loc. pl. aksū(b) (aki-s) : cp. O.Bulg. pâl-chū Skr. ṛṣi-ṣu (ṝṣi-ṣ 'oriasis').

Thus disappeared dialectically also by 3. the -i, which had been shortened from -i, in the feminine forms tô-ji 'the same' dągusi part. pret. (to dągu 'I grow') : tôj dągus.

2. e was dropped in the ending -es in a prehistoric period of Lithuanian. Nom. pl. akmens 'stones', dûkters 'daughters' dêziûnts and desziûnts 'decades': O.Bulg. kamen-e from *-es, Gr. θεύρετ-ες, O.Bulg. desêt-e. Gen. sg. akmens, dukteřs : O.Bulg. kamen-e (§ 665, 4), O.Lat. salût-es class. salût-is (§ 81 rem. 1).

At a later period a, i, u also disappeared before -s.

sēna-s and sēns 'old' (on the accentuation cp. § 691 rem.), dēva-s and dēvus 'god': Skr. sāna-s dēvā-s. This shortening of the nom. sg. of Indg. o-stems is more frequent in some Lith. dialects than in others, but seems nowhere to be entirely wanting. I conjecture that it had its beginning in forms of three or more syllables like cūkla-s 'apple' āvina-s 'ram' and participles in -dana-s.

-i disappeared only in forms of three or more syllables. Instr. pl. akmis beside akmis, mergāms beside mergomis (mergā 'girl') : cp. Skr. -bhiṣ.
So also u. Dat. pl. vilkáms from O.Lith. vilkamus (cp. § 691 rem.). The form may be identical with O.Bulg. vîlkounî, see the accidence.

3. Long vowels and also ē and â were shortened in final syllables, if they had the broken accent (§ 691); see Leskien Archiv. f. slav. Phil. V 188 ff. Since a appears for ò, it may be assumed that this shortening took place, when ò or at least very open ò was still pronounced for ò (cp. § 108).

Nom. sg. fem. gerà 'bona' from *gerd, cp. the compound form geró-ji, so too tà 'the' beside tó-ji : cp. Gr. χώρα. Instr. sg. fem. gerà beside gerá-ja, so too tà beside tá (the latter originally only proclitic); the ending -à from *-ám. Acc. pl. fem. gerás beside gerás-ias, so too tás beside tás (the latter to be judged like tâ); -ás from *-áns. Nom. sg. fem. patî 'wife, spouse' from *patî : cp. Skr. dêvî 'goddess'. Nom. acc. du. naktî (naktî-s 'night') žmogû (žmogû-s 'man') from *naktî *žmogâ : O.Bulg. noštî (noštî 'night') syny (synâ 'son'). 3. sg. fut. bûs rîs beside 1. sg. bûsiu 'I shall be' rûsiu 'I shall swallow'. Nom. pl. masc. gerî beside gerê-ji (beside this strangely tê) : cp. Gr. xalî, rolî. Nom. acc. du. fem. gerî beside gerê-ji, so also dôl 'two': Skr. ášvê, ávé, Indg. -ôjî. Instr. sg. masc. gerû beside gerê-ju : cp. Lat. modo, Indg. -ô. Nom. acc. du. masc. gerû beside gerê-ju, so also dû from *devî (§ 184) : cp. Gr. ἵνω, ðw-ðxâ. 1. sg. sukû 'I turn' beside the reflex. sukû-si sukû-s (1.).

Rem. Compare the retention of long vowels with slurred accent in gen. sg. anô 'illius', gen. pl. mergû 'puellarum' gen. sg. mergûs 'puellae', gen. sg. naktês etc.

Such shortening also before ũ, ē, r, l+s. It shows itself here by the broken accentuation passing into the slurred. Compar. geriaûs adv. 'better' beside geriáusiai 'best'. 3. sg. fut. gaûs, keleûs, pa-leîs, geîs, keîs beside 1. sg. gâusiû 'I shall get', keleásiû 'I shall travel', pa-leîsiû 'I shall let loose', geîsiû 'I shall drink', keîsiû 'I shall raise'. Cp. the author Lit. Volksl. u. März. p. 315, Bezzenberger in his Beitr. X 202 ff., and § 691 rem. below.

5. Assimilation of final nasals to explosives and spirants of different organs, as in litaq 'in alium' in pōnaq 'in dominum'. The treatment of -n (= Indg. -n -m) in other respects has already been discussed in § 218.

6. -s became assimilated to following sz- and ž-. vēnaszvōvē 'one shot' = vēnas szvōvē. tōkiožvēys 'such fishes' = tōkōs žvēys. So also s- following -sz. asišsiu 'I shall send' = ąsz sišsiu. isvēto 'out of the world' = ąsz svēto.

7. Of the numerous other final changes of the Lithuanian dialects, suffice it here to mention the shortening in certain districts of ę, ė, ų, ū to ā, ē, ĩ, ĭ, which took place at the end of words and before final single consonants, if the syllable did not bear the chief accent. Gen. sg. raikas 'of a hand' (standard Lith. raikas) beside mergōs 'of a girl'. Nom. sg. mergėle 'girl' (stand. Lith. mergėle) beside srovē 'a flowing'. Nom. pl. pātis 'ipsi' (stand. Lith. pātys), sūnus 'sons' (stand. Lith. sūnūs). This shortening was caused by the expiratory accentuation.

§ 665. Finals in Slavonic, especially O.Bulg.

1. In prim. Slav. ọ became ę before nasals in final syllables. *[unku] 'the wolf' (O.Bulg. vlūkũ) from *[ugko]-m : Skr. ugka-m Gr. λύκο-ν. *nesu-ų 'I carried away' (O.Bulg. nesi) from *nesko-m : Skr. ābhāra-ṃ Gr. ἐφέσο-ν. *[lkũ]-ns acc. 'wolves', whence further by § 219 *vlkũs (O.Bulg. vlũkỹ) : Gr. Cret. λύκο-ς Goth. vulta-ns.

2. Then the -n of the endings -un, -in, -an was dropped, and there arose -ū, -y, -y, the historical endings of O.Bulg. Acc. synū 'son': Skr. sūnū-m. Acc. vlūkũ : Skr. ugka-m (1.). Acc. gosši 'guest': op. Skr. dvi-m 'ovem'. Nom. kamy 'stone': op. Gr. ἀξιοῦ (§ 663, 1).

Rem. The ending of the gen. pl. -ą, e. g. vilökũ 'of wolves', mater-ą 'of mothers', must be explained from -om. See the accidence.
So also prim. Slav. -\(\text{-en}\) and -\(\text{-yn}\) (the latter = Indg. -\(\text{-yn}\), -\(\text{-yn}\)) lost the nasal and there arose -\(\text{-e}\). Nom. acc. sg. neutr. *polje 'field' from *polje-\(\text{-n}\), older *polje-\(\text{-m}\). Acc. sg. *mater-\(\text{-e}\) from *\(\text{mater-}\)\(\text{-m}\). See § 219 p. 186 ff.

On the other hand -\(\text{-an}\) and -\(\text{-en}\) became nasal vowels. Acc. sg. fem. *\(\text{-en}\) 'wife': cp. Skr. \(\text{ākva-}\)m Lat. equa-\(\text{-m}\). Nom. acc. sg. neutr. *\(\text{-mēn}\) 'name' from *\(\text{mēn}\). See § 219 p. 186 ff.

3. Indg. prim. Balt.-Slav. -\(\text{-a}\) became -\(\text{-a}\) and fell together with Indg. -\(\text{-a}\) -\(\text{-a}\) and -\(\text{-e}\) in -\(\text{-a}\). In historical times there appears partly -\(\text{-i}\), e. g. O.Bulg. nom. pl. masc. *\(\text{ti} = \text{Lith. tē} \text{Gr. τη} \text{matē} 'mother' = \text{Lith. motē, partly -\(\text{-e}\), e. g. dat. sg. fem. raeē 'to a hand' = \text{Lith. račkai (§ 664, 4)}, loc. sg. masc. *\(\text{vlīck} \text{vīlikē} '\text{wolf}' = \text{OING. vōlfe (§ 659, 2)}. To what this duality -\(\text{-i}\) and -\(\text{-e}\) is due, remains undetermined. See §§ 76. 84.

Indg. prim. Balt.-Slav. -\(\text{-i}\) became -\(\text{-i}\), further -\(\text{-i}\). Loc. sg. synū : Skr. sānāṭ Goth. sīnāū (§ 659, 3).

4. Originally final -\(\text{-s}\) and the -\(\text{-s}\) which later became final, were dropped. Nom. sg. synū : Lith. sūnū-s. Nom. pl. synov-e : Skr. sūnāve-as. Gen. sg. kamen-e : Lith. akmei-s (§ 664, 2). Nom. acc. sg. neutr. nebo 'sky': Skr. nābhas Gr. vēgoç. 2. sg. veze 'thou drovest': Skr. váha-s. 2. sg. opt. vezi : Skr. vāhē-\(\text{-i}\). Acc. pl. syny from *\(\text{sūnūs}\), older *\(\text{sūnūs}\) (§ 219) : cp. Goth. sunus-s; vīky (1.) : Goth. vīlfa-\(\text{-s}\); krajo (kraji 'edge') from *\(\text{krajo-}\) (§§ 84. 219). 2. 3. sg. da (1. sg. dachū 'I gave', 2. pl. daste) from *\(\text{dās}\); prim. Balt.-Slav. 2. sg. *\(\text{dōs-}\) 3. sg. *\(\text{dōs-}\) 2. 3. sg. ja (1. sg. jastū 'I ate' prim. f. *\(\text{čēs-o-m i. e. *čēs-}\) s-o-m, rt. ed- 'eat') from *\(\text{čēs}\); prim. Balt.-Slav. 2. sg. *\(\text{čēs-}\) 3. sg. *\(\text{čēs-}\).

This loss of -\(\text{-s}\) was probably brought about in absolute finality and before words beginning with a consonant. See § 281 rem. 3.

5. -\(\text{-i}\) and -\(\text{-i}\) disappeared in the O.Bulg. period, after imparting their timbre to the preceding consonants, e. g. *\(\text{patem-}\)(), *\(\text{patēch-}\). See §§ 36. 52. The transition of -\(\text{-i}\) to o in combinations like iz-bāvito i (jū) 'liberat eum' iz-bōvījēto i (jū) liberant eum' etc. is to be explained from the fact that the
pronoun, which was attached enclitically, was still only spoken as j: from -tũ j(?) arose -to j(?) like domoch(ii) from domích(?)i, see § 52.

§ 666. Initials in Baltic-Slavonic.

1. i and y frequently arose before initial vowels. The phonetic condition was that the preceding word ended in a vowel. i and y represent the movement of transition.

Lith. i. j-iüti 'to take'. j-iü 'in'. j-yrka-s 'ear'. j-yrę 'is'. j-ėskoti 'to seek': OHG. eis-rön. pri-si-j-ėsti 'to gorge oneself'. su-j-ėsti 'comedere'. lępę-j-ęti 'he bid go'. Also j-uńt 'up', j-ušz 'I' etc. j- seems to have been entirely generalised only in ėęskęti and in j-ünkęti 'to become accustomed' (O.Bulg. v-ykna 'I learn' Goth. bi-uhts 'acustomed'); association with jünkęti 'to yoke' (rt. jeug-) formed a factor in the latter word.

Lith. y. v-uńgs-s 'fire'. v-ųpę 'river'. v-oszkę 'goat'. v-ųszvę 'mother-in-law'. So far as I know v became fixed nowhere before u- and o-, whilst in some dialects it became permanent before a- and entirely supplanted the form with a- (ašzvę). Here probably also belongs the v- in v-ńna-s 'unus', which must be very old, since it occurs permanently in Lettic (v-īns) and in the whole of Lithuanian.

Slav. i. j-ėsti 'is': Lith. ėsti, cp. uččti from *nečči § 607. j-iėli 'stag': Gr. ἱλιο-ς. jasči 'cats' from *j-ėsči (§ 76): Lith. ėsti; but iz-ėsti 'consumes'. imę 'I seize' from *j-imę, inf. j-ėti: Lith. imę įmę, j-ėti; but iz-ämę iz-ėtı 'to take out'. j-ęza 'illness' from *ńza, prim. f. *ąžha, from rt. anąg-. j-ėykę 'tongue': Pruss. insweis. j-ąblųko and ablųko 'apple'. j-aza and ąza 'cord'. j-utro and utro 'morning'.

Slav. y. v-ykna 'I learn' from *ünkna (§ 219 p. 187) beside učči 'to teach': Lith. j-ünkstę 'I become accustomed' (see above). v-ytra 'otter': Lith. ętra (§ 257). v-ymr 'udder' from *ądmę: Skr. aḥha (§ 547). v- was fixed in these words as well as in v-onja 'smell' beside ačhata 'to smell', v-ąsă beside ąsă 'moustache'. v-aza beside aza and j-aza 'cord', to which also v-ęzati 'to bind' with permanent v-1).

§ 666—667. Accentuation in general.

Rem. 1. We must leave it for a more thorough investigation to determine, between what vowel qualities j- and r- were regularly developed in each single case and how far levelling out has taken place, further, whether anything prevents our assigning the beginning of the development of these glides to the Baltic-Slavonic primitive community (cp. Lith. j-ještį O.Bulg. jastį etc.).

2. e- uniformly became a- in certain Lith. districts, e. g. asú = esú 'I am', aĩsin = ėsin 'I shall go' (but ut-eĩsin, ise-eĩsin etc.). If we remember that every consonant before e had a palatalised pronunciation in the dialects in question, this change is easily explained as an affection of absolute initiality.

3. In Slav. ė- (from older oį-) became i-. inĩi ‘one’ = Lat. oino-s ĭinu-s. See § 84.

Rem. 2. We have probably no right to explain this change by assuming that i was first developed before oį- as a glide and that then became ėi- īi- (cp. jichũ § 84 p. 82). Such an ī- before e has not yet, so far as I know, been established.

ACCENTUATION.

The nature of accentuation1) and the accentuation of the Indg. languages in general.

§ 667. 1. Accentuation of syllables, words and sentences.

By accentuation in the widest sense is understood the gradation of a sentence according to the stress and pitch of its members.

In every separate syllable, i. e. in every quantity of sound produced with a single independent expiratory impulse, there is always one element which with respect to accentuation has the precedence of the rest, e. g. a in English man; this element is called the sonant of the syllable. The form of the tone movement in the whole of the syllable, the relation, in which non-sonant members of the syllable stand in respect of accentuation to one another and to the sonant, may differ, e. g.

1) Cp. among others Sievers Grundzüge der Phonet. 3 176 ff., Seelmann Die Ausspr. des Lat. 15 ff.
Accentuation in general. § 667.

Lith. viš-siu 'I shall cook' and viš-siu 'I shall fall', Gr. οἰ-νοι loc. sg. and οἰ-νοι nom. pl.

In a polysyllabic word there is always one syllable which by its accentuation takes precedence of the rest. This syllable is generally called simply the accented syllable. Syllables which have not the high tone or principal accent can also display different degrees of accentuation, which characterise the word. E.g. in Mod. English cherishing, forgetfulness the final syllable is more strongly accented than the penultimate, in Mod.HG. abenddämmerung 'evening twilight' the antepenultimate more strongly than the other syllables which have not the principal accent and these latter again show gradations among themselves. Word-accent is thus the relative characteristic of all the syllables of a word.

The word seldom stands alone; generally it is the member of a sentence which in phonetic just as in syntactical relations forms a complete unity. Within this whole again there are words with higher, others with lower accent-points. Cp. e. g. the accentuation of the sentence speak truth and lie not. To the accentuation of the sentence belongs thus everything, which bears upon the different accentuation of the words as members of a sentence.

2. Expiratory and musical (chromatic, tonic) accentuation.

If the preeminence of the sonantal element consists in the greater force, with which the breath-current is expelled (voice-stress), we have expiratory accent; if on the other hand in a raising of the voice above its ordinary level (voice-pitch) we have musical accent. The latter may be heard e. g. in the final syllable of our really, when spoken in a tone of surprised enquiry.

Rem. 1. For accentuation, particularly expiratory, quantity also requires attention. Languages with considerable differences of accent-stress, as German and English, have generally also more considerable differences in the duration of syllables than languages, which, like Romance, Slavonic and Mod.Gr., form their syllables with less varying stress. The treatment of syllables, which do not bear the principal accent in languages
where the accent is strongly expiratory, often shows very distinctly, how
the different quantity of these syllables and the different grades of the
secondary accent stand in mutual relation to one another.

None of the Indg. languages had and has exclusively ex-
piratory and none exclusively musical accentuation. But one
of the two methods of accentuation always appears in the stages
of development accessible to our observation as dominant and
typical for the history of sounds. Essentially expiratory accent
appears in Old Armenian, in the Old Italic dialects, in Keltic,
Germanic and Lithuanian, essentially musical in Sanskrit and
Old Greek; we have no satisfactory information concerning the
accentuation of the Old Iranian dialects and of the Old Bulgarian.

3. Three accent-grades.
Between the highest imaginable and the lowest imaginable
grade of accentuation there are, strictly speaking, innumerable
intermediate grades. For all practical purposes it is sufficient to
distinguish three grades. The highest grade of the expiratory
accent we designate the principal accent, that of the musical
accent high tone, the lowest grade absence of accent (also loss of
accent) and low tone. Between these lie secondary accent and
medium tone.

Rem. 2. The grammatical terminology here roughly resembles that
for the positions of articulation of the lingual palatals; here as there we
have to deal with an unbroken graded series, and the ordinary division
into dentals etc. leaves free scope, since such division fails to draw sharply
defined limits.

4. The different forms of syllabic accent.
Expiratory accent. An expiration, simply allowed to die
away, contains but one point of expiration. If on the other
hand fluctuations in the expiratory impulse take place, still other
points become perceptible alongside the principal point; these
owing to their smaller force are felt as subordinate to the
principal point. Where the accentuation has only one point, the
sonant, the bearer of the syllabic accent, is separated from the
following consonant simply by the change of position in the
organs of articulation, it is cut off by the consonant, and such
accent is called clear cut accent ('), e.g. English had. Where
the accentuation has two ( ) the second point may still fall upon the sonant of the syllable, e. g. Mod.G. sō (in certain cases), or on the consonant immediately following, e. g. mānī (Thuringian).

Musical accent. Whilst the sonant or the syllable lasts, the voice remains on the same level (level tone), or ascends from its level (rising tone), or descends (falling tone), or within the same syllable both rises and falls, or falls and rises (musical circumflex). The level tone also combines in different ways with the rising and falling tones. e. g.

These differences of accentuation hold good for all syllables, not merely for principal accented and hightone syllables, in which alone according to the ordinary mode of marking accentuation they are usually indicated. This conclusion is established by the following considerations. In Lithuanian the nom. sg. *vārnā 'crow' became vārna, just as *gerā became gerā, and the gen. sg. tilto 'of the bridge' retained the length of the -o just like anū (§ 664, 3). The final syllables of *vārnā and *tiltā (tilto) had thus an accent of the same form as the final syllables of *gerā and *anū (anū) 1). In Greek lowtone final -o was counted long for the word-accentuation, in case the syllable, if bearing the accent, shows the circumflex, e. g. loc. sg. oǐxos beside ἵνθοπος, on the other hand it was treated as short where the syllable, if bearing the high tone, shows the acute. e. g. nom. pl. oǐxos beside καλός; the -o of oǐxos was thus circumflexed, but the -o in oǐxos had the acute.

§ 668. Our means for determining the accentuation in the older periods of the Indg. languages are the works of the native grammarians, metre, the accent marks of the texts handed down to us, the modifying influences, exercised by the accent on the sounds, and the accentuation in those living languages which form the continuation of these older stages of development.

1) Native Lithuanian scholars affirm that the differences of syllabic accent appear also in syllables which do not bear the principal accent, that e. g. in the instr. sg. kiruńī the same slurred (geschliffen) accentuation is heard in the first syllable as in the nom. sg. kirvīs 'axe'.

§ 667—668 Accentuation in general.
Notices of grammarians we possess for Sanskrit and the classical languages. They are not precise enough to furnish us with a clear and complete picture of the accentuation.

Metre hardly requires consideration elsewhere than in HG. For the same languages we have accented texts. The system of indicating accent is however very incomplete. The Hindoos marked with the udātta only the word-accent, without betokening the differences of accentuation between the syllables which had not the high tone and without taking account of the kind of emphasis, the quality of syllabic accentuation. Sentence accent was indicated only in so far, as under certain circumstances words with subordinate tone in the sentence as a whole, remained without mark of accent. In Greek the tone movement, which was worked out within the individual syllable, was expressed by the distinction of acute and circumflex, only however, if the syllable was the most prominent in the word. Both accents thus served at the same time to indicate the position of the high tone in the word. First attempts at indicating sentence-accent were the use of the grave (e.g. βασιλεὺς ἐγένετο but ἐγένετο βασιλεὺς, περὶ τοῦτον but τοῦτον πέρι) and the non-accentuation of words.

From sound-changes we may often gather what the accentuation was. Reduction and total loss of syllables point to a more strongly developed expiratory accentuation. If the accent-force of several syllables is concentrated upon one, those left without force lessen their duration and firmness. Thus the position of the principal tone is at once recognisable.

Conclusions, drawn from the younger periods of languages, are not to be applied to the older without great care. As the languages, whose course of development we can trace through considerable periods of time, show, the accentuation of a language may undergo complete modification in a comparatively short time. Only where on the whole a coincidence in the accentuation of earlier and later periods seems already probable on other grounds, ought the younger phases of language to be adduced, e.g. in HG., to clear up the phenomena of the older periods.
§ 669. The position of the word-accent can be arrived at through comparison of Sanskrit, Greek and prim. Germanic


(Verner's law). The word-accent was free, that is, unrestricted either by number of syllables or by questions of quantity. E. g. *potē(r) 'father': Skr. pitā, Gr. πατήρ, Goth. fadar O.Icel. fadar fadur prim. Germ. *fadar. *bhrōdō(r) 'brother': Skr. bhrātṛ Gr. ἄδειος Goth. brōpar prim. Germ. *brōbōr. *oktō 'eight': Skr. aṣṭa, Gr. ἑξακόσια. *dékōnt-es nom. pl. part. act. from dēk- 'see': Skr. dēkānt-as Gr. δεκάοντες. *é-k-mi 'I go' *i-mēs 'we go': Skr. émi imās. *lelip-yané or *lelip-yanē 1. pl. indic. perf. act. from leip- 'smear, stick to': Skr. līlipimā Goth. bi-libum prim. Germ. *lībūmi. *vortējō causat. from yert- 'turn': Skr. varṇāyanti Goth. fru- gàrdja prim. Germ. *yārdjō. Sanskrit preserved most accurately the word-tone; nevertheless we find even in this language also not a few instances of shifting, see § 672.

For the relation to one another of the syllables of a word which do not bear the high tone (§ 667, 3 p. 529) we have no certain information as regards the time immediately before the breaking up of the Indg. prim. community. From certain fluctuations perceptible in the historical periods and affecting the accentuation of certain classes of genuine nominal compounds, owing to which the accent rested sometimes on the first, sometimes on the second member of the compound, we may conclude that the less accented member had preserved as medium tone the high tone originally belonging to it as an independent word, just as the syllable -zieh- in Mod.HG.

wéchsl-beziehungen still exhibits the word-accent of beziehungen or the syllable -lai- in Lith. vaik-palaikis ('ne'er-do-well') that of palaikis (§ 691 end). The misplacing of the high tone in the former case resembles that in the German ünbeschreiblich beside ünbeschreiblich, üngemein beside üngemein etc.

So far as sentence-accent is concerned, the enclitic use of certain words and categories of words in Sanskrit, Greek etc. was doubtless inherited from the period of the prim. community.

Thus enclitic were:

Certain particles, as *qe 'and': Skr. ca Gr. τε Lat. que; *yē 'or': Skr. ca vā Gr. *fē in ἡ-δ from *ἡ-φε (§ 677) Lat. ve.

The interrogative pronouns (st. *go- and *qi-: Skr. ka- and ci-, Gr. πο- and τι-, Lat. quo- and qui-), if they had an indefinite meaning, cp. e. g. Gr. τι-ς 'who? and ἀνήρ τις.

The personal pronouns, if no contrast of meaning prevailed, as between I and thou etc., cp. e. g. the enclitic Skr. mē Gr. με Ο.Bulg. mi 'to me'.

Further, probably in many instances, the vocative, see § 672;

Lastly the finite verb also to a large extent, always if the temporal particle *ē, the augment, immediately preceded it, e. g. *ē ἔδεικτ 'he looked': Skr. adhikat Gr. ἔδεικε; apparently already in the period of the Indg. prim. community an agglutination had taken place here which obliterated the feeling for ē as an independent word. Further, the verb in the principal sentence was frequently appended with the low tone to those adverbs which appear in the separate languages as prepositions, as *pró bherā = Skr. prā bharāmi; more rarely the verb was welded into a unity with living case-forms. But apart from such definite categories of words with which the verb showed a special pre-

1) It is assumed that this enclitic use had occasioned the weakening of a form *uos to *uos 'to thee' (Skr. t̮ Gr. τος O.Bulg. ti). Op. § 187.

2) So also the passive participles and verbal abstracts with suffix -ti- had the tone on the prefix, e. g. *próbhyto-s *próbhyto-s (Skr. prā-bhyto-r prābhyto-s) beside *bhūto-s *bhūto-s (Skr. bhūto-s bhūto-s).
ference for enclitic connexion, the verb in principal sentences had the low tone. In these it preserved its accent in Sanskrit only when the first word of a sentence (§ 672).

§ 670. Did the expiratory or the musical accentuation preponderate at the time of the breaking up of the primitive community?

The reduction and rejection of vowels point to a more strongly developed expiratory accent. This method of accentuation therefore must be referred to that period of the Indg. primitive language in which the syllable preceding the principal tone underwent the weakenings, mentioned in § 310 ff., when e.g. "pet-é- and "derk-é- became "pté- and "dyké-. That between these processes and the close of the primitive language a certain time had elapsed, is shown by the fact that the state of the language, phonetically produced by those accentual influences, was altered by a series of new formations which with good reason are referred to prim. Indo-Germanic.

R. e. E. g. dat. sg. "bhrdt-aj 'to the brother' (Skr. bhrdtr) had come in either for older "bhrdtor-aj after the analogy "pitr-daj 'to the father' (Skr. pitr) or for older "bhrtr-daj after the analogy of the stem-form of the strong cases "bhrdor- (e. g. acc. "bhrdor-m). Nom. pl. *mātr-ës 'mothers' (Skr. mātrau) with strong grade radical vowel beside *pitr-ës must in like manner have been influenced by analogy. Prim. Indg. is also the levelling of *dēkō-m *dykē-s *dykē-t *dēkō-neu *dykē-te *dēkē-nt (rt. dēk- 'see') on the one hand to *dēkō-m *dēkē-s *dēkē-t etc. (Skr. dēkā-m dēkā-s etc.), on the other hand to *dykō-m *dykē-s etc. (Skr. dykā-m dykā-s etc.).

Towards the end then of the Indg. primitive community the expiratory character of the accent seems to have no longer preponderated. The fact that Sanskrit and Greek with preponderantly musical accent show as separate languages hardly any phonetic changes which could be ascribed to the effects of expiratory accent, points to this conclusion). If at the time of the separation of the peoples and accordingly still in the oldest periods of their separate existence the accent had had

1) In Aryan the only difference to be considered is that of o = ø and on = ø (§§ 228, 230) and Skr. yāt-ās besides yāt-ām (§ 198).
a strongly marked expiratory character, these two languages would doubtless not have preserved so faithfully and so unabridged the old inherited condition of the sonants. I am of opinion therefore — without venturing to express a final decision on a question so difficult and still so much requiring a comprehensive and thorough investigation —, that Skr. and Greek accentuation on the whole represent in the point in question the method of accentuation which prevailed at the time of the separation. In the prim. Germanic development the Indg. accent again became more strongly expiratory; for it is to the strengthened breath-current of the syllable bearing the principal accent that we must ascribe the circumstance that the voiceless spirants (*brópar—'brother' *kéusó 'I test') remained voiceless (see §§ 530, 581).

§ 671 The contrast between circumflex and acute in Greek and that of the slurred (geschliffen) and broken (gestossen) accent in Lithuanian appear to correspond to one another and to stand in historical connexion. Gr. nom. sg. ἵματι nom. pl. ἵματι (orig. nom. du., see accidence) : gen. sg. ἵματις = Lith. nom. sg. geró-ji nom. du. geró-ji : gen. sg. gerós-íos. Nom. du. καλός nom. pl. καλός : gen. pl. καλῶν loc. sg. ἰστιοῦ = nom. du. geró-ji nom. pl. geró-ji : gen. pl. geró-ji loc. sg. ἀν τίς ('at home'). Cp. further 3. sg. opt. λέξει and te-sukē with reference to the remarks made on final -οι page 530.

Rem. 1. Hansen's attempt (Kuhn's Ztschr. XXVII 612 ff.), to establish this difference of syllabic accent for Germanic also, has, in my opinion, not succeeded.

Further the difference of accentuation in Skr. nom. ὀνυθ and voc. ὀναθ and Gr. nom. ζευς and voc. ζεῦ points to an original qualitative difference in Indo-Germanic (§§ 673, 677).

Hence it may be conjectured that already in the time of the Indg. primitive community, there existed different forms of syllabic accent.

Rem. 2. Owing to the incompleteness of the present investigation, I have taken no aversion in writing the Indg. prim. forms in this work of these different accents. In every case the word-accent has been written with the acute (').
Rem. 3. In Italic, Celtic and Germanic, a stress accent was developed on the first syllable of the word, which drove out the Indg. free accent. Thurneyser (Revue Celt. VI 313) conjectures historical connexion here and sets up ‘a general West European regulation of accent’. The assumption of such a connexion is bold. For since in the special Germanic development the prim. Indg. word-tone still acted as a stress accent (Verner’s law), the new Germanic accentuation would be a borrowing from Celtic, the Germanic tribes would through contamination have given up their native accentuation in favour of the Celtic: should not then Celtic influence reveal itself in other directions too in a far larger extent than is actually provable? Moreover Lettie and Czech show by their accentuation on the first syllable that languages can pass through the same revolution in accent quite independently. To the assumption of a connexion between Celtic and Italic accentuation I am less opposed. No other branches show so many special coincidences as Italic and Keltic.

Aryan.

§ 672. With Sanskrit accentuation alone have we a tolerably intimate acquaintance.

It has been already remarked in § 669 that the Hindoos preserved on the whole the prim. Indg. position of the word-accent. Changes were doubtless due only to analogy; in one set of instances however it is impossible to decide whether the variation belonged to the Sanskrit or the prim. Aryan period.

Examples. For *ganvás 1. du. ‘we come’ (from *guy-ús, § 229) came gánvas after the singular forms like gánti; the formal similarity with the forms, accented on the root, which had arisen phontetically, occasioned this innovation, cp. alongside these ga-thás ga-tás etc. Presents with original á in the root syllable, as bhárámi, caused the accent in those verbs whose root syllable had unaccented a to pass over to the root syllable: gáchámi ‘I come’ for *gáchámi from *guy-ás (cp. ichámi ychámi etc.), dášámi ‘I bite’ for *dásámi from *dákó (§ 224). The transition from mati-š to máti-š (‘thought’), from pakti-š to pakš-š (‘a cooking’) etc. is connected with the circumstance that these nouns from the Indg. prim. period had a final and initial accentuation which varied in the different cases. The accentuation paścá (Atharvaveda V 15, 5) for paścā ‘five’ follows sąptá ‘seven’; cp. paścábhīṣ : sāptábhiṣ.
As regards sentence accent Sanskrit appears to have preserved the old position almost invariably. At least the enclitic use of the particles, like ca va u ha, of the forms of the personal pronouns, as mē ma, of the vocative and of the verb must be regarded as Indg., as was already remarked p. 534. In independent sentences the verb had no accent unless at the beginning of a sentence, e. g. agnim tē purdhítam 'I praise Agni, the house-priest' (beginning of the Rigveda). The vocative had from the beginning the high tone on the first syllable, e. g. pitar 'O father' mdtar 'O mother' (Gr. nātrœ, μητρο). It had however its independent high tone only at the beginning of a sentence, otherwise it was unaccented, e. g. idāṁ indra śurhi 'this. O Indra, hear'. Just as this use appears to be original, so also the law may be old which requires the vocative, if connected with a word which more nearly defines it, to form in respect of accent a unity with that word, e. g. vāsō sakhe or sākhe vasō 'O good friend', sāhasāh sūnō or sūnō sāhasāh 'O son of strength'. I conjecture that this practice in Sanskrit as in other languages, if it did not occasion, at any rate helped the formation of improper compounds, op. e. g. Skr. jās-pati-ś 'lord of the family', Gr. δέο-πότης, voc. δέο-ποτα, 'house master' (§ 204 p. 171)¹, Δίός-κονάται 'sons of Zeus', Lat. Juppiter (see § 612 p. 468), Dies-piter.

§ 673. According to the account of the native grammarians the Sanskrit accent was a musical one. It is obvious that there had also existed alongside that accent differences of voice stress. The expiratory accent cannot however have been very strong.

The high tone was called udāṭta, that is, 'raised' ('). Opposed to it was the anudāṭta, that is, 'unraised' (not-high tone).

The udāṭta was a simple rising tone. If the udāṭta-syllable was followed by two or more unaccented syllables, the first of these syllables had the so-called enclitic svarita (')': it was

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1) The combination *dēmo-patīs probably dates from the Indg. primitive period; op. Skr. pātīr dān and dāmpatīṣ, the latter perhaps for *dēs-patī-, with substitution of the pause-form dān.
pronounced with falling tone, and its accent formed the natural transition from the high tone reached in the udāṭṭa-syllable to the low tone of the next syllable but one. E.g. bhṛdīturas 'fratres', vidūṣṭarēbhyaś 'doctioribus'.

There was, besides, the so-called independent svarita (*). It arose, when a high accented vowel was joined in the same syllable with a low accented vowel, e.g. divēva from divī īca, ēvāśṇīyaṭ from ēvā aśṇīyaṭ, sōḍravīt from sō (a)dravīt, apsvantār from apsū antār, vyāptiṣ from vi-āpti-ṣ. This accent is defined as a compound accent, as a combination of a higher and a lower tone within the limits of a single syllable. It was rising-falling, the combination of the udāṭṭa with the enclitic svarita. It may be, accordingly, compared with the Greek circumflex (e.g. τρεῖς from *τρῄς).

The contrast in accentuation between nom. dyāuṣ and voc. dyāuṣ appears to have descended from the period of the Indg. primitive community, since it corresponds to the contrast between Greek Zevos and Zev. Cp. § 677.

Rem. Further peculiarities of Sanskrit accentuation in Whitney § 80 ff., L. Masing Die Hauptformen etc. p. 37 ff. 72 f. and elsewhere.

§ 674. As regards the accentuation of the Old Iranian dialects we have no information.

If the sound-law respecting the transition of r before k, p, t into a spirant which has been assumed by Bartholomae for Avestic and mentioned above in § 260, is correct, we must conclude that at the time when this sound-change took place, Avestic had in general the same word-accent as Sanskrit.

Armenian.

§ 675. That the accentuation of Old Armenian was once essentially expiratory, is shown by the numerous weakenings of syllables.

Since the vowels of the original final syllables in polysyllabic words disappeared (§ 651, 1), the accent must have been thrown back, cp. e.g. mard 'man' from Indg. *mṛtō-s (Skr. mṛtā-s). And since i, u, ē, oi, ea remained unchanged.
only in the originally penultimate syllables, while in earlier syllables ἰ and υ were rejected and ὐ, ὅ, ύ were reduced to ἰ, υ, ὅ (§§ 31, 47, 63, 79, 632), the accent must have been concentrated on the originally penultimate syllables.

Further conclusions depend upon the answer to be given to the question of the chronological relationship between the weakening in originally final syllables and the weakening in syllables earlier than the original penultimate. I believe we must assume with Hübschmann that the first mentioned weakening was earlier in time. Consequently we must conclude that in the first place a withdrawal of the accent from the final syllables in general took place, but that at the period when gen. *duster became dster, accentuation of the final syllable was the regular principle.

The abandonment of the prim. Indg. word-accent presupposes the development of an expiratory secondary accent, limited by number of syllables. This gradually overpowered and drove out the original accent.

Greek.

§ 676. The prim. Indg. freedom in the position of the word accent and the capability of the prim. language to use enclitically in the sentence words of any number of syllables whatever (particles, pronouns, forms of the finite verb), were materially limited in Greek through the development of a secondary accent, of the accent, which displays itself in the so-called law of three syllables. The chief points are as follow (cp. Wheeler's treatise, cited above p. 532.):

Accentuation in Greek.

§ 676.

Thus arose ἂθήνα from *thetic 1): Skr. svādhān. φερόμενος: φερομενο -ov from *φερομενος: bhārāmānas bhārāmānas. Ἀγάμεμνον from *Ἀγαμεμνὸν: ep. ἄδελποι beside ἄδελφος etc. ἀπό-τιος from *ἀπο-τιος: Skr. ἀρα-κιλίς. ἀν-ἐπι-θετος: ἀν-ἐπι-θετον -ov from *ἀν-ἐπι-θετος: ἀν-αρι-χίτας ἀν-αρι-χίτας. ὀππότερος, αὐτός πότερον (i. e. *αὐτός πότερον ‘ipse utrumvis’) from *στός ποτιρος (ep. Goth. sna), *αὐτός ποτερον. ἔγων φερομεθα (i. e. *ἔγων φερομεθα) from *ἔγων φερομεθα: ἔγων διαρείξαι. ζευς ἥμιν (i. e. *ζεὺς ἥμιν) from *ζεὺς ἥμιν.

Rem. 1. Almost all the forms of the finite verb had the recessive tone, cp. e. g. ἔμεν διδάσκει with Skr. ends daddhān. This is probably not to be explained exclusively from the enclitic use in the principal sentence (§ 609 p. 534). Nothing prevents our assuming that the accentuation of the subordinate sentence was still in force at the time when the secondary accent was developed. Then many forms of the principal sentence necessarily acquired the same accent as the forms of the subordinate sentence. *ς φερομεν of the principal sentence (Skr. *ς bhārāmas) became φερομεν, the form of the subordinate sentence (Skr. bhārāmas), *ς φερομεθα of the principal sentence (Skr. *ς bhārāmahi) and *φερομεθα of the subordinate sentence (Skr. bhārāmahi) fell together in φερομεθα, etc. Such falling together of a part of the forms, led to considerable levellings, after the

1) We give the words as they exist in Ionic or Attic. Strictly speaking we ought to have given the prim. Greek forms.
The acute on long vowels and diphthongs is parallel to the 'broken' tone in Lithuanian, nom. τιμά : Lith. geró-fi, see § 171. The circumflex corresponds to the 'slurred' tone in Lithuanian, e. g. gen. τιμάς : Lith. gerós-ios, loc. cit. The accent in voc. Zēv corresponds to the Skr. independent svarita dyāuṣ : the whole rising movement fell to the first mora (cp. náreṣ beside nāṣ), and thus there remained for the second only the falling movement, see §§ 671. 673. The new circumflex which arose by vowel contraction (τρεῖς from *τρεῖς, οἴνος from οἶνος, ηφίσμεν from ηφίσμεν, τίμησκε from τίμησκα) teaches us that the second of the sonants which have run together, had the same or a similar tone movement as the Sanskrit enclitic svarita. Thus the svarita in Skr. dīṇa from divī iva, may be compared with this circumflex, see § 673.

Besides the acute and the circumflex the old grammarians ascribe to Greek the grave accent (βαρεῖα προσφοβία), marked by . It is alleged for two essentially different cases.

Firstly, for the last syllable of proclitic words, e. g. τίνα γάρ, περὶ τοῦ του, ἀλλὰ ταῦτα, ἥκε σοί. The accent of these words, when not used proclitically, was τίνα, πέρι, ἀλλα, *ή-ε̣; the last form is proved by the fact that -ε̣ is the old Indg. enclitic *-ye (Lat. -ve), § 669 p. 534.

Rem. 2. That the Byzantines and we along with them write the proclitic ἧ, ἓ, ἐ ἐ̣ ὦ̣ ὦ with accent, but ποῖος- ποῖος, πῶ, πῶν with the grave, has a purely graphical reason. When in the case of initial vowels the signs for accent and breathing coincided in the same letter, the proclitic monosyllables were relieved of their accent-sign. See Wackernagel Kuhn's Ztschr. XXVIII 137.

Secondly, as substitute for a final acute, when the word did not close the sentence (βασιλέως ἐνοίσα), with the exception of τίς τῷ, which always retained the acute (τίς ἐνοίσα;).

Whether in both cases there was precisely the same tone-movement, is not clear. Equally obscure is the character of the modification undergone by the acute in βασιλέως ἐνοίσα.

Rem. 3. If we speak of a 'weakened' or 'stiffed' acute, the matter is as obscure as before (see L. Masing's excellent remarks loc. cit. p. 79 ff.).
Only this much is certain, that the explanation of the phenomenon must start from the fact that the grave had its position where a syllable was spoken directly after in which the tension of the voice began to rise or reached a point. In cases like *ρέετις (ρεῖς), ἄλλος, τω-δε, ὑς τις, ξαλοῖ ταῖς the syllable following the acute had a falling movement, the tension of the voice began to relax in it, and after ἀναγνωρίσεις βασιλεύς came complete absence of tension, the pause. On the other hand in *βασίλευς Σάφέρης and in *βασιλεύς ἔγνειοι a rising tone movement directly followed the rising acute. Compare with *βασιλεύς Σάφερης the fact that, in the body of a word, two acutes are not tolerated in two successive morae, whence, e. g., there is no *ἀγγέλος πε, as might be expected (see Wheeler op. cit. pp. 126, 129). We may thus conjecture that the grave was not solely a rising tone.

§ 678. In matters of accentuation only trivial differences appear between the different Greek dialects.

The Lesbians alone instituted a more important innovation, by throwing back, as the grammarians tell us, theaccent in every case according to the law of three syllables, e. g. σόφος, βασίλευς, Ἀτρεύς, θύμος, πόταμος.

Rem. When it is said that prepositions and conjunctions as ἄν, δι, ἕν retained their accent on the last in Lesbian too, it is simply a question of the proclitic grave (§ 677), which formed no opposition to baryton accentuation.

The Lesbian accentuation seems, in the main, to have arrived at this position through the great bulk of forms with baryton accent dating from the Greek prim. period having gradually drawn over the forms which were otherwise accented.

Italic.

§ 679. While the native grammarians tell us something of the accentuation of Latin, in the investigation of the accentuation of the other Old Italic dialects we are thrown back on what their phonetic form teaches us when compared with that to be presupposed for the period of the Italic and Indg. primitive period.

There is nothing to contradict and much to support the assumption that the prim. Indg. accentuation had already, during the prim. Italic unity, undergone a complete revolution. In polysyllabic words the accent which was expiratory was borne by 

Brugmann, Elements.
the first syllable. Thus a secondary accent had developed on the first syllable and driven out the competing original accent.

Rem. The assumption of F. Stolz (Lat. Gramm. p. 148 and Wiener Stud. VIII 149 f.), that the Indg. final accent in *nīmōn (aeveom), gen. *nāve (nāvis) etc. still survived in the separate Lat development, does not convince me in the slightest.

This accentuation also held good for the compound verb, and it was here certainly not merely caused by the mechanical principle of initial accentuation, but represents the prim. Indg. accentuation of the principal sentence. Such compounds with accentuation of the preposition in the Italic prim. period are e.g. Lat. prae-hibeō praebebī Umbr. pre habia ‘prachibeat’, Lit. pro-
hibē Osc. pru-hipid ‘prohibuerit’, Lat. in-ec Umbr. en-etu imp. ‘inito’, Lat. conv-vertō Umbr. co-sertus ‘redierit’. To the prim. Indg. enclisis of the verb in the principal sentence may also be due Lat. né-scriō, nōn vīs, mē-vīs etc. So also igitur which is the same as the second member of ad-igitur and occurred originally only in such combinations as quid igitur? = *quid agitur? etc.; if igitur at a later period appeared as the first word in a sentence this is parallel to the similar use of Greek τοι in τοι γαρ οὖν. Here belongs further also the unaccented forms of the indic. of the substantive verb, as Lat. pōtis-sum pōssum, situs-est situst, Umbr. ertzom-est ‘peremptum est’, Osc. prūstū-set ‘probata sunt’.

The enclisis of certain pronouns and particles was also descended from the early period. Lat. sī quis, nūm quis etc., Umb. sve-pis Volsc. se-pis Osc. svoe-pis ‘sī quis’, Osc. pūtrūs-

Postpositions too were enclitic in primitive Italic. Lat. quo-
cum, Umbr. asa-ku ‘apud aram’. Lat. tantis-per parum-per sem-per, Umbr. trio-per ‘per tria, ter’, Osc. petiro-pert ‘quater’. It is impossible however to make out if this usage was prō-Italic.

Certain vowel weakenings may have been called into being in the prim. Italic period through the action of initial ac-
centuation. Cp. the nominatives Lat. Umbr. ager Osc. Frunter against Gr. ἄγεος-ς, Lat. famul Osc. famel ‘famulus’, §§ 623 rem. 1. 633. 655, 9. Compare further the loss of the final vowel in some prepositions, as Lat. ab = Gr. ἄνω, sуб = Gr. ἄνω: Lat. ab-dó, Pelig. af-ded ‘abdidit’, Lat. sub-dó sub-tendó, Umbr. su-tentu ‘subtendito’. Here syncope might be suspected—(§ 633). Yet it must be remembered that these prepositions often stood before vowels, and thus the form which had lost its final vowel before other vowels, might have become generalised (§ 655, 1).

§ 680. In Latin the initial accentuation, descended from the prim. Ital. period, caused vowel reduction in the next syllable, which had the weakest accent. The method of its action was twofold, the syllable either retained its syllabic value or, as a syllable, entirely disappeared.

peperci from *pēpercī : parcō. cecidī from *cécaudī : caedō. cóns-cendō from *cōn-scandō : scandō. an-hēlō from *án-θanslō : halō from *(h)anslō (§ 208). ex-ercēō from *ex-arceō : arceō. ob-sideō from *ób-sedeō : sedeō. cōn-ficiō cōn-factus from *cōn- faciō *cōn-factus : faciō factus. praehibēō from *préi-habeō : habēō, Umbr. pra-habia ‘praelibeat’. cón-stituō from *cōn- statūō : statūō, Osc. Anter-statās dat. ‘Interstitiae’. ex-istumō from *ex-aistumō : aestumō. in-clādō from *in-clandō : clandō. sē-cernō in-certus from *sē-crīnō *in-crītus : Gr. ἀ-κρο-ς. in-imicūs from *in-amīco : amīcus. con-tabernālī-s from *cōn- tabernālis : taberna. Cp. §§ 33. 65. 81. 97. 109 d. That this vowel weakening was not one of the oldest historical characteristics of the prim. Latin period, is shown by the form of the borrowed words Alixenter, Agrigentum, Tarentum; these came by their e instead of a through the same phonetic law and were at the time accented on the first syllable.

R e m. Historical forms like ob-arceō beside ob-ercēō, ob-tractō beside ob-trectō, ex-pandō do not prove that the law worked irregularly. Such forms depend on a re-composition, just as e. g. Mod.HG. ur-theil drith-theil for urtel drittei show a revival of the second part of the compound after the analogy of theil.

ind-nō from *ind-ovō. ãnācrus from *ãnācru-s. See § 172, 1.
reppuli from *ré-pepuli. undecim from *ānu(s)-decim. sur-
pul from *sūb-rapul. See § 638.

Perhaps the fact, that o remained unweakened before con-
sonants in final syllables, e. g. novo-s socio-s (sorin-s), but became
an irrational vowel in middle syllables, e. g. novi-tās sociē-tās,
is to be explained from secondary accent carried by the final
syllable in polysyllabic words. Cp. § 81 p. 73.

§ 681. In trisyllabic and polysyllabic words an expiratory
secondary accent developed itself in pre-literary Latin according
to the quantity of the penultimate syllable. If this syllable was
long it bore the accent, if short, the accent was carried by the
antepenult. Thus *pépervē became pepérē, *inimīcu-s inimīcu-s,
*èxistumāmūs èxistumāmūs, and *èxistumō passed into èxistumō,
*èxānciunt into èxānciunt; genu. *èontubernalium into contubera-
nālia.

Rom. "The Romance languages, by preserving, as a rule, the first
syllable of Latin words while unaccented middle syllables often disappeared
show that the first syllable always retained a considerable secondary accent;
VI 813.

Through loss of vowel in final syllables this new word-
accent came to stand here and there on the last syllable, as in
illēc(e), tantō-n(e), auālin(e), disturbāt from disturbāvit, mānit from
mānīvit. Whether the nominatives as nostrās Arepāns Somnīs
Compāns, usually classified with these forms, were genuine Latin
nominative formations, may be doubted.

It is difficult to get a clear idea of the nature of the newly
developed expiratory accent as syllabic accent.

According to the native grammarians there were an acute
(') and a circumflex accent ('). The former stood on all
short vowels, e. g. mix, bene, vēterem, on long vowels in the antepenult, e. g. dēleō, and on long vowels in the penultimate, if
the final syllable was long, e. g. rēgēs. The latter stood on
long vowels in monosyllables and on the final syllable of poly-
syllabic words, e. g. rēx, illēc, and on the long vowels of the
penultimate, if the end syllable was short, e. g. rēgis, rēgīna.
So far, as the accentuation of the long vowels is concerned
(rēgēs, but rēgis), this difference in the forms of the syllabic accent is probably rightly regarded as a pedantic fiction of the grammarians.

Vowel shortening in Jūppiter (Jūpiter) etc. points, as we saw in § 612, to a clear cut accent. Nevertheless the reason for the separate treatment of the words in question, while other words apparently similarly formed have no shortening, is quite obscure.

§ 682. Besides the cases of enclisis, mentioned in § 679, there are others whose age we are not in a position to determine. Here may be mentioned especially combinations like in-vicem, dēnovō from dē novō, ἰτιοῦς from *in slocō, prefectō from *prō factō originally something like 'as good as a fact' (cp. con-fectus § 680).

Compound words with an enclitic as second member were also subjected to this new law of accent (§ 681). *tāntō-ne, *uē-rē-que, *ıtra-que, *utrōrōm-que, *scelēris-que, *scelērīm-que passed over into tāntōne, utērque, utrāque, utrōrōmque, scelērisque, scelērīmque; here too the accent of the initial syllable was retained as secondary accent. On the analogy of such accentuation people also said tantāne, utrāque, where the new law had nothing to do with the giving up of the original accentuation, and scelērā-que, for which *scelērāque might have been expected. In the latter case moreover this analogy was not, as it seems, the only influence; the circumstance that the last syllable of polysyllabic words had originally a secondary accent (cp. § 680 p. 548) was also not without effect. In combinations like scelērā-que which were always felt by the speaker as a combination of two elements, the tone movement of the uncompounded first member (scelērē) counteracted the accentuation of the antepenult (*scelērāque) which formed a sharp contrast to it. This seems to be specially supported by agitē-dum which had no form so accentuated as scelēris-que alongside it.

The retention of the old accentuation by ita-que ̧ ̃iti-que etc., is to be explained from the fact that they were no longer felt as
§ 683. We saw that in prehistoric times Umbrian-Sannine dialects shared the initial accentuation of Latin. Hence the numerous instances of syncopè in these dialects, as Umbr. osatu 'operate' Osc. úpsannam 'operandum' from *ópesa-, see § 633.

Whether this accentuation still prevailed at the date of our monuments or whether a new system of accentuation had already taken its place, is a subject for further investigation. The extensive rejection of vowels in final syllables, as in Umbr. pihaz 'pintus' Osc. túvšks 'publicus' (§§ 633, 655, 5), leads us to conjecture that the initial accentuation was retained.

Old Irish.

§ 684. The effects of accent on the form of words, prove that in the primitive Keltic period the first syllable had come to bear the word-accent owing to the development of an expiratory secondary accent.

This mode of accentuation prevailed in noun forms whether the word was simple or compound. O.Ir. necht O.Corn. noit 'neptis' : Skr. napti-ś. O.Ir. clot 'renowned' O.Bret clot (f.?) 'renown': Skr. šrutá-. Gall. Trí-casses; the accentuation of this word is cleared up by its Romance form, French Troyes (from *Tricas). O.Ir. τάυς 'leadership, superiority, beginning', Cymr. tywyys 'guidance' from *tó-yessu-s = *to-yed+tu- (O.Ir. do-fédim 'I lead'), with its derivative in -ako- *tó-yessako-s O.Ir. tóisech 'guide' Cymr. tywysoy 'guide, leader, chief' O.Kelt. inscript. (Denbighshire) tovisaci; the great antiquity of the accentuation of this prefix follows from the t- instead of d- in the Gaelic and in the Britannic branch.

In the case of the verb there was a difference according as the verbal form was accompanied by a preposition or not. While the uncompounded verb had initial accentuation (e. g. O.Ir. caraim O.Cym- caram 'I love'), the compound verb was not accented on the first syllable of the word, but on the first syllable of the second member of the combination; the imperative formed
an exception, for in it the preposition bore the word-accent. A peculiarity doubtless to be referred to the prim. Indg. verbal accentuation. The accentuation of the prim. Indg. subordinate sentence was retained and generalised; the imperative alone, which had no place in the subordinate sentence, still represents the accentuation of the principal sentence (cp. Skr. prā-bhara, Gr. πρά-βαρα). Irish has best preserved these relations, e.g. do-mēlim 'vescor', but imper. tō-mīl 'vescere'; do-bērid 'fertis; datis', but imper. tāibrith 'ferte, date'. The prefix form do- with d shows that the Britannic branch once shared in them (Thurneysen Revue Celt. VI 311).

The fact that, in the time of the prim. Keltic unitary period, when the initial syllables received the word-accent, combinations like O.Ir. do-mēlim did not take the accent on the pre-position, proves that the latter was not yet fused with the verbal form into an indissoluble unity. The n of con- etc. points also to this as will be seen below.

Thus far the relationships of verbal accentuation allow themselves to be without difficulty connected with those which we must presuppose for the Indg. primitive period. Now Irish still shows a rule of accentuation which also seems to date from prim. Keltic, viz. the same accentuation as in the imperative 1. after the negative particles nē nī 'non' (mani 'si non', conti 'ut non' etc.), nē nūd nāch 'non'; 2. after the relative (snak(n), if it was suffixed to a preposition, including the particle in- in which' and the conjunctions ar-an- 'ut', di-an- 'cum', co-n- 'dence ut'; 3. after the interrogative particle ind- im- in-. E. g. nē épur 'non dico' beside at-briur. That this accentuation goes back to prim. Keltic, is shown by the double form con- and cóm- of the preposition, corresponding to Lat. cum. Thus con-écat 'possunt', but nē cúmacat 'non possunt'. The transition from in to n cannot be comprehended from the difference of accentuation by itself, but only from the prim. Keltic sound-law according to which final -m became -n (§§ 211, 657, 8); con thus became con at a time when as yet no closer connexion with immediately succeeding verbal forms had been introduced (cp.
The retention of the $n$ in $nī caunecat$ will then have been due to the same cause as in the imperative, that is, the firm connexion of the preposition with the verb and the accentuation of $cōn$- in $nī caunecat$ were prim. Keltic. It has not yet been satisfactorily explained how this method of accentuation in the case of preceding negative particles etc., was arrived at in prim. Keltic.

Enelisis, inherited from the prim. Indg. period, probably appears in O.Ir. cā-ch O.Cymr. pau-p ‘everybody’, O.Ir. ne-ch Cymr. ne-p ‘quisquam, ullus’ (scarcely to be connected directly with Gr. -τε, since we should expect *cāch *neich).

§ 685. The accentuation; characterised in the last paragraph as primitive Keltic, appears to have experienced no material alteration in the special Irish development down to the Old Irish period.

How the strongly expiratory word-accent occasioned in many cases sound-weakening and loss of syllables, has been remarked in §§ 66. 82. 90. 98. 106. 613. 623 rem. 1. 634. 657. Consequently the Indg. vowels retained their qualitative and quantitative differences with comparative purity only in syllables under the principal accent.

We have seen in § 634 that in a certain prehistoric period of Irish the syllable immediately following the accented syllable in trisyllabic and polysyllabic words had the weakest accent, cp. e.g. dat. caírt-īb beside gen. sg. caírat, to nom. caíra ‘friend’.

The prim. Keltic accentuation suffered greater changes in Britannic. Cymric accents almost all polysyllables on the penult. Matters are more complicated in Bas Breton.

Germanic.

§ 686. Verner’s law, treated in §§ 530. 581, shows that the prim. Indg. free accentuation had still long existed in the special primitive Germanic period. On the chronology of this sound-law cp. also § 541. The word-accent had at that
time, as has been remarked in § 670 p. 536, an expiratory character.

§ 687. During the prim. Germanic period a new expiratory accentuation came into being, which in all material points was similar to that of Keltic.

The first syllable became the bearer of the accent in nominal forms, both simple and compound. Goth. *fāder OHG. fātser etc. 'father' from prim. Germ. *fāder-, older *fāder-. Skr. pita-. Goth. hāidu-s OHG. hēit 'manner'; Skr. kēth-ḥ-. Goth. ānda-vanuri OHG. ānt-wurti 'answer'.


On the other hand in the compound verb\(^1\) the first syllable of the second member received the accent. Goth. fra-liusa OHG. far-liusu 'I lose'. OHG. fīr-tūm 'I extirpate, destroy, excrete', cp. frā-tāt 'scelus'; ir-lōbōm 'I permit' cp. ēr-lōb 'permission'; ob-lōznu 'I forgive', cp. ēb-lāz 'pardon'; zīr-gāngu 'deficio', cp. zīr-gang 'defectio', also Ags. zēa-tuw pl. 'equipment' = Goth. *gā-tērōs. The different forms, which the prefix assumes in Goth. and-beita 'I chide' and-hafja 'I answer' and anda-beit 'blame' anda-hafts 'answer' show that this accentuation of compounded verbs was due to the fact that the preposition did not form a word-unity with the following verb. The pre-Germanic form of the prefix was *antō (cp. Gr. ἀντί), and if the prim. Germ. *anda in and-beita etc. had lost its final -a, this loss can only be explained by the law of finals (§ 660, 1), thus anda must at that time have been still an independent word. Cp. O.Ir. con- in con-bect, § 684 p. 551.

Rem. The tmesis in Gothic, as ga-u-lōubjats 'do ye two believe?'; ga-u-rōs-zēli 'if he saw aught'; bi-u-gidī 'shall he find?'; dis-uh-pam-sat 'and he then seized' (see Bernhardt on I. Corinth. XV. 15) seems, at first sight, yet more distinctly to point to this slack connexion of the pre-

\(^1\) Denominatives like OHG. antwurten 'to answer' from antwurti, urchmunden 'to testify' from urchundi 'testimony' do not of course belong to this class.
position with the verb in the prim. Germ. period. But Kluge (Kuhn's Ztschr. XXVI 80) assumes with good reason that the prefix was not proclitic here, but had the full accent and that the verbal form was enclitic, just as in Skr. ēṣā ca tiṣṭhāti etc. If this is right, this thesis does not prove anything for cases like fra-husw.

In Germanic, so far as we can see, the imperative of compounds does not, as in Keltic § 684, form an exception. For Gothic cp. undbindiph John XI, 44 'loose ye', undhusfīp Mark XI, 30 'answer ye' not anda-. It had thus no doubt the accentuation of the subordinate sentence on the analogy of other verbal forms. An extension of this accentuation beyond its original sphere may be observed in the noun formations which attach themselves closely to the verb. That the passive participles had originally, in agreement with Skr. prā-bhṛta-s etc., the nominal accentuation, is still shown by e. g. Goth. anda-fānts 'discreet' beside und-pāgkjan 'to deliberate', OHG. ūntar-tām Mod.HG. ūnter-than 'subject', durh-noht 'perfect' (to durh-māgan), missi-langun 'miscarried' (to missi-lingan), Ags. frā-cod 'despised' = Goth. fra-kun Ips. But beside these already Gothic and-hulīps and-bitans, OHG. fur-hölan etc. Cp. Kluge loc. cit., p. 68 ff.

Enclitics descended from pre-Germanic. -h in Goth. mī-k 'and no' = Lat. no-que, hvō-h fem. 'each', cp. Lat. quae-que. -k in Goth. mī-k (OHG. mi-i) 'no', cp. Gr. ἕλπις.

The new accentuation of Germanic had probably occasioned to some degree vowel absorption in the prim. unitary period. See § 635.

The question is, did the new accentuation arise through the development of an expiratory accent on the first syllable of the word, which struggled for a long time with the old word-accent and finally overpowered it, or is Verner right in saying (Kuhn's Ztschr. XXIII 129): "The transition to the fixed accentuation (root accentuation) is an analogical formation, completely carried out. The cases, in which the accent rested upon the root-syllable, were already under the old principle of accentuation in the majority, and this mode of accentuation then spread itself in the Germanic primitive language, since the word-forms,
which had the accent on the ending, gradually threw it back on to the root syllable. That in certain cases the analogy of forms, accent on the first syllable from of old, had influence, is not to be denied, but I do not think that we can rid ourselves of the assumption of a free development of the recessive accent. I do not see e. g. how the effect of analogy helps us in the case of the numerous polysyllabic adverbs and prepositions whose initial syllable, as has been established by Verner's law, had originally no accent.

§ 688. In Gothic there are a number of sound-weakenings which show that the new Germanic accentuation remained for a certain time in this dialect on the whole unchanged, e. g. sätja 'I set' from *sätijā, sânjus 'sons' from *sānijus (cp. with this qiūs from *qiwa-z, § 179 p. 156), batris 'bearest' from *bhrizī. See § 635. 660.

It cannot be decided with certainty whether this system of accentuation existed still at the period of our monuments. The alterations in Gothic, which appear in the period after Ulphilas, do not prevent us from assuming that the traditional accentuation had remained, and so we may believe that it did remain.

§ 689. In West Germanic, especially in High German, the new accentuation has persisted in the main down to the present day.

The West Germanic law of syncope (§ 635) shows us the position of the word accent, and at the same time the relation of stress, which the accents of syllables without the principal accent, had to one another. If e. g. in OHG. hōrta (Goth. háusida) the i was dropped, but remained in nörīta (Goth. násīda), the second syllable must have had a weaker accent in the first case than in the second; and hōrta shows further that the last syllable in the older form *hōrīta had a secondary accent. According to Paul (Paul-Braune's Beitr. VI 136 ff.) the secondary accent in polysyllables did not merely follow mechanical routine, but was guided also by logical principles. The logical character of the secondary accents is shown by their varying with the flexion in the same word. Thus
e. g. the ending of the nom. and acc. sg. and probably also of the plural had a weaker grade of accent than the endings of the other cases, so that in the nom. and acc. of trisyllabic nouns the penult had stronger accent-stress than the last, while in the other cases the reverse held true. Paul conjectures that these functional differences of accent were already in existence in the primitive Germanic period.

In a number of cases vowel loss is to be explained from frequent enclitic or proclitic use of the word. Thus OHG. mun from ino innan, see p. 484; mih 'me' daž 'that' with final vowel loss in contrast with such forms as chuni, see p. 517. Cp. Paul loc. cit. pp. 125. 132. 144 and elsewhere.

Baltic-Slavonic.

§ 690. Lithuanian and a part of the Slavonic languages show freedom of accentuation, and there can be no doubt that this method of accentuation extends back to prim. Baltic and prim. Slavonic. But the two branches go in details only partially hand in hand, and neither of the two systems quite agrees with the system which must be presupposed for the prim. Indg. period.

There are here two possibilities — either new principles of accentuation came into being as in other Indg. languages, which caused a new word-accent but which are still concealed from us, or the innovations in accent were the affects of analogy only, the old inherited word-accent having been generalised differently in different categories of forms. The latter, so far as we can see at present, is the more probable hypothesis and two examples may be given to show how in this way deviations from the prim. Indg. word-accent could have arisen. The accent falls on the ending in the 1. and 2. sg. in Lithuanian, and in Slavonic (i. e. in the dialects which retained the original Slavonic accentuation) in all the persons of the pres. indic. corresponding to the Skr. r̥hūmi (Indg. *yēghō); Lith. vešu veši, Russ. vezū vezēš vezēt etc., Bulg. vezū vezēš vezē etc.
§ 690. Accentuation in Balt.-Slavonic.

Servian vēzēm vēzēš vēzē etc. (for older *vezēm etc., see § 692). We may assume that in the period of the Balt.-Slav. prim. community, the accent was already at any rate on the 1. sg.¹) pushed from the root-syllable towards the end of the word (cp. Leskien Archiv. f. slav. Phil. V 509 f.). If we consider now that the final accentuation in present forms composing the Skr. 6. class (tulāmi) comes from prim. Indg., that this accentuation therefore in such forms as Lith. sukū Russ. skū 'I turn', may be treated as original, it is not hard to conjecture that in prim. Baltic-Slavonic *vēzē was modified into *vēzē after the analogy of *sukō. In Lith. and Slav. the masculine noun stems in o never have the accent on the final syllable in the nōn. and acc. sg. If then e. g. Lith. dūma-s dūmu and Russ. dym (O.Bulg. dymů) correspond to Skr. dhūmā-s dhūmā-m and Greek θήμο-ς θάμω-ρ, this may depend on a generalisation of the accentuation of such nouns as Lith. vilku-s vilku Russ. vōlk (Skr. vēka-s, vēka-m). Whether the whole of the deviation in Baltic-Slav. accent from the prim. Indg., may be thus explained, rests with more accurate investigation to show.

It seems to me to be highly probable that the Balt.-Slav. innovations, as regards the position of the word-accent, were brought about in this latter manner, owing to the fact that the twofold quality of the Lith. syllabic accent is historically connected with that of Greek (§ 671), although this duality of the syllabic accentuation has directly nothing to do with the contrast between syllables with and syllables without the high tone (see p. 530).

It may be further mentioned that Baltic-Slavonic, like all other branches of languages, possesses old inherited enclitics. Lith. gē-gi 'not surely' kiš-gi 'who surely? who then?', O.Bulg.

¹) The prim. Slav. and O.Bulg. form vēz was not in any case, it is true, the Indg. form *vēzē, but a conjunctive form *vēzēm = Lat. séhám (see § 219), which suppressed the indic. form. But this conj. form too had the accent originally on the root syllable and we may assume that the accentuation of the indic. and conj. forms was identical at that time of the prim. Slavonic period when the two forms were used indifferently i. e. shortly before the suppression of the indic. form.
ne-go ne-ze, the strengthen comparative particle (cp. Skr. ná 'not' and 'even as'): Skr. gha in ná gha etc. O.Bulg. mi 'mihi' enclitic beside mine, like Skr. me beside māhyam. Indefinite pronouns Lith. ku-s O.Bulg. stem ko- (nom. kū-to), e. g. Lith. nē-ka-s O.Bulg. ni-kitto (dat. ni-komu) 'nobody'.

§ 691. Baltic.

The accentuation of Prussian is not known.

Lettic always acccents the first syllable, and it is clear that this accentuation is younger than the Lith. free accentuation. The syllabic accent is of a twofold character. We have to distinguish between broken ('gestossen') and lengthened ('ge-dehnt') tone; for further information see Bielenstein's Die lett. Sprache I 32 ff.

Lithuanian accentuation seems on the whole to be the unchanged continuation of that of prim. Baltic.

It is essentially expiratory throughout, as it seems, the whole sphere of the language. The musical accent does not however play a subordinate part.

In certain Lithuanian districts the word-accent is thrown back on to the initial syllable. This phenomenon is apparently most widely spread in the Memel dialect, and in this case it might perhaps be due to the influence of the Lettic dialect (des kurischen Dialektes). In the other dialects, e. g. that of Godlewa (see Brugmann Lit. Volksli. u. März. p. 295), such influence cannot be assumed, except in case that the eastern, little known dialects similarly share in the change, and thus a geographical communication with the area of the Lettic language be established.

Frequent elaborate attempts have been made to explain the differences of syllabic accentuation, which is either broken ('gestossen') or slurred ('geschliffen' better 'schleifend'). But the descriptions of these differences differ materially from one another, so that it is not easy to form a correct picture from them. The chief points are as follow:

1. Short syllables have always the same single-pointed accent, e. g. bi-tas ('house'). Syllables, in which a tautosyllabic liquid or nasal follows the short vowel, form an exception to this
rule; these sound-combinations stand on the same level as the
diphthongs (ai etc.).

2. In long syllables, that is, in such as contain a long
vowel or short vowel + i, y, nasal, liquid, it makes a difference
whether the moment of the greatest intensity of expiration
falls on the first or last mora. In the former case we have
the broken ('gestossen') accent, e. g. buili ('to be'), luni\kin ('I
abide'), var\na ('crow'), in the latter the slurred ('geschliffen'),
e. g. kuldos ('thin, lean'), teulnas ('an overflowing'), wulkas
('field') vilkas ('wolf'). No fluctuation seems to take place with
broken accentuation, the voice-stress slackens steadily. On the
other hand a secondary point seems to exist with slurred ac-
centuation. Kurschat says of the latter accent, that a leap
is made to a higher step, "so that such a vowel appears, as it
were, compounded of two vowels of which the first is unaccented,
the second accented", and that also a "falling" takes place between
the first and the second step. The secondary point—which in
any case is insignificant—is thus situated before the chief
point. Siévers Phonet. 3 203. also indicates this accent as double
pointed. Musically speaking the broken tone is a simple falling,
the slurred either a simple rising (/) or a combination of a rising
and a level tone (\).
But if the vowel is short and the tautosyllabic liquid medium long, the second mora of it, that is, the third of the syllable, has the accent (०००), e. g. variōlus ('name'), as if variōlīus. In the latter case a shifting of quantity took place in certain dialects, the vowel becoming medium long and the liquid short, variōlus became ranīōlus.

Long vowels (०००) can be accented on the first (०००) and on the last mora (०००), e. g. bālti - bāntī, suōlus 'justice' = suroūlus.

If we apply these laws to the law of vowel shortening in final syllables, treated in § 664, 3 (p. 523), we have the following results: As *gerd became gerā, the final syllable was deprived of two morae, ऒ०० became ऒ, anō had a medium long vowel (०००) and retained it. In the transition of gōrē to gōrē (०००) first became (०००) (०००); but the medium long syllable did not tolerate this accentuation, (०००) necessarily arose, thus gōrē.

We saw in § 664, 2 that ṣaṃna 'old' ṣaṃras 'good' became sēna yērs. The second syllable being abolished as such and in the former case the r, in the latter the r, adding a mora to the preceding medium long vowel (०००), the result was first of all (०००). This accent position was not tolerated, there arose (०००), thus sēna, yērs. Has not also the dat. pl. vilkāms from vilkāms been brought about in the same manner (cp. § 664, 2)?

If a short vowel was dropped in the last syllable which had the word-tone (§ 664, 1. 2), the syllable immediately preceding it received the word-accent in the shape of a slurred tone. This modification cannot have taken place in absolute finality. Loc. sg. tōjē passed into tōj, instr. pl. tomīs into tōms, instr. sg. akiṁē into akrī, instr. pl. akiṁōs into akiṁus, pirmā into pirmī. According to this the gen. sg. akmeṁus dukteřs had arisen from *akmen-ės *dukte-ės.

It may be mentioned lastly that in nominal compounds, if the first member has the word-accent of the whole compound, the second member exhibits its own word-tone as secondary accent, e. g. vaik-palaikis 'a worthless young fellow' lăs-kekšelnis 'bastard child', and that likewise verbal forms, if they had the prefix pēr- 'over, through', retain their own word-accent as secondary accent, e. g. pēr-lekti 'to fly over' pēr-vazašti 'to ride through'.

§ 692. Slavonic. Since the accentuation of Old Bulgarian is not recorded and the phonetic changes of the prim. Slav. and O.Bulg. periods offer insufficient help for the determination of the accentuation (cp. § 281 rem. 3 extr.), we are obliged to
have recourse in the first instance to the Modern Slavonic dialects.

Of these Polish, Sorabian and Czech have given up the free word-accent. They accent all words in the same position; Polish has the accent on the penult, Sorabian and Czech on the first syllable.

Among the West Slav. languages Polabian preserved the movable accent, the material is here however of a limited nature. The languages of special importance are the South Slavonic languages (Servian-Croatian-Slovenian and Bulgarian) and the Russian dialects. These represent on the whole the prim. Slavonic accentuation. But it must be noticed that in the greatest part of the Servian-Croatian dialects, in the so-called Štokavian dialect (i. e. in the dialect, in which the neut. interrogative pronoun is što, in contrast to Čakavian, where this pronoun is ča), a shifting of the principal accent has taken place in such a manner that it was thrown back from its original position near a syllable from the beginning of the word, so that it only preserved its old position when it originally rested on the first syllable.

Thus e. g. on account of Russ. nesi Bulg. nesi Sor.-Štokav. nesẽm (from *nesẽm) Rezian. nesε is we can deduce a final syllabic accentuation for O.Bulg. nesq and further for prim. Slav. *nesq.

Rem. Many excellent treatises have been made on the accentuation of single Slav. languages and dialects. But a treatment on the whole Slavonic accentuation in general is still wanting, and since my knowledge of the modern Slavonic dialects is insufficient to undertake such a treatment and to be able to draw conclusions for the prim. Slav. period, I leave off with the above hints.
ADDITIONS AND CORRECTIONS.

P. 10 l. 6 read Manx for Many.

p. 15 l. 6 read in for im.

p. 31 l. 8 read Germanic for Teutonic.

p. 78 last line read drög for drög.

p. 94 l. 18 and p. 406 l. 19 (cp. also p. 95 l. 22, p. 274 § 354, l. 8, p. 350 l. 7 from the bottom) occurs the root *syhāyī-, *syhāyīd- 'seindere'. Since Av. *seindūgeiti, which has been assigned to this root, belongs rather to *skendū- 'blow' from *skandī- (on the i in the root-syllable *seind- cp. § 94 p. 89), while Av. *sid- in the 8. sing. opt. perf. *hi-sid-yād 'might have torn, destroyed' corresponds to Skr. *sid- (see Hübschmann Ztschr. d. deutsch. morgenl. Gesellsch. XXXVIII 424 f., Burg-Kuhn's Ztschr. XXIX 358 ff.), the root must probably be put down with a palatal sound as *sēhaī-, *sēhaīd- (cf. § 400) and Lith. sēknūd skaištūs be explained according to § 467 (cp. also § 414 rem.).

p. 223 § 280 l. 2 read bordering for boarding.

p. 224 last line but 4 read Low Sorab. for Low Sorab.

p. 288 l. 3 read *siekra- for *siekra-.

p. 325 § 437 l. 1 read Ir. Brit. b initially and in the combination wūg; and add O.Ir. swō 'butter' which by mistake has been put as an example to § 433), at the end of a) in § 437.

p. 326 ll. 10—11 omit On what . . . . . . I cannot say.

ABBREVIATIONS.

Ags. = Anglo-Saxon.

epf. = common primitive form.

fr. = from.

MHG. = Middle High German.

OHG. = Old High German.

OS. = Old Saxon.

prim. f. = primitive form.
インド・イーステリア・カナダ
コンベンション - フジ・ダウン
物理学 - コンパス

哲学 - コミュニティ