COMPARATIVE GRAMMAR.
A COMPENDIUM
OF THE
COMPARATIVE GRAMMAR
OF THE
INDO-EUROPEAN, SANSKRIT, GREEK AND LATIN LANGUAGES.

BY
AUGUST SCHLEICHER.

TRANSLATED FROM THE THIRD GERMAN EDITION
BY
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PART I.

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TRANSLATOR'S PREFACE.

This book is a translation of those parts of Schleicher's 'Compendium der vergleichenden Grammatik der Indo-germanischen sprachen' which treat directly of the Indo-European original language, Sanskrit, Greek, and Latin: it was undertaken for the use of students of Greek and Latin Philology, on the suggestion of Mr. Peile, M.A., of Christ's College, Cambridge, to whom I am indebted for several hints and corrections. My thanks are due to Herr Gustav Voigt also, for help kindly given.

I shall be glad if readers will point out any mistakes in the translation.

Herbert Bendall.

Liverpool College,
Oct. 1874.
This work is meant to be an elementary handbook for lectures and self-instruction. The want of such a work has been hitherto widely felt. The state of Indo-European Philology is now such that it has become possible to write a compendium of the comparative grammar of the Indo-European languages. After we have discarded that part which is still doubtful, there remains a large store of knowledge, embracing the different sides which language offers to scientific treatment: this knowledge will, in my opinion, stand unshaken for all time. The chief object of a compendium of the Indo-European languages is to collect and arrange in a short and appropriate form, and yet in an intelligible manner, these results of Indo-European Philology. Where, however, it is impossible to avoid mentioning what is obscure and doubtful, it will be expressly characterized as such.

It is no slight task to compose a first handbook of this kind treating of the formation of the Indo-European languages: whether the writer of the present work has succeeded in temporarily satisfying the want, others must decide; but he begs them to take it into consideration that his book is a first essay in the direction pointed out.
The following account of the origin of my book may to some extent at least show that I have honestly encountered the difficulties of the task.

I have been Academical Professor for fifteen years, and have lectured on Indo-European grammar from the outset; partly sketching out grammars of particular Indo-European languages, from a philological point of view, partly writing a grammar of the languages which collectively form a speech-stem, i.e. a so-called Comparative Grammar. To infer from the number of hearers whom even these latter lectures attracted, and from the perseverance and attention with which I was listened to, they must have treated the subject in a manner intelligible to beginners. I have remodelled my notes more than once. It was a real pleasure to work for my hearers and pupils here: I am indebted to their encouragement and participation for the heartiness with which I undertook the complete re-arrangement of my treatise on Comparative Grammar of Indo-European languages, which I had delivered in two sets of half-yearly lectures.

In these lectures on Indo-European grammar I felt the want of a printed elementary treatise, which should offer in the most appropriate way the necessary examples and comparative tables. Dictating, and continually writing on the black board, is wearisome both to hearers and to the lecturer. Hence the thought first occurred to me of having my paper multiplied in MS. for the use of my pupils. And from this arose by degrees what I have now completed, the composition
of a compendium especially for beginners. This book is therefore my notes repeatedly revised, and this is the point of view from which I desire it to be used and criticized.

It is to be understood that in my lectures I did not confine myself to the matter in the notes; what is printed here is merely that part which I used to dictate. Enlargements on particular points and excursus by the way I have never denied myself. Those who make use of this compendium will perhaps take this into consideration. The attempt to reduce the compass of the book to the narrowest limits possible made it a necessity to banish from it all discussions as regards different views. Generally I have attempted, whenever I could, to arrange the facts in such a way that they carried their proofs with them: moreover, the materials are so copious that even in the lectures it is difficult to find time for a controversial statement of details.

Circumstances unfortunately compelled me to finish the last preparation of the MS. for a printed compendium in a short time: but I hope that I have nevertheless written a useful book.

The design and execution of my work must speak for themselves; to discuss these points here would occupy too much space, and lengthen the compass of the preface to excess.

August Schleicher.

Jena, September, 1861.
ABBREVIATIONS.

A.S. Anglo-Saxon
acc. to according to
bef. before
bes. beside
betw. between
caus. causative
comb. combination
dial. dialect
diall. dialects
ex. example
exx. examples
f.f. fundamental form
fm. form
fmn. formation
inserr. inscriptions
M.H.G. Middle High German
mom. momentary
N.H.G. New High German
O.Bulg. Old Bulgarian
O.H.G. Old High German
origl. original Indo-European

Asterisk * indicates that the form does not occur.

The other abbreviations explain themselves.
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Loss of \( g, c, x, \) before \( n, m; \) of \( x \) before \( l; \) of \( t, d \) before \( c; \) of \( s \) before sonants 

Loss of \( s \) before \( m; \) of \( s \) before \( l, d, \) and \( b \) 

Loss of \( r \) before \( d; \) of \( r \) before \( s \) 

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\( br \) for \( sbr, rbr; nt \) for \( net \) 

b. Complete assimilation of a following to a preceding sound 

\( ss \) for \( st; \) \( rr, ll, \) for \( rt, lt; \) \( rr \) for \( re, \) etc.; \( ll, \) etc. perhaps for \( ly; \) \( ns \) for \( net; \) \( ss, s, \) for \( st, \) from \( dt, \) \( tt \) .

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INTRODUCTION.

I. Grammar forms one part of the science of language: this science is itself a part of the natural history of Man. Its method is in substance that of natural science generally; it consists in accurate investigation of our object and in conclusions founded upon that investigation. One of the chief problems of the science of language is the inquiry into, and description of the classes of languages or speech-stems, that is, of the languages which are derived from one and the same original tongue, and the arrangement of these classes according to a natural system. In proportion to the remainder but few speech-stems have hitherto been accurately investigated, so that the solution of this chief problem of the science must be looked for only in the future.

By grammar we mean the scientific comprehension and explanation of the sound, the form, the function of words and their parts, and the construction of sentences. Grammar therefore treats of the knowledge of sounds, or Phonology; of forms, or Morphology; of functions, or the science of meaning and relation, and syntax. The subject of grammar may be language in general, or one particular language or group of languages; grammar may be universal or special: it will in most cases be concerned in explaining the language as a product of growth, and will thus have to investigate and lay down the development of the language according to its laws. This is its exclusive province, and therefore its subject is the laying-down of the 'life of the language,' generally called historical grammar, or history of language, but more correctly 'science of the life of
a language' (of sound, form, function, and sentence), and this again may be likewise as well general as more or less special.

The grammar of the Indo-European languages is therefore a special grammar: because it treats of these languages as products of growth, and exhibits their earlier and earliest gradations, and would therefore be more accurately called a special historical grammar of Indo-European languages.

Note 1.—By comparative grammar is meant not that grammar which is merely descriptive, but that which throws light on speech-forms as far as possible, because as a rule it is not confined to the treatment of any one particular language.

Note 2.—The following work embraces only two parts, viz. scientific treatment of sounds and of forms. Indo-European function and sentence-formation we are not at present in a position to handle in the same way as in the case of the more external and intelligible branches—sounds and forms.

II. To assume one original universal language is impossible; there are rather many original languages: this is a certain result obtained by the comparative treatment of the languages of the world which have lived till now. Since languages are continually dying out, whilst no new ones practically arise, there must have been originally many more languages than at present. The number of original languages was therefore certainly far larger than has been supposed from the still-existing languages. The easiest preliminary distribution of languages which we can make is suggested by their morphological constitution.

There are—

1. Languages which are simply composed of invariable disjointed meaning-sounds, Monosyllabic, e.g. Chinese, Annamese, Siamese, Burmese. Such sounds we denote by \( R \) (radix). The Indo-European language would be in this stage of development when the word \( \text{ai-mi} \) (I go, \( \text{ei} \mu \)) was sounded not so, but as \( i \) or \( i \text{ma} \) (formula \( R \), or \( R+r \)).

2. Languages which can link to these invariable sounds sounds of relation, either before, or after, or in the middle, or
in more than one place at once [denoted here as s. (suffix), p. (prefix), i. (infix)]. These are Confixative languages, e.g. Finnish, Tatar, Dekhan, Basque, the languages of the aborigines of the New World, of South Africa (Bantu), and most languages in fact. In this step of development the word ai-mi would be i-ma or i-mi.

3. Languages which for the purpose of expressing relation can regularly vary their roots as well as their confixes (which have sprung from independent original roots), and can at the same time preserve intact the means of compounding. These are Inflexive languages. Such a root as is regularly varied for the end of expressing relation is here denoted by $R^{s}$ ($R^{1}$, $R^{2}$, etc.), a similar suffix by $s^{*}$.

Hitherto we have become acquainted with only two speech-stems of this class, the Semitic and the Indo-European. The latter has for all words only one formula, viz. $R^{s} s^{*}$ ($s^{*}$ meaning one or more than one regularly variable suffix), and consequently a regularly variable root with a regularly variable expression of relation at the end of the suffix, e.g. ai-mi, eiµu, √i.

The Indo-European is therefore a suffix-language, together with the neighbouring languages of the Finnish stem, including Tataric, (Turkish) Mongolian, Tungusian, Samoiedish, as also with the Dravidian (Dekhan)—all included in the formula Rs.

Note 1.—The Semitic, which is not akin to the Indo-European, has more word-forms, namely $R^{s}$ and $pR^{s}$, forms quite strange to Indo-European, which has only one. Besides, its vowel-system is perfectly distinct from the Indo-European, not to mention other marked differences. Cf. Aug. Schleicher, 'Semitisch und Indogermanisch' in Beitr. ii. 236–244. An attempt to deduce the fundamental language of the Semitic speech-stem has been made by Justus Olshausen in his lehrbuche der hebräischen sprache, Brunswick, 1862.

Note 2.—The augment in Indo-European is no relation-affix, no prefix, but an adherent, though originally independent word, which may moreover be omitted.
III. The life of a language (generally called its 'history') falls under two heads—

1. Development in prehistoric times. As man has developed, so also has his language, i.e. the expression of his thoughts by sounds: even the simplest language is the product of a gradual growth: all higher forms of language have come out of simpler ones, the Confixative out of the Monosyllabic, the Inflexive out of the Confixative.

2. Decline in the historic period. Language declines both in sound and in form, and in its decay changes of meaning take place alike in function and construction of sentences. The transition from the first to the second period is one of slower progress. To investigate the laws by which languages change during their life is a most important problem in the science of language, for unless we are acquainted with them we cannot possibly understand the languages in question, especially those which are still living.

Through different developments, at different points in the province of one and the same language, the self-same tongue branches out into the ramifications of the second period (whose beginning however is likewise earlier than the origin of historic tradition), and diverges into several languages (dialects): this process of differentiation may repeat itself more than once.

All these changes took place gradually and at long intervals in the life of the language, since generally all changes in language unfold themselves gradually.

The languages which spring immediately from an original language we call fundamental; almost every fundamental language has split up into languages; all these last-named languages may further branch into dialects; and these dialects into sub-dialects.

All the languages which are derived from one original-language form together a class of speech or speech-stem;
these again are sub-divided into families or branches of speech.

IV. The name of Indo-European has been given to a distinct set of languages belonging to the Asiatico-European division of the earth, and of a constitution so consistent internally, and so different from all other languages, that it is clearly and undoubtedly derived from one common original language.

Within this Indo-European class of speech however certain languages geographically allied point themselves out as more closely related to one another: thus the Indo-European speech-stem falls into three groups or divisions.

These are:

1. The Asiatic or Aryan division, comprising the Indian, Iranian (or more correctly Eranian), families of speech, very closely allied to one another. The oldest representative and fundamental-language of the Indo-European family, and generally the oldest known Indo-European language, is the Old-Indian, the language of the oldest portion of the Védas; later on, after it had become fixed in a more simplified form, and subject to certain rules, as a correct written language, in opposition to the peoples' dialects, called Sanskrit. We are not acquainted with Eranian in its original form: the oldest known languages of this stem are the Old-Baktrian or Zend (the Eastern), and the Old-Persian, the language of the Achaimenid cuneiform inscriptions (the western). To this family besides is related the Armenian, which we know only from a later date, and which must have branched off even in early times from the Eranian fundamental-language.

2. The south-west European division, composed of the Greek, next to which we must perhaps place the Albanian, preserved to us only in a later form; Italian (the oldest known forms of this language are the Latin,—especially important for us is the Old-Latin, as it was before the in-
troduction of the correct literary language formed under Greek influence,—the Umbrian and the Oscan), Keltic, of which family the best known, though already highly decomposed, language is the Old-Irish, Erse dating from 700 A.D. Italian and Keltic have more in common with one another than with the Greek.

3. The North-European division, composed of the Sclavonic family with its closely-allied Lithuanian,—the most important language for us of this group,—and the German, widely separated from both. The oldest forms of this division are the Old-Bulgarian (Old Church-Slavonic in MSS. dating from 1100 A.D.): the Lithuanian (and of course the High-Lithuanian, South-Lithuanian, Prussian Lithuanian), first known to us 300 years ago, but clearly of far greater antiquity, and the Gothic from the fourth century. Beside the Gothic, however, are the oldest representatives of German and Norse, Old-High-German, and Old-Norse, which we may bring forward when they present earlier forms than Gothic.

The greatest number of archaic particulars in point of sounds and construction of language is found in the Asiatic division, and within it, in the Old-Indian; next in point of archaicisms (i.e. preservation of similarity to the original language, by having fewer strongly-developed and peculiar forms) comes the S.W.-division, in which Greek is found to be most faithful; and lastly the N.-European group, which, if regarded as a whole, may be shown to have the most characteristic development, and to be the least faithful to the original language.

By combining these facts with the above-named relationships of the Indo-European languages, and drawing inferences as to the process of separation of the Indo-European body of language in ancient times, we get the following result: The Indo-European original language differentiates first, through unequal development in different parts where it prevailed, into
two fundamental languages, viz. the Sclavo-Teutonic, which afterwards divided itself into Teutonic and Sclavo-Lithuanian, and the Aryo-Graeco-Italo-Keltic, the remaining portion of the Indo-European language, which divided itself into Graeco-Italo-Keltic and Aryan; and the Graeco-Italo-Keltic soon split up into Greek and Italo-Keltic, while the first, the Aryan, remained undivided for some time. Later still the Sclavo-Lithuanian, the Aryan (Indo-Eranian) and Italo-Keltic, further divided themselves. It may be that at most or at all of the divisions there arose more languages than we now know of, since probably many Indo-European languages have died out through lapse of time. The further eastward an Indo-European people lives, the more archaicisms are found in its language: the further westward they have gone, the fewer archaicisms, and the more numerous new-formations are found in the language. From these and other indications we infer that the Sclavo-Teutonic race first began its wanderings westwards; next followed the Graeco-Italo-Keltic; and of the Aryans who remained behind, the Indians journeyed south-eastward, the Eranians south-westward. The home of the Indo-European original race must be sought in the highlands of Central Asia.

It is only of the Indians, who were the last to leave the parent stem, that it is quite certain that they expelled an aboriginal race from their later dwelling-place, a race of whose language much passed into their own: a similar process is highly probable in the case of many other Indo-European peoples.

The most ancient divisions of the Indo-European, up to the origin of the fundamental languages belonging to the families of speech formed from the speech-stem, may be seen in the following table (see next page). The length of the lines shows the duration of the periods, their distances from one another, the degrees of relationship.
Note.—In the present work an attempt is made to set forth the inferred Indo-European original language side by side with its really existent derived languages. Besides the advantages offered by such a plan, in setting immediately before the eyes of the student the final results of the investigation in a more concrete form, and thereby rendering easier his insight into the nature of particular Indo-European languages, there is, I think, another of no less importance gained by it, namely that it shows the baselessness of the assumption that the non-Indian Indo-European languages were derived from Old-Indian (Sanskrit), an assumption which has not yet entirely disappeared. This view has found supporters up to the present date, especially as regards Old-Baktrian (Zend). The term ‘Sanskritist,’ not seldom applied to Indo-European philologers (meaning that we concede to Sanskrit a position which it does not deserve, by deriving other languages from Sanskrit, or explaining them by it, instead of studying them fundamentally), is likewise shown to be quite inapplicable by the plan employed in the Compendium. The disadvantage of having in certain cases Indo-European original forms inferred which are more or less doubtful, does not weigh at all against the advantages which, according to our view, are attained by the arrangement of the subject used hereafter.

A form traced back to the sound-grade of the Indo-European original language, we call a fundamental-form [f.f.] (e.g. Lat. generis, f.f. ganasas; Gk. γένος, f.f. ganasas). Hence it is only when forms of different sound-grades are brought to one and the same sound-grade, that we can compare them with one another. When we bring forward these fundamental-forms, we do not assert that they really were once in existence.
GRAMMAR.

PHONOLOGY.

A. VOWELS.

INDO-EUROPEAN ORIGINAL-LANGUAGE. § 1.

Since in the citation of examples we make use not only of vowels but also of consonants, before we treat of the vowels we proceed to set forth a table of the speech-sounds collectively, arranged according to the physiology of sound, followed by the necessary remarks upon pronunciation, etc.

Table of the Sounds of the Indo-European Original Language,
i.e. those sounds from which arose the sounds of the different Indo-European languages; according to the laws of sound-change which come into play during the life of a language, and to which accordingly, they may be traced as to a common source.

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<td>SPIRANTS.</td>
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<td>mute sonant</td>
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<td>s</td>
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<td>a</td>
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<td>i</td>
<td>ai, āi</td>
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<td>au, āu</td>
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<td>u</td>
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</table>
§ 1. **Note 1.**—The three aspirates and the vowel-diphthongs with " (thus "ड", "उ", "आ") probably were wanting at an earlier period in the life of the Indo-European original language; in the most archaic state of the language, while it was yet uninflected, all the vowel-diphthongs were absent.

Thus the Indo-European original language probably possessed six momentary sounds, viz. three mutes, and three sonants; six consonantal prolonged sounds, viz. three spirants, and three so-called liquids, *i.e.* the two nasals $n$, $m$, and $r$ (*l* is a secondary offshoot of $r$), and six vowels. At a later period, shortly before the first separation, there were nine momentary, and nine vowel-sounds. We must not overlook the numerical proportion belonging to the number of sounds.

**Note 2.**—Sonants (or medials) are those consonants in whose production the glottis gives a simultaneous sound: this is the case with all nasals and $r$- and $l$-sounds, whilst the momentary consonants and spirants can be pronounced with or without the accompaniment of the vocal-sound. Sonants thus have something of the vowel in their composition. The aspirates are double sounds; both sounds of which they consist, the preceding momentary consonant and the subsequent aspiration, must be heard in pronunciation.

**Note 3.**—The momentary consonant which precedes the pronunciation of an initial vowel—the so-called spirituslenis, the aleph or hamza of the Semitic,—which is formed by the sudden separation of the vocal chords, should properly be represented here and in the other languages in the tables, and expressed by a special character (perhaps, after Gk. analogy). It is a consonant sound produced in the larynx alone, and must therefore be placed in a laryngeal class of sounds (to which $h$ also belongs, v. post. § 4). Nevertheless I have ventured to abide by the majority of Indo-European spelling-systems, and to leave this sound uncharacterized.

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<td>$a + a = aa$</td>
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<td>2. i-scale $i$</td>
<td>$a + i = ai$</td>
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<tr>
<td>3. u-scale $u$</td>
<td>$a + u = au$</td>
</tr>
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</table>

**Vowels of the Indo-European Language.**

*Note 1.*—The second step occurs in the Asiatic, South-European, and North-European divisions of the Indo-European languages, and therefore in all probability traces its existence
from the original language, though the separate languages often § 2. disagree in its use.

Note 2.—aa and āa were perhaps even in early times both compressed into a. But at the same time the two ās which thus arose are distinguished from one another, e.g. in Greek and Gothic ā of the 1st is distinguished from ā of the 2nd step. Notwithstanding that the earliest Indian and the Zend seem to bear evidence against the contraction of both as, we have placed throughout hereafter an ā for aa and āa in original Indo-European words, chiefly because it would be impossible to distinguish always between a 1st and a 2nd step-form.

a, the commonest vowel, constitutes a class by itself; i and u are by nature very similar, and are fundamentally different from a. i and u have the consonants y and v as collateral relations, and frequently as representatives, whilst a cannot pass into any consonantal sound, and has therefore the vowel-nature in a higher degree than the more consonantal sounds i and u. a is by far the most frequent vowel in the Indo-European language, occurring more often than i and u taken together.

Each vowel can move in its own scale only: this takes place in the root itself for the purpose of expressing relation: the vowels in stem-formative and word-formative suffixes likewise are capable of step-formation, since these suffixes themselves have arisen from roots originally independent. The fundamental-form of the root is always to be cited with the fundamental vowel. Before two consonants the step-formation does not take place; the fundamental vowel a (never i or u) is found in all roots which end in two consonants.

The essence of inflexion depends upon the vowel-system.

Vowel-lengthening must not be conceded to the original language as being of secondary origin.

Note.—Even where the correspondence between different Indo-European languages seems to point to a greater antiquity in the lengthening (e.g. in many nom. sing. as Sk. pitār(s), Gk. πατήρ, Old-Lat. patēr, Goth. fudar, i.e. *fathār; Sk. dūrmanās, Gk. δυσμενής; Sk. úgamā, Gk. τοιμήν, Lith. akmā, Lat. homō,
§ 2. Goth. guma, i.e. *gumā) we believe that we see an unoriginal phenomenon, which suitably to the nature of the case did not become developed in the different Indo-European languages till after their separation from the original language (not unfrequently the conformity is wanting even in this particular, cf. Sk. bhāran, Gr. φέρων, Lat. ferens, Goth. bairands, Sclav. bery). In the original language we can cite here only the pure fundamental forms, i.e. the word preserved perfectly intact as regards all its parts (thus, e.g. patars, dusmanass, akmans).

**Examples.**

1. *a*-scale.

vak-mi (1 sg. pres.), √vak (speak), va-vāk-ma (1 sg. pf.), vāk-s (uox); bhar-āmi, ba-bhār-mi (I bear), bhar-ta-s (borne), √bhar (bear), ba-bhār-ta (3 sg. pf.), bhār-a-s (burden), bhār-aya-ti (3 sg. pres. caus. vb.; φοπεῖ); da-ta-s, da-tā (datus, data), √da (give), da-dā-mi (1 sg. pres.) ; dha-ta-s, dha-tā (past part. pass. n. sg. m. f.), √dha (set), da-dhā-mi (1 sg. pres.), etc.

2. *i*-scale.

i-masi (1 pl. pres.), √i (go), ai-mi (I go); vid-masi (1 pl. pres.), √vid (see, know), vaid-mi (I see), vaid-aya-ti (3 sg. pres. caus. vb.), vi-vāid-ma (pf.); √div (shine), div-am (acc. sg. word-st. div, light, bright sky, Zεύς), daiv-a-s (shining, diuos, deus), etc.

3. *u*-scale.

bhug-na-s (past part. pass.), a-bhug-am (1 sg. aor.), √bhug (bend), bhāg-āmi (1 sg. pres.) bu-bhāg-ma (1 sg. pf.); yug-a-m (iugum), yug-ta-s (iunctus), √yug (iungere), yu-yāug-ma (1 sg. pf.), etc.

**Note.**—The agreement of Greek and Gothic proves the 2nd step in pf.; πέφευγα gives no evidence against the 2nd step, but is a Graecism for *πέφουγα; cf. forms like λέ-λουτ-α, √λυτ, which therefore would lead us to expect ov here, because ε corresponds to ο in; v. sub Greek vowel-system.

§ 3.

**Vowel Sound-laws**

(i.e. influence of vowels and consonants on vowels) were not existent in the original Indo-European language.

A meeting of several vowels occurs but seldom, since hitherto
no consonants have been elided, and prepositions, like separable § 3. adverbs, stand before their verb. Nevertheless, if two vowels do come into contact with one another in consequence of word-formation, hiatus perhaps occurred in the most original state of the language; in early time, however, a may have become fused with following vowels: thus probably i (and u, but examples are wanting) after a becomes combined with it into a diphthong, in cases like bharait (3 sg. opt.), √bhar (bear), pres. st. bharai, i is the sign of the opt.; the opt.-st. is thus bharai-, t=sf. of 3 sg. But the sequence of two vowels, of which the former is i or u, will not be considered as a hiatus, e.g. i and u (so also ai, āi, au, āu) remain unchanged before other vowels, as i-anti (3 pl. pres. √i, go), ku-kru-anti (3 pl. pf.) krou-as (neut. the hearing, √kru, hear).

Note.—The earliest Old-Indian points clearly to the non-avoidance of hiatus between i, u (and the diphthongs which have these vowels as their key-elements), and following vowels. We may nevertheless suppose that iyanti, kukruvanti, krauvas were pronounced, i.e. that i and u before vowels split up into iy, uv, as this pronunciation almost arises from them.

Sanskrit.

Tabular View of Sanskrit Sounds.

<table>
<thead>
<tr>
<th>CONSONANTS.</th>
<th>PROLONGED.</th>
<th>VOWELS.</th>
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<td><strong>UNASPIRATED.</strong></td>
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<td>mute sonant</td>
<td>mute sonant</td>
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<tr>
<td>Gutt.</td>
<td>k</td>
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<tr>
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<tr>
<td>Ling.</td>
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<tr>
<td>Dent.</td>
<td>t</td>
<td>d</td>
</tr>
<tr>
<td>Lab.</td>
<td>p</td>
<td>b</td>
</tr>
</tbody>
</table>
§ 4. The nasalised pronunciation of vowels (as Fr. en, on) is indicated by ~ (ā, ī, etc.): this pronunciation arises through the change of a following nasal consonant according to sound-laws.

The accented syllable is marked '.

Note 1.—If we compare the above table with the table of Indo-European sounds in § 1, we shall find that the sounds collectively existed in the original language likewise (ê = original ai, ô = original au), but in addition to them we shall see a number of very similar unoriginal sounds, which have arisen from those original sounds according to the laws of language, and now stand side by side with them.

Note 2.—The doctrine of the Sanskrit alphabet belongs to Sanskrit special-grammar, as an appendix to the sound-rules.

Pronunciation. Known to us through the Hindu, which is on the whole a very good representative, and by means of the physiology of sounds, and the history of language.

The remarks on the pronunciation of the aspirates in § 1 hold good here also: they are distinct double sounds, and the h must be made audible after the momentary sounds.

We are accustomed to pronounce the momentary palatals k, ĝ, kh, ĝh, like tsch, dsch, or, more accurately, like French dj, tschh, djh, a pronunciation which is correct only for a later state of the language; in the earlier period the correct pronunciation of k and ĝ would be a close blending of ky, gy—almost like k, g, in German kind, gieng (in the case of the aspirates the aspiration is still naturally added). Our pronunciation of these sounds is nevertheless clumsy (especially before other sounds than i, e), and we therefore willingly abide by the somewhat incorrect traditional pronunciation, i.e. momentary dental + lingual spirant.

‘Lingual,’ for want of a better term, is used for that part of the mouth between the palate and the teeth. The momentary linguals are sounds like t and d, except that they are produced not by the teeth, but much further back towards the palate:
to effect this the tongue must be bent backwards; these sounds are called by the Hindus 'head-sounds' (which has been mis-translated 'cerebral'): in the conventional European pronunciation they are not distinguished from the dentals.

Of the spirants, the exact pronunciation of ॐ (a variation fr. ॐ acc. to sound-laws) is not known; it has no equivalent in sound: we pronounce it either as ॐ or not at all.

ॐ is always audible and equivalent to a sonant, and is therefore like our ॐ, but must, however, be sounded emphatically. The ॐ is a fricative noise formed in the upper part of the larynx, and belongs (like ', § 1, Note 3) to the class of laryngal consonants. For convenience, here and in the other languages where it makes its appearance, we have placed it amongst 'Gutturals.' ॐ can be produced either with or without vibration of the vocal chords, i.e. as a sonant or as a mute.

च must be pronounced like ｙ, but without its accompanying vocal-sound, and probably somewhat more sharply (with closer contraction of the organ), perhaps like च in sichel; the conventional pronunciation as a sharp श is wrong, and must be avoided; च has nothing in common with ｓ.

ॐ=Germ. sch, Fr. ch.

Nasals. ँ is the guttural nasal, and must therefore be pronounced like Germ. न in enkel, or न्ग in lange; ँ is the pal. nas., which must have been sounded as a close blending of न्य (as Fr. ग्न in campagne); ँ, the head-nasal, takes the place of formative न, where ँ or ऴ follows: our pronunciation of it is unsuccessful, for we usually confuse it with न.

र and ल as vowels are perhaps sounded as in Germ. hadern, handeln, pronounced with an inaudible e as er, el; the existence of a strong vowel-sound in vowel र is expressly attested by Hindu grammarians (Benfey, Or. und Occ. iii. 25 sqq.). ि is= long ि, and should therefore be distinguished from it by a more prolonged pronunciation. Also ि before consonants was pronounced as a consonant, with a strongly perceptible vibration of
the chords (as in other languages, especially in Zend), which even appears in spelling as a perfect vowel (a, i) after r. (Benfey, ib. p. 32.)

*Note.*—The Bohemian likewise has r, l, as vowels; the Slovack dialect has, moreover, the long form of each sound.

**Sanskrit Vowels.**

Of special importance are the change of a to i, i, and u, û, and its total loss (the latter rarely happens in the case of the other vowels). In the latter cases r and l after consonants form syllables, and count as vowels; r is then even capable of being lengthened to ð (as i and u to i and û).

Besides short i and u, Sanskrit has further their unoriginal lengthenings î, û; ai and au have been compressed into ē and ö (through approximation of a to i and u, whereby it became e and o; and through a further like assimilation of i and u to a, which thus passed into the same vowels e and o; from ee, oo arose ē, ö).

Here for the first time we are met by a very important law affecting the life of a language—the law of assimilation (partial and total), and by the no less frequent ‘vowel-weakening,’ a favourite change, especially in the case of a. The vowel-scales of the Sanskrit are now therefore as follows:—

<table>
<thead>
<tr>
<th>Weakening</th>
<th>Fund.-vowel</th>
<th>1st Step</th>
<th>2nd Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a-scale loss; i, u; î, û;</td>
<td>a</td>
<td>â</td>
<td>å</td>
</tr>
<tr>
<td>2. i-scale</td>
<td>i</td>
<td>ē</td>
<td>āi</td>
</tr>
<tr>
<td>3. u-scale</td>
<td>u</td>
<td>ō</td>
<td>āu</td>
</tr>
</tbody>
</table>

*Note.*—The a-scale is thus enriched by one member: a negative step-formation (i.e. the weakening) has thereby placed itself in a parallel line with the positive.

**Examples.**

1. a-scale.

The weakening occurs principally through the influence of the accent; a similar influence is likewise exercised by assimi-
lation to i, u of the following syllable, or the preceding con-
sonant has an effect equivalent to this assimilation.

Loss of a occurs most frequently before r, also after r, in
which cases ar and ra followed by a consonant become vowel r;
in parallel cases al becomes vowel l, va=u, ya=i; loss of a is
however by no means confined to these instances.

Examples of complete loss of a are:

\[ r=ar; \sqrt{bhar} (bear, pres. bhár-ámi, féro, bhr-tá-s (n. sg.
masc. part. perf. pass.)); \sqrt{kar} (make, 3 sg. pres. kar-ótí), krt-ú-s
(made), \ka-kr-má (1 pl. pf.); \sqrt{mar} (mori), mrt-ú-s (mortuos,
\betaporós=*μρο-το-ς); \text{st. mā-tár-} (μητέρ-, mater), mā-tí-bhyas
(matribus), mā-tí-śu (μητράσι), etc.

This r is subsequently treated acc. to analogy of the other
vowels, and thus is also lengthened; e.g. acc. pl. mā-tí-s
(matres, μη-τέρ-ας), dā-tí-n (datores, δο-τηρ-ας), st. dā-tár-
(dator, δοτήρ).

\[ l=al\text{ occurs only in } \sqrt{kālp} (3 \text{ pres. med. } kālp-a-śe, keep
one-self right, succeed), which stands for original karp (v. 'Con-
sonants'), klp-tá-s (n. sg. masc. past part. pass.).

\[ r=ra; \sqrt{prkht-ā} (3 \text{ sg. pres.}), \sqrt{pra}k (pray, cf. Goth. frah,
Lat. prec, e.g. in prak-śyáti, 3 \text{ sg. fut.}); prth-ú-s (broad), \sqrt{prath}
(cf. πλατ-úς, Lith. plat-ú-s), etc.

Note.—The Hindu grammarians treat r, l, as fundamental
vowels, ar, al, as their first step-formations. As a vowel of the
first step it is generally=a (for it often stands parallel to ē, ō,
also), in the second it is perfectly=ā. The first step is called
by the Hindu grammarians guṇá-s (masc. 'quality'), the second
step vṛddhi-s (fem. 'increase,' \sqrt{vardh}, to increase, find. with sf.
ti), expressions which have often been introduced into European
works on language.

Loss of a, without admitting vocalisation of consonants, occurs
not only before other consonants, but also before r, which is
capable of being vocalised, in those cases where a vowel follows r
(from ar); in which case, as in all others where a is lost before
a consonant, the latter alone remains. Examples: \ka-kré

Loss of a before other consonants, e.g. ġa-ghan-ūs (3. pl. pf.), āhan, ghan (kill), for ġa-ghan-ūs (sg. ġa-ghan-ā); ġa-gm-ūs (3. pl. pf.), ġam (go), for *ğa-gam-ūs (sg. ğa-gám-a); s-ándi (3. pl. pres.), ās (esse), for *as-anti (as s-unt for *es-unt); s-yáti (e.g. in vy-av-a-sità, he determines), for *as-yáti, ās, sa, so too s-yáti for *aç-yati, f.f. *ak-yati, āç, çā (acuere); ā-pā-pt-at (3. sg. aor.) for *a-pā-pat-at, √pat (fall, fly, πτ-κθαυ), etc.

u=va (a is lost and v becomes u); uk-tá-s (n. sg. masc. past part. pass.), √vak (speak, 3. sg. pres. vāk-ti), u-vāk-a (3. sg. pf.) for *va-vāk-a, ākūs (3 pl. pf.) for *va-vak-ūs, f.f. *va-vak-anti, ārōkam for *a-vā-uč-am (1. sg. aor.), f.f. *a-va-vak-am (Gk. ἐκρων fr. *έ-Fe-Feπ-ov); sup-tá-s (pf. part.), √svap (sleep; svāp-iti 3. sg. pres., ā-svap-am, 1. sg. aor.); urū-s (wide, eūps) for *varū-s (comp. st. vāriyās-, superl. vāriśtha-), etc.

i=ya (a is lost and y becomes i); īk-tá-s (past part. pass.) for *yag-ta-s, √yā́γ (offer, worship; 3 sg. pres. yā́γ-ati), i-yā́γ-a (3 sg. pf.) for *ya-yā́γ-a, ājūs (3 pl. pf.) for *ya-yaγ-ūs, f.f. *ya-yag-anti; ādhi-yati (3 sg. pres.), √yādhi (wound, slay), vi-vidh-ūs (3 pl. pf., 3 sg. = vi-vyādhi-a), etc.

§ 7. Weakening of a—1. to i and u occurs before r, sometimes with assimilation to vowel of following syllable; weakening of a to i often occurs without influence of following sounds. u in certain cases corresponds to original an, am (the nasal is lost, after dulling the preceding a into u).

Examples. gir-i-s (mountain), √gar (be heavy), Zend gairiś, both from *gar-i-s (cf. Scl. gor-a, with another st.-termn.); gur-ū-s (heavy), cf. Gk. βαρ-ῦ-s, f.f. of both *gar-ū-s, the original ลำ fm. gar comes to light only in the Sk. step-forms of this word, e.g. gār-ētha-s (superl. of gurū-s); kur-ū (2 imper. act.), kur-u-tē (3 sg. pres. med.), and other like forms of √kar (make)—these stand for *kar-u, *kar-utē, etc., whilst the latter again stand for *kar-nu, *kar-nutē, etc. (v. post. ‘Rules of Con-
jugation’), kur-más next for *kur-umas, fr. *kar-nu-mas, where, § 7, as in the similar forms, the u which caused the assimilation is lost; pur-á-s (many), f.f. and Old-Persian par-u-s, cf. πολ-υ-s, \(\sqrt{\text{par}}\) (fill), pur-á-m, pur-i (state), from same \(\sqrt{\text{par}}\), with a changed to u before r, without assimilating influence (cf. πολ-υ-s, f.f. par-i-s).

Weakening of a to i is frequent, e.g. kir-áti (3 sg. pres.), \(\sqrt{\text{kar}}\), pf. ka-kár-a (pour out); gir-áti (3 sg. pres.), \(\sqrt{\text{gar}}\), pf. ja-gár-a (throw); \(\sqrt{\text{gás-más}}\) acc. to sound-laws for *gís-mas (1 pl.), beside \(\sqrt{\text{gás}}\) (pure \(\sqrt{\text{fm.}}\) gás, bid). This weakening occurs especially in the case of roots in a (which by-the-bye we find wrongly classified with \(\sqrt{\text{v/termn.}}\) a, e, ái, ó, acc. to the system of the Hindu grammarians), e.g. sthi-tá-s (sta-tu-s, \(\sigma\tau\alpha-τό-s\)), \(\sqrt{\text{stha}}\) (stand); hi-tá-s for earlier (Vêd.) dhí-tá-s (θε-τό-s), \(\sqrt{\text{dha}}\) (set); mi-tá-s (like the preceding, past part. pass.), \(\sqrt{\text{ma}}\) (measure); st. pi-tar- for *pa-tar-, cf. πα-τέρ-, pa-ter-, \(\sqrt{\text{pa}}\) (protect) ; further in pres. redupln. e.g. bi-bhár-mi, \(\sqrt{\text{bhar}}\) (bear), tि-śthá-mi = तौर्मु, f.f. of both is *sti-stá-mi, earlier *sta-stá-mi, \(\sqrt{\text{stha}}\) (stand); cf. Sk. dá-dhá-mi, dá-dá-mi, and Gk. τι-θη-μυ, δι-δο-μυ, where the Sk. does not yet show that weakening which has occurred in Gk.).

\(\sqrt{\text{u=an}},\ am\) , e.g. in termn. of 3 pl. -us, fr. -anti, -ant, e.g. bhárëy-us=φέπουευ=*bharay-ant (3 pl. opt. pres. act.), babhùs= *babharenti (3 pl. pf. act.), ubhá, ubháu=ἀμφω, ambo; thus later languages show the more original form, etc.

2. a becomes weakened to i, ū, likewise in the combination ar, so that \(\sqrt{\text{ir}},\ ûr\), the latter after labial consonants, are considered as of the same force as vowel r; the weakening to i, however, occurs not only before r, but also not seldom in other cases.

\(\sqrt{\text{är=}}\)r (vowel)=ar after labial initial \(\sqrt{\text{v/sounds}}\), e.g. pür-ná-s (plenus) for *pr-na-s, Zend pere-na-s (Zend ere=Sk. vowel r), f.f. *par-na-s, \(\sqrt{\text{ar}}\) (fill), etc., yet also kaṁ-kür-, intensive pres. st. \(\sqrt{\text{kär}}\) (go), and the like.

\(\sqrt{\text{ir=}}\)r (vowel)=ar after all except labial initial sounds, e.g.
§ 7. *stir-ná-s* (past part. pass.) for *str-ná-s*, f.f. *star-na-s*, √*star* (strew);
*dírgá-s* for *dÁrghA-s* (long), Zend *dareghá-s*, Gk. δολυχό-ς, etc., f.f.

*i* as a weakening of *a* often occurs, especially in cases of roots in *a* (like its weakening to *i*), nevertheless it also often occurs in the case of a non-radical *a* belonging to formative affixes, e.g. *lí-ná-s* for *ha-na-s* (past part. pass.), √*ha* (leave, 3 sg. pres. *gó-há-ti*); *pí-ta-s* (past part. pass.), √*pa* (drink, 3 sg. pres. *piba-ti* for *pa-pa-ti*, fr. *pa-pa-ti*); *yu-ná-más* for *yu-na-mas* (1 pl. pres.), cf. *yu-ná-ti* (3 sg. pres.), pres. st. *yu-na-* √*yu* (iungere), etc.

*Note 1.*—Through this weakening are developed also roots with *i*, which originally were in *a*, e.g. Sk. *kri* (buy), e.g. pres. *krí-ná-ti*, fut. *krè-šyáti*, pf. *kkráy-a*, etc., thus with pure *i*, seems nevertheless to have come from original *kra=kar*, cf. Gk. πέρι-νημ, Lith. perkū (buy), where the √ with *k* is a further formation. The weakenings of original *a* are altogether not rarely formed by steps like original *i* and *u*; e.g. fr. *pi-tá-mahá-s* (masc. grandfather; on *pi-tár-, √pa*, v. supr.) is formed a st. *pái-tá-maha-* (adj. grandfatherly); fr. st. *dhír-a-* (adj. firm, stable), √*dhar* (hold), weakened to *dhír*, sf. *-a-, dháir-ya-m* (neut. stability); fr. *púr-ná-más-a-s* (masc. full-moon; on *púr-ná-, √*par*, v. supr.), *páur-ña-másá-* (adj. of a full-moon), etc. A change of *a*-scale to *i*- and *u*-scales is accordingly seen, especially in later formations, having arisen after the language-instinct had lost the root-forms.

*Note 2.*—Cf. the cases where *i* apparently stands for *a*, though it really is a contraction of *ya*, *yá*, or an auxiliary vowel, § 15, c, f.

§ 8. The fundamental vowel *a* appears in Sk. as the commonest vowel in roots and relation-sounds, e.g. *ád-mi* (1 sg. pres.), √*ad* (edere); *ás-ti* (3 sg. pres.), √*as* (esse); bhár-asi (2 sg. pres.), *á-bhar-at* (3 sg. impf.), bhár-antas (φέρωτες, n., pl., masc. pres. part. act.), √*bhar* (bear); áp-as (opus), áp-as-as (operis); mán-as (μέν-ος), mán-as-as (*μεν-εσ-ος, μένονις*); ács-va-s, f.f. aktras (equos, ἵππος for *ικός*); sa (δ), ta-m, (τó-v, is-tu-m); *çata-tamá-s* (centesimus), etc.
The step-formation of a to ā cannot further be analysed § 9. into first and second steps (as in Gk., Lat., Goth.), and, moreover, can scarcely—only by means of the analogy of completely corresponding words in i and u—be distinguished from lengthening. Therefore we hesitate to make the distinction between lengthening and step-formation in the case of f. vowel a, and accordingly probably admit many forms as steps, which would be more accurately denoted as lengthenings. The step-formation of a to ā occurs in roots and in relation-sounds.

Examples of step-formed roots with √vowel a are ba-bhār-a (3 sg. pf.) bes. bhār-āmī (1 sg. pres.), √bhar (bear); u-vāk-a (3 sg. pf.) bes. vāk-ī (3 sg. pres.), √vāk (speak); vās-as (nestis) bes. vas-ī (3 sg. pres. med.), √vas (clothe); kār-āyati (3 sg. pres. causat. vb.) bes. kar-ō-ī (3 sg. pres.), √har (make), etc.

Note.—The roots which end in a occur mostly in step-raised forms [whence arose the grammatic rule that roots in ā appear only in pronominal functions, as ta (n. sg. masc. so, acc. ta-m dem.), ya (n. sg. masc. ntr. ya-s, ya-t rel.), ka (n. acc. sg. masc. ka-s, ka-m), etc., whilst all verbal roots end in ā—acc. to Hindu grammarians in ā, ē, āi, ā]. Also the un-raised forms, indeed the shortened forms of these roots are not rare, e.g. ḍī-ghā-ti, ḍā-gā-ti (3 sg. pres.), but ga-tā-s (past part. pass.), ga-hī (2 sg. imper.), gā-kkhati, f.f. ga-skati (3 sg. pres.), cf. βέβαμεν, βάργυς, √ga (go); dā-dā-mi (1 sg. pres. dī-dī-o-mu), but dā-dā-mās for *da-da-mās (1 pl. pres.), cf. dī-do-mu, dō-o-sv, do-ṛī, dāmus, √dā (give); dā-dhā-mi (1 sg. pres.), but da-dhā-mās, fr. *da-dha-mās, cf. tī-θε-μεν, θέ-σις, θέ-τος, √dha (set); ā-pā-t (3 sg. aor.), pā-syā-ti (3 sg. fut.), but pi-ba-ti for *pi-pa-ti, fr. *pa-pa-ti (3 sg. pres.), cf. ṭe-ṭo-mai, ṭo-σις, ṭa (drink); pi-ti (3 sg. pres.), but pā-ti-s, cf. ṭo-σις; Goth. fa-th-s, i.e. *fa-di-s, Lith. pā-t-s, for *pa-ti-s (lord), with weakening of a to i in pi-tar- (n. pūtā), cf. ṭa-ṛō, f.f. pa-tar-, √pa (protect); ti-ṛś̄ha-mi, ṛ-ṝṣṭu-mu (1 sg. pres.), but ti-ṝṣṭha-ti for *stī-sta-ti, fr. *sta-śta-ti (3 sg. pres.), with weakening of a to i in sthī-tā-s, f.f. *sta-tā-s, cf. ṭa-ṛō-s, stā-tu-s, √ṭha, original stā (stare), etc. Here accordingly, as in many other like cases, the root-forms are evidently ga, dha, da, pa, pa, stha; so too a is everywhere to be assumed to be the root-sound, even where it happens that the raised forms only are seen in

a as a sound expressing relation is found raised in termin, a of pres. st. bhára-mi (1 sg. pres.), bhára-masi (1 pl. pres.) bes. bhára-sí (2 sg. pres.), bhára-tí (3 sg. pres.), etc., bhára- is pres. st. of /bhára (bear); in almost all cases of the fem. of a-st., e.g. náv-á náv-ám (n. acc. sg. fem. nou-a, véFa) bes. náv-a-s náv-a-m (n. acc. sg. masc.), st. náv-a (nouos); áç-vá (equa) bes. áç-va-s (equos), st. áç-va- (ak-va-), and generally before certain case-sff., e.g. dévá-s, earlier dévá-sás (n. pl.) bes. dévá-s (n. sg.), st. dévá- (deus); further in final syllables of sundry consonantal noun-stems before certain case-sff., e.g. dā-tár-am (acc. sg.), dā-tár-as (n. pl.), fr. st. dā-tár- (da-tor), which appears pure in e.g. dā-tár-i (loc. sg.), in dā-tr-bhis (instr. pl.), dā-tr-é (d. sg.), and others it is weakened to dā-tr.

§ 10. 2. i-scale.

Fundamental vowel i; i-más, cf. i-mev (1 pl. pres.), /i (i-re); vid-más (1 pl. pres.), cf. Fíó-mev, Hom. Fíó-mev, /vid (uid-ere, scire); viç-áti (3 sg. pres.), viç-as (n. pl. people, husbandmen), /viç (go in, dwell); div-am div-ás (acc. g. sg. of n. dyáu-s, sky), /div (shine; cf. ΔíF-ós; similarly fr. Zevís = *Ayewes); pák-ti-s (fem. coctio), cf. πέτ-σι (for *πέτ-τι-ς, /pak, πέτ, origl. kak, cf. Lat. cec, Lith. kep (coquere), formed through sf. -ti-, f.f. therefore kak-ti-s.

i is not seldom a lengthening of genuine i, just as we have already found it to be a lengthening of i = a. The laws under which this lengthening takes place are not discovered in every instance. The lengthened i is often interchanged with the unlengthened i, and is subject to step-formation and change (to iy, y), like the latter.

In cases like pátí-n (acc. pl. masc.), f.f. pati-ms, st. pátí- (lord); pákti-s (acc. pl. fem.), f.f. pakti-ms, st. pákti- (coctio), we clearly see a compensatory lengthening, v. post. (§ 15, d), where also the lengthening bef. y is yet to be mentioned (§ 15, a), as
e.g. i-yāt bes. i-yāt (3 sg. opt.) √i (ire). Bef. final r in noun- § 10. stt., as bef. r folld. by a sf. which begins with a conson., lengthening occurs in the case of i and u, e.g. st. gir- (speech; acc. sg. gir-am), n. sg. gir for *gir-s, loc. pl. gir-śu, instr. pl. gir-bhis for *gir-su, *gir-bhis.

So also in roots i appears bes. i, and is grammatically arbitrary, since in these cases the √fm. is usually characterized by the long vowel, as e.g. √bhi, not bhi (frighten), cf. bi-bhi-más and bi-bhā-mas (1 pl. pres.; 3 sg. bi-bhē-ti); in other roots it happens that only the lengthened vowel appears, e.g. ni-tē-s (past part. pass.), √ni (nī acc. to Grammarians and Dictt.; ‘lead’); prī-tā-s, √prī (prī, delight), etc.

Note 1.—Root-fms. with final vowels are particularly often mentioned in the lengthened fm. in gramm. and dictt., because the lengthening was particularly popular in these cases. On the unoriginality of i and u in Indo-Eur., cf. my remarks in Beitr. i. 328-333.

Note 2.—On tr-ṭiya-s (ter-tiu-s), in wh. tr can be taken as a weakening fr. tri (st. of numeral 3), v. sub. ‘Numerals.’

The 1st step of i is in Sk. ē, e.g. ē-mī (ē-mu), f.f. ai-mī, § 11. √i (ire); vēd-a (Foīda), vēd-a-s (n. sg.; sacred writings of the Hindus, Vēda), √vid (see, know); vī-vēc-a (3 sg. pf.), vēc-a-s (n. sg. house, cf. Foīk-o-s, uīc-u-s), f.f. vaīk-a-s, √vič (go in); dēv-ā-s (deus), f.f. daiv-a-s, √div (shine); pāk-tē-s (g. sg.), pāk-ti-s (coctio), pāt-ē-s (g. sg.), pāt-i-s (lord); bi-bhē-ti (3 sg. pres. redupl.), √bhi (frighten); nē-tra-m (eye, lit. ‘the guiding one’), nāy-ati (3 sg. pres.), nay=nē (v. post. § 14, d), √nī (lead); cē-tē (kuī-tai 3 sg. pres. med.), √ći (rest, lie), etc.

The 2nd step of i is in Sk. āi, e.g. vāc-ya-s (man of third caste), √vič (go in; cf. vič-as and vēc-a-s); vāid-ya-s (vēdic, learned), √vid (see, know; cf. Vēd-a-s); dāiv-a-s (godly), whence dāiv-a-m (destiny), st. dēv-ā- (deus), √div (shine); cāiv-a-s (belonging to the god Çiva, Çiva-worshipper), fr. Çivā-s (the god Çiva); vāśnava-s (belonging to Vishnu, Vishnu-worshipper
§ 11. fr. Viṣṇu-s (the god Vishnu); bef. vowels not ai but ay is found (§ 14), e.g. nāy-aka-s (masc. leader), nāy-āya-ti (3 sg. pres. causat. st.), √ni (lead), etc.

§ 12. 3. u-scale.

This scale, in all its parts, runs parallel to the i-scale, also the lengthening of u to ū occurs here, like i to ī above.

Fund. vowel u, e.g. buddhā-s for *budh-ta-s (past part. pass.), bu-budh-ā (1, 3 sg. pf. med.), √budh (learn, know); tud-āti (3sg. pres.), √tud (thump); yug-ā-m (iugum, ćurōv), yuk-tā-s (past part. pass.) for *yug-ta-s (iunctus), ā-yuģ-at (3 sg. aor.), √yuģ, yug (iungere); su-ta-s (past part. pass.), √su (produce, sow); gru-tā-s, kān-tā-s (past part. pass.), ġru-dhi (vōd. 2 sg. imper. aor. kān-thā), √gru (hear), etc. In pres. st. gru-, e.g. gru-nō-mi (1 sg. pres.), √gru (hear), ru is exceptionally weakened to r, by complete loss of u.

The lengthening of u to ū occurs here, just as in the i-scale i becomes ī, e.g. ā-bhū-t (ē-φυ, 3 sg. aor.), bhū-tā-s, bhū-ta-m (masc. ntr. past part. pass.), √bhū (bhū, be), cf. φυ-τό-ς, ṛα-τυρο-ς; sū-nū-s (son), cf. Lith. sūnas, Goth. sunus, √su (bear, sow, sts. also given as sū); sū-nū-n fr. *su-nu-ns (acc. pl.), Goth. sununs, st. sūnū- (n. sg. sū-nū-s, cf. § 15, d). Like i, so u bef. r, and bef. r+conson. in noun-stt. is lengthened (§ 10), e.g. st. dhur- (fore-part of a coach-pole, e.g. acc. sg. dhūr-am), n. dhūr for *dhūr-s, instr. pl. dhūr-bhis for *dhūr-bis, etc.

§ 13. 1. step ō, e.g. bōdh-ati (3 sg. pres.), √budh (learn, know); pra-tōd-a-s (masc. goad), √tud (push); yu-yō̄-a (1, 3 sg. pf.), yō̄-a-s (joining, speculation), √yuģ (iungere); bhāv-āti (3 sg. pres.), ā-bhāv-at (3 sg. pf.), bhāv=bhō (v. § 14, d), √bhū (be); sōš-yāti (3 sg. fut.), √su (bring forth); crō-tra-m (ntr. ear), √gru (hear), sū-nō-s (g. sg.), st. sūnū- (n. sg. sū-nū-s, son), cf. Lith. sunaus, Goth. sunaus, etc.

2. step ō, e.g. bāuddhā-s (masc. Buddhist) fr. buddhā-s (past part. pass. n. propr. Buddha), √budh (know); ā-tāud-sam for *a-tāud-sam (1 sg. aor.), √tud (push); yāug-ika-s (adj. fr. yōga-s
supr.), st. yāga-, ṣvyu (iungere); bhāv-a-s (being, nature), § 13. bhāv=bhāu (v. § 14, d), ṣbhau (be); sāu-ti (3 sg. pres.), su-śāv-a (1, 3 sg. pf.) for *su-sāv-a (v. sub. consonn.), sāv=sāu (v. § 14, d), ṣ/su (bring forth); ā-ṛav-śam (1 sg. aor. compos.), ṣṛu (hear), etc.

Note.—"i and u are subject to step-formation only when they are at the end of roots," is the rule of Sk. grammar, i.e. they are in these cases lengthenings of real i, u; as medial root-sounds however, they are felt by the language-instinct to be unorigl., and are therefore not treated like genuine i, u. Real i and u appear besides only before root-terms, which consist of one consonant.

Vowel Sound-laws.

§ 14.

Note.—Only the most important Sk. sound-laws are here mentioned—those which operate within the word: the changes undergone by the termn. of a word in consequence of its place in a sentence belong to the department of Sk. special-grammar, not to the Indo-Eur. (the so-called 'Comparative') Grammar.

1. Laws of the concurrence of vowels.

Fundamental law: Sk. permits hiatus in its earliest remains of language alone (in the Vedic hymns), where we find even two like vowels in juxtaposition. In classical Sk. hiatus is avoided, a. by contraction, b. by loss of the former vowel, c. by separation, d. by change of vowel to corresponding spirant.

Contraction occurs when a happens to stand before another vowel, except in those cases where a is lost bef. the following vowel. Change to the consonn. takes place when i, u (including their furthest formations ḍ[=ai], ō[=au], āi, āu). This contrast between a and i, u, arises from the fact that a has no corresponding spirant, whereas i, u, have by their side y, v, which are only different from them through a slight distinction in pronunciation; the change from i, u, to y, v, is through intermediate iy, uv.

a. Exx. of contraction: pres. st. bhāra-=i of opt. mood= bhāre-, e.g. bhāre-t fr. *bhara-īt (3 sg. opt. pres., ṣbhar, bear);
§ 14. noun st. áçva+ī of loc. case=áçvē (loc. sg. of n. sg. áçva-s, equos), etc.

Note.—v. older peculiar contractions post. (§ 15, c).

b. Loss of a occurs e.g. in cases like dhanin- (rich, n. sg. masc. dhanī), fr. st. dhāna- (neutr. n. sg. dhāna-m, wealth)+sf. in; only bef. sf. ya is a regularly lost, e.g. st. dhān-ya- (adj. rich, n. sg. masc. dhān-ya-s), from same st. dhāna-. Roots in a do permit this loss of a not unfrequently, e.g. da-d-mā, da-dh-mās (1 pl. pres. act.), fr. pres. stt. da-da-, da-dḥa- (1 sg. dā-dā-mi, dā-dḥā-mi), √da (give), √dḥa (set); so also in pf. they lose their termn., and subsequently even assume an auxil. vowel i, as if they ended in a conson., da-d-i-mā, da-dḥ-i-mā (1 pl. pf.), like tu-tūd-i-mā, √tūd (push), so that it becomes probable that a was lost bef. i, and not ma, but ima, etc., was considered to be the termn.

c. The splitting-up of i and u (and of their lengthenings ĭ, ā,—perh. it is more correct to suppose no lengthening to take place before vowels) to iy, uv, is retained where these vowels are radical in monosyll. words, more rarely also in ordinary Sk. otherwise, i.e. when two consonn. stand before the vowel.

Exx.: bhiy-ī (loc. sg.), cf. n. sg. bhi-ī-s (fear), st. thus bhī-; iy-āy-a (3 sg. pf.), √i (go), fr. *i-āi-a; āi is √i in 2nd step, i in fund. fm.

çu-çruv-ūs (3 pl. pf.), √çru (hear), f.f. ku-kru-anti; āp-nuv-anti (3 pl. pres. fmd. by nu fr. āp, work); bhruv-ī (loc. sg.), n. sg. bhrū-s (ō-ϕpūs), st. therefore bhrū-.

Note.—y-anti (3 pl. ind. pres.), √i, contrary to rule where we should have expected iy-anti; i is here exceptionally treated according to the plan laid down below.

d. The change into corresponding semi-vowel is regular in ordinary Sk., that is, occurs exclusively in the case of i and u as 2nd part of diphthongs e (=ai), āi, o (=au), āu, e.g. pākt-ā (instr. sg. of n. sg. pakti-s, coctio) for *pakt-ā, ni-ny-ē (1, 3 sg. pf. med.), √ni (nī, lead) for *ni-ni-ē.
ná-y-ati (3 sg. pres.), √ni (lead), here raised to 1st step nē, § 14.
i.e. nai.

ni-ná-y-a (1, 3 sg. pf. act.), √ni, nai=2nd step of ni.

§ 14.

i.e. nai.

ni-ná-y-a (1, 3 sg. pf. act.), √ni, nai=2nd step of ni.

§ 14.

i.e. nai.

ni-ná-y-a (1, 3 sg. pf. act.), √ni, nai=2nd step of ni.

§ 14.

Note 1.—The earlier lang. shows the splitting-up only in the case of i, u. The scale of variation is as follows: 1. i, u + vowel, e.g. pākti-a; but there arises very easily, 2. iy, uv + vowel, e.g. pākti-yā; and finally the vowel element is lost entirely, 3. y, v + vowel, e.g. pākti-a.

Note 2.—The fms. explained in § 6, such as uk-ús, iy-ús, form no exception to the laws above laid down, and are prob. not contracted fr. *uukús, iygús, but rather arise fr. resolution of v, y, into u, i; *va-va-k-us, *uvakús, *uvkus, *ukús; *ya-ya-j-us, *iyanus, *iynás, *iynás, are the gradations of change here to be understood.

2. Vowel-change caused by the neighbouring § 15. consonn.

Note.—A single instance had to be mentioned as early as § 7, as pūnás with ā on acct. of p; generally the weakenings of a bef. r are intrinsically caused by this conson.

a. y often lengthens preceding u, i, a (for splitting-up of y to iy, iy, v. supr. § 14, 1, c.), e.g. crū-yā-tē (3 sg. pres. pass.), √crū (hear); gi-yā-tē (3 sg. pres. pass.), √gi (conquer, e.g. in gi-tā-s, past part. pass., gāyati 3 sg. pres.); gā-ya-tē (is born, 3 sg. med.), √ga (generally gan, and thus means bring forth, bear; cf. Zend za-yē-ītē, f.f. therefore ga-ya-tai), etc.

Note.—Bef. y = i, i also may be explained as splitting-up of i to iy. Perh. fr. this source arise also the lengthenings of u to ā, and a to ā, bef. y. Cf. sq.
§ 15. b. *iy sometimes occurs instead of *y, and also *iy with the favourite vowel-lengthening bef. *y.

After *a in certain cases *iy (with *a or *ā therefore *ēy) instead of *y (with *a or *ā therefore *ay, *āy), e.g. pres. st. in *a† opt. element *ya forms not -a-*ya, but -a-*iya, i.e. -ēya, e.g. *bōdhēyam for *bōdha-*ya-m (1 sg. opt. pres.), pres. st. bodha-, /budh (learn, know); *dē-*ya-s (part. necessitatis, n. sg. masc.) for *dā-*ya-s, st. *dā-*ya, consisting of step-formed /dā (give), and sf. *ya; gāṅgēya-s (found in or on the Ganges), fr. gāṅgā (nom. pr. Ganges), step-fmd. gāṅgā + sf. *ya, for *gāṅgā-*ya-s.

Also after consonn. occurs *iy for *y, thus in compar. st. fmd. with origl. sf. *yams, e.g. st. lāghiyēś- (n. sf. masc. lāghiyān), fr. laghū-s (light)=ē-*lāχū-s, for *lagh-yēś, cf. *ē-*lāsōsōn for *lāχ-*yon, and superl. lāgh-īs-tha-s, ē-*lāχ-īso-ro-s, where is- is a relic of -yas-, -yēs-.

So moreover the sf. *ya has also a sf. *iya, e.g. st. karaṇ-īya- (faciendus) for *karaṇ-*ya-, st. kāraṇa, which loses its termn. bef. *ya (§ 14, 1, b), etc.

Note.—*iy=y is not developed in Indian until after the division of Aryan into Ind. and Eran.; the Zend, which stands so close to Old-Ind., still has y=Sk. *iy.

c. *ya was sometimes compressed into *i. So esp. in fem. stt. in *i, which prob. can only be=*yā, e.g. bhārantī (the bearing one, f.) =*bhārant-*yā = *yēpouṣa = *yēpouṃ-*yā; *janitrī = *janitr-*yā fr. *gan-i-tar-*ya (genetrix)=ηενετερα, i.e. *ηενετερ-*ya, etc., ya- stt. fr. usual masc. stt., Sk. bhārant-, *janī-tār-, Gk. *yepoutr-, *yενε-τήρ-; devī= *daiyu-*yā (dea), cf. Lith. deivė, i.e. *deivyā, f.f. daiuv-*yā (once ‘goddess,’ now=‘ghost’), later fmn. fr. st. devā-, Lith. dēva, f.f. *daiuva- (deus); Vēd. *āvi (instr. sg. for Sk. āvy-ā, both fr. *āvī (āvi-s, ouis, ə sf. of instr. sg.), etc.: *i is clearly a weaker vowel-fm. for *yā in opt., e.g. 3 sg. act. bibhr-yā-t, but 3 sg. med. bibhr-i-ta, /bhār (bear, pres. st. bibhar-), etc.

Sometimes *i is a product of a similar earlier contraction of *i-*a or *ya after loss of conson. betw. *i and *a, as in sād-āti (3 sg. pres.), fr. *si-adati for *si-sad-ati, /sad (sit, pf. sa-sād-a, aor.
SANSKRIT. VOWEL SOUND-LAWS.

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d -sad-at), like लो fr. लक्ष्मी=सिसेदयो, s.s. sis-sad-yami, Lat. sid-o § 15. fr. *sisdo for si-sed-o, s.s. *si-sad-ami (with not unfreq. pres. redupln.), also the it now used as a root, e.g. तीते (3 pres. med., rises, causat. it-ayati, he arouses), is recognized as a product of pres. redupln.; ती=ि, ियार, िर (go), etc.

d. Compensatory lengthening. Esp. in declens.-fms. (n. sg., acc. pl.) is found lengthening of the foregoing vowel after loss of conson. Exx.:

N. sg. rājā for *rājan-s, st. rājan- (masc. rex) + nom. sf. s, cf. ताव for *ताव-स; dhanī for *dhanin-s, st. dhanin- (rich); mātā for *mātar-s, st. mātar- (mater), cf. माताप for *माता-स; dūr-manās for *dūr-manas-s (masc. fem. evil-minded, compounded of dūs, evil, manās ntr. mens), cf. दुमानिः for *दुमानिः-स; agnimān for *agnimant-s (fiery, st. agni-, ignis+sf. -mant).

Notice bhāran without compens. lengthening for *bharant-s (n. sg. part. pres. act. whilst the corresponding Gk. ϕέρων for *φερων has the lengthening).

Acc. pl. आच्छन for *ाच्छन-s, n. sg. आच्छ-s (equos); pātin for *patin-s, n. sg. patis (lord); sūnā for *sūnum-s, n. sg. sūnū-s (son); mālīs for *mati-nis, n. sg. māti-s (fem. thought): dhēnās for *dhēnun-s, n. sg. dhēnū-s (milch cow).

Bef. sonant conson. we ought prob. to consider o to be a compens. lengthening=as, with dulling of the vowel, e.g. māṅbhis, instr. pl. for *manas-bhis, fr. mānas- (neutr. mens, μένος) and bhis (sf. of instr. pl. consisting of bhi+pl. sf. s), etc. This change of as to o often takes place in case of final as.

Note.—In the case of compens. lengthening in Sk. and in the other languages, we might make a more accurate distinction as follows: 1. "+conson.=" (cf. O.-Bulg instr. sg. -mi=origl. bhi, bes. instr. pl. -mi, i.e. -mī=origl. -bhis), in terminations; medially this case is not found: 2. "+conson. 1 +conson. 2=" (e.g. mātā for *mātars) in termn.: 3. "+conson. 1 +conson. 2="+conson. 2, final and medial (e.g. mālīs for *matin-s; Gk. ε'πλ for *επτ; a subdiv. forms here "+cons. 1 +cons. 2 +cons. 3="+cons. 3 (e.g. ἵστας for *ἵσταρς): 4. "+
§ 15. conson. 1 + cons. 2 = + cons. 1 (e.g. μῆτης for *μήτερς), or + cons. 1 + cons. 2 + cons. 3 = + cons. 1 (e.g. φέρον for *φέρους, finally and medially, the latter, e.g. Gk. ἔφηνα for *ἐφανε). The physiological explan. of this sound-process is difficult, esp. in case No. 4.

e. Dulling of ā to ē and āu bef. lost conson. and in fine. For ā there occurs a dulled fn. in ē, in certain cases in the middle of a word, when ā has been produced through compens. lengthening (§ 15, d), in the case of unusual and late consonantal loss: in termn. it occurs, but is likewise confined to certain cases; also we find ē for ā, like āu for ā, the latter of which is retained in the old lang. Exx.:

ē for ā when consonn. have been lost; thus in imperat. pres. ēdhī for *ā-dhī, *as-dhī (√ and pres. st. as-, esse, dhī termn. of 2 sg. imper.); dhēhi for *dhāhi, with asp. (v. § 59) for Vēdic dadhī for *dadh-dhi (pres. st. dadh, √dha, set); dēhi for *dāhi, fr. *dadhi for daddhī (pres. st. dad, √da, dare); in pf. fm. as Sk. pēt-i-mā for *pāt-i-ma, Vēd. papt-i-mā fr. *pa-pat-ma (1 pl. act.; pf. st. papat-, √pat, fly, fall); tēn-i-rē for *tān-i-rē fr. older ta-tn-i-rē (3 pl. med.; pf. st. tatan-, √tan, stretch), etc.; finally in voc. of fem. a-st., e.g. ācēvē (but earlier still ācēvā), voc. of aćēvā (equa). āu for earlier ā (cf. ē for as in termn. bef. sonants, § 15, d) occurs in n. acc. dual, e.g. ācēvāu, earlier ācēvā (n. ācēvas, equos); further in 1, 3 sg. pf. act. of roots in a, e.g. dadāu, archaic dadā, √da (dare).

f. An auxil. vowel i, ī, occurs betw. stem-termns. and termns. which begin with a conson. in word-fmn., esp. in conjugation fms., in which origly. and partly still in the earlier lang., the termn. was added immediately to the stem-termn., e.g. pres. fm. of single vbs., as svāp-i-mi, svāp-i-śi, svāp-i-ti, svāp-i-mās (1, 2, 3 sg., 1 pl. pres.), etc., for *svap-mi, etc., √svap (sleep); in pf. this occurs regularly in case of certain persons, e.g. 1 pl. tutud-i-mā, √tud (tundere), etc. Here we often see even now the older fms. without inserted i, partly even in ordinary Sk., as e.g. ḍakār-tha (2 sg. pf.), √kar (facere), partly in the earlier lang.
of the Vēdas, in which a fn. tutudmā, etc., may be found. In § 15. fut. e.g. gam-ī-śyāmi (1 sg. fut.), \(\sqrt{gam}\) (ire); in part. pres. pass., e.g. vid-ī-tā-s, \(\sqrt{vid}\) (see, know), and many similar fnns., this insertion of \(\dot{i}\) occurs in certain roots.

\(\dot{i}\) occurs as auxil. vowel in aor.-fms., e.g. 2 sg. ā-nāi-\(\dot{i}\)-s, \(\sqrt{n}\) (nī, lead), bes. 1 pl. ānāi-\(\dot{i}\)-ma; in pres. fms. as 1 sg. brāv-\(\dot{i}\)-mi, 3 sg. brāv-\(\dot{i}\)-tī, bes. 1 pl. brū-mās, \(\sqrt{brū}\) (brū, speak), and in impf. fms., as ā-brav-\(\dot{i}\)-s, ā-brav-\(\dot{i}\)-t (2, 3 sg.) (id.); ās-\(\dot{i}\)-s, ās-\(\dot{i}\)-t (2, 3 sg.), \(\sqrt{as}\) (esse), etc.; ghr-\(\dot{i}\)-tā-s past part. pass., \(\sqrt{grah}\) (grasp), has likewise this \(\dot{i}\), which is therefore used just like \(i\), only not so often.

The Vēd. ās for *ās-t (acc. to a sound-law of Old-Ind., which must be discussed under 'Consonants'), instead of later ās-\(\dot{i}\)-t, favours the view that \(\dot{i}\) is an auxil. vowel inserted at a later time.

*Note.—*Since beside svāp-ī-mi for *svapmi, etc., we see svāpāmi, etc., we must simply suppose that here, as often elsewhere, beside the pres. st. svap-, there was a pres. st. in a, svapa-.

### GREEK.

#### § 16.

**Summary of Sounds.**

<table>
<thead>
<tr>
<th>CONSONANTS.</th>
<th>PROLONGED SOUNDS.</th>
<th>VOWELS.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNASPIRATED</td>
<td>ASPIRATED</td>
</tr>
<tr>
<td></td>
<td>mute sonant$^1$</td>
<td>mute sonant$^1$</td>
</tr>
<tr>
<td>Gutt.</td>
<td>(\kappa)</td>
<td>(\gamma)</td>
</tr>
<tr>
<td>Pal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ling.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dent.</td>
<td>(\tau)</td>
<td>(\delta)</td>
</tr>
<tr>
<td>Lab.</td>
<td>(\pi)</td>
<td>(\beta)</td>
</tr>
</tbody>
</table>

1 Or medial.
§ 16. In this table only the indivisible sounds are mentioned.

ζ is a consonantal diphthong, namely d with the sonant dental spirant (e.g. Sclavonian z). Ψ, ξ, are only characters for two sounds τς, κς. The vowel-diphthongs are αυ, ει, οι; αυ, ευ, ου (older pronunciation); υυ; also α, η, ω (older pronunciation, by which the i was still heard); αυ (perhaps in the word γραφός [γρηγός], perhaps pronounced distinctly from αυ with short a), ηυ, ου.

Note 1.—υ at an earlier period of the language was equivalent to u, but became pronounced like y, ु, as early as classical times; ου in the earlier language was the genuine diphthong ou, but even in the classical period it had become equivalent to ु, as indeed it did in other languages, e.g. French, the older ou became ु, whilst the spelling retains the earlier sound-grade.

To pronounce Old-Greek after the fashion of modern Greek is a mistake, which arises from utter ignorance of the laws of development and phonology of a language.

We should be careful to distinguish αι from ει in pronunciation, because they are distinct sounds: they are pronounced as they are written, i.e. αι like German ai or ei, but ει like e + i tacked on, a diphthong, which is found dialectically in German, and characterized in other languages by ey (ę') (cf. Curt. Ept. § 8 sqq.).

Note 2.—Like most other written languages, the Greek does not characterize its long vowels throughout; in earlier Greek, however, they were not indicated at all: α serves as a and ा, i for i and ी, u for ु and ू, in the earlier writing e for e and е (η); o for o and ो (ω). These incomplete indications of sounds have nothing to do with the language itself, τς, e.g., must be read τής, τει=τηι, i.e. τή, τει=τει, i.e. τή, etc.; in all cases the long vowels are derived from the original language. Cf. ‘Declensions.’

The system of Greek writing belongs to Greek special-grammar, as an appendix to the phonology.

§ 17. **The Greek Vowel-system.**

The most important deviation from the original language lies in the colouring of a into e and o, which takes place alike in the case of a and ा by the side of the original vowel pre-
served: the archaic dialects (Doric) have remained most faithful § 17. to the older order of sounds: o has a double duty; it is not only 1. the representative of the original a, but also 2. (opposed to e=a) the representative of the original ā.

Through the differentiation of ā into o, ā, η, ω, it became possible to separate ω as the second step from the first o, a, η.

The weakening of a into i and u, as well as loss of a, occurs comparatively seldom.

This same colouring of the a-sound into e and o occurs when it is combined with i and u in a diphthong; here too e (=a) is the first, o (=ā) the second step, which however is replaced in the u-scale almost always by the first step (ei, eu=original ai, au; oi, ou=original āi, āu). It is only wherever the language has lost the living variability of the vowels according to their scales, ai and au appear as steps raised from i and u.

A large number of vowel-sounds, especially diphthongs and long vowels, arise in Greek through the elision, permutation, and change of position of the original spirants y, v, s, which were entirely, or in certain combinations, unbearable to Greek pronunciation. The vowel-sounds so formed are consequently entirely unoriginal, being products of the peculiar sound-laws of the Greek language, and foreign to the original state of the language.

The Greek vowel-system, in many parts differing from the original one, reminds us in several respects of the Zend; whilst we find on the other hand the greatest conformity with that of the Latin language.

The vowel-scales of the Greek language are then as follows:

<table>
<thead>
<tr>
<th>Weakening</th>
<th>Fundamental-vowel</th>
<th>1st Step</th>
<th>2nd Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-scale</td>
<td>loss i, u</td>
<td>e, o, a</td>
<td>o, ā, η</td>
</tr>
<tr>
<td>i-scale</td>
<td>i</td>
<td>ei (ai)</td>
<td>oi</td>
</tr>
<tr>
<td>u-scale</td>
<td>u</td>
<td>ev (au)</td>
<td>ou (āu)</td>
</tr>
</tbody>
</table>

Note.—More than one sound accordingly occurs here in different functions, as is the case with i and u in Sanskrit, and
§ 17. partly also in Zend. In the Greek, however, we meet with the ambiguous of the sounds for the first time to a greater extent; we may here therefore speak of it briefly. Besides the permutations shown above, \( \iota \) = original \( i \) and \( a \); \( \upsilon \) = original \( u \) and \( a \); \( o \) = original \( a \) and \( a \): that is, the diphthongs are ambiguous because they stand, sometimes for scale-sounds, sometimes for results of contraction, sometimes for protracted vowels. e.g. \( \epsilon i \) in \( \epsilon i\mu \) (eoi, ibo), fundamental-form \( a\-\mu\-i \), originally distinct from \( \epsilon i\mu i \) (sum), from \( *\epsilon \sigma \mu \), fund.-form \( a\-\mu\-i \); \( \epsilon i \) in \( \epsilon i\nu \) (opt. pres.) for \( *\epsilon \sigma \gamma \nu \), f.f. \( a\-\gamma\-\mu \); \( \kappa \tau \epsilon \nu \) (kill) for \( *\kappa \tau \epsilon \nu \gamma \omega \); \( \upsilon \) in \( \sigma \tau \nu \delta \) (haste; raised to \( \upsilon \) in \( \sigma \tau \nu \delta \omega \), \( \upsilon \sigma \tau \nu \delta \) is altogether different, as \( \upsilon \) in \( \tau \upsilon \) (foot) for \( *\tau \nu \delta \-\upsilon \), f.f. \( \tau \upsilon \) (foot); \( \upsilon \) in \( \nu \upsilon \), fr. \( *\nu \upsilon \), for \( \nu \upsilon \), \( \nu \upsilon \) for \( \nu \upsilon \), (acc. pl. of \( \tau \upsilon \)), f.f. \( \tau \upsilon \) (tans); \( \upsilon \) in \( \nu \upsilon \nu \), fr. \( *\nu \upsilon \nu \), for \( \nu \upsilon \nu \), \( \nu \upsilon \nu \) for \( \nu \upsilon \nu \) (nom. sing. masc. and n. fr. \( \nu \upsilon \), young); \( \upsilon \) in \( \gamma \nu \upsilon \nu \) for \( \gamma \nu \upsilon \nu \) (gen. sing. fr. \( \gamma \nu \upsilon \nu \), knee):—similarly in the case of \( \chi \), \( \lambda \nu \nu \-\chi \) (remaining), \( \chi \lambda \upsilon \tau \), but \( \mu \nu \o \nu \) (lot, fate) for \( \mu \nu \o \nu \-\gamma \), \( \chi \mu \nu \) (divide); \( \o \xi \), fr. \( \o \xi \) (older form \( \delta \o \xi \), Lat. \( \o \xi \)); \( \o \) in \( \o \o \o \) (burn), \( \o \o \) (young) for \( \o \o \o \o \) (nom. sing. fem. st. \( \o \o \o \), black) for \( \o \o \o \o \), etc.

§ 18. Examples.

1. a-scale.

Weakening. Loss. e.g. \( \gamma \o \nu \-\o \nu \-\mu \o \) (become) for \( *\gamma \o \nu \-\nu \-\o \mu \o \), \( \gamma \o \nu \), original \( \gamma \o \nu \); \( \pi \o \-\pi \-\o \) for \( *\pi \o \-\pi \-\o \-\o \), \( \pi \o \), original \( \pi \o \) (fall); \( \epsilon \-\o \chi \-\o \) (1 sing. aor.), fund.-form \( a\-\o \o \-\o \-\o \-\o \-\o \), \( \o \o \o \), original \( \o \o \-\o \o \-\o \-\o \-\o \), \( \o \o \o \) (1 sing. aor. \( \o \o \o \o \)), \( \o \o \o \) (follow), original \( \o \o \o \), etc.

There takes place not unfrequently a complete loss of an original \( a \) in the elements of stem-formation, e.g. \( \pi \o \-\o \-\o \-\o \), \( \pi \o \-\o \-\o \-\o \), from stem \( \pi \o \o \-\o \-\o \) (father), original \( \pi \o \o \-\o \-\o \), thus stand for \( \pi \o \o \-\o \-\o \), \( \pi \o \o \-\o \-\o \) (Homeric), f.f. \( \pi \o \o \-\o \-\o \), \( \pi \o \o \-\o \-\o \), etc.

Note.—Loss of initial \( a \) in Greek is not common, cf. \( \epsilon \o \-\o \) (we are), f.f. \( a\-\o \o \-\o \), Sansk. \( a\-\o \o \-\o \), Lat. \( a\-\o \o \-\o \); \( \epsilon \i \o \) = \( *\epsilon \o \o \gamma \nu \), f.f. \( a\-\o \o \-\o \), Sansk. \( a\-\o \o \-\o \), Lat. \( a\-\o \o \-\o \); \( \epsilon \i \o \) for \( *\epsilon \o \o \), f.f. \( a\-\o \o \), Sansk. \( a\-\o \o \-\o \) (well).

The weakening of original \( a \) to \( \iota \) (cf. Curt. Gk. Et., p. 641 sqq.) is not frequent or regular in roots, and occurs most often before two consonns., e.g. \( \epsilon \o \-\i \o \) (2 sing. imper.),
GREEK. a-SCALE. WEAKENING.

\( \sqrt{\text{es}}, \text{origl.} \text{ and Sansk. } \text{as (to be)}; \) \( \pi\text{t}-\nu\mu \) beside \( \pi\text{t}-\acute{\alpha}n\nu\mu \) § 18.

(spread out), cf. pateo; \( \pi\text{t}-\nu\acute{e}v \) (fall), \( \sqrt{\text{te}}, \text{Sk. } \text{pat}; \) k\( \text{r}-\nu\mu \)

beside k\( \text{r}-\acute{\alpha}w \), k\( \text{r}-\acute{\alpha}n\nu\mu \) (mix); \( \text{tik}-\text{tw} \) (bring forth), \( \sqrt{\text{tak} \), \text{origl. } \sqrt{\text{tak}}, \text{cf. } \acute{\epsilon}-\text{tek-ov}, \text{t\'e-ton-k-}\alpha; \) \( \acute{\upsilon}\nu\mu \) for *\( \text{i}k-\text{Fos}, \text{Sk. } \acute{\alpha}c-\text{vas}, \text{Lat. } eq-\nu\,\upsilon\o s, \text{f.f. } ak-\text{vas}, \sqrt{\text{ak}} \) (run). The passing of original \( a \) into \( i \) is through intervening \( e \), to which fact the examples cited bear witness.

This weakening of the fundamental \( a \) into \( i \) occurs regularly in the reduplicated form of the present, e.g. \( \tau\text{i-\theta}n-\mu \), Sk. and \( \text{origl. } \text{d\'a-dh\'a-mi}, \sqrt{\text{the}}, \text{Sk. and origl. } \sqrt{\text{dha (place); } \delta l-\delta\omega-\mu} \), Sk. and \( \text{origl. } \text{d\'a-dh\'a-mi}, \sqrt{\text{dha (give); } \gamma i-\gamma n-\mu\mu\mu, \sqrt{\text{yen}, \text{origl. } g\text{an (bring forth); } \pi\text{i-\pi\text{t}-}\omega, \sqrt{\text{te}}, \text{origl. } \text{pat (fall). This } i \) (weakened from \( a \)) occurs lengthened to \( i \), e.g. in \( \pi\text{i-\nu\o} \) (drink), \( \sqrt{\text{to (p\'o-\nu\o, } \nu\text{o-\t\'e-\nu, } \pi\text{e-\pi\o-ka)}, \text{origl. } \text{pa}; \) \( \text{partheu-\nu}\text{x-\nu-x-}\eta \) (looker-at-maidens), cf. \( \delta\nu-\omega\nu-\eta \) (sight), \( \sqrt{\text{\'o}, \text{origl. } ak \) (see); \( \nu\sigma-\mu\nu-\eta, \nu\sigma-\mu\nu-\eta \) (loc. sing. moil), f.f. \( \text{yudh-man\'a, yudh-man\'i}, \) the latter to the st. \( \text{yudh-man\'a, } \sqrt{\text{yudh (join battle), suff. man.}} \)

Dialectically (in D\'oric, Aiolic) this weakening of \( \text{origl. } a \) to \( i \) is more common; e.g. D\'oric. \( \iota-\sigma-\tau\lambda, \) I\'onian. \( \iota-\tau\lambda\gamma, \) for \( \epsilon\sigma-\tau\lambda \) (hearth), \( \text{origl. } \sqrt{\text{vas; } } \nuw \) Arkad. and Kuprian for \( \nu\v\nu \) (in), related to the pronoml. stem \( \alpha n; \) Boi\'otian \( \iota\nuw=\text{I\'onian. } \epsilon\nuw \) for \( *\epsilon\sigma-\nu\nu \) (n. sing. masc. part. pres. act.), \( \sqrt{\epsilon\nu-} \) (be), etc. Through the dulling of \( a \) to \( o \), and further of \( o \) to \( u \), a change of \( \text{origl. } a \) to \( u \) takes place.

This weakening of \( a \) to \( u \) (cf. G. Curt., p. 644 sqq.) occurs merely unconnectedly, in most cases through the influence of a nasal or \( r, l \); and herein we must not forget that \( v \) represents an older \( u \), so that in Greek we have the same weakening from \( a \) to \( u \) as in Lat. and German, etc., e.g. \( \nu\nu\nu-\delta \) (gen. sing.), stem \( \nu\nu\nu-
\) (night), (Sk. adv. \( \nu\nu\nu\nu\nu\nu-\nu\nu\nu\nu\nu \) =\( \nu\nu\nu \), Lat. stem. \( \nu\nu\nu\nu\nu\nu : \) the root-vowel thus is \( a \), and the root clearly \( \sqrt{\nuak} \) (necare, nocere); in \( \nu\nu\nu \) (stem \( \nu\nu\nu \), nail), root \( \nu\nu\nu \), cf. Goth. \( \text{nag}-\nu\nu, \text{Sk. } \text{nakh-\nu, etc., the origl. vowel is no doubt } a, \gamma \nu\nu \) (woman),
§ 18. ιγαν (bring forth), cf. Sk. γαν-α-ς (mensch), γανι (wife), Gothic kven-s (wife, spouse); ΚΥΚΛΟΣ (ring), cf. Sk. ΚΑΚΡΑ-Μ; μυλ-ος, μυλ-η (mola), ιμαλ fr. mar, cf. mola, molere, Lith. malu, Gothic malan; ἄν-όνυμος (nameless) beside ὄνομα (name), f.f. gnāman, etc.

Dialectically this change is more frequently observed, esp. in Aiolic, e.g. ὄνυμα = ὄνομα; ὑμος = ὑμος, f.f. samaías, from stem sam = Gk. ὅμο (ὁμός, like), the origin of which is found in the pronoml. origl. ὑα = Gk. ὁ; Aiolic locative ἄλλω, τνίδε, for ἄλλοι (ἄλλοι, other), τοῦδε (το- demonstr. pronoml. st.); Boiotian τό for *τνί = τοι (n. pl. masc. same st.), τοις ἄλλοις = *τνίς *ἄλλοις = τοίς ἄλλοις (dat. loc. pl.), by contraction of ν to υ.

Note.—I hold it inadmissible to separate from the rest those cases in which original κα, γα, become κυ, γυ, and to explain them collectively from καν, γαν, with loss of α; neither will a fmn. *ΚΑΚΛΟΣ seem to me to be Gk., and yet we must suppose some such form. No one, so far as I know, has had recourse to a fmn. *ΝΑΞ, *ΟΥΝΑΞ, *ΜΑΛΗ, in order to explain the ν in these words. Here ν must have arisen from α without passing through να, and the same process must have taken place after gutturals.

§ 19. Root-vowel α in the original language.

As a rule, ε is the representative of origl. α in roots; whilst o generally takes its place in the stem-formative and word-formative particles, a is found in roots; in word-formative additions it is mostly dependent on a nasal now lost, but once in existence.

ε = a. εδ-ω, Sk. ἄδ-μι (eat), ζεδ, origl. ad (edo); ζεδ in εξ-ομαι = *ζεδ-γομαι (sed-eo), ζεδ-ος (sed-es), origl. sad (sit); γεν in γέν-ος (gen-us), origl. gan (gi-gn-ere) of gan-as; εσ-τι, Sk. and origl. ἄσ-τι (κεντι, origl. as, esse); φερω, Sk. and origl. bhār-āmi, ἐφερ-οῦ, Sk. and origl. ă-bhar-am, ϕερ, origl. bhar (ferre), etc. So also ε is common in elements of relation, e.g. st. πα-τερ- (n. sing. πατήρ, father), origl. pa-tar-; st. μη-τερ- (n. sing: μήτηρ, mater), origl. mālar-; st. μεν-εσ- (n. sing.
GREEK. a-scale. ROOT-VOWEL a.

μένος, might), Sk. and origl. μάν-ας; φέρ-ετε, Sk. βήρ-άθα; § 19. origl. evidently bhar-a-tasi (2 pl. pres. act.), etc.

ο = a. τοδ-ός, Sk. and origl. pad-ός (g. sing.), st. and √pad (foot, go), where of course, in accordance with the sensibility of the Greek, the o may also be considered as a raised step from e in τεδ; ὃ, τό, origl. and Sk. sa, ta-t, root and st. sa, ta (pron. dem.); τό-σι-ς (lord)=origl. and Sk. πα-τί-ς (lord); μέν-ος (n. acc.), μέν-ους (gen. sing.) for *μένεο-ος, Sk. and origl. μάν-ας, μάν-ας-ας; similarly in a-stems, a changes to o, as νέφο-ς (n. sing. masc.), νέφο-ν (acc. sing.)=Lat. nouo-s, nouo-m, Sk. and origl. náve-s, náve-m, etc.

Dialectically o takes the place of a. Aiolic βροχέως for βραχέως (adv.), from st. βραχύ- (breuis=breguis, short); Arkadian ἐκτόνων for ἐκτόνων (100), f.f. of -κατον is κατα-μ or καντα-μ, cf. Sk. καλά-μ; Kuprian κόρδα=καρδία (heart), cf. Lat. cord-, f.f. of this stem is kard-; st. tektan- in τέκτανα, i.e. *τεκτανιά (fem.), τεκτάν-ομαι (build), i.e. *τεκτανιομαι stands by the form τέκτον- (n. sing. τέκτων, builder), f.f. taktan-; the older a is preserved in the Doric Ἠκατην for the newer ΑΤΤΙΚΗ εἰκοσί (twenty), f.f. of the second part of the word is (dα)κατι; in δια-κάτιοι for διακόσιοι (200), -κατιοi is derived from an origl. stem κατα- or καντα- (100).

a = a. ἂκ-ωκ-ή (point), st. ἂκ-οντ- (n. ἂκον, dart), origl. √ἀκ (Lat. ac-, ae-utus); ἄγ-ω (lead)=Lat. ago, Sk. ἄγ-αμι, origl. √αγ; ἄχος (grief), ἄχ-νυμαι (am grieved), origl. √αγ; ἐ-λαχ-ύς (little), Sk. lagh-us (old raγh-ú-s) (light); πλατύ-ς (broad, wide), Sk. prthú-s, origl. pratu-s; λα-μ-β-άνω (take), ἐ-λαβ-ον, Sk. ἄ-λαβ-αμ, √λαβ, Sk. labh- (get); δάκ-νω (bite), ἐ-δακ-ον, cf. Sk. δαγ-αμι, f.f. √δακ; ἐ-λακ-ον (I spoke), cf. Lat. loq-νωρ, Sk. λάρ-αμι (cry out), √λακ, origl. rak; st. πα-τέρ- (father)=Lat. pa-ter-, origl. pa-tar-, √pa (protect).

a stands beside e, e.g. ἐ-ταμ-ον beside ἐ-τεμ-ον (téμ-νον, cut), in ἐ-ταφ-ον, ἐ-ταπ-ον, ἐ-κταν-ον beside τρέφ-ω (cherish), τρέπ-ω (turn), κτεν-ον (kill) (=*κτεν-γο). We cannot trace herein a
§ 19. step from $e$ to $a$, but only a vowel-colouring, originally merely
dialectic, which indeed was used in Greek for the purpose of
expressing the relation of the aorist. As $ε-ταμ-ον$ is to $ε-τεμ-ον$,
so are the present forms $τέμων$, $τρέφω$, $τρέπω$ to the Dóric
τάμων, τράφω, τράπω, which we have to consider as the pre-
sents corresponding to the aorists $έταμον$, $έτραψον$, $έτραπον$;
κρέασον (better) (i.e. *κρέα-γων) beside κράπ-ιστος (best). Cf.
Dóric $á=Ió$. Attic $η$.

$\alpha=a+\text{nasal}$. τόδα (acc. sing.), Sk. and origl. $πάδ-αμ$ (ped-
em), πόδ-ας, Sk. $πάδ-ας$, origl. padam-ς; φέρων-τα, Sk. and origl.
βαραν-ταμ (ferent-tem), φέροντ-ας, Sk. βαραντ-ας, origl. bharant-
ams (acc. pl. feren-ς); $έπτάδ$, Sk. and origl. $σάπτάν$ (septem);
δέκα, Sk. δάκαν, origl. dakan (decem); $-σα$ (I sing. aor. in comp.)
=Sk. and origl. $-σα-μ$, cf. $ε-δείξα$ ($=ε-δεικ-σα$) and Sk. $ά-δικ-
σα-μ$, $ν/δίς$, origl. dik (show).

§ 20. Step-formation in the $a$-scale. Rule for the first step
is: radical $e$ is raised to $o$, $a$ to $ä$ (i.e. $η$). There are, however,
exceptions to this rule.

1. $ε:o$. φόρ-ο-ς (tax), φορέω (bear (durative), wear) = Sk.
and f.f. βάρ-ας (burden), βαρά-γαμί (causat.) beside φέρ-ω,
Sk. and f.f. βάρ-αμί (fero); Φόκ-ο-ς (waggon), Sk. vah-ας,
f.f. vágḥ-ας (waggon), $\sqrt{Feχ}$, Sk. vah, origl. vagh (vehere),
which, however, as a verb becomes intermixed with $\sqrt{εχ}$, Sk.
sah (have, hold); μέ-μον-α (strive), f.f. $μά-μάν-α$, beside
μέν-ος (might), Sk. and f.f. $μάν-ας$, $ν/μεν$, origl. $ν/μαν$
(think); γον-ή (birth), γόν-ο-ς (thing born, bairn), γέ-γον-α, f.f.
γα-γάν-α, Sk. γαγάνα, beside $έ-γεν-όμην$, $γέν-ος$ (genus), Sk. γάν-ας,
f.f. gan-ας, $\sqrt{γεν}$, origl. $\sqrt{gan}$ (gi-gn-ere); τόκος (thing born,
bairn), τόκ-εύ-ς (paren), beside $τεκ-έσθαι$, $τίκ-τω$, $\sqrt{τεκ}$
(pro-
duce); $τέ-τροφ-α$ beside τρέφ-ω, $έ-τράφ-νυν$, $\sqrt{τρεφ}$ (nourish);
$έ-κτον-α$ beside κτελ-ω (i.e. *κτεν-γω), $έ-κταν-ον$, $\sqrt{κτεν}$ (kill);
$έ-λοχ-α$, λόχ-ος, beside λέχω, $\sqrt{λεγ}$ (legere); $έ-φθορ-α$, $φθορ-ά,
beside $φθελ-ρα$, i.e. *φθερ-γω, $\sqrt{φθερ}$ (destroy); $δψ$ (voice), i.e.
Φόν-ς, origl. vák-ς, Sk. vāk for *vāk-ς (cry), beside Féπ-ος (word),
GREEK. a-scale. 1st step.

origl. vāk-as, Sk. vāk-as, origl. √vak (cry); γόν-ν, gen. γόνατος, § 20.
older (Iōn.) γόνατος=γονFatos, γοννός=γονFos, cf. Sk. γάνυ
(genu); δ-νο-μα, older (Hom.) oδ-νο-μα (name), from δ-γνυ-μα,
cf. Lat. gno-men, (Sk. nām-an, also, with root-vowel raised).

In Greek, on account of the prosodic quantity of o, this step is possible only before two consonants, e.g. δέκαρκα=Sk. da-
dár-ś-a, origl. da-dark-a, beside δέρκ-ομα, δ-δρακ-ον, δéρκ, origl. 
dark (see).

Note.—The same kind of step-formation of e=a to o=a occurs in Latin, also in Sclavonic, e.g. O.-Bulg. vez-u=original 
vagh-āmi, Lat. ueho, bes. voz-u=original vāgh-ā-s, Gk. Fάχ-o-ς, vi.
infr.

2. a: ā, η, two equivalent sounds. e.g. λέληκ-α, λέλάκ-α, 
beside ε-λακ-ον, √λακ (cry out), cf. Sk. lap, origl. rak; κέ-κλαρ-α 
beside κ-κλαρ-ον, κλάξω=κλαρ-γω, √κλαρ (sound); λέ-ληθ-α, 
Dor. λέ-λαθ-α, λήθη (forgetfulness), beside ε-λαθ-ον, λα-ν-θ-άνω, 
√λαθ (escape notice); ει-ληθ-α beside ε-λαρ-ον, λα-γ-χ-άνω, 
√λαχ (get by lot); δέ-δηθ-α beside δάκ-νω, δ-δακ-ον, √δακ 
(bite); ει-ληφ-α, λήψ-ει (i.e. ληψ-σις=ληψ-τις), beside ε-λαβ-ον, 
λα-μ-β-άνω, √λαβ (take); κέ-κράγ-α beside κράξω, *κραγ-γω, 
√κραγ (cry aloud); ε-άγα, Iōn. ε-γά-α, i.e. Fe-Fάγ-α, f.f. 
vāγ-α, beside ἀγ-νυμι, √Fάγ (break); st. μη-τερ-, origl. and Sk. 
mā-tar-, etc.

In elements belonging to the formation of words, o will be 
found raised to η, ā: this rule is observed regularly in the stem-
termination o=a in such stems as are raised in the feminine 
termination, e.g. νέο-ς (n. sing. masc.), νέο-ν (n. sing. neut.), 
origl. and Sk. nāva-s, nāva-m (nouo-s, nouo-m), but fem. νε-α, Iōn. 
νεν=origl. and Sk. nāvā (noua). In ἦ, 'ā, origl. and Sk. sā, beside 
ό, origl. and Sk. sa (pron. demonstr.), and other pronominal stems, 
is found radical o raised to η, ā, the root being equivalent to the 
stem as often.

Note 1.—μέ-μη-α beside μέλ-ει, μέλ (be a care to), shows 
also the raising of ε to η.
§ 20. **Note 2.**—Sometimes ediator to ă, e.g. Ἀδετυ (city), Sk. ράς τύ (house), Sk. and original ἐν (inhabit); similar shortenings often occur in the a-termin. of feminine stems.

**Note 3.**—The laying-down of the laws for the use of ă, η, belongs to the special-grammar of Greek: the Doric predilection for the more ancient ă and that of Ionia for η are well known. In Attic likewise ă changes to η, yet ă repeatedly occurs, owing to the surrounding sounds, especially in the case of ρ, ε, η, ι, γ (i.e. ζ, σγ, λλ, etc.), preceding, and ε, η, following, when its change to η is stopped.

For the second step we have ω in examples such as ἐρ-ρωγ-α, ῥῶξ, ῥωγ-ός (cleft), beside ῥήγ-νυμί, /Frαγ (break), cf. Goth. brak, Lat. frug; πτώξ, i.e. πτώκ-ς, gen. πτώκ-ός (cowering), πτώσωω, i.e. *πτώκ-γω (cower), beside πτήσωω = *πτήκ-γω, ἐ-πτακ-ον, √πτακ (cower), clearly a further formation from √πτα, cf. πε-πτη-κύς; ἀρωγ-ός (helper) beside ἀρήγ-ω (I help). From these examples we gather an equation η:ω:ε:ο.

Also where there is no parallel first step to ω, we must hold it to be in the position of a second step, e.g. τρώγ-ω beside ἐ-τραγ-ον, /τραγ (gnaw, chew); ὀδ-ωδ-α beside ὀγω = ὀδ-γω, ὀδ-μη, ὀσ-μη, √ὀδ (smell); ὑκ-ύς = Sk. ἀς-ύς, origl. ἁκ-ύς (sharp), ἁκ-όκ-ή (point), √άκ, cf. ζππός (equous), origl. ἀκ-ες; ὀ-ὀν, better φόν (Sappho, ὁνον acc. to Ahrens, ὁβεον Hesuch.), origl. ἁυα-μ (ouom, lit. bird-, of a bird), from origl. αει-ς, Sk. ει-ς (auis); ἀγ-ωγ-ή (leading), ἀγ-ωγ-ός (leader), beside ἀγ-αγ-ειν, ἀγ-ειν (lead); ἐ-δο-μεί beside ἐ-δο-μεν, √δο (dare); ἐδ-ωδ-ή (food), √ἐδ, Lat. ed, origl. and Sk. ad (eat); γνω-τός (known), γν-γνώ-σκω (learn, come to know), cf. Lat. (g)nō-tus, (g)nō-sco, γνα, from gan.

**Note.**—Dialectically ου occurs for ω, i.e. ă, in isolated instances (a weakening which occurs also in Lat.). ω:ου (ă):o:v (u), e.g. Thessal. γνωίμα = γνώμη (insight, opinion), γνυ, original γνα = gan (learn); -ων = -ων, fund. -άμ in gen. pl., cf. Lat. -um, etc.

§ 21. 2. i-scale.

**Root-vowel i.** i-μευ, i-θι, Sk. i-μάς-ι, i-χι, origl. i-masi, i-dhi, /i(ire); ἐ-λιτ-ον, √λιτ, Lat. lic, Sk. rik, origl. rik (leave); Flδ-μευ
GREEK. i-scale. 1st step.

=Sk. and origl. vid-mási, st. Fló-tóp- [n. sing. Fló-tóp and Fló-tóp § 21. (knower, witness)], for *Fíd-tóp-, f.f. vid-tar, √vid (know); e-πiθ-ov, e-πiθ-óμην, πiδ-τις (faith), for *πiθ-τις-σ, √πiθ (persuade), and element of stem-formation τι; σχιδ-η (splinter), σχιδ-ω (split) =σχιδ-η-Sk. khid, Lat. scid, origl. skid (scindere); o-μχ-εiω, √μχ=Sk. mih, origl. migh (mingere); λχ-νος (daintiness), λχ-μάω, √λχ, Sk. lih, rih, Lat. lig, origl. righ; στιχ-ος (rank), ε-στιχ-ον, √στιχ (march, tread), Goth. stig, Sk. and origl. stigh; τλ-ς, fund. ki-s, Lat. qui-s, Goth. *hi-s, prnl. root, origl. ki (dem. and interrog.), etc.

Lengthened i is a parallel form to i (often depending on fixed proportion of sound), e.g. Hom. ἵ-ομεν and ἵ-ομεν besides ἵ-ομεν (1 pl. pres. conj.), origl. i-a-mas, √i (ire); ἵ-ος (ntr. sweat), ἵδ-ω (I sweat), √iδ, origl. svid, cf. Sk. svid-yámi; πί-νω (πίνε), πίθα, besides ε-πι-ον, √πι (drink), cf. Sk. pí beside pa.

i raised by steps. § 22.

1. i raised to ei; e.g. ει-μυ (go), Sk. é-mi, origl. ai-mi, √i; πειθ-ω (1 sing. pres.), √πιθ, so λειπ-ω, √λιπ; λειχ-ω, origl. raigh-ámi (1 sing. pres.), √λιχ, origl. righ; στειχ-ω, origl. staigh-ámi, √στιχ; Feiδ-εταυ, εισομαι (for*Feiδ-εσομαι), Feídos (ntr. outward-form), √Fiδ; εικ-όν (likeness) besides ε-ικ-του, ε-ικτην, √Feix, clearly (=resemble); κει-ταυ (3 sing. pres.med.)=Sk. cei-té, √ki (lie), etc.

ai occurs in the main perhaps only as a lifeless step-formation where the language has lost all sense of the derivation, and hence for the most part no i, ει, or oi, is parallel to ai, e.g. aiδ-ω (I kindle), aiδ-εσθαι (burn), aiδ-ηρ, aiδ-ερος, (aether), aiδ-ουσα (porch), cf. Lat. aed-es, aed-ilis, √iδ=Sk. idh, indh (burn), Germ. it, in O.H.G. eit (fire); ai-Fów, origl. ai-ván-s (time, long time), cf. Lat. ae-u-o-m, origl. ai-va-m, Sk. é-va-s, origl. ai-va-s (a going), Goth. aiv-s, f.f. ai-va-s (time, long time), with other step-forms, √i (go), with sf. van, va (here the language no longer felt the connexion with i-μεν, εi-μυ, oι-μος); καιρό-s (point of time), cf. Goth. hvei-la (hour, time, Engl. 'while'), origl. hai-rá, origl. √ki.
§ 22.  Note.—In medial terms., e.g. φερο-μαι, *φερε-σαι, φερε-ται, φερον-ται, μι is not a step-form, but the product of a contraction from f.f. bharā-mami, bharā-sasi, bharā-tati, bharā-ntanti, v. sub. ‘Conjugation.’

2. i raised to oi, e.g. oi-mos, oi-μη (road, a going), cf. ai-Fόν, ει-μυ, ε-μεν, /i (go); πε-ποιθ-α beside πεθ-ω, πιθ (ε-πε-πιθ-μεν); λε-λουπ-α, λουπ-δ-ς (left, remaining), beside λειπ-ω, ε-λιπ-ου, λιπ-π; Φοιδ-α (know)=Sk. νε-δ-α, with the 1st, Goth. vait with 2nd step, beside Φειδ-ος, Φιδ (Φιδ-μεν); ή-οικ-α (seem) beside εικ-όν, for Φέουκα, Φικ, ε-ικ-τον, ε-ικ-την; Φοικ-ος (house), cf. Sk. νε-χ-s, Lat. uic-us, i.e. *weic-ο-s, with 1st step, Φικ=Sk. νις, origl. νικ (settle); Φοικ-ος (wine), cf. Lat. uin-um, Germ. wein with 1st step; λαιβ-η (lib-atio) beside λειβ-ω (pour), and λιβ-ο-ς (drop), λιβ-άς, -άδ-ος (moisture), λιβ; στειχ-ος (rank) beside στειχ-ω, ε-στιχ-ον, στιχ (blood-licking) beside λει-τ-ω, λυ-νος; κοιτ-η (bed), κοι-μάσθαι (sleep), beside κει-ται, κι, etc.

Note.—In opt. φέρ-οις (etc.)=fund. bhar-ai-s, also in nom. pl. e.g. oi, original saí (tai), οι is the result of a contraction, not a step of a vowel-scale; v. ‘Conjugation and Declension.’

§ 23.  3. u-scale.

Radical u, e.g. ε-φυ-νον, φυ-νή (fug-a), φυ, Sk. bhiug (bhiug-nā-s, bent), Goth. bug (bend), Lat. fug (only here and in the Greek with a narrower sense); ζυγ-όν (yoke)=Lat. iug-um, Sk. and origl. iug-ām, уγ (join, iungere); ε-ρυθ-ρό-ς (red) =Sk. rudh-ivā-s, f.f. rudh-ra-s, ρυθ, origl. and Sk. φυθ, Goth. rud (be red), etc.; σύ, τύ (thou, du), cf. Sk. tu-am, Lat. tu, Lith. tu, Sclav. ty; κλύ-ω (hear), κλυ, Sk. gru, Goth. hlu (Eng. loud, lud=voice), origl. kru; ρυ-τό-ς (flowing), φυ, Sk. and origl. ςρυ (flow), so ερρυ-νη=ε-σρυ-η, Germ. strru (in ström, stream, with inserted t); φυ-ω (am), φυρ-ον (being), φυ, Sk. bhu, Lat. bu, origl. bhu (be); κε-χυ-μαι (perf.), χυ, Goth. υγ-t (pour) (with a t for further formation); εσ-συ-μαι, (pf.), σύ-το (aor.), ςυ (rush); ωκ-υ-ς=Sk. ας-ς-s, origl. ακ-ς-s,
(sharp); ἐπάτ-υ-ς, Sk. πρθύς, origl. πρατ-υ-ς (broad), sf. u; § 23. ἄο-τυ (city)=Sk. τᾶς-τυ (house); βοη-τυ-ς (shout), μόρ-τυς (witness), etc., with sf. -τυ, Sk., Lat., origl. τυ. The lengthening of u to υ is not uncommon, e.g. τ'δαρ, cf. Sk. υδ-α-μ, υδ-ακά-μ, Lat. υνδα, with inserted nasal, Sk. όυδ (be wet); κλοῦ-θι (imper. aor.)=Sk. κρο-δι, origl. κρο-δι, cf. κέ-κλοῦ-θι, κλοῦ-τος, όκλου, origl. κρο (hear); πέ-πνυ-μαυ, πε-πνυ-μένος (prudent), πνυ-ω, όξυ (shave); υς and σύς (swine), cf. Lat. sūs, Sk. sū-kara-, O.H.G. su, όsu; δρο-ς (tree), Goth. triu (arbor). We cannot decide with any certainty where origl. αυ stands as a lengthening for a root-vowel, and where it stands for a step of a vowel-scale. In the last-mentioned examples perhaps originally a step-form was in existence.

Note 1.—The older sound u has been kept in Boiot. (του=συ, κούνες=κώνες, etc.), and in diphth. αυ. The later υ=υ occurs proportionately early, however. The same transition of sound occurs also in other languages. Lat. una became Fr. une, pronounced ùn.

Note 2.—In Greek as well as in Umbr., ε occurs as a weaker representative form of υ. In mod. Gk. it is well known that υ has universally become ε. So φι-τυ-ς (father, begetter), φι-τυ-ω (beget)=Lat. fu-tu-o, όφυ, original bhu; δρι-ου, also δρι-ος (forest), and δρο-ς (tree), cf. Sk. dru-, masc. n. wood, m. tree), Goth. triu (tree); ςλ-αλο-ς (hag) and συς. Curt. Gk. Et.² p. 647 sqq.

Step-formation of υ.

§ 24.

1. step ευ, e.g. φευ-ω (flee), πε-φευ-α, όφυ; ελεύ[θ]-σομαι (shall come), ελυθ in ἤλυθων=ε-ελυθ-ου; κλέF-ος=Sk. γρά-ας (fame), origl. krav-as, όκλυ; πλάF-ω (sail)=Sk. and origl. πλά-άμι, όπλυ; ρεύ-μα (stream), ρεύ-σομαι, όF-ω (flow)=Sk. and origl. srá-άμι, όρυ, origl. and Sk. όςρυ (flow); πνεύ-μα (breath), πνεύ-σω, πνέF-ω (blow), όπνυ; σεύ-ω (rash), όσυ; χρέF-ω (pour), όχυ; ξεF-ω (I scrape), όξυ; Zeύ-ς (nom. propr. God), for *Dευ-ς, in Sk. with 2nd step δγαυ-ς (heaven), in the other cases from όδιν, όDίF=δυν, *Dυ, όν, etc.

αυ is here too a lifeless step-formation, e.g. αυ-ω for *αυσ-ω
§ 24. (kindle), ἐν-ἀναρ-μα (tinder), cf. εὐ-ὢ, Lat. uro=*ous-o, *eus-o (see Lat. ‘Vowels’), Sk. ὑσ-ἀμι, origl. aus-ἀμι, ἥ/ου, origl. ὦς; αἰγ-η (glance), ἥ/υη, cf. Sk. ἀγα (force); αὐχ-ἀν-ὢ, i.e. αἰγ-σανω (make to grow), cf. Lat. aug-εο, ἥ/ογ (which occurs pure in Lith.).

2. Second step οὐ occurs seldom, espec. when u is medial (no *πο-φον-α=Goth. baug,=*bu-däuga, like λέλουτα), while we find it compensated for by the first step, yet cf. εἰλήλουθα (Hom.) from ἥ/ελθθ, cf. ἥ/λυθθν and ἥλεόθ(θ)σομαι [origl. ἥ/εθθITH ἥ/εθθ, origl. ἁ (go), in ἥθ-χομαι (come, go), f.f. er-sκομαι, further formed in Greek by sf. υ (τροσ-ἡλυ-τος ἑπ-ἡλυς, newly come), to which is added the frequent accompaniment of a verb-stem θ (v. sub. ‘Formation of Present-stem’); the secondary ἥ/ελθθ so formed sts. was treated as if the ἥ/vowel was really υ (exx. in text), sts. is merely equivalent to an auxiliary vowel (§ 29), which moreover may disappear, ἥ/λθθν], ἁ-κόλουθος (follower), and κελευθ-ος (way); ῥοῦσ-ος (reddish), for ῥοῦθος (or perhaps ῥοῦθ-τιος, ῥοῦθ-σιος ?), beside ἥ-ρευθ-ω (blush), and ἥ-ῥυθ-ρός (red); στοῦν-ἡ (haste) beside στεῦθ-ω (haste); λοῦσσυν= ἓλκυθ-γον (white pith of deal), cf. λευκ-ός (white), ἁμφι-λύκ-η (twilight), λύχ-νος. More often beside final υ, e.g. πνοῦ-ἡ (blast) beside πνῦ-ω, ἥ/πνυ; ῥοῦ-ἡ, ῥό-ος (stream), beside ῥεῦ-μα, ἥ/ρυ; χοῦ-ἡ (outpouring) beside χεῦ-ω, ἥ/χυ; πνῦ-ος (voyage) beside πνῦ-ω, ἥ/πνυ; ῥό-ος (swift) beside ῥεῦ-ω, ἥ/θυ, Sk. and origl. dhu; ξοῦ-ις (chisel), ξεῦ-ονον (carved-work), beside ξεῦ-ω, ἥ/δυ; σοῦ-ος (quick motion), σοῦ-μαι=σοῦ-ομαί (Trag. haste), beside σεῦ-ω, ἥ/συ.

In separate instances also αὐ (ἀυ) is a second step fr. υ, e.g. ναῦς (nauis) (i.e. ναῦς on acct. of νηυς)=Sk. ναυ-ς, ἑν. νηυ-ος, Dōr. ναῦ-ος, Sk. νᾶυ-άς, point to ἥ/νυ.

οὐ is only ἑν. —αυ, e.g. θωῦ-μα (wonder)=θαῦ-μα, θεῦ, θεῦ-ομαι (show, gaze), point to ἥ/θυ.

ω also occurs sts. as second step from υ, e.g. ξω-μος (broth), cf. ξυ-μη (yeast), Sk. γυ-κα-μ, Lat. iu-s, similarly belonging to
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\( \sqrt{yu} \), Gk. \( \zeta \nu \) (with which \( \zeta\-\omega \) (cook) for \( *\zeta\-\omega \), cf. \( \epsilon\-\zeta\-\mu\alpha \), \$ 24. \( \zeta\-\tau\-\sigma\-\tau \), has no connexion, cf. O.H.G. \( \sqrt{jas} \), cook); \( \xi\-\nu\nu\mu \) (gird), \( \sqrt{\xi} \), origl. \( yu \) (join); \( \chi\-\nu\nu\mu \), \( \sqrt{\chi} \), \( \chi\-\omega \) (pour). If we compare \( \pi\lambda\-\omega \) for \( \pi\lambda\-\varepsilon\-\omega \), Iön. parallel-form to \( \pi\lambda\-\varepsilon\-\omega \), Dör. \( \beta\omega\-\sigma=\beta\omega\-\sigma=Sk. \, g\-\mu \), and Iön. \( \omega\-\nu=\nu \), hence we infer in Greek a step-formn. \( \omega \nu \), \( \omega\-\nu \), \( \omega \), where the 2nd element has become assimilated to the first, so that only \( \delta \), \( \omega \) \( (=\omega \, \omega \) on) remains.

Note 1.—Cases such as \( \sigma\-\varav\-\sigma \) (heaven) beside Sk. \( \varav\-\mu\nu\-\sigma \) (name of a deity); \( \sigma\-\nu\-\eta \) (scar) beside Lat. \( u\-\nu\nu\-\mu\nu\-\sigma \), Sk. \( \nu\-\mu\nu\-\mu\nu\-\sigma \) and \( \nu\-\mu\nu\-\mu\nu\-\sigma \) (wound); \( \sigma\-\nu\-\sigma \) (wide) beside Sk. \( \nu\-\sigma \) for \( *\nu\-\sigma \), \( \sigma \), \( \sigma \), show \( \nu \), \( \sigma \), \( \sigma \), in place of the expected \( \sigma \), \( \sigma \). The explanation of this is difficult; perhaps it is to be considered less as a transposition of \( \sigma \), \( \sigma \), to \( \nu \), \( \nu \), \( \nu \), than a shortening fr. original \( \nu \) to \( \nu \) and a step-formation from the latter.

Note 2.—There are three roots \( \theta \nu \) in Gk.: 1. \( \theta\-\omega \), hasten; 2. \( \theta\-\omega \), offer; 3. in \( \theta\-\mu\-\mu \), \( \theta\-\alpha\-\mu\-\mu \), gaze.

Note 3.—All vowel-sounds which do not appear in the vowel-scales are therefore unoriginal products of the sound-laws (especially of contraction after the elision of consonants).

Sound-laws of Vowels. § 25.

The laws laid down in ordinary Greek grammars, i.e. the laws of contraction, etc., may be passed over as already understood.

At first sight we are struck by the frequently occurring hiatus which arises from elision of spirants \( y \), \( s \), \( v \), and their vocalisation, and which is not by any means invariably obviated by contraction; thus arise forms such as Homeric \( \delta\-\eta\-\omega \-\nu \) (five vowels together), 3 pl. opt. from \( \delta\-\nu\-\omega \) (slay), fr. \( \delta\-\nu\-\nu \) (hostile); \( \delta\-\nu\-\nu \) evidently \( =*\delta\-\nu\-\nu \) Sk. \( \delta\-\alpha\-\sigma\-\sigma \) (hostile), adjectival form in \( \nu \), fr. \( \delta\-\sigma\-\sigma \) (demon, slave, originally ‘foe’), whence \( *\delta\-\sigma\-\sigma \-\nu \-\nu \-\nu \), whence \( \delta\-\nu\-\nu \) (enraged), of which 3 pl. f.f. \( \delta\-\sigma\-\nu \-\nu \-\nu \-\nu \-\nu \-\nu \) (hostile), comes \( \delta\-\nu\-\nu \-\nu \-\nu \) (Acc. to Aufrecht in Kuhn’s Zeitschrift, vii. 312,
§ 25. sqq., ἰός proved to be Æolic in δάφιος belongs to ϝδυ; f.f. accordingly of ἰός, ἱώφευν=*δάφια-ς, *δάφια-γα-αντ.) Diphth. ι, η, ω, are only secondary products of contraction.

Whilst the termination (except a few instances, e.g. partial shortening of ᾰ to ᾴ in fem. and the like, cf. § 20) does not yet exercise a destructive influence on the vowels,—and also the vowels of syllables which follow medially upon one another (excepting the working of the i of σι on the vowel of the preceding syllable) have no essential influence upon one another,—we perceive a variation of the older vowel-system, caused by consonantal influence,—a variation of considerable importance and characteristic of the language.

Important above all are the changes in consequence of the Greek distaste for the original and frequent Indo-European spirants y, v, s; y and v become e and u; y as i and u change position from a following to a preceding syllable; y, v, and s, further fall out from between two vowels. After the disappearance and softening of consonants, frequent vowel-lengthening takes place. A consonantal sound in the beginning of a word is not unfrequently accompanied by an introductory vowel-sound, and besides occurs the so-called vowel-insertion between two consonants.

§26a. Introduction of i into a preceding syllable in case of termin. -σι. e.g. (1.) loc. dat. pl. ταῖσι, ἦσσα, thence ταῖς, fr. *tāsi (pronoml. st. ta raised to tā, and loc. termin. pl. si), and also τοῦσι, τοῖς, fr. *to-si, *tā-si (although another explanation offers itself here, v. sub. 'Declension'). (2.) 2 sing. ind. and conj. act., e.g. φερεσ (indic.), fr. *φερεσι, *φερε-σι, f.f. bhara-si; φέρης (conj.), fr. *φερησι, *φερησι, *φερησι, f.f. bharā-si.

§26b. Vocalisation and transposition of y and v.

1. y changes to i and u to v, e.g. original stem-formative particle ya=Gr. ω; πάτρ-ω-ς (paternal), cf. pat-ius, st. πατέρ-, cf. Sk. ṗitr-ya-s, origl. patar-ya-s; ἡγ-ω-ς (holy), cf. Sk. yaḥ-ya-s (to revere); compar. suff. -ιν, origl. -yans, e.g. ἴδ-ιν, st.
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ηδ-ίον (ηδ-ύς, sweet), f.f. svād-γάς, st. svād-γάς, cf. ἐλάσσων §26b. for ἑλαχισσόν, f.f. lagh-γάς (ἑλαχ-ύς, small, f.f. lagh-υς), in the latter of which inst. y as such has disappeared; pres.-st.-suff. origl. ya, e.g. ἵδ-λ-ο (sweat), f.f. svād-γά, δα-ίο (kindle), fr. da-γά, cf. κράζ (howl), for *κραγ-γά, with same suff. which here has retained υ; in Ὓς ρετ. fut. form. ὑ-ω for *ὑγ-ω, origl. syάμι; in gen. sing. masc. neut. of a-stem, origl. ya, e.g. Ιβ-ι-κό (sweat), f.f. svίδ-γάς, Ζα-ίο (kindle), fr. da-γά, cf. Κπάκο (howl), for *Κπάκο-γά, with same suff. which here has retained υ; in ὄς ὄς, δός = *δώ, δός = *δω, cf. δόδέκα fr. *δωδέκα, Sk. and origl. δέκα.

Note.—Esp. in Lesb-Aiolic υ between two vowels is preferred to be=υ, e.g. χέ-υ-ω=χέ-Φω (pour), υ/νυ; so πνεύ-ω=πνέ-Φω (breathe), ϋυν; δευό=θέ-Φω (haste), υ/θυ, etc.

2. Further, ῇ occurs sts. undeniably for y (not however for υ, Φ) especially after consonants; in the cases from y there remains only the accompanying vowel-sound itself, as a short and indeterminate vowel which is nearly=ε, e.g. ε=υ in fut. forms, πλευσώμαι, φευξώμαι=σέομαι, σγομαι, fund. f. -σγάμαι; further in κενός (empty), Αιολ. κέννος; both fr. *κέννος, f.f. κανάς, Sk. κάνυάς; ἐτέος (true)=Sk. σατύάς; στερέος (firm, solid) beside στερόος, f.f. *στεργός, σταύρας, fem. στείρα, σταυρά; Epic ἰννό-η = ἰνό-α (manliness), f.f. of suff. is γά (st. ἰνώρ-, ἰνόρ-), n. sing. ἰνήρ (man).

Note 1.—In cases of declens., e.g. πόλεος, ε is not=υ, but there was a step-raising of ι to ει, and the representative y was lost; e.g. πόλεος=πόλεος, fr. *πολέ-ος, st. πολύ (city), f.f. parai-ας, st. pari.

Note 2.—Original υ also does not change to ι. In poetry perhaps the metrical forms such as πλέειν for πλευέιν (sail), ς/πλυ, raised to πλευ, πλεF, may be traced to a present st. in ya, which the Σk. has strangely liked, thus πλείω=πλέ-Φω-γά, while πλέω = πλέ-Φω; νείος beside νέ-Φος (new), νείος beside νέ-Φος.
§26b. (fallow), brings us to a f.f. navjas, which clearly occurs in Lith. nav-jaęs, Goth. niýgis, st. niýya- (new). From such cases eι may have become a more widespread representative of e by analogy. In πυνή for πυνῆ, we find ya-stems, whilst πυνῆ (\(\sqrt{\nu}ν\)) has suff. a, πυνή=aπυνή=aπυνήη, suff. ya.

Note 3.—εσ=έσ-ός, Lat. sou-os, suus, f.f. of both *sev-os; τεσ=τεFος, Lat. touos, tuus, f.f. *tevos (yet σός, fr. σός=τέFος, not raised from \(\sqrt{τυ}\)), through the Latin the Italograec f.-forms are made clear. In forms like ἐδεία, fem. of ἐδος (sweet), there is a clear step-raising, thus f.f. is ἐδε高峰论坛=eγά-δαν-γά, diverging from the unraised Sk. ἐδάνα, fr. *ἐδάνα.

Note 4.—G. Curt. Gr. Et. 2 p. 500 sqq., treats of α, ω, as representatives of original v. This occurs on the whole but seldom, and mostly in words of uncertain etymology, e.g. δαν (Allman), for *δαν, *δαν, (long while), and these must stand for *διαν-ά, *διαν-ν, acc. of a st. *διαν=Lat. *diue-, in di-e-s= *diue-s (day, for meaning cf. Lat. diu, long).

3. When y and v stand after ν, ρ, they regularly occur as i and u before the consonants: in Aiolic dialects, however, assimilation takes place to the preceding consonant: this assimilation occurs in the case of λ in the other dialects, transposition in the case of λ is merely the exception. The origin of the transposition we must hold to be this, that at first, whilst y and v were yet in existence, an i and u arose by assimilation in the foregoing syllable (as in Zend), and that long afterwards the y, v, disappeared.

y; e.g. κτέινω (kill), Aiolic κτέννω, for *κτεινω, fr. *κτεινο; μέλαινα (fem. fr. stem μέλαν− black), fr. *μελάναια; χείρων (worse), Aiol. χέρρων, for *χερ-ρων, fr. *χεργον; φθείρω (destroy), Aiol. φθέρρω, for *φθεργον; κλίνω (lay), Aiol. κλίνω, for *κλίνυο; κρίνω (sift), Aiol. κρίνω, for *κρυνυο; πλύνω (wash), for *πλυννω, *πλυννυο, *πλυνμυο, contrn. of u and u to " and v.

In the case of λυ the assimln. occurs outside the Aiolic dial., φείλω, however, for *φειλω, Hom. φέελω (ought).

Note 1.—After ν, ρ, λ, original y very often=ι, e.g. χρόν-ιο-ς,
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ėλευθέριο-ς, μακάριο-ς, παράλυο-ς, collectively constructed with § 26b. original suff. ya.

Note 2.—For epenthesis of y beside other consonants, we have good instances in μελίζων (greater) for *μεγ-γων, fr. *μεγ-γων, μεγ- with compar. suff. original -γανς; ζ:=γγ, consequently this is a clear case of genuine epenthesis; κρείσσων (stronger, better) for *κρευτ-γων, fr. *κρετ-γων (κρέσσων preserved in diall.); σσ:=τγ (v. post.) formed just like μελίζων; πείκω (beside πέκω, comb) for *πεκγν, which by the laws of sound (κγ=σσ) must coincide with πέσσω (cook) in form; st. γυναικ- (γυναίκος, gen. fr. γυνη, woman) for *γυνακί, cf. φυλακίς (female-guard); st. αἰγ- (n. sing. αἰγ for αἰγ-ς, goat) for *ἀγν-, cf. Sk. αγά-ς (stag), αγά (goat) (Curt. Gr. Et. 2. p. 608). It cannot be denied that πείκω for *πεκγν is very doubtful phonetically.

v; e.g. γονυός, γούνα (Διολ. γόνυος, γόνυα), γούνατος, for γούνFός, γούFά, γούFάτος, st. γόν (knee); οὖλος, Ion.=δόλος (all), fr. ὄλFος, cf. Sk. σάρβα-ς (every, all), Lat. salvo-s, solius (Fest. totus), fr. *sλυο-ς; παῦρο-ς (small, few) fr. *παρFο-ς, cf. Lat. paruo-ς; νεῦρο-ν (sinew) fr. *νερFο-ν, cf. Lat. neruo-ς.

In consequence of the evanescence of y, v, s, vowel- § 27. accumulation and contraction occur frequently.

Thus s disappears, e.g. in φέρη fr. *φέρεσα (2 sing. pres. med. fr. φέρω, bear), Sk. bhārasē; μένους (gen. sing. fr. μένος, might) fr. *μενεσος, Sk. mánas-as; eîν (1 sing. pres. opt. of éω-, esse) fr. *έω-γην, f.f. as-γά-μ; είπόμην fr. *έ-σεπ-ομήν, κέπ (follow), i.e. σεπ, Sk. saē, Lat. seq, in έπομαι; είρπου fr. *έ-σερπ-ου, κέρπ (crawl), Sk. sarp, Lat. serp-o; πεποινία (fem. part. pf. act.) fr. νεινια, and the latter fr. ν(αν)τγά, etc.

F disappears in εἱργασάμην (Εἱργάζομαι, work) fr. *ε-Εἱργασάμην; είπαν, είπειν, older ε-ειπαν, fr. *ε-Ειρ-ιπαν=φ. ε-Ειρ-ιπαν, redupl. aor. of Fεντ (speak), Sk. vak, Lat. uoc, f.f. vak, etc.

Loss of y is common above all in the stems whence arise the contr. vbs. in εω, ἄω, όω, fr. *εγω, *αγω, *ογω=Sk. and origl. -ayami, e.g. φορό, φορέω (bear)=Sk. bhārāyāmi, etc.

Note.—The sound-laws by which concurring vowels are regulated in different dialects do not belong in this place;
§ 27. because they extend to explain the Greek forms alone. The fundamental-forms, however, in the commonest and most important cases, conform to the rules laid down in the construction of stems and words.

The forms peculiar to the Greek, e.g. ὀρῶ, ὀράς, by assimilation for ὀραω, ὀράς; ὀρῶσι beside ὀράωσι, ὀρῶσι, etc., frequently offer difficulties in their explanation.

§ 28. After the evanescence and medial and final loss of consonants, there often occurs a compensatory lengthening.

1. n lost before s, followed by lengthening of preceding

ο to ου—e.g. φέρονυ (they bear)=*φερονυ fr. φέροντι=βιάραντι, φέρονσα=*φερονσα fr. *φερόντα, etc.; λίκυνσ (acc. pl. st. λίκο-, wolf)=*λίκυνς, cf. Goth. vilta-ns; Κρέταν τό-νς=τούς (acc. pl. st. το- demonstr.), f.f. ta-νς, ta-μς.

e to ει—e.g. τίθες (n. sing. m. part. pres. act. fr. τίθη-μι, place, √θε)=Κρέταν τίθες fr. *τιθέντ-ς; χαρές (n. sing. masc. conn. c. χάρις, grace)=*χαρε-Φεντ-ς (but fem. χαρέςσα= *χαρε-Φετγα, without ν, cf. Sk. sf. -vαντ, fem. -vατι=vατγα, likewise with loss of n), etc.

a to α—e.g. ιστάς (n. sing. m. part. pres. act. ιστη-μι, place, √στα)=*ιστάνς fr. *ισταντ-ς, etc.

υ to ι—e.g. δείκνυς (δείκνυ-μι, show)=*δείκνυνς fr. *δείκνυν-τς, etc. Similarly ειμι (am) for *ες-μι, by compensatory lengthening (cf. Aiol. εμι by assimiln.), Sk. and f.f. ἀσ-μι; ὀρευός (mountainous) for *ὀρευ-νός, Aiol. ὀρευ-νός (fr. ὀρός, mountain, Ιόν. οἰρός, therefore older *ὀρ-φος, √ὀρ, or-iri, exsurgere), st. ὀρε-, with sf. -νο-, etc.

2. Moreover medial compensation is found in the formn. of 1 aor. after the loss of σ, preceded by λ, μ, ν, e.g. ἐνεμά (νέμω, distribute) for *ἐνεμ-σα, cf. Aiol. ἐ-νέμμ-ατο, by assimiln.; ἔφηνα (φαίνω for *φανγω, point out) for *ἔφαν-σα, ἐστείλα (στέλλω for *στέλγω, send) for *ἐστελ-σα, Aiol. representation of compensation, ἐστείλα, etc.

3. Compensation by lengthening is frequently found in nom. sing. masc. of consonantal stems to compensate for lost
final s or τs, e.g. ποιμήν (shepherd) for *ποιμεν-σ, cf. Sk. πάγα § 28.
for *ραγάν-σ, Lat. homo for *homon-σ, Goth. guma (man), i.e. *γυμα for *γυμαν-σ; μυτηρ (mater) for *μυτηρ-σ, cf. Sk. ματά for *ματαρ-σ; πατήρ (father) for *πατερ-σ, cf. Sk. πιτά for *πιταρ-σ, Old Lat. pater for *pater-σ, Goth. fadar, i.e. *fadər, for *fadar-σ; έιμενής (well-
meaning) for *μενεσ-σ, cf. Sk. suamanās for *-manas-σ; φέρων (bearing) for *φεροντ-σ; πεποιθός (perf. pt. act. πέποιθα, trust) for *πεποιθο-Φα-τς.

Vowel insertion and addition. § 29.

1. Vowel insertion occurs in Gk. in the same way as in Oscan and O.H.G., only less regularly. Acc. to G. Curtius, Gr. Et. 656, sqq., this change takes place only in the neighbourhood of r, l, and nasals, so that it clearly arises from the vowel-sounds contained in these consonants. a and e occur most frequently, o and i are rarer, u rarest, as vowels attached to these consonantal sounds: e.g. δ-ρέγ-ω (reach, stretch), υρέγ fr. υργ, cf. Sk. αργ (reach), beside υργ-νόμαι (stretch) and υρό-γ-νυά beside υργ-νύά (fathom), where clearly υρέγ, υργ, υργ=υργ, origl. arg; ταράσσω =ταραξ-γω (make uneven, disturb), beside τέ-τρηχ-α (perf.) and τραχ-ός (rough, uneven), υ τραχ, therefore; όλυς-εινός (pain-
ful) beside άλγ-ος (pain); δολιχ-ός (long)=Sk. διργ-άς, υ δαργ, beside υν-δελεξ-ής (unbroken, uninterrupted), fr. same root; ἡλυθ-νοῦ beside ἡλθ-νοῦ (v. supr. § 24); χάλαξα (hail), i.e. *χαλαδύα, cf. Skl. γραδ-ν, Lat. grand-o, Sk. hrād-unā (storm); κολεκ-άνους, κολοκ-άνος (lank), κολοσσός (colossus) for *κολοκ-γος, cf. Sk. κρί-άς (lank), υ καρμ (make lean), Lat. crac-entes (graciles), origl. υκρακ, κακ; κονίς, pl. κονιδ-ες (dust, nits), cf. O.H.G. hnīg, Bohem. hnīd-a. Even long vowels clearly arise in this way, e.g. ἔρω-δ-ίος (heron), Lat. ard-ea.

Note.—But e is no auxiliary vowel in such forms as ἡδεία, i.e. *ηδει-μα (v. supr. § 26 b. 2, n. 2): and also in ἐπέκουσα fr. *ἐπεκε-σατι, *ἐπεκε-σατις, κύνε-σατι, loc. pl. st. ἐπεκε- (ἐπος, word), κυν- (κύων, dog, g. κυν-ός), and other loc. pls. in consonantal stems. These are probably constructed on the analogies of the υ- and υ-stems, cf. πόλε-πι, st. πόλι- (state), γλυκέ-σι, st. γλυκύ- (sweet), as
§ 29. doubtless in other languages consonantal stems have often become allied to vowel stems, especially to the i-stem (e.g. Lat. pedi-bus, st. ped-). [Curt. has suggested doubts which I do not understand, especially on account of the Hêrakl. πρασσόντ-ασσα; he maintains a helping-vowel in these cases.] Less still do futs. of verb-stems in λ, μ, ν, ρ, belong here, e.g. τευδό fr. *τευς, *τευν; βαλό fr. *βαλς, *βαλε. In these cases we come upon the verb-stem -εσω, original ασάμι, fut. of χας (esse) (v. sub. ‘Conjugation’).

2. Vowel addition (prefix).

This phenomenon of sound also is to be referred to the slight development of the vocal-sound before the following consonants. Acc. to G. Curtius (Gr. Et. 2 p. 649, etc.) prefixed-vowels are very rare before simple momentary sounds; they never occur before τ, φ, but on the contrary, most frequently before more than one consonant, before liquids, and before nasals. Exx. a) before two consonants, ἀ-στρόφ (star), cf. Latin stella for *sterula, Goth. stairnô, Sk. st. star-; ἀ-φρύς (brow), Sk. bhrû-s, O.H.G. brâwa, Skl. brûç; Lesb. Aiol. ᾀ-σφα, ᾀ-σφι=σφε, σφι, origl. st. sva; ἧ-χθέσ beside χθέσ (yesterday), Sk. hyas, etc.

b) before λ, μ, ν, ρ; ἦ-λαχύς (small), Sk. laghûs, Lat. levi-s, fr. *legu-is; ἦ-μέ, ἦ-μοι, beside μέ, μοι, origl. st. ma (pron. 1 pers.); δ-μηχέω (mingo), δ-μηξ-λη (mist), origl. σμήgh, cf. Sk. mih (mingere), Lat. mig, mi-n-go, etc.; ἦ-νηψ (man), Sk. st. nar-; Umbr. ner (prince); η-νεκ- (bear), in ἦνεξ-θην, ἦνεκ-ov; δι-νεκ-ής (thorough), for νεκ, cf. O. Bulg. nes-ti, Lith. nèsz-ti (bear); ἦ-νέφα (nine), with redupl. ν, cf. Lat. nömen, Sk. nánan, etc.; ἦ-νυξ (nail), st. νυξ-, Sk. nakha-s, nakha-m, O.H.G. nagel; ἦ-νομα, name, cf. Lat. (g)nömen, Sk. nàman, Goth. naman-, where in the Gk. the o did not arise until the origl. initial g had disappeared, ἦ-νυθρός (red)=Sk. rudhîrás, Lat. ruber, fund.-fm. rudh-ra-s, ρudh; ἦ-ρεβος (n. lower-world, gloom), Sk. râgas (gloom), Goth. rîkvis (dimness); ἦ-ρεψ-εσθαὶ (belch), cf. Lat. ructare for rug-tare, etc.

c) before origl. ν; ἦ-Φέργ-ευ beside Φέργ-ευ (keep in), cf. Sk. varî (keep off); ἦ-Φέρς (II. xxiii. 598), Krêt. ἦ-Φέρα beside
**LATIN. TABLE OF SOUNDS.**

\[ F_{\text{p}o\text{n}}, \; \varepsilon_{\text{p}o\text{n}} (\text{ros, dew}), \text{cf. Sk. } \sqrt{\text{var}} (\text{rain}); \varepsilon_{-\text{Feikoiv}} (\text{Il. vi. } \S\text{ 29. 217}) \text{ beside } \varepsilon_{\text{iakoiv}} (\text{twenty}), \text{Boiot. } \text{Fikati, Sk. } \nu i\gamma i, \text{Lat. } \nu i\gamma i\text{nti}; \text{ the initial was origly. } \delta v (\delta v i=\text{two}), \text{the } \varepsilon \text{ was not prefixed until the } \delta \text{ had disappeared (cf. } \delta_{-}\nu o\mu a); \text{ and more frequently in the case of } \Phi. \]

d) before other consonants; \( \varepsilon-\delta\nu\varepsilon \) (tooth), st. \( \dot{\varepsilon}-\delta\nu\varepsilon \), cf. Lat. st. \( \text{dent-} \), Sk. st. \( \text{dant-} \) and \( \text{danta-} \), Goth. \( \text{tunthu} \); in this word the \( \sigma \) arises clearly, I think, from the vowel-sound of \( \delta \), and my view is confirmed by the consonance of the \( \sigma \) with the \( \sigma \) of the second syllable, as well as by the agreement of all the other languages in initial \( \delta \).  

\[ \varepsilon\delta-\sigma\nu\varepsilon \text{ in Aiolic should, I think, be separated fr. } \delta\delta\sigma\nu\varepsilon, \text{ and be regarded as a poetical expression; it is a part. of } \varepsilon\delta\omega (\text{eat}), \text{‘the eating ones,’ i.e. ‘teeth’; the origl. } \text{dant-} \text{ (tooth) may arise from } \sqrt{\text{ad}}, \text{da (eat), but in my opinion } \text{da-nt-} \text{ more probably belongs to } \sqrt{\text{da}}, \text{ad, ‘separate, cut’; cf. Zend st. } \text{dâ-ta-}, \text{‘tooth.’}] \dot{\alpha}\text{-dax-}\mu\varepsilon \text{ (itch), } \dot{\alpha}\text{-dax} \omega, \dot{\alpha}\text{-dax} \varepsilon \omega \text{ (bite, itch), fr. } \sqrt{\text{dak}} \text{ in } \delta\alpha-\nu o \text{ (bite), Sk. } \text{daç}. \text{ For other inst. of prefixed-vowel before other mom. consonn., more or less probable, see Curt. Gr. Et.}^2 \text{ p. 653.} \]

**LATIN.**

**Table of Sounds in the Latin Language.**

<table>
<thead>
<tr>
<th>CONSONANTS.</th>
<th>VOWELS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MOMENTARY SOUNDS.</strong></td>
<td><strong>PROLONGED SOUNDS.</strong></td>
</tr>
<tr>
<td><strong>UNASPIRATED.</strong></td>
<td><strong>ASPIRATED.</strong></td>
</tr>
<tr>
<td>\text{mute sonant}</td>
<td>\text{mute sonant}</td>
</tr>
<tr>
<td>Gutt. ( c, q, g )</td>
<td>( h )</td>
</tr>
<tr>
<td>Pal.</td>
<td>( j )</td>
</tr>
<tr>
<td>Ling.</td>
<td></td>
</tr>
<tr>
<td>Dent. ( t, d )</td>
<td>( s )</td>
</tr>
<tr>
<td>Lab. ( p, b )</td>
<td>( f, v )</td>
</tr>
</tbody>
</table>
§ 30. Note 1.—I have placed h amongst the mute spirants, because it is nowhere pronounced with a vowel-sound except in Sk.

Note 2.—Guttural n has no peculiar character; n is gutt. before gutt. consonn. c, g, g (n adulterinum), but not after g, where, contrary to the German usage, it must be pron. like ordinary dental n.

Diphthongs, almost exclusively peculiar to Old. Lat., are ai (ae), au, ei, eu, oi (oe), ou, ui.

§ 31. Latin Vowel-system.

The Lat. vowel-system has suffered frequent changes in the course of time. Classical Lat., like Umbrian, shows a distaste for diphthongs, and these have changed to more compact sounds: the old diphthongs are vouched for by Old Lat., and esp. by Oscan. In the above cases the Lat. is insensible to vowel-development. A movement of root-vowels in their scales (confined, however, generally to two steps only) is not still shown except in a few roots.

The influence of final sounds, and further of sounds generally on one another (of consonant upon vowel, vowel upon vowel), has reached a high pitch in Lat. Unoriginal shortenings and lengthenings also occur frequently, so that the vowel-system of the Latin has diverged very widely from the original sounds. Besides, Old-Lat. and Osc. (both Italic languages with more origl. vowel-systems) have reached us only in a very fragmentary condition, while Classical Lat. has the characteristics of a written language which became stereotyped under foreign influence, and Umbr. is in the highest degree unoriginal in its vowels. Accordingly, of all Indo-Germ. languages, Lat. offers the greatest difficulties to a scientific investigator.

a is frequently weakened to u and i, and passes in a great measure into e and o (later generally to u), as in Gk.; similarly ā into ē and ō, only in Lat. the influence of neighbouring sounds is clearly the reason for vowel-colouring. In consequence of the full and thorough conformity of the Lat. with
the Greek vowel-scales, we are probably entitled to treat \( \ddot{o} \) in § 31. Latin also as a vowel of the second step.

The \( i- \) and \( u- \) scales were in the oldest form of the language exactly like the Greek, especially in the distinction of \( ai \) and \( au \) from \( ei \) and \( eu \). In the \( u- \) scale the second step takes throughout the place of the first, whilst \( e \) before \( u \) (\( e \)) passes into \( o \), according to Lat. sound-laws (vid. § 34) [as in Gk. the converse takes place]. The later language, however, has preserved only \( au \) of the old diphthongs; yet even this diphthong shows a marked tendency to become a simple sound in certain cases.

Latin vowel-scales (Old Lat. sounds distinguished by upright characters):

<table>
<thead>
<tr>
<th>Weakening. Fund.-vowel</th>
<th>1st Step.</th>
<th>2nd Step.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ( a- ) scale loss.</td>
<td>( i, u )</td>
<td>( e, o, a )</td>
</tr>
<tr>
<td></td>
<td>( o, \ddot{e}, \ddot{a} )</td>
<td>( \ddot{o} )</td>
</tr>
<tr>
<td>2. ( i- ) scale</td>
<td>( i )</td>
<td>( ei, \ddot{e}, ai, ae )</td>
</tr>
<tr>
<td></td>
<td>( oi, oe, \ddot{u} )</td>
<td></td>
</tr>
<tr>
<td>3. ( u- ) scale</td>
<td>( u )</td>
<td>( eu, au, \ddot{o} )</td>
</tr>
<tr>
<td></td>
<td>( ou, \ddot{u} )</td>
<td></td>
</tr>
</tbody>
</table>

In Class. Lat. \( eu \) no longer exists as a vowel-step, but has become \( ou \) (i.e. \( \ddot{u} \)).

The change from diphth. to monophth. is capable of simple physiological explanation (assimilation of both sounds, each to the other, e.g. \( ei \) to \( \ddot{e} \), \( ai \) to \( ae \), \( oi \) to \( oe \), \( au \) to \( \ddot{o} \), or of one to the other, as \( ei \) to \( i \), \( ou \) to \( \ddot{u} \)), the change from \( oi \), \( oe \) to \( \ddot{u} \), is caused by the common passing of \( o \) into \( u \). (change-scale \( oi, ui, \ddot{u} \); possibly also \( oe, ue, \ddot{u} \)).

**Examples.**

§ 32.

1. \( a- \) scale.

Weakening. 1. Loss of radical \( a \), e.g. \( sum, sumus, sunt, si\ddot{e}m, \) etc., for *es-um fund.-fm. as-mi, *es-umus f.f. as-masi, *es-unt f.f. as-anti, *es-i\ddot{e}m f.f. as-y\ddot{u}m (\( \sqrt{e} \), to be, cf. Gk.); gigno (produce, cf. \( \gamma\iota-\gamma\nuo-\muai \)), fr. *gi-gen-o, \( \sqrt{gen} \) (cf. gen-\( ui \), gen-\( us \)), origl. gan; especially in the second member of compounds is this loss frequent, as in malo fr. *maulo, and this again fr. *mage-vol-o
§ 32. (magis uolo), and in like cases (v. 'Sound-laws,' § 42): sf. -br-um (in part at least fr. *ber-um), √ber, origl. bhar (ferre), so that here we have a compound, not a stem-formative sf.; the same remark applies to -gnus fr. *-genus (√/gen, gi-gn-cre), e.g. mali-gn-us (ill-disposed, malus, evil), and others, and -gium in iur-gium (lawsuit) for *iur-igium, cf. rem-ig-ium (rowing), √ag (agere), etc.

In stem-formative suffixes, loss of origl. a occurs, as in the kindred languages, e.g. patr-is, older *patr-us, *patr-os, for pater-os, st. pater, f.f. patar-as (gen. sing.), and in many other cases.

2. Weakening of a to i is very frequent, esp. in the second member of a compound, e.g. ac-cipio (receive) beside capio (take); per-ficio (complete) beside facio (make); as-sid-eo (sit by), √/sad, Lat. sed; me-min-i (bring to mind), √man; co-gni-tus (known), √/gna, fr. gan; in-si-tus (implanted), √sa, etc.; moreover in stem- and word-formative particles, e.g. uch-is, uch-it (2, 3, sing. pres., √/ueh, carry), for *uch-isi, *uch-iti, origl. vagh-asî, vagh-atî; nò-min-is (gen. sing. nòmen, name), origl. gnâ-man-as, etc.

It occurs even in the accentuated syllable of the word (as in Germ.), e.g. in-ter (between), Umbr. an-ter, compar. of pronoml. st. an, cf. Sk. an-tár, án-tara-s (inter, interior), Gk. èv-repa; in-(neg.), Umbr. an-, Sk. an-, Gk. àv-; igni-s (fire), Sk. agni-s; quin-que (five), f.f. kankan, Sk. pánkan.

In the reduplication-syll. of pres. stems fr. roots in root-vowel a, this weakening takes place regularly, e.g. gi-gno (beget) fr. *gi-gen-o, f.f. ga-gan-āmi, cf. Gk. γι-γν-ομαι, √/gan; ser-o (sow) =*síso (i changed to e on acct. of the r), f.f. sa-sā-mi, √sa; si-st-o (set), f.f. sta-stā-mi, √sta; sādo (set myself) fr. *si-sdo, *si-sed-o, f.f. sa-sad-āmi, √/sad.

Note.—The lengthening of e weakened from origl. a into i (ei) is hardly susceptible of proof: scribo (write) beside γράφω, since both words are generally akin, we must perhaps assume to be a case of a-scale passing into i-scale, as often in Scelavo-
Teutonic: in cases such as uiri-tim (man by man) fr. st. uiro-§ 32. (uir, man), the analogy of other forms (verbal stems) is followed (cf. tribu-tim, etc.).

3. Weakening of a to u is common, esp. in stem- and word-formative elements, but also in roots, through the influence of certain consonants. i is clearly the furthest weakening from a, for u through intermediate ü (“medius quidam inter i et u sonus—pinguius quam i, exilius quam u—sonum y Graecae uidetur habere” Gramm.; imp. Claudius Caesar ordered the character |- to be used for this sound) often changes to i, whilst older forms in u exist beside later ones in i; u is also an unimportant representative of weakening from a through o, the older lang. very often retaining o where later u occurs. The vowel-scale of change from a to i is therefore evidently: a, o, u, ü, i. Thus, e.g. a f.f. ap-tama-s becomes *op-tomo-s, op-tumu-s, op-timu-s (best), Ital. ottimo; dakama-s, *decomo-s, decumu-s, decimu-s (tenth), Ital. decimo; beside cap-io (take), man-cup-ium (property; Plaut.), oc-cup-are (seize), in-cip-ere (begin), man-cip-ium; con-cut-io (shake violently) beside quat-io (shake), in-sul-sus (unsalted) beside salus (salted), etc. u is frequent as a merely later change fr. older o (cf. Gk., where o remains), especially in word-formative elements, e.g. nom. acc. sing. masc. neut. of origl. a-stem -u-s fr. Old-Lat. -o-s, Gk. o-s, origl. -a-s; -u-m, Old-Lat. -o-m, Gk. -o-v, origl. -a-m, e.g. da-tu-s (given) fr. da-to-s; Gk. δο-τό-s, origl. da-ta-s; acc. da-tu-m fr. da-to-m, Gk. δο-τό-v, origl. da-ta-m. Lat. os, us, generally represents origl. final as, e.g. gen-us (race), earlier gen-os=γέν-os, Sk. γάν-as, origl. gan-as; op-us (work), Old-Lat. op-os, Sk. and origl. ὁπ-ας; -bus (sf. dat. abl. pl.), earlier -bos for -byos, Sk. bhyas; ferunt (they bear), Old-Lat. fer-ont, fer-onti, Gk. φέρ-οντι (φέρ-οντι), Sk. and origl. bhár-anti; also in pres. part. o clearly is the form of the earlier lang., cf. e-unt-em (him who goes), i.e. e-ont-em, where beside e, o has become u, whilst e regularly occurs; uol-unt-arius (willing).
§ 32. points to a once-existing *volont-, *volunt-, beside usual *volent- (willing), etc.

After consonantal u, o remains, e.g. volt (later uult, he will), Sk. and origl. var; loquuntur (loquuntur, they speak); quom (quam, conj. ‘when,’ ‘since,’ cf. quon-iam), f.f. kam; quo-d (which), f.f. ka-t (but is-tu-d, f.f. ta-t); nouo-s, new (nouus), Sk. and f.f. náva-s, etc.

Note.—Through the older o-forms, Latin approaches near to Greek.

§ 33. The root-vowel of the a-scale, origl. a is represented by—

1. a preserved in a very few cases, appearing by preference before g, c, e.g. ac-us (needle), ac-ies (point), ac-erbus (sour), ac-sk, ac-as, origl. ak; ag-o (drive), ág-ω, Sk. ág-amì, ág; mag-is (more), mag-nus (great), μέγ-ας, Sk. st. mah-ānt- (n. sing. masc. mah-ān), Goth. mīk-ils, *mag, Sk. mah fr. magh; frag-ulis (breakable), frag-or (crash), frā-n-go (break), Goth. brak (pres. brik-a, pf. brak); ang-uis (snake), Sk. áh-īs, Gk. εχ-υs, Germ. unk; ans-er (goose) for *hans-er, Germ. gans, Sk. hās-ās, f.f. ghans-; al-īus (other), ἀλλας=ἀλ-λος, Goth. al-is; ap-iscor (get), ap-tus, cf. Sk. āp-nō-mi (1 sing. pres. ind. adipiscor) ap; sta-tus (placed), Gk. στα-τος, f.f. sta-tas, sta-tus (sown), sa; da-tus (given), da-tor (giver), Gk. δο-τος, δο-τηρ, /da, etc.

2. Origl. a appears as o, especially in roots before and after v, and further in stem- and word-formative elements.

After v, as uom-o (spue), Gk. Φευ-εω, Sk. vām-āmi; uol-o (will), uol-t, uol-im, later uult, uel-im, cf. Sk. vār-āmi (vr-ṇāmi, vr-ṇāmi), var; uoc-are (call), Sk. vak, Gk. Fer, origl. vak; uort-o (turn), later uert-o, cf. Sk. vārt-atē (3 sg. pres. med. uertitur, est), var; uo-s (you), uoster (your), later uester, cf. Sk. vas (uos, ubis); uolu-e (twirl), Goth. vale-yan (uoluere); cf. quatuor (four) for *quatuors, *quatuores, beside τέσσαρες=τέτ accord, f.f. prob. katvāras; even uocuus (empty) in inscr. for vacuus.

Origl. sva is regularly so in Lat., prob. fr. suo for sue, origl.
sва, by the above rules; у falls out, as in те (thee), се (himself), § 33.

etc., for *тue, *sue, e.g. socer (father-in-law) fr. *suocer, *sucrer,

Gk. екυрός for *σΕκυρός, Sk. σνάχυρα (written σνάχυρα), Goth.

σνάχωρα, cf. socerus (mother-in-law), Sk. σνάχρυς (written σνάχρυς);

σορότημ (sister, acc.), Sk. σνάχσαραm, f.f. σνάσταραm; σοπ-ωr, σομνύμ

(sleep), for *σοπ-νύς (cf. ιπ-νυς), Sk. and f.f. σνάπ-νάς, σνάπ-ι-μι

(I sleep); σων-ως (sound), Sk. σνάν-ας.

Before е, e.g. оυ-ις (sheep), Gk. ὑφις, Sk. ἀν-ις, Lith. ав-ис; уоу-оs, later ноу-ως (new), Gk. νέφ-ος, Sk. нáв-ας; нου-εμ

(nine), Gk. ἐν-νέφα, Sk. нáв-αν.

In other combinations, e.g. mor-ιοr (die), origl. and Sk. √мαр

(mori); δομ-αι (tame), Gk. √δαμ (ἐ-δαμ-ου), Sk. δαμ, Goth.

tam, H.G. сαμ; οπ-ως (work), Old-Lat. op-ως, Sk. ᾑψ-ως; log-ωr

(speak), cf. Gk. ἑ-λακ-ωυ, Sk. √λάπ; ρο-τις (powerful), ρο-τες

(mighty), ρο-τερι (become master of), cf. Gk. πτ-οις (lord), Sk.

and origl. πά-τις (master) [perh. in these instances the lab. μ, π,

and the lab. vowel which in Lat. accompanies ι, are the

causes of ι representing a] coq-υερ (cook), Gk. √πεν, Sk. πακ,

Lith. kep, etc., origl. κακ.

In terminal particles (stem- and word-formative) о is remark-

ably regular before s and м (as in Gk.); for later weaken-

ing of о to у, v. sup. §§ 32, 3; e.g. suff. -тo in n. sing. м. and

acc. masc. and neut. -тo-s, -тo-m, Gk. -тo-ς, -тo-ν, Sk. -τα-ς, -τα-м,

e.g. in-clu-to-s (famed), acc. clu-to-m, cf. Gk. κλυ-τός, κλυ-τό-ν,

Sk. γρυ-τά-ς, γρυ-τά-μ, origl. κρυ-τα-ς, κρυ-τα-μ; neut. termn.

-ος, later us, e.g. gen-ος (gen-us, race), Gk. γέν-ος, Sk. γάν-ας,

origl. ган-ας, so also Ven-ος (prop. n. fem., -ος authenticated);

Lat. pl. -bos (-bus), Sk. -βυάς, etc.

3. а passes into е very frequently, without assignable reason,

in neighbouring sounds: e.g. fer-о (bear), √fern, Gk. φέρ-ω, Sk.

and origl. бхάρ-αμι, √βhar; es-t (he is), √ες, Gk. ἐς-τί, Sk.

and f.f. δς-τi, √ας; σεd-εo (sit), √σεd, Sk. and origl. σαd;

gen-us (race), Old-Lat. gen-ος, √gen, √Gk. γέν-ος, Sk. γάν-ας,

origl. ган-ας, √gαn; υεh-ιt (he carries), √υεh, Sk. χά-ατι, f.f.
§ 33. vagh-ati, √vagh; pecu- (cattle), Sk. st. paçu- (n. sing. mase. paçu-s), f.f. stem paku-; eq-uos (horse), √ec, Gk. ἐπίως = *ek-Fos, Sk. ác-vas, √aç, f.f. ak-vas, √ak; dec-em (ten), Gk. déka, Sk. dácan-; f.f. dakan-; septem, Gk. ἑπτά (seven), Sk. and f.f. saptán-; dent-em (tooth, ace), o-hovT-a, Sk. ddnt-am; septem, Gk. eTrra (seven), Sk. and f.f. saptdn-; dent-em (tooth, ace), o-hovT-a, Sk. and f.f. hhdr-ant-am; the origl. sound-comb. ant also becomes ont, unt, in Lat., e.g. fer-unt (they bear) fr. *fer-onti, Sk. and origl. bhár-ant-i, e-unt-em (going, acc.; cf. § 32), beside fer-ent-em; st. pa-ter- (father), mā-ter- (mother), origl. pa-tar-, mā-tar-; (g)nō-men (name), Sk. nā-man-, f.f. gnā-man, etc. 

§ 34. Step-formation of a.

1. Corresponding to e we find o as the equivalent heavier vowel, and o sometimes occurs as a step-forman. fr. e=a (cf. Gk. and Slav.); thus in these cases o=a; e: o=a : ā, e.g. mon-eo (warn), i.e. mān-āyami, caus. vb. fr. origl. √man (think, thus simply = make to think), beside mens (mind) for *mets, *men-ti-s, f.f. man-ti-s (sf. ti), fr. √man, cf. me-min-i (I remember), later with weakening of e to i; noc-eo (hurt), f.f. nāk-ayāmi, caus. vb. fr. origl. √nak, Sk. √naç (die) (so simply ‘make to die’), nex, nec-is (death), per-nic-ies (ruin), nec-are (kill), cf. vēk-ūs, vēk-rōs (corpse); tog-a (wrapper) beside teg-o (cover), √tag (H.G. tak), prob. for stag, cf. στέγ-ω, Sk. sthāg-āmi (cover), in Lith. steg-iū (cover) stands beside stōg-as' (tectum); socius (comrade) beside seq-ui (go with), ad-sec-la (escort); doc-o (teach), caus. f.f. dak-ayāmi, beside di-die-i, disco (learn) for *dic-seo, prob. for *di-dac-seo, cf. di-di(k)-σκω (teach) beside διδάξω, i.e. διδάκ-σω, διδαχ-η (teaching), θ'dak (not dice, as in

- e is often an evident weakening from a, e.g. per-fec-tus (made thoroughly) beside fac-tus (made), etc.
- e has proceeded from o in cases such as uort-o, uester, etc., fr. older uorto, uoster, f.f. vart-ā-mi, Sk. and origl. √vart, Goth. varth; uos-ter, cf. Sk. vas (uos, ubis) (cf. § 33). Accordingly e comes after a and o as a lighter vowel.
When o is short, the step-formations can take place also before two consonants, e.g. pond-us (n. weight) beside pend-ère (weigh); ex-torr-is (exile), torr-eo (roast) = *tors-eo, cf. tos-tus (p. part. pass. torreo) for *tors-tus, beside terra for *ters-a (the 'dry land' in contrast to the 'water'), ✓tars, Goth. thars (in thairsan, roast, thaursyan, thirst, vb.), Sk. tarš (thirst). Beside a, o occurs in scob-s (sawdust), scob-ina (rasp), and scob-o (scratch); port-io (share) beside part-em (pars, part), im-pert-io (give, share).

2. e is not common, e.g. tég-ula (tile) beside tég-o and tóg-a; rég-em (rex, king), cf. Sk. ráj-am, ráj-ánam beside rég-o (rule); lég-em (lex, law), col-lég-a (comrade in office) beside lég-o (pick out, read), séd-es (seat) beside séd-eo (sit), ✓sad; sé-men (seed) beside sá-tus, so chiefly as a step-formm. of e; e corresponds to origl. ë in plé-nus (full), f.f. prá-nas, ✓pra, par (fill); ëd-i, cf. Sk. áda, i.e. *aäda (perf.), fr. éd-o (eat), Sk. ád-mi; sèmi-(half), Gk. ἡμ-, Sk. sèmi-, O.H.G. sámi-; siém, siët (1, 3, opt. fr. es, be), cf. ėn-, ėn-, Sk. syám, syät, origl. as-yä-m, as-yä-t, in which cases perh. i has had an assimilating influence.

3. As ë is to e, so is ë to a in the sound-scale, which, therefore, occurs most often before guttural consonants, e.g. ãc-er, ãc-rís (sharp), beside ãc-ies (point); plác-are (appease) beside plác-ère (please); pác-em (pax, peace), thence pác-are (to pacify), beside pác-isci (bargain); màc-ero (soften) beside màc-er (thin): amb-ãg-es (roundabout-way), cf. amb-ãg-ere (be in doubt), fr. ✓ag in ãg-o (drive, lead), Gk. ἁγ-ω, Sk. ãg-ãmi, origl. ag-ãmi; st. con-tág-io- (con-tág-iu-m, contact), and further formed from it the commoner con-tág-tón- (n. sing. con-tág-io), fr. ✓tag in tango (touch), tac-tus (past part. pass.) for *tag-tus, cf. con-tingo (touch, hit); st. suf-frág-io (suffrág-ium, origly. 'sherd'); vote) beside frág-or (crash), ✓frag, cf. fra-n-go (break), in-fri-n-g-o
§ 34. (break into); sāg-ire (perceive), sāg-us (sooth-sayer), sāg-a (witch) beside sāg-ax (knowing); pāg-inā (page, leaf), com-pāg-i (compages, union), com-pāg-in- (compago), fr. √pāg in pa-n-g-o (fix), cf. com-ping-o (fix together); uād-o (go) beside uād-o- (uudum, ford); lāb-i (glide) beside lāb-are (totter); dā, dā-s, beside dā-tus, √dā (give); fā-ri (speak), fā-ma (fame), fā-cundus (eloquent), beside fā-teri (own to), origl. √bha; mā-ter (mother), Sk. mā-tar-, √ma; frā-ter (brother), Sk. bhrā-tar-, √bhra, transposed fr. bhar.

The fem. of the a-st. had origly. in the Lat. also long a, e.g. nou-ā, coc-tā, origl. nav-ā, kak-tā, cf. Sk. nāv-ā, *pak-tā (this form does not happen to occur, but is replaced by an entirely different form pak-tā), Gk. vēF-ā, περ-τή, fr. nou-o-s, coc-to-s, nou-u-s, coctus, origl. nav-a-s, kak-ta-s, Gk. vēF-o-σ, περ-τό-σ. Remains of this ā have been preserved in Latin.

4. Not unfrequently ō is a step-formation from a, especially beside o=ā, and where a is a root-termn., further in stem-formative elements, e.g. per-sōn-a (mask) beside sōn-us (sound), sōn-are (sound), Sk. and origl. √svan; sōp-io (put to sleep), i.e. Sk. and origl. svāp-āyāmi, causat. verb, beside sōp-or (sleep), Lat. √sop, Sk. and origl. svap; uōc-em (uox, voice)=Sk. vāk-am, Gk. Fōt-a, origl. vāk-am beside uōc-o (call), origl. √vák (speak); oē-iōr (swifter), comp. fr. lost adj. corresponding to Gk. ὁκ-ύς, Sk. āc-ū-s (swift) (perh. sounded *oquis), origl. √ak; dō-nuμ (gift), Sk. and f.f. dā-na-m, dō-te-m, n. dōs (dowry, =dō-ti-s), f.f. dā-ti-m beside dā-tus, √da; gnō-sco (nō-sco, learn), gnō-tus (known, cf. γνω-σκω, γνω-τός), gnō-men (name) beside (g)nōta (mark), co-gni-tus (known), √gna, fr. gan (as later forms show); pōd-ex beside pēd-o and pēd-ico, Sk. and origl. √pard, Gk. πεπό, H.G. farx; da-tōr-em (giver, acc.), Sk. dā-tār-am, Gk. ὅτ-τη-ά, origl. suff. tar, here raised to tār; quō-rum fr. st. quo- (rel. interrog.), origl. ka, etc.

5. ā as=origl. ā can only be considered a later parallel form from ō, since o has frequently become u; probably it does not
occur within the root. Hence the suff. -tūro-, fem. -tūra-, e.g. § 34. da-tūr-us (about to give), rup-tūr-a (breach), Lat. formns. from stems in -tōr, origl. -tār, da-tār-, rup-tār-, the suff. of gen. pl. -um, -rum (prob. for -ām, -rām, cf. Bücheler, Grundriss der Lat. Decl., p. 40) stands for earlier -ōm, -rōm (bou-ōm even in Verg.), Gk. -ων, in *-ων, Sk. and origl. -ām, -sām, e.g. (is)tarum=Gk. *ταων, i.e. τῶν, Sk. tāsām; voc-um=Gk. Φω-ων, Sk. vāk-ām.

2. i-scale.

In this, as in the u-scale, there is a lack of roots which present all three steps at once. In the i-scale, I know only the fid in fides (faith), per-fid-us (faithless) beside con-fid-o (trust), i.e. feid-o (di-feid-ens is vouched for) and foid-os (foedus, treaty): even in roots which appear in two steps, e.g. dic (Gk. δικ, Sk. diç, etc.), in in-dic-o (point at), causi-dic-us (advocate) beside deic-o, dic-o (say); and i (go) in i-tum beside ei-s, ei-t, ei-tur=īs, īt, ītur (cf. īqu, go, Sk. ī-mi), there is a step wanting.

The fundamental vowel i occurs, e.g. in dicare (dedicate), divid, cf. Sk. diç, Gk. δίκ (in δεκ-νυμ); i-tum (cf. ἵ-μεν, Sk. i-mās), divid, cf. Sk. vid-mās, Gk. Fιδ-μεν, Goth. vit-un, divid; sci-n-d-o (slit), scissus=ṣcid-tus (slitten), cf. Sansk. khi-n-ā-d-mi, σχι-ξω=σκι-ῶ, Goth. skid in skaid-an, ṣcid; /ścig, origl. migh, Gk. μίγ, in mi-n-g-o, mic-tus for *mig-tus (past part. pass.); /stig in li-n-g-o (lick), origl. righ, Gk. λίγ; qui-s (who?), cf. Goth. his (dem.), Lith. si-s, f.f. ki-s, /qui=k. In stem-formative elements, e.g. ou-i-s (sheep), Gk. ὀφ-ν-s, Sk. āv-i-s, Lith. av-i-s, /u, av, with suff. i, i is often lost in consequence of its position at the end of a word, e.g. men-s for men-tis, men-ts, f.f. man-tis, or dulled to e, as men-tem, cf. sqq.

This genuine i is dulled to e according to definite laws, e.g. in-dex, in-dic-is (pointer), divid; ig-ne-m (fire, acc.) for older ig-ni-m, Sk. agni-m, Lith. įgni̯. The earlier forms of this acc. occur not uncommonly, as nau̯-m (ship, acc.) beside naue-m and
§ 35. others. Also *mare for mare, cf. mar-i-a (in similar cases final i is lost); so also in nae-bos, tempestate-bus (inscr.), origl. i has passed into e, stems nāui-, tempestiti-.

Note.—Thus here e is the newer, i the origl. and hence older sound; whilst in the case of the more usual i weakened from a, when it is interchanged in the earlier lang. with e, the latter is the earlier sound. The language, however, no longer felt the difference of derivation, and both i-sounds were treated alike. Perh. unorigl. lengthening of i to i should not be separated from step-formn. of i (to ei).

First step: ei (i, e); *deiu-os, diu-os (godlike, deiuae, deiuinus, occur), Sk. dēvā-s, f.f. daiea-s, ō div (shine); deic-o, diico (say), f.f. daik-āmi, ō dic; ei-tur, i-tur (‘it is gone,’ impers.), ō i; feid-o, fid-o (trust), ō sid; uiuo-s, uīuo-s (alive), cf. Sk. ǵivā-s, Lith. ǵyvas, ō gi, redupl. gig, uig, giu, uin (u for g, through intermed. gu (vid. sub. “Consonn.”)), uieo-us, uīc-us (hamlet), Sk. vēgas, Sk. Fōkos; uīnum (wine), i.e. uenom, Goth. vein, Gk. Fōivos; clearly rd-us, eid-us (a fixed day in the month, origly. the day on which the moon shines, the bright day; Corss. Krit. Beitr. 261), ō id, origl. and Sk. ō idh (vid. sub. ai, ae).

Deus (god) is weakened fr. *dēus, *dēuos, *deiuos, and is thus a parallel-fm. to dīuos, to which deiuinus points; so ēo (go) is clearly for ēo, *ēyo, f.f. *aįy-āmi for *aiāmi, with splitting up of i into iy; uen-dēmia (inscr.) = uin-dēmia (vintage).

In word-formative elements, ē beside ei, i, is common, later generally the rule, e.g. omneis, omnis, omnes, etc.

ai, ae, occur here and there as in Gk., e.g. aid-e(m), aed-es (house, hearth), aid-ilis (overseer of buildings), aes-tās (summer heat) for *aed-tas, cf. Gk. aįθ-ω, aįθ-ouσa, aįθ-νπ, Sk. ō idh (kindle); ae-uo-m, old ai-uo-m (aye, long time) (except in gend.) = Sk. ēv-a-s (course), cf. ai-Fōv, ō i (go), origl. suff. va; maes-tus (sorrowful), maer-eo (grieve, intr.) beside mis-er (wretched); aem-ulus (vying) beside im-itari (imitate); laevoς (left-), cf. λαιFōς; scaevōς (left-), cf. σκαίFōς; caecus (blind), cf. Goth. haihs (one-eyed, blind).

Second step is oi, oe, ü; e.g. foid-ere, n. *foiid-os (foed-us, § 35. treaty),ʃud; über (fruitful), early Lat. *oib-ri-s, f.f. äidh-ri-s, cf. Sk. edh-atë (he grows), hence źidh, über (neut. subst. fruitfulness), early Lat. perh. *oib-es, f.f. äidh-as, fr. same root; *oinos, oino(m), occurs, oenus, unus (one), cf. Goth. ains; comoinem, comûnem (common, acc.), cf. Goth. gamains; so we find löidos, loedos, lûdus (game); oitier, oetier, ûtier (use), etc.

Note.—For oe we find e written by mistake (cf. Fleckeisen, 5th Art. aus einem Hilfsbüchlein für Lat. Rechtschreibung, Frankf. 1861, p. 22), e.g. ob-ëdire for ob-œdire, cf. audire, n-ënum=n-oenum (non).

3. u-scale.

Very much obliterated in Lat. Exx. are very rare: we can bring forward only lûc-erna (lamp), Gk. Λυκ, Sk. rûk, f.f. rûk, beside Leuc-esie (Carm. Sal.), Louc-inn (nom. pr.), lûcém (light, acc.), lû(c)-men (light), lou(c)-men; dûc-em (leader) beside douc-ere, dûc-ere (lead); rûb-er (red), f.f. rudh-ra-s, beside rûf-us (red), f.f. rûdûh-as; pro-nûb-us (marriage-making), in-nûb-us (unwedded), beside nûb-o (marry—of the woman); rûp-es (rock, cliff) fr. rup, in ru-m-p-o (break); trûd-o (thrust) beside trûd-i-s (thrusting-pole).

The fund. vowel u, e.g. in rup-tus (broken), ru-m-p-o (break), cf. Sk. lu-m-p-âmi, lup, origl. rup; us-tu-s (burnt), us, Sk. uš; tu-tud-i fr. pres. tu-n-d-o (thump), cf. Sk. tud-âmi, tud; rub-er (red), for *ruf-er,*ruf-ro-s, ruf=ûth, Sk. and origl. rûdh; iug-um (yoke)=ûr-ôv, Sk. yug-âm, yug; fu-i (was), fu-turus (about to be), cf. fu-ôv, origl. and Sk. bhû (in Sk. lengthened bhû). In stem-formn. (not in stem-formative particles), e.g. pec-u (cattle, pl. pecu-a), cf. Goth. faihu, O.H.G. vihu, Sk. paçû-s.

This genuine u was also weakened to i (û) [like that which arose from a, cf. § 32], e.g. lub-et, lib-et (it pleases), Sk. and origl. lubh (desire), Goth. lub (in lub-ô, beloved, liub-s, love; ga-laubs, dear); cli-ens (hearer), clu, klû, origl. kru (hear);

Note 1.—Genuine u does not change to o except in fū-se, √fu.

Note 2.—ā as lengthening from ā is prob. not to be separated fr. ā=ou, 1st and 2nd step-formn. of u. In tū (thou), we have an unorigl. lengthening, f.f. is tū, for in Sk. tv-am, Gk. τū, σū, Goth. thu, Scl. ty, there is no step-formn. We cannot decide between lengthening and step-formation in cases like sū-s (boar), šs, O.H.G. sū; mūs (mouse), μūs, O.H.G. mūs, etc., where Gk. vouches for the hypothesis of the lengthening.

The first step-formn. (acc. to analogy of all Indo-Eur. langg.)—sounded of course precisely as in Gk.—was eu; but it was lost very early, since the only remaining instance of this archaic step-formn. is in Leuc-esius (n. prop.), cf. λευκ-ός (white), also Loucetius, Lucetius; f.f. is prob. *Leuc-ent-ios, a further formn. fr. a particip. st. *leuc-ent- (as Prudent-ius fr. prudent-), of a pres. *leuc-o, √luc, as φεύγ-ω fr. √φυγ. In consequence of the sound-law mentioned § 33, (e before u, v, changed to o), there will arise fr. eu an ou, coinciding with 2nd step, and later becoming ā. Hence from dāc-o (lead), douco, we must infer an older *deuco, f.f. dauk-āmi, √dük (because pres. stt. of this kind were formed by the 1st step); ûro (burn), *ouso for *euso=ε̃-ω for *evo-ω, Sk. ो-āmi, f.f. aus-āmi, √us; in roots which end in u we find ov for *ev= eu, e.g. *plou-ont, thence plou-ont, plou-ont (they rain); *plou-ont, however, is for *pleu-onti, cf. Gk. πλέF-onti (πλέ-onti), f.f. pla-anti; so flou-ont=flou-ont, fr. *pleu-onti, and other similar pres. fms.; ious, iour-is (iūs, iūr-is, right), is for *iou-os, *iou-es-is, and formed like *gen-os, *gen-es-is (gen-us, gen-eris), fr. √iu (iungere), by the first step, as is usual in this kind of noun st., *iou-os is thus for *ieu-os, formed fr. √iu like κλεF-os fr. √κλυ, and corresponding Sk. γράv-as fr. √gru; iūs, iūr-is (broth)= *iou-s, *iour-is, *iou-os, *iou-es-os, *ieu-os, *ieu-es-os, f.f. yav-as, yav-as-as, fr. another √yu, Gk. √ζυ (in ζυ-μη, yeast), cf. Scl.
LATIN. VOWELS: u-scale.


Also Iou-em = Dionem (acc. n. pr.) must be referred to *dyev-em, and clearly Tū-piter stands for *dyū-piter, *dyou-piter, and the latter for *dyeu-piter, st. dyeu- = ζυ-, which is merely a sound-variation fr. dyeu, √dyu = div (shine, as noun-st. ‘heaven’ and ‘god of heaven’; Sk. nom. dyā-us (2nd step) does not correspond with the Lat.): here the 1st step is much commoner than the 2nd, so that Lat. ā must generally be referred hither as = Old-Lat. ou.

Note.—neu, seu = neue, *seue, do not belong here strictly, any more than ne-uter, ne-utiquam (also nutiquam like nullus).

au, as in Gk., is a first step long since unused, and in Lat. the only diphth. retained, and not yet given up (it occurs still in Ital. and in more isolated cases in other Latin lang.), although even in early times it was weakened, esp. in popular dialects, to the sound o; further au is contr. into ā (prob. through intermed. o), e.g. raud-us, rōd-us, rūd-us (crumb of earth), √rud, elsewh. rub, ruf, √rudh (be red). Exx. of au: aur-ōra (dawn), f.f. prob. aus-āsā, √us in ār-o, us-tus, cf. Sk. st. nūs-ās (aurora), without step-formn. in root and suff. (the latter occurs in certain cases only); aug-eo (I increase), cf. aūō, aūānō, prob. fr. *aiu-ō, *aiu-ānō, Lith. āug-u (I wax), √ug; the above-mentioned raud-us (neut. pl. raud-era), √rud, Sk. √rudh, Gk. √pό, etc.

Note.—au can also arise through a secondary process, e.g. nauta (sailor), auceps (bird-catcher), gaudeo (am glad), fr. nāu-i-ta, *au-i-cep, *gāu-i-deo, etc.

The second step of u, viz. old Lat. ou, later ā is equally wanting with the 1st step, and it is only by the aid of the cognate langg. that we can detect whether ou, ā, represent origl. au or āu: the latter is certain only in rare instances, e.g. rūf-us (red) = Kelt. rūad, Goth. raud-s, f.f. rāudh-as; clearly
§ 36. here belongs über (udder), on acct. of Gk. οὖθαρ, f.f. of both āuđhar, though Sk. ādhas, O.H.G ütar (H.G. euter), show other degrees of the scale: perh. also lūc-em, Louc-ina, lū(c)men, √ luk, origl. √ ruk.

Note.—ū, ou, are here and there secondary products through falling-out of sounds, as e.g. *councti, cuncti (all together), fr. co-iuncti; noundinum (S.C. de Bacc.), nündinum, fr. *nouendinum, cf. nundinae (period of 9 days), prūdens fr. pro-uidens.

§ 37. Vowel Sound-laws.

Accurate statement of the extraordinarily variable vowel sound-laws of the Lat. must be left to the special-grammar of the lang.: a general view only can be given here.

Hiatus. In case of vowels coming into contact with one another, hiatus is often obviated by means of contraction. This occurs regularly, when the first vowel is a, thus amo (1 sing.) fr. *amao, amas (2 sing.), fr. *amais, f.f. of termn. -ayāmi, -ayasi; amarunt (3 pl. pf.) fr. ama(u)erunt; equae and equā fr. equāi (d. sing); diē, fidē, fr. diēi, fidēi, etc. Other exx. are found in ēs fr. siēs, sit, earlier seīt, fr. siēt, f.f. syāt; tībī, tībei, fr. tībie, f.f. of termn. -bhya(m); so too in uōbeis, uōbīs, f.f. of termn. bhya(m)s; senatūs (gen. sing.) fr. sena-tuis (-tuos), senatu (d. sing.) fr. senatui, cōgo fr. *co-igo, equo (d. sing.) fr. equōi, etc. Both vowels, however, remain in many cases, esp. u and i with its kindred e make no hiatus with follg. vowels, e.g. fui, lues, fluunt (fluont); the noun-termns. -io, -iā, -iēs; fieri, tenuia (tenvia), eunt, eo, meae. In combination even co-actus, de-esse, co-optare, but also medially, boo (boare), etc. Hiatus in the middle of a word is almost always brought about by loss of consonn., e.g. fluunt fr. flouont, boo fr. bouo, etc. The laws of hiatus in Lat. need a further and more accurate settlement.

§ 38. Assimilation exercises a wide-spread influence; vowel assimilates vowel, both forwards and backwards, and also in case of indirect contact of vowels (passing over consonn.), causing both
partial and complete similarity; and the same effects are produced § 38. by consonants upon vowels (relationship between particular consonantal- and vowel-sounds). And, moreover, by this means immediate contact betw. like vowels is avoided, and dissimulation takes place.

Thus *aureulus, gladiolus, even vinulentus, etc., stand for aureulus, gladiulus, *vinulentus, fr. aureu-s, gladiu-s, uinu-m, cf. longulus, turbulentus; duritie-s beside duriti-a, etc.; cf. siëm, siës, siët, with Sk. syâm, syäs, syät. In these and similar cases we see an assimilating influence of foregoing vowels on those follg.; consequently o is nearer to e and i than u, and e more akin to i than a.

A reflexive assimiln. passing over cons. occurs, e.g. in *ex-ul but exil-ium, facul-tas but facil-is, sta-bulum but sta-bilis; mihi, tibi, but Umbr. mehe, tefe; bene but bonus.

For relation between o and u, vide § 33, 2; u has a special affinity for labials, and above all m and l. Hence from weakened a we get, not i, but u, in cases like oc-cup-o, au-cup-ium, bes. capere, con-tubernium (chummage) beside tab-erna (hut), op-tum-us (later only, optimus), etc.; bef. l older o became u, e.g. poculum fr. pocolom, consul fr. cosol, epistula fr. ἐπιστολή; through this weakening of a, before l+cons. we find u, not i or e (the regular representative of i before 2 consonn.), e.g. sâulsus, insulsus, sepelio, sepultus, etc.; further, u has remained before n+cons., e.g. ferunt, homunculus (cf. supr. § 32). Throughout, it represents here too an earlier o, wh. maintained itself intact in the popular diall., as later inscrr. and Ital. (e.g. sepoltura as early as 558 A.D., cf. Ital. sepolcero, colonna, Ital. colonna) prove.

Even origl. i—not weakened fr. a—gives way to u in cases like testu-monium (witness) beside testi-s; carnu-sex (flayer) beside st. carni- (n. caro, flesh), and the like; where, nevertheless, the analogy of the commoner cases may have had some influence.

e is retained by preference in final syll. bef. nasals, e.g. septem, cf. ἑπτά, nömen, Sk. náman-, cornícen, νομα, ouem fr. oui-m, and
§ 38. so in most i-stems; in acc. sing. of a-stem nevertheless we find o, u (nouo-m, nouu-m); but above all e is found bef. r, e.g. camera fr. καμάρα, operis beside nominis; stetērunt for *steti-sonti, cf. stetis-ti; uēher-is fr. uēhis-is, cf. uēhit-ur; peperi for *pepīri, fr. pario, like cecini fr. cano; affero, not *af-fir-o, wh. we might look for acc. to analogy, comparing such cases as collīgo fr. lego.

r has also a preference for o (=u) preceding, e.g. fo-re, fo-rem, fr. √fu (fu-turūs); Lat. ancorā fr. Gk. ἀρκόμα; but robtir, ebur with u, perh. on account of preceding b.

Further, e occurs bef. two or more consonn. interchangeably with i bef. one cons., e.g. index but indicis; eques-ter for *equet-ter, *equit-ter but equit-em; asellus fr. *asin(u)lus, cf. minus; consecro, abreptus, etc. (but it remains i bef. ng in attingo, infringo and the like).

The sound-combinations ent, end, and unt, und, are weakened forms, e.g. fer-ent-em beside e-unt-em fr. *e-ont-em, where the earlier sound o, u, has been kept in consequence of dissimiln., beside e, volunt-arius; faciendus and faciundus, both fr. *faciundus, remain in sacris faciundis, 'iure dicundo,' and the like. After u, e is invariable: tu-endus, restitu-endus. a is throughout the origl. vowel in these cases.

i has a special affinity to n and dentals, and is the commonest weakening fr. a, e.g. μῆχανη but māchina; nominis, hominis, cecini, fr. stems gnāman-, ghaman-, ka-kan-, etc.

By dissimiln. is prevented the combn. of two like vowels, e.g. ueri-tas fr. uerus, but pie-tas (piu-s), ebrie-tas (ebriu-s), etc., not *piu-tas, etc.; equit-is (eques) but abiēt-is, ariēt-is, pariet-is (abies, aries, pariēs); diuinus, diuo-s, but aliēnus (aliu-s); leui-gare (lēuis) but uarie-gare (uariu-s), etc. The first vowel is changed in méio fr. *mīg-yo, *miō: ei, dei, are older and more correct than ii, dii, etc. Through dissimiln. o kept ground longer after u, v, e.g. equos, equum, nouum, mortuos, etc.

§ 39. Through loss of consonants vowel-change takes place, viz.
1. Compensatory lengthening; 2. Contraction.
1. Compensatory lengthening, e.g. pēs, ariēs = *pēd-s, § 39. ariēt-s; a regular shortening has here taken place later (§ 41), e.g. pedēs fr. pedēs = *pedēt-s, patēr fr. patēr = *patēr-s; fērēns = *fērēnt-s (cf. φεْρων = φεْροντ-ς); sāl (salt) = sāl-s (gen. sāl-is), cf. ālās, etc.; esp. often through loss of nasal bef. s, e.g. acc. pl. of a-st. -ōs (nōv-ōs) = -ons (f.f. nav-ans); in compar. -iōr, -iōrem, fr. -yans, -yansam, etc.; further, pōno (place) = *pos-no (cf. pos-ui), quini (by fives) = quīncri, exāmen (swarm) = exāg-men (ago); thus g falls out esp. bef. y, e.g. māior (greater) = *māg-īr, cf. mag-nus (great), āio (say) = *dg-īo (cf. ad-dg-ium, proverb), mēio (urino) = *mēio = *mīgyo, etc.

2. Contraction (vid. supr. § 37), e.g. amārunt, amāstī, nōrunt, amō (fr. *amao), docēs, audīs (fr. *doce-is, *audi-is); nōuis = *nouo-i8, *noua-is fr. *nouo-bios, *noua-bios (v. Decl.), etc. In redupl. perf. this case is very clear, e.g. fēci fr. *fēsici, cf. cecini, likew. iēci, frēgi, etc.

Note.—Cases like inuitare (invite) = *uicitare, √ uōc; conuitium (wrangle) = *conuicitionum √ uōc; suspicio (suspicion) = *suspicitio, etc. (on the last ex. cf. Fleckeisen, Rhein Museum, viii. 227; on the other side Corssen, Kritik. Beitr. s. 12 sqq., who writes suspicio, conuicium, and derives them accordingly, but assigns inuitare to an ambig. Sk. √ vi). Cf. § 77, 1. a. sub fin.

Weakening (lightening of vowels by change of quality § 40. with and without shortening) is very common in Lat., and throughout not exclusively confined to unaccentuate sylls., whence probably too the analogy of this weakening arose (cf. supr. § 32, 2; on the question cf. G. Curtius, das dreisilbengesetzt der Gk. u. Lat. betonung, in Kuhn’s Zeitschrift, ix. 321 sqq.). Esp. regular is the occurrence of weak. in sylls. of word-formation; in composition and in reduplication, but also in root sylls. Nevertheless, that the weakening did not invariably occur in the second member of a compound is proved by exx. such as com-paro, per-agro, per-actus, etc. (Corss. Kuhn’s Zeitschr. xi. 370). Through weakening
§ 40. *a* becomes *e*; *fall-o* fe-fell-*i*, *parc-o* pe-perc-*i*, *fac-tus* per-fec-*tus*, etc.

*a* becomes *u*; *cap-io*, *oc-cup-o*; here belongs the *u* of the un-accentuated final sylls., e.g. *du-tu-s* f.f. *da-ta-s*; early Lat. *oper-us*, Sk. and f.f. *ápas-as*, etc.: the change fr. *a* to *u* is through intermed. *o*.

*a* becomes *e*; e.g. *fac-io* con-fic-*io*, *pa-ter* Iupi-*ter*, *cad-o*, *ce-cid-i*, *can-o*, *ce-cin-i*, etc.; the change must be through intermed. *e*. *e* occurs for *i* acc. to the above-stated rule, in cases like *tubi-cen*, *pe-per-i*, *oper-is* for *opis-is* (opos-os f.f. *ápas-as*), etc. Cf. § 38.

*a* becomes *e*; e.g. *hál-o* an-hél-*o*.

*a* becomes *i*; *quaer-o* in-quir-*o*, *caed-o* ce-cid-*i* con-cid-*o*, aequos in-iquos, etc.

*au* becomes *i*; caus-a ac-eús-*o*, fauc-es suf-fóc-*o*, plaud-*o* ex-plód-*o*, etc.

Even long vowels and diphths. became *i* (ἐ) by more marked shortening, e.g. *gnō-tus* co-gnē-*tus*, iouro (iūro), pe-iéro, de-iéro (-yéro for *-yiro*, with *e* for *i* bef. *r*, cf. § 38).

Before secondary suffixes, and as 1st member of compds., stems in *o*, *u*, weaken their stem-terms. before consonn. to *i*, e.g. *duri-tas*, *duri-tes*, st. *duro-* (durus); *corni-culum*, *corni-cen*, *corni-ger*, st. *cornu-*, etc.

Bef. vowels *u* remains, e.g. *fructu-arius* fructu-osus, st. *fructu-*; it also keeps ground bef. labials, e.g. *locu-ples*, quadru-pes, quadru-plex.

§ 41. Also shortening of vowels in unacc. final sylls. prevails very widely.

Thus *ā* in fem. is origl. *ā* (Sk. *ā*, η), hence kept long sometimes in earlier Latin; Ἔ, in abl. sing. of *i*-st. and of conson. stems, following their analogy, is origl. -ait, thence -aid, -eid, -ēd, *id*, later -ei, -ē, -i (so patrē, tit. Scip. Barb.); Ἔ of the vb. sometimes appears short, e.g. caue, iubē; *i* in *mīhō, tībi, ībī*, etc., is fr. earlier *ē*, *ei* through shortening, mihei, tībei, ubei, occur not seldom: final Ἔ always represents origl. *ē*, e.g. homō—*homon-s*;
agō cf. ἀγω, f.f. ag-āmi, next step ag-ā by loss of mi; ego cf. § 41. ἐγώ; in these cases the nasal may have caused the dulling of ἀ to ὀ; duo, ambo, octo, cf. δύω, ἄμφω, ὀκτό.

Shortening occurs regularly bef. final t; amā-t for -āt=-āit, -aat fr. -ayati, cf. amā-mus; so -et, -ēt, in the derived vbs. and in opt. fr. -ēt, -ēt, earlier -ēt: also -ēt in pf. was sounded -ēt in earlier times, and the like.

Similarly bef. other consonns., e.g. -is of opt. (fecerīs) for and beside -īs (fecerīs); pa-tēr fr. pa-tēr (cf. πα-τῆρ) for *pa-ters; -ōr in nom. sing. fr. -ōr, e.g. censūr (tit. Scip.) fr. *cens-tor-s, and many more such.

Evaporation in unacc. sylls. brings us to total loss, final and § 42. medial loss of vowels (§ 32).

Final loss of vowels is partly of late date only, e.g. animal for and beside animale, dic for and bes. dice, hoc for and bes. hoce, ut for and bes. uti; partly older, e.g. uēhis for *uēhisi, f.f. vaghasi; est, uēhit, for *esti, *uēhiti, f.f. asti, vaghati (tremonti has remained, Bergk. index lect. Marburg, 1847–8), etc.

Medial loss of weakly-accented vowels is esp. common in Lat., and occurs (1.) bef. vowels, e.g. minor, minus, for *minior, *minius; nullus for ne-ullus, etc.; cases can be produced where no contraction has taken place, e.g. un-ōculus (uno-oculus), sem-ānimus (semi-animus), nūtiquam (ne-utiquam). (2.) bef. consonns., the commonest case, e.g. alumnus, vertumnus, for *alumenus, *verturnenus, suff. = Gk. -μενο-, Sk. -māna-; stella for *sterla fr. *sterula; puella for *puerla fr. *puerula; misellus for *miserlus fr. *miserulus; patrem for *pater-em, st. pater-; rettuli fr. *re-tetuli; reppuli fr. *re-pepuli; repperi fr. *re-peperi, and so on. Thus the loss of medial vowels is chiefly approved betw. like consonns. (as in Mid.H.G., Zeitschr. x. 160). Unacc. i may altogether disappear, e.g. dixti fr. dixisti, ualde fr. ualide, gaudeo fr. *gauideo (cf. gauisus), etc.

Of special importance in treatment of declension is the medial loss of origl. a and i, i.e. o or u and i before the s of nom. sing.
§ 42. Thus arises *puer, etc., fr. *puers, which comes fr. *puero-s, puerus (in existence), *uir fr. *uirs, *uiros, acer (§ 43) fr. acris, etc. This is noticeably regular after r with short syll. precedg.; hence *quatuor stands for *quatuors, *quatuores, cf. té*scarces, Sk. katváras; after the vowel had been lost, the s also fell off from the r. Such forms as *famuls fr. famulos, damnas for *damnats fr. damnatos; alis for *alios (vouched for more than once); Sallustios, Clodios (Inserr.) for Sallustios, Clodios, etc.; alid for *aliod, aliid.

Loss of i in i-st. is remarkably common, whereby its Lat. nom. has become thoroughly confused with that of conson. stems, thus e.g. primas for older primatis, gens fr. *gents and this fr. *gen-ti-s, mors for *morts fr. *mor-ti-s, fr. *gen, origl. gan (gignere), and *mor, origl. mar (mori), f.f. therefore gan-ti-s, mar-ti-s, and the like. Further acer for and bes. acris, uigil fr. uigilis, etc.

Note.—The occasional omission of vowels in the text of Inserr. which could not take place in the spoken lang. (e.g. de**cumius, fecit, uixt for Decumius, fecit, uixit) has been pointed out by Ritschl. (Rhein. Mus. n. Folge xvi. p. 601 sqq.; xvii. p. 144 sqq.).

§ 43. Insertion of a helping-vowel likewise sometimes occurs in Lat., e.g. s-u-m fr. *es-mi, *es-u-mi, origl. as-mi; s-u-mus fr. *es-mus, *es-u-mus, origl. as-masi; uol-u-mus fr. *uol-mus, f.f. var-masi, cf. uol-t, f.f. var-ti; teg-u-mentum (hence teg-i-mentum) bes. teg-mentum, and the like belong likewise here; u is here the helping-vowel on account of m following, cf. drach-u-ma (Plaut.) fr. δραξ-μη, since in general a similar vowel-insertion was admitted in foreign words, as e.g. tech-i-na (Plaut.) from τέχνη, etc.

Bef. r, e=i (§ 38), e.g. um-e-rus (shoulder) bes. Sk. āsu-s for *amsa-s, rub-e-r (red) for *rubr fr. *rubrs, *rub-ro-s=e-puθ-ρο-ς, Sk. also with helping-vowel rudh-i-rá-s, origl. rudh-ra-s; gener (son-in-law) for *gen-r(o-s), cf. γαμβρός for *γαμ-ρο-ς; ager (field) for *ag-r(o-s), Gk. ἀγ-ρο-ς; caper (he-goat) for *kap-r(o-s), a form like κάπ-ρος (boar), etc.
The common helping-vowel $i$ may generally be regarded as § 43. a weakening of an older $u$ or $e$: it occurs rather irregularly (cf. Ritschl. Rh. M. n. F. 1862, 607 sqq.) in e.g. $mor-i-turus$ bes. $mor-tuos$, $or-i-turus$ bes. $or-tus$, etc. After the analogy of consonl. roots this $i$ is found also in the case of roots ending in a vowel, e.g. $ru-i-turus$, $di-ru-i-tus$ bes. $diru-tus$, $tu-i-tus$ bes. $tu-tus$, etc.
B. CONSONANTS.

§ 44. CONSONANTS OF THE INDO-EUROPEAN ORIGINAL LANGUAGE.

The consonn. in Indo-Eur. are specially distinguished from the vowels, setting aside their physiological conditions, in that they are fixed and invariable in roots (we may pass over the changes which they undergo in consequence of sound-laws that are always secondary), but cannot, like vowels, raise themselves in a definite scale of gradation. Whilst the nine origl. vowel-sounds of the Indo-Eur. can be reduced to three fundamental vowels, the consonn. are collectively independent of one another. Whilst the vowels by means of their step-formation according to meaning thereby serve for the expression of relation, consonn. are merely elements of expression of meaning; no relationship is expressed in Indo-Eur. by the use of root-consonn.

The Indo-Eur. origl. lang. has fifteen consonn., which in § 1 are classed according to their physiological conditions, viz. three momentary mutes, three mom. sonants, three mom. son. aspirates, three spirants, and three so-called liquids, i.e. two nasals and r. The existence of b (mom. son. labial) in the origl. lang. cannot be authenticated by any perfectly certain example: but it is highly probable that it did exist, as the origl. element of the frequent aspirate bh. The number of origl. consonn. is also much greater than that of the vowels (prob. 3 × 3, but certainly 2 × 3 existed).

The aspirates, as double sounds, seem to be foreign to the most original condition of the lang., and to have developed only in later times: but they certainly existed before the first splitting-up of the origl. lang., for they are found in the three divisions of the Indo-Eur., or at least they can be detected;
that is, they occur in Aryan and in S.-European; in N.-Euro-
pean likewise they must once have existed: the Teutonic has
them, it is true, like the other northern langg., changed to
sonants, but the origl. sonants are distinguished from them by
becoming tenues.

Consonantal sound-laws had not arisen so early as the
origl. lang.; consonn. can be placed anywhere, and in any com-
binations which the organism of the lang. required, because these
combinations (e.g. vāk-bhis inst. pl. fr. st. vāk, voice) were not
yet so close that those consonn. which are brought together by
word-formation exercised any influence on one another (thus
e.g. in vāk-bhis the influence of bh on k produces as early as
Sk. the fm. vāg-bhis: k has here changed bef. sonant bh into
its corresponding son. g: on the improbability of origl. inter-
change of i, u, with y, v, cf. § 3).

Examples. § 45.

Momentary mute unaspirated consonants.

1. k. ka-s (who), ka (-que, and), katvār-as (four), kankan
(five), kard (heart), v/kak (cook), /ka and ak (be sharp, quick),
/ki (lie), /kru (hear), kru-ta-s (heard), kvan-s (dog), /skid
(cut), /vak (speak), /dak (bite), /dik (show), /ruk (light),
ak-man-s (stone, heaven), dakan (ten), varka-s (wolf); sf. -ka, etc.

2. t. ta-t (that), tu (thou), v/ta, tan (stretch), tri (three), v/sta
(stand), stag (cover), v/pat (fly, fall), v/prat (broad), v/vart (turn);
common in stem- and word-formative particles, e.g. sf. -ta (pf.
pt. pass.), bhara-ti (fer-t), ragh-is-ta-s (ṛādhōṣā), etc.

3. p. v/pa (drink), v/pa (protect, rule), thence pa-ti-s (lord)
and pa-tar-s (father), par (fill), hence paru-s (many) and par-na-s
(full), v/pad (go) as noun-st. n. sing. pad-s (foot), pratu-s
(πατρός), v/pru (flow), prav-ati (he flows), v/spak (see, look),
v/sarp (creep, serpere), v/tap (burn, heat), v/svap (sleep) thence
svap-na-s (sleep, n.), etc.
§ 46. Momentary sonant unaspirated consonants.

1. **g.** √ ga (go), 1 sing. pres. ga-gā-mi, √ ga, gan (be born),
   √ gan (know), √ ag (agere), ag-ni-s (ig-ni-s), √ grabh (grasp),
   √ yu-g (iungere), thence yug-am (yoke, iug-um), etc.

   1. **g.** √ gia (go), 1 sing. pres. ga-ga-mi, √ gi, sing.
      pres. ga-ga-mi, √ gi, sing. pres. ga-ga-mi, √ gi, sing. pres.
      ga-ga-mi, √ gi, sing. pres. ga-ga-mi, etc.

   2. **d.** √ da (dare), 1 sing. pres. da-da-mi, √ dak (bite), √ dam
      (tame, domare), dama-s (domus), √ dik (show), √ div (shine), st.
      dva- (two), √ ad (eat), √ sad (sit), √ vid (uidere), 1 sing. pres.
      vaid-mi, etc.

   3. **b.** I know of no certain example of this sound.

   Note.—The Teutonic and Gk. forms of those words that show
   b in the Aryan and S.-European langg. point partly to bh, e.g.
   Sk. √ bandh (bind), but Goth. band, f.f. therefore bhandh, Gk.
   √ pevθ for * fevθ, pev-epos (affinis), peisom for * pev-θ-μa (cable);
   Sk. bāhūs (fore-arm), Gk. πηξυς for * φηξυς, N.-Eur. bogr,
   O.H.G. pucc, origl. initial-sound bh; Sk. √ budh (know), Gk.
   √ πυθ (πυνγαμα) for φυθ, Goth. bud, not * pud, as might be
   expected fr origl. b (moreover the Goth. root, notwithstanding the
   difference of function, is identical with budh, πυθ); if b were origl.,
   the Gk. fms. would be βευθ, βηξυς, βυθ. These three roots
   have a final asp., which was the effect of the disappearance of
   an origl. asp. at the beginning in Aryan and Gk. (this con-
   jecture has been ably confirmed by Grassmann, Zeitschr. xii.
   110). In other instt. we lack decisive representatives in N.-
   European, e.g. βραχυς, breuis, Sclav. brūže; Sk. √ lab, lamb
   (labi, delabi; 3 sing. pres. lāmbate), Lat. lab. (lab-itr), etc.;
   καννβς (hemp), Norse hanpr, O.Bulg. konoplya, a doubtful
   and borrowed form. Grassm. Zeitschr. xii. 122 sqq. shows it
   to be likely that b did not exist in Indo.-Eur., at least at the
   beginning of a word. Nor have I found any certain exx., ap.
   Bickell Zeitschr. xiv. 425 sqq., of the origl. existence of lab.
   son. in Indo.-Eur.

§ 47. Momentary sonant aspirated consonants.

1. **gh.** √ ghar, ghra (burn, shine; be green, yellow), ghans-s
   (m.f. goose), √ stigh (step), √ agh, angh (be tight), √ vagh (uehere),
   √ migh (mingo), √ righ (lick), dargha-s (long), etc.

   2. **dh.** √ dha (set, make), 1 sing. pres. dha-dhāmi, √ dham
      (blow), √ idh (burn), √ rudh (be, become red) thence rudhra-s
      and rāudha-s (red), madhu (honey, mead), madhya-s (medius), etc.
3. **bh.** √bhā (shine, speak), √bhār (bear, ferre), 1 sing. pres. § 47. bhār-āmi, √bhu (be, become), 1 sing. pres. bhār-āmi, √bhū (bend, flee), bhārā-tar-s (brother), √grabh (grasp), nabha-s (neut. nubes), -bhi common case-sf. bh is not very common in st.-formative particles.

**Consonantal Prolonged-sounds.** § 48.

**Spirants.**

1. **y.** ya-s (which), yuga-m (yoke, iugu-m), √yug, yu (iungere); very common in st.-formative particles, e.g. madh-ya-s (medius), as-yā-t (sit, siēt), bhāra-yā-mi (ϕoϕω), compar. sf. -yans (prob. also -yant); also in word-formative sf., e.g. -bhyan, -bhynams, sf. of dat. sing. pl. -sya, sf. of gen. sing. masc. of a-st., etc. As a medial sound, y is akin to i, cf. § 3.

2. **s.** √sad (sit), saptan (seven), √su (sow), thence su-nu-s (son), √sru (flow), √sviđ (sweat), √sta (stand), √star (strew), √smar (remember), √as, pres. as-mi (sum), √us (urere), √vas (dwell, clothe oneself), √tars (torrere, thirst), sva-star-s (sister); common in word-formative partt., e.g. akva-s (equos), nom. sg. masc., akvā-sas, nom. pl. masc., etc.; also in st. forms, e.g. man-as (mind), etc.

3. **v.** √va (flow), √vam (uomere), √vak (speak), thence vāk-s (voice), √vagh (carry, uehere), 1 sing. pres. vagh-āmi, √var (will), √vart (turn, uertere), au-is (ouis), √vid (see, know), naua-s (new, nouos); in stem-formative partt., e.g. sf. -vant, Sk. -vant, -vans, Gk. -Fevr, -Fot; rarer in word-formative parttt., e.g. loc. pl. -sva, etc.; v as a medial sound is akin to u, vid. § 3.

**Nasals.** § 49.

1. **n.** na, an- (negation), √nak (die), thence nak-ti-s (night), nava-s (nouos), nāu-s, gen. nār-as (nauis), √gan (be born, know), st. ana- (dem. pron.); n is common in st.-and word-formative parttt., e.g. par-na-s (plenus; past part. pass.), ak-man-s (stone), gnā-man (name), bhara-nti (ferunt), etc.
§ 49. 2. m. √ma, ma-n (measur, think), thence ma-na-s (mind) and mā-tar-s (mother), √mar (mori), √smar (remember), √vam (uomere); common in word-formative partt., e.g. varka-m (acc. sg.), ai-mi, i-masi (eo, imus, 1 sg. pl. pres.), etc.; in st-formative partt., e.g. ghar-ma-s (heat), gnd-man (name).

§ 50. r. √rak (shriek), √ruk (light), √rik (liqueure), √righ (lick), √rudh (rubere), raghu-s (light, adj.), √kru (hear), √bhar (ferre), √ar (oriri, ire; arare), √par (fill); also in stem-formative partt., e.g. sf. tar, bhrā-tar-, mā-tar-, and the like, but not in word-formative sff.

§ 51. **Sanskrit Consonants.**

The physiologically-arranged table of Sk. consonn. is in § 4, where also their pronunciation is considered. Whilst the vowel system of Sk. is generally original, its conson. system is mixed in many ways with later elements. Hence arises that large number of conson.-sounds which is unparalleled in other Indo-Eur. langg.

The origl. sounds in Sk. are the mom. mutes and sonants, and the sonant aspp. all of gutt., dent., and lab. quality, thus, k, t, p; g, d, b (?); gh, dh, bh; further the spirants y, s, v, and also n, m, r. Thus Sk. still possesses the consonn. of the Indo-Eur. origl. lang. entire. All the rest, nineteen in number, have arisen in pure Aryan words from these fifteen origl. consonn., and are to be treated as parallel fms. of them, which have been called forth according to generally perceptible sound-laws, and through the influence of the non-Indo-Eur. langg. spoken by Dravidian (Dekhanic) peoples who were pressed back by the Aryans, and were the earlier inhabitants of the peninsula of Further India, just as neighbouring langg. very often acquire sounds from one another.

The origin of the so-called Sk. lingual mom. consonn. and ling. nasal (l, d, lḥ, dh, ḷ) is due to the latter influence, therefore these sounds are peculiar to Indian, and are unknown in this form to other Indo-Eur. langg. Within the Indian these
sounds gain a still wider sway in the course of the development § 51. of the lang. (in the Prākṛits). In Aryan words they are variations of their corresponding dentals.

Further the palat. mom. sounds and their nasal are all unorigl. (ṅ, ṇ, ṇh, ṇh, ṇ); they have arisen from the corresponding gutturals; and so is the pal. mute spirant ɣ, which is a variation fr. k. The law acc. to which the gutt. partly pass into palatalas, partly remain, is hitherto unexplained in particular cases (however, that the change of gutt. into palat. did not occur till late, is implied by the circumstance that the gutt. were reduplicated by means of the corresponding palatalas).

Unorigl. also are all the tenues aspp. (kh, th, ph; in the case of ṅh and ṇh the unoriginality is sufficiently clear from the nature of the unasp. sound), whose origin is in known cases mainly caused by foregoing s (kh, ṅh=ṣh, ṇth=ṣt).

Unorigl. also is h, which mostly represents gh, sometimes also other aspp.; ṅ occurs partly acc. to definite sound-laws, partly without perceptible reason for s; ṅ (visarga) is an altogether late variation of s, and confined almost entirely to the termination.

The gutt. and palat. nasals stand only bef. mom. conson. of their own quality, by which therefore they are conditioned; the nasalisation of the vowels (") is likewise dependent on the follg. conson.; it occurs bef. s and h (bef. other conson. it is often merely a way of writing nasal consonn.).

I bes. r, is as in other langg., unorigl.; it obviously increases in the course of the development of Sk.

Besides the sound-laws already explained, Sk. has numerous laws for medial sounds, but esp. for termn. (these laws however do not belong here, but rather to Sk. special grammar), through which the conson.-syst. of Sk. became considerably removed from the basis of the origl. lang.

The representation of gutt. by palatalas occurs only bef. vowels and sonant mom. prolonged sounds, not bef. mom. consonn., mute conson.-prolonged-sounds, and in termin. Yet here also
§ 51. occur palatals by no means acc. to fixed sound-laws (e.g. yu-yōg-a iunxi, bes. yōg-a-s iunctio), so that it seems that the lang. has availed itself of the change of gutt. into palatals (originally merely physiological), in order to express differences of relation.

Examples.

§ 52. Origl. mom. mute unaspirated consonn.

1. Origl. k=Sk. k, k, kh, ḫh, ḍ, p.

Sk. k=origl. k, e.g. in ka-s (who), kar (make), kim-i-s (worm), vīka-s (wolf), st.-formative sf. -ka, e.g. dharmś-ka-s (right, fr. dharmaś, duty), etc.

Sk. ḫ=origl. k, ḫa-kāra (soci), ḫa- is the relic of the most origl. reduplicated supposed kar; ḫa (-que, and), katvār-as (quatuor); ṛuk (shine), vak (speak), whence vāk-mi (I speak), vāk-am (uocem, speech); k stands for k esp. in /termn., etc.

Note.—Bef. mom. sounds and s the gutt. remains, e.g. vak-ti (he speaks), vāk-śi (thou speakest, ś for s after k, v. § 55, 2), vag-dhi (speak), g for k acc. to sound-laws, v. post., etc.

kh and ḫh occur for origl. k after s; this s more often than not is lost in case of skh, in case of ḫh always. [For aspirating force of s, v. Kuhn, Zeitschr. iii. p. 321 sqq., 426 sqq. Cf. also Ascoli, Zeitschr. xvi. p. 442 sqq.]

Sk. ḫh=origl. sk, e.g. khanja-s (limping), cf. O.H.G. hinch-an, hink-an, hank, likewise without initial s, but Gk. σχάζω (limp), σκαργγ=Sk. khaγγ, f.f. skag; khāγ-s (stirrer), cf. Ang.-Sax. sceæ-an, Norse skak-a (shake); khaγ (spring forth), cf. Sclav. skak-atī (spring).

Note.—Most words in kh cannot, or at least not certainly, be reduced to their f.f.

Sk. ḫh=origl. sk, e.g. khid (split), Zend ākid, Lat. scid, f.f. skid; khāyā (cover), cf. Gk. σκάδα; gakkhami, f.f. gaskami (the redupln. of kh to ḫh is regularly written so after a short vowel), and in similarly fnd. pres. stt.
Note.—Bef. \( t, \theta h, \kappa h \) becomes \( ś \), e.g. \( \text{prāś-}t\text{um} \) (\( t \) for \( t \) after \( ś \)), § 52. infin., \( √\text{prak}h \), f.f. prob. \( \text{prak} \), with unorigl. \( s \); cf. Lat. \( \text{pre} \) (precor), \( \text{pro} \) (procax), Lith. \( \text{pras} \), Sclav. \( \text{pro} \), Germ. \( \text{frak} \) (fraithman), Sk. \( \text{praq-}nā-s \) (prayer) for \( *\text{prak-na-s} \); but e.g. \( \text{prak-}śyāti \) fut. with \( k \) acc. to usual rule.

\( γ=\) origl. \( k \); \( √\text{ci} \) (\( \text{cētē}=\text{kētā} \) of gr.); \( ġa \) and \( aγ \) (acuere), pres. (a)\( ġ-yāti \), \( ġā-tā-s \), ci-tā-s (acutus), whence also \( \text{ágman-} \) (n. \( \text{ágma} \), stone); \( √\text{gru} \) (hear); \( ġ\text{ovan}- \), n. \( ġ\text{vā} \) (hound); \( √\text{diγ} \) (show); \( √\text{daγ} \) (bite); \( \text{dāγan-} \) (ten), etc. \( \gamma \) is a favourite sound esp. bef. liq. consonn. and \( v \); further in \( v\) termns., in place of \( k \); it is however not uncommon at the beginning of roots.

In verb sttt. \( k \) remains bef. \( s \), though \( \gamma \) was produced from it in other circumstances, e.g. \( ā-\text{dik-}śat \) (\( ē-\text{śew-}σε \), after \( k \), \( ś \) stands for \( s \), v. post.), so in certain noun sttt., e.g. \( \text{dik-}śu \), loc. pl. fr. st. \( \text{diγ-} \) (n. sg. \( \text{dik} \) for \( *\text{diγ-s} \), gen. \( \text{diγ-}ās \), quarter of the compass), dat. pl. \( \text{diγ-bhyās} \) acc. to sound-laws (v. post.) for \( *\text{diγ-bhyas} \).

Other noun. sttt. let their \( γ \), however, interchange with \( t \), \( ḍ \), unoriginally. Bef. \( t, \theta h, ć \) becomes \( ś \), which \( t, \theta h \), then become lingual, e.g. \( √\text{darg} \) (Gk. \( \text{dērκ}, \) see), but \( \text{drā-}ś-ā-s \) (past part. pass.) for \( *\text{drāγ-}ta-s \), f.f. \( \text{dark-}ta-s \).

Sk. \( p=\) origl. \( k \) occurs only sporadically. This change fr. \( k \) to \( p \) is seen in all Indo-Eur. langs. except Lat. and Erse; e.g. \( √\text{pak} \) (cook) for origl. \( \text{kak} \). Whilst Lat. \( √\text{coc} \) preserves both gutt., which evidently arose fr. redupln. of origl. \( √k\), Gk. has in \( πεν \) permitted labials to arise in both cases, Sk. \( \text{pak} \) and Scl. \( \text{pek} \) have only changed the initial, and Lith. \( \text{kep} \) contrariwise the final. This ex. is specially full of information, and points unmistakably to the originality of the \( k \), hence the \( √\text{fm} \). is in these cases \( \text{kak} \). Further \( \text{pānkan-} \) (five) for \( *\text{kankan} \); \( √\text{sap} \) (sequi, Vēdic) seems to be a bye-fm. of \( \text{sak} \) (sequi), f.f. \( \text{sak} \), so that in this root also two variations fr. origl. \( k \) are to be seen; st. \( \text{ap-} \) (water) must stand bes. Lat. \( \text{aq-ua} \), Goth. \( \text{ah-va} \) (river), for origl. \( \text{ak-} \), Lith. \( \text{ąpę} \) shows likewise the change fr. \( k \) to \( p \), f.f. of \( \text{ąpę} \) is thus \( *\text{ak-}γā \), and the root of this word is probably
§ 52. ak (be swift). [On the change of origl. k to p, wh. often does not appear till late in certain words, while in others k remains, cf. Beitr. iii. 283 sqq.]

Note.—In the words hrd-, hrd-aya-m (heart), h=origl. k, clearly through intermed. hh; origl. k is attested by cord-is, karpā-la hairt-ō, Lith. szird-is, Sel. srūd-ice. In √guh (hide, 3 sg. pres. gūh-ati, gūh-ā, cairn) g is softened fr. k, f.f. of root therefore is kudh, as Gk. κεύθ-ω (hide), Lat. cus-tos for *cud-tos, Ang.-Sax. hyd-an, prove.

2. Origl. t = Sk. t, th.

Sk. t = origl. t, e.g. ta-t (that), origl. id.; tv-am (thou); √ta, tan, 1 sg. pres. ta-nōmi (stretch); pāt-ati (3 sg. pres.), √pat (fly, fall); vārt-atē (3 sg. pres. med), √vart (uertere); sf. of past part. pass., e.g in yuk-tā-s (√yug, yug, iungere), cf. iunc-tu-s, ἥσυχ-τό-ς; sf. ti of 3 pers. vb., e.g. 3 sg. bhāra-ti, 3 pl. bhāra-nti, cf. φέρε-(r)τι, φέρο-ντι, fer-t, fer-nt, Goth. bairi-th, baira-nd, etc.

Sk. th = origl. t, esp. after s, e.g. √stha (stand), e.g. sthi-tās, origl. sta-ta-s (status); √stha (cover), cf. Gk. στεγ, Lith. steg; superl. sf. -ištha, e.g. lágh-ištha-s, cf. ἑλάχιστος (here th has become th acc. to sound-laws after k). Sometimes th stands for t without being caused by preceding s, thus tha, termn. 2 sg. pf., e.g. babhārtha (thou hast borne) could hardly have had an s inserted bef. it; as a √termn. in √prath (be wide, broad), 3 sg. prāth-atē, prth-ūs (πλατύς); √math, manth (move), 1 sg. pres. math-nāmi, mānth-āmi, where origl. st must not be assumed.

Note 1.—The unoriginality of th is shown by the fact that it does not appear at the beginning of words (except in the few onomatopoetic or unused and unorigl. words given in Lexx.).

Note 2.—It appears that after k (in those cases where t though part of a sf. was not felt to be such) this t passed into s; s however in these instances becomes s (v. post. § 55, 2), e.g. ἵκα-ς (bear)=ἄρκτο-ς, ursu-ς for *urctus (cf. post. sub Lat.); st. tākšan- (carpenter)=τεκτον-; ἵκαν (slay) further fmn. fr. ἵκα, cf. κτεῖν in κτεῖνω; ἱκί (dwell), Gk. κτί (ἀμφι-κτί-ονες, dwellers-around, κτί-ξω, build), etc. Contrariwise, e.g. ukt-ās
(said), past part. pass.; vāk-ti, 3 sg. pres. vāk, origl. vak (say, § 52. speak); st. cāk-tār- (fut. part.), cāk-tā- (past part.), cāk (know, be able), etc.


Sk. p = origl. p, e.g. pa (drink, protect), whence pā-ti-s (lord), pi-tār- n.sg. pi-tā (father); par (fill), 3 sg. pres. pi-par-ti, whence pūr-nā-s for *par-na-s (plenus); spac (see, spy) in spač-a-s (spy), vi-spačtā-s (perspicuous) for *vi-spač-ta-s (past part. pass.); tap, 3 sg. pres. tāp-ati (heat, burn); sarp, 3 sg. pres. sārp-ati (serpere, ire), etc.

Sk. ph = origl. p, esp. after s, e.g. sphāti (alum), sphātiha-s (crystal), cf. German spat; sphur, 3 sg. pres. sphur-āti (shake, in Vēd. the root means 'strike, push'), clearly fr. *sphar, cf. σφαλω, à-σφαλω, O.H.G. sporo (spur), spor (track); phēna-s (foam), cf. Scl. pēna, Lith. pēna-s (milk); Lat. spūma, provided it comes fr. *spoi-ma, would here also point to sp, in phē-na-s etc. we must therefore assume a root epi, etc. For the rest, ph is not frequent in initio.

The aspiration of tenues after s is not, however, by any means universal, as is shown by the common combinations sk (skānd-ati, scandit), st (str-nāti, sternit), sp (sprg-āti, touches).

Origl. mom. sonant unasp. consonn. § 53.

1. Origl. g = Sk. g, ġ (h).

Sk. g = origl. g, e.g. ga (go) in ġā-gā-ti, ġi-gā-ti, 3 sg. pres., ga-tā-s (past part. pres.), ā-gā-t (3 sg. aor.); yugā-m (iugum); grabh, grah (seize), etc.

Sk. ġ = origl. g, e.g. ġi-gā-mi (βlβηυι), 1 sg. pres. ga (go); yu-nā-ġ-mi, 1 sg. pres. yug (iungere), cf. parallel yug-ā-m with g preserved; ġan (gignere), e.g. ġān-as = Lat. gen-us, 1, 3, sg. ind. pf. ġa-ġān-a = γέγονα, γέγονε; ġān-ād-s = (g)nō-tus, ġānā fr. ġan, origl. gan, etc.

Note.—Bef. ġ in many cases we find not the gutt. but an unorigl. ẓ, e.g. sṛtā-s, past part. pass. sar (do); māṛs-ti, 3 sg. pres. mar (cleanse, wash away). Sometimes also ġ is interchanged with š and t, acc. to the quality of the following sounds.
§ 53. In more cases in Sk. ʰ (= gh) stands where Gk. and the other langg. point to origl. ʰ, so that in Sk. we must assume an unorigl. aspiration, e.g. st. mah-ánt-, i.e. *magh-ant- (big), but parallel to it mág-mán- (strong), cf. Gk. μέγ-ας, μεγ-ατος, Goth. mik-ils (big), Lat. mag-nus; indeed beside it stands Sk. √mah=magh (to wax), which exactly corresponds to Gk. √mag (can, be able); hánu-s (jaw) = Gk. γένν-ς, Goth. kinnu-s (chin), cf. Lat. gena, and (dens) genu-inus; ahám, i.e. *agham=γάω, Goth. ik, Lat. ego; gha, ha=Gk. γε, Dér. γα, Goth. -k (in mi-k=με-γε). In all these cases Gk. γ=Goth. ʰ are in favour of origl. ʰ.

2. Origl. d=Sk. d, e.g. √da (dare), 3 sg. pres. med. dá-da-tē, 2 sg. imper. med. epic dá-da-sva, 1 sg. pres. act. dá-dā-mi; √dam (domare), e.g. dam-ā-s, dáṁ-ana-s (domans, coercens), 3 sg. pres. dām-yā-ti; √vid (uidere), e.g. 1 sg. pres. vēd-mi, 1, 3, sg. pf. vēd-a=Foḍa, Foḍe; √sad (sidere, considere), e.g. 3 aor. sg. ā-sad-at, etc.

Note.—d in pīḍ (press) and nīdā- seems to have arisen from sd, namely in case of pīḍ, which is proved unoriginal through i and d, comes fr. *pīḍ, *pi-sad=api-sad, cf. πιέξω=πι-σέδυω= πέπεισυδυο; bes. nīdā-s, nīdā-m, stands Lat. nīdu-s, which may very likely be for *nisdus (cf. iu(s)-dex, i(s)dem; v. sub Lat. 'consonn.'), to which Teutonic nest points; *nisda-s would then have arisen from *ni-sada-s, and mean "down-sitting," unless it belong to √nas, on which point v. Curt. Gr. Et.² no. 432, p. 282.

3. Sk. b (cf. § 46, 3), which may be held unorigl., occurs, e.g. in balā-m (force), with which is usually classed O. Bulg. bolij (greater); √lab, lamb (labi), 3 sg. pres. lāmb-ātē, Lat. lab.

§ 54. Origl. mom. sonant asp. consonn.

1. Origl. gh=Sk. gh, h.

Sk. gh=origl. gh, e.g. √agh in agh-ām (ill, sin, origl. prob. anguish); √stigh=στιχ (step), 3 sg. pres. stigh-nulē; mēgh-ā-s (clouds), cf. √mih, sub 'ʰ'=gh; dirghā-s (long)=δόλιχό-ς, etc.

Sk. h=origl. gh; e.g. hāsā-s (goose), cf. χόν, Germ. gans, Lith. žōsis, Pol. goś; √āh=angh in āh-ū-s (snake), āh-as, āh-atis (pain); √vah (uehere), 3 sg. pres. vāh-ati, for vagh, cf. Goth.
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\(/vag\); \(/mih\) (pour out, mingere), 3 sg. pres. \(mēh-ati\) for \(migh\), § 54. cf. supr. \(mēghās\), Gk. \(\sqrt{μωχ}\); \(\sqrt{λ\ellh}\) (lick), 3 sg. pf. \(tī-tē-ha\), cf. \(λ\ellh\), etc.

Note 1.—In nakha-s, nakha-m (nail, claw), cf. \(ουνυχ-ος\), Scil. nog-\(ūti\), Goth. *nag-\(l\)-s, \(kh\) stands most strangely where we should have expected \(gh\).

Note 2.—\(gh\) occurs rarely, e.g. \(γhαsā-s\) (fish); in other Indo-Europ. langg. no similar example is yet known; \(gh\) occurs most often in initio in onomatopoetic words.

2. Origl. \(dh=Sk.\ dh, h\).

Sk. \(dh=\)origl. \(dh\), e.g. \(\sqrt{dha}\) (set), 1 pres. \(dā-dhā-mi\), cf. \(τλ-\theta-μ\), Goth. \(\sqrt{dā}: \sqrt{idh}\) (kindle), 3 sg. pass. \(idh-yātē\), cf. Gk. \(\alphaθ-ο\); \(\sqrt{rūdh}\) (rubere) in \(rūdh-irās\) (ruber), cf. Gk. \(\varθ,\) Goth. \(\vartheta\); \(mādhū\) (honey, mead, intoxicating drink), cf. \(μέθων\), etc.

Sk. \(h=\)origl. \(dh\), e.g. in \(hi-tā-s\) for *dhi-ta-s fr. *dha-ta-s, past part. pass. \(\sqrt{dha}\) (set), cf. \(θε-ρό-ς\); \(\sqrt{rah}\) (rah-\(tū-\), forsaken, bereaved; \(rāh-as\), ntr. secret, hidden) for *radh, cf. \(\lambdaαθ\) (\(\lambdaαθ-ε\varθ\), escape notice; \(\lambda\dot{αθ}-\rhoα\), secretly); \(\sqrt{guh\) (hide) for *guhd, cf. \(\sqrt{κωθ\) (\(κωθ-\omega\), hide); \(\hdot\) for \(dhi\), sf. of 2 sg. imper. act., e.g. \(pā-hi\) (tuere), but Vēd. \(ṣrū-dhī=κλωθ-θ\iota\); in Sk. this \(dhi\) occurs after consonn. only, e.g. \(ad-dhi\), \(\sqrt{ad\) (edere), but \(hi\) after vowels.

3. Origl. \(bh=Sk.\ bh\), rarely \(h\).

Sk. \(bh=\)origl. \(bh\), e.g. \(\sqrt{bhar}\) (ferre), 1 sg. pres. \(bhār-āmi\), cf. Gk. \(\φέρ\); \(\sqrt{bhu}\) (become, be), 3 sg. pres. \(bhār-ati\), cf. \(φι\); \(bhūd\) (findere), 3 sg. pf. \(bi-bhēd-\iota\), cf. Lat. \(\sqrt{fīd\) nābhas (air, heaven), cf. \(νέφος\); \(\sqrt{bha}\), 3 sg. pres. \(bhā-\iota\) (gleam), cf. \(φα\), \(φα-\upsilon\), etc.

Sk. \(h=\)origl. \(bh\), e.g. \(\sqrt{grah}\), Vēd. still \(grabh\) (seize); \(mā-hyam\) bes. \(tū-bhyam\) (dat. sg. pers. pron. 1 and 2), cf. \(mi-hi\) bes. \(tī-bi\); \(bh\) has disappeared entirely in instr. pl. of a-st., e.g. \(άγvāis\) for *\(aγvā-bhīs\) (v. ‘declens.’).

In roots which end in aspp. an origl. initial asp. loses the aspiration; e.g. \(\sqrt{bandh}\) (bind), 3 sg. pres. \(badh-nā-ti\), pf. \(ba-bāndh-a\) for *\(bhandh\), Goth. band, Gk. \(πe\upsilon\) for *\(φe\upsilon\); bāhū-s
§ 54. (masc. elbow) for *bhāhu-s, cf. Norse bögr, Gr. πηχυ-ς for *φηχυς; √budh (learn, know), 3 sg. pres. budh-yātē, bōdh-ati, cf. Goth. √bud, Gk. πυθ for *φυθ; √druh (hurt), 3 sg. pres. druḥ-yātī for *dhrugh, Zend drug, druḍ, druž, but O.H.G. trug, i.e. earlier drug, are in favour of initial dh. Cf. the reduplication-law (§ 59, 3).

CONSONANTAL PROLONGED SOUNDS.

§ 55. Spirants y, s, v.

1. Origl. y=Sk. y, e.g. pron. √ya (rel.), n. sg. masc. ya-s; ya is further a frequent st.-formative element, e.g. mādh-ya-s=med-iu-s; the same part. fms. the opt., e.g. s-ya-t=s-iē-t; further, as one part of the pres. stem which comes fr. as (esse), and serves to form the fut., e.g. dā-s-yā-ti=δοσει fr. *δω-σ-ηε-τι; ya forms derivative vbs., e.g. bhārā-ya-ti, 3 sg. pres. vb. causat. √bhar (ferre)=φοει fr. *φοε-ηε-τι; √yu, yūj (ungere), cf. Lat. √iug, whence yugā-m=Lat. iugu-m; yuvan-, acc. sg. yuvān-am, cf. Goth. jūggs (same meaning), Lat. iuuenis: yākrī (liver), cf. Lat. iecur (id.).

The connexion between y and i is treated in § 14, 1, d; the splitting up of y to iy, īy, in § 14, 1, c; change fr. y to iy, īy, v. § 15, 2, b.

2. Origl. s=Sk. s, ś.

Sk. s=origl. s, e.g. √sād (sedere), e.g. sād-as ntr., sād-ana-m (sedes); sāp-tan-, Vcd. saptān=septem; √su (beget, sow), e.g. su-tās, past part. pass.; √sru (flow), 3 sg. pres. srav-ati: svāsar-, acc. sg. svāsār-am (sister); √svād (sweat), 3 sg. pres. svād-yāti; √stār (sternere), 3 sg. pres. str-nāti; √smār (remember), 3 sg. pres. smār-ati; √as (esse), 3 sg. pres. ās-ti; √vas (dwell), 3 sg. pres. vās-ati; √vas (clothe oneself), 3 sg. pres. vās-tō; in st.-and word-formative particles, as mān-as (ntr. mens)=μεν-ος; -s is an element of nom. masc. and fem., e.g. vṛka-s, pl. vṛkā-sas (wolf, wolves), etc.

Sk. ś=origl. s, e.g. √uś (ur-ere), cf. us-lus, 3 sg. pres. ūś-ati;
\( \sqrt{\text{tar}S} \) (thirst), 3 sg. pres. \( tr\-\text{y}ati \), cf. Lat. \text{torr-}eo = *\text{tors-}eo, § 55.

Germ. \text{durs-}t; \( \acute{s} \) also sporadically after \( a \), e.g. \( \sqrt{\text{bh}h\acute{a}s} \) (speak), 3 sg. pres. \( \text{bh}h\acute{a}s\acute{a}t\acute{e} \), further fmn. of \( \sqrt{\text{bha}} \)=Gk. \( \phi \alpha \) in \( \phi\-\text{v}u\-\text{s}, \( \phi\-\text{a}\-\text{v}u\-\text{s} \) (speech), \( \phi\eta\-\text{m} \) (say); bes. \( \text{bh}h\acute{a}s \), 3 sg. pres. \( \text{bh}h\acute{a}s\acute{a}t\acute{e} \) (shine, gleam), further fmn. of a similarly sounding \( \sqrt{\text{bha}} \)=Gk. \( \phi \alpha \) in \( \phi\alpha\-\text{v}o \) (show, make clear) = *\( \phi\alpha\-\text{v}u\-\text{v} \), \( \phi\-\text{a}\-\text{v}u\-\text{s} \) (showing); \( \acute{s} \) thus stands to \( s \) as palatal to gutt.; it is initial in \( \text{sa}S \) (sex) only, but cf. Zend \( \text{kha}S\acute{e}s \), a fm. which renders doubtful the originality of the initial sound of this numeral in the other langg. of our stock.

Origl. \( s \) has moreover undergone many more changes in Sk.; these changes, however, did not occur generally till a relatively late period; \( s \) before \( t \) (\( \text{th} \)) and \( p \) (\( \text{ph} \)) and after \( a \) (except in fine) remains fixed; after \( k \) and \( r \), \( \acute{s} \) stands for \( s \); likewise after \( i, u \) (and their diphthongs, generally after other vowels, as after \( a, \acute{a} \)) medially bef. most sounds (bef. all vowels and \( y, \acute{u}, m, t, \text{th} \); \( \acute{o} \) and \( \acute{\acute{u}} \) bef. \( s \) do not break this sound-law); fr. st. \( \text{bh}h\acute{u}t\acute{i} \) (=\( \phi\alpha\-\text{v}u \)) thus comes loc. pl. \( \text{bh}h\acute{u}t\-\text{i-}k\-\text{u} \) for *\( \text{bh}h\acute{u}t\-\text{i-}u \); \( \acute{a}\-\text{si} \) (3 sg. fut. \( \sqrt{\text{ni}} \), lead) for *\( \text{nai-} \text{sy}a\-\text{ti} \); \( \acute{o}\-\text{si} \), f.f. \( \text{ai-} \text{si} \) (2 sg. pres. \( \sqrt{\text{i}} \), go); \( \text{vak-} \text{si} \) (2 sg. pres. \( \sqrt{\text{vak}} \), speak) but \( \acute{a}t\-\text{si} \) for *\( \text{ad-} \text{si} \) (2 sg. pres. \( \sqrt{\text{ad}} \), eat) and \( \text{t\-} \text{su} \) (loc. fem. pl. \( \text{ta} \), pron. dem.); st. \( \text{dhanu} \- \text{su} \) (bow), loc. pl. \( \text{dhanu}\-\text{su} \) or \( \text{dhanu}\-\text{su} \) for *\( \text{dhanu-} \text{su} \); with sf. \( \text{mant} \), \( \text{dhanu}\-\text{mant-} \), n. sg. \( \text{dhanu}\-\text{m} \- \text{an} \) (provided with a bow). Betw. \( s \) and \( \acute{s} \) there is nevertheless great vacillation (particulars must be relegated to Sk. special. gr.; it is enough to note here that \( \acute{s} \) = origl. \( s \)).

\( \acute{o}, \acute{r}, \acute{\acute{c}} \), occur, like \( s \), acc. to definite sound-laws, in place of \( s \); yet mainly in termn. alone, in which case -\( \acute{\text{as}} \) also may pass into \( \acute{o} \), and \( s \) be lost, e.g. \( \text{vrka}\-\text{g} \) for \( \text{vrka}\-\text{s} \) at end of a sentence, or bef. \( k, p \); \( \text{avir e} \- \text{ti} \) for \( \text{avis e} \- \text{ti} \) (ouis it); \( r \) occurs for \( s \) bef. all sonant sounds unless \( a \) or \( a \) precede; -\( \acute{a} \), however, bef. sonants becomes \( \acute{o} \), and -\( \acute{\text{as}} \) becomes \( a \); this latter also medially, e.g. \( \text{ca-dhi} \) for *\( \text{caas-dhi} \), 2 sg. imper. fr. \( \sqrt{\text{caas}} \) (rule), but 3 sg. imper. \( \text{caas-} \text{lu} \); \( \text{av} \- \text{ic karati} \) (the sheep goes); \( \text{vrkâ} \) \( \text{bhavat} \) for \( \text{vrkas abhavat} \) (the wolf was); \( \text{vrka} \- \text{ast} \- \text{e} \) for \( \text{vrkas} \- \text{ast} \- \text{e} \) (the wolf sits), etc.
§ 55. In stems ending in -s these changes take place before case-sff. also which begin with a conson., e.g. st. mánas-, g. mánas-as, without change; but instr. pl. mánobhis for *manas-bhis, loc. pl. mána-su for mánas-su, which also occurs, dhánur-bhis for *dhanus-bhis, st. dhánus- (bow).

§ bef. s passes into k, e.g. ādevis (hate), 2 sg. pres. devék-ši for *devēk-si; also the change to t, d occurs, as in the case of č, e.g. devi-dhi, 2 sg. imper. act. ādeviš for *deviš-dhi. Cf. Sk. grammars.

Note.—In ṣvácūra-s (father-in-law), ṣvārū-s (mother-in-law), ċ stands in initio (by assimiln. to follg. ċ), instead of s, cf. Zend ḍhācura- i.e. *svacura-, ěkupō-Ś, Lat. socer, socrus; similarly in st. ċiśka- (dry) for *suska-, cf. Z. huska-, O.Bulg. suchă, f.f. sauwa-s, Lith. sauša-s; č for s occurs besides in other single cases bef. v and u.

3. Origl. v=Sk. v, e.g. āvid (perceive), 3 sg. pres. vēt-ti for *vēd-ti; āva (blow), 3 sg. pres. vā-ti, cf. Goth. āva; āvah (uehere), 3 s.g. pres. vāh-ati, cf. Lat. uēh, Goth. vag, Sclav. vez, etc.; āvar (cover), 3 sg. pres. vr-nōti, whence ār-nā (wool) for *var-nā, cf. Gk. Fép-tov, Sclav. viū-na, O.H.G. wol-la, etc.; āvar (will), cf. Lat. ul (uelle), Goth. val (will), etc.; āvi-s=Lat. oui-s, òFoṣ; nāva-s=Lat. novo-s, véFo-s, etc.

On the connexion betw. v and u, v. § 14, 1, c, d.

§ 56. Nasals.

1. Origl. n=Sk. n, e.g. na, an- (negation); ānaç (perish), 3 sg. pres. nācyati, cf. vec; st. nar-, nara-, n. sg. nā for *nars, nara-s (ā-vēp); nāu-s=vañs; nā-man=Lat. nō-men-; dānta-s (dens); often n is changed into another nasal, e.g. pūr-ñā-s (plenus, cf. supr. ā=a, § 8), f.f. par-na-s, n for n, since r precedes, v. post.; āṅhā-tās=gnō-tus, origl. fm. of āṅhā is gan, on ų for n, v. post.; yuṅgānti (iungunt), āyug, with inserted nasal, but yunktē, 3 sg. med. with ų, since k follows, v. post.; lump-āti= rumpit, has nasal m because p follows; hāsū-s, cf. hāsner, Germ. gans; mā-si, 2 sg. pres. act., mā-syātē, 3 sg. fut. med. āman (mean), with ā for n acc. to Sk. sound-laws, etc. All these changes must have been wanting in Indo-Eur. origl. lang.,
because clearly either the nasal was not yet within the root, but § 56. stood after it, acc. to the formative principles of Indo-Eur. (v. Introduction, 2), and so the fms. in question were still perh. yug-nanti, yug-natai, or else n and m remained unchanged, e.g. man-si, etc.

Bef. case-terms. which begin with consonnn., n as a noun-st.-termn. disappears, e.g. st. náman- (nomen), loc. pl. náma-su for *náman-su (*námá-su). This sort of loss of n takes place in other like cases also.

2. Origl. m = Sk. m, e.g. √man (mean, think), whence mán-as (mens) = µév-os; mā-tár = má-ter-; √smar (remember), cf. Lat. me-mor with lost s; √vam, Lat. nom-ere, 3 sg. pres. vám-ati; in st.- and word-formative particles thus sf. man, e.g. ná-man-; m as sign of acc. case, e.g. áśva-m = equo-m; -mi, -masi, -mas, 1 sg. pl. e.g. ë-mi, pl. i-más, earlier i-mási = el-µu, i-µev, etc.

The nasals n, m have, as the above exx. show, undergone many variations in Sk. because they always adapt themselves to the quality of the succeeding consoonn. Accordingly bef. gutt. mom. ň only is found; bef. palatals is found ŉ, this sound occurs also immediately after k, ĝ; bef. lingg. and (acc. to distinct sound-laws) where ling. sounds š, r, precede in a word, ň is found; n has its place bef. dentt. and vowels; m bef. labb. and vowels (these two origl. nasals only are found in the beginning of a word); bef. s and h, " is found. Particulars belong to Sk. special-gr.

r- and l-sounds. § 57.

r was softened to l in many cases at an early date; sometimes the earlier lang. retains r where the later already has l.

Sk. r = origl. r, e.g. √ram, 3 sg. pres. rámáté (he is pleased); √rik (separate), 3 sg. pres. ri-ná-k-ti (with inserted na); √ruk (shine), 3 sg. pres. rók-até; √mar (mori), e.g. mr-tá-s, past part. pass. (mortuos); √par (fill), 3 sg. pres. pi-par-ti; st. √kpr- (fem. appearance, beauty), √karp, cf. corp-us; Z. kref-s; in stf., e.g. rudh-i-rá-s = ë-pvθ-pó-s; sf. tar, Lat. tor; tra-m, Lat. tru-m, etc.
§ 57. Note.—In termn. r was treated like s; at the end of a sentence it becomes ə, etc., cf. § 55, 2.

Sk. ɨ=original r, e.g. ɨk, 3 sg. pres. ɨk-ate (see), doubtless akin to ruk (shine), cf. λευκ-ός and λεύσσω = *λευκ-γω; √lup (break), 3 sg. pres. lumpāti, cf. Lat. √rup; √kalp (be in order), 3 sg. pres. kālpate, cf. krp; √lih, λαξ, Lat. lig, Erse lig, Goth. lig, Lith. liž, Scl. liž (lick), but in earliest Indian still rih. Also where the kindred langg. show no r, we must yet assume an origl. r, because we notice that l is continually spreading, whilst r becomes rarer; if we suppose this process to have been going on continuously in pre-historic times, r will remain as the older by elimination; cf. Zend. Such instances are found in e.g. plu (float), Lat. plu, Gk. πλυ, Scl., Lith. plu, Germ. flu (in flu-ə, in diall. fleu-e (wash)); here precisely it happens that ɨ—so frequently interchanged with r—occurs throughout; whilst in Sk. there is still a root pru (go) in existence, which origly. was prob. identical with plu, and must be considered as its earlier fm.

§ 58. Sketch of some sound-laws important for comparative grammar (so far as they are not contained in foregoing sections).

Between the various ways in which the Indo-Eur. sounds make their appearance in particular Indo-Eur. langg. (i.e. those changes of origl. sounds through which this or that distinct lang. arose from their common fundamental lang., e.g. Sk. vāk-am, Gk. Φόν-α, Lat. uōc-em, fr. f.f. vāk-am), and the variations which the sounds undergo during the separate existence of the lang. thus produced, namely sound-laws, we can draw no sharp line of demarcation. The distinction between sound-representation and sound-law is chronological, and therefore indeterminate, and the exact definition of the date at which a sound-change occurred is generally difficult. For this reason, and also in order not to break up the subject too much, I have often above left the boundary between sound-correspondence
and sound-law ill-defined; moreover, sound-laws—as peculiar to § 58. the separate-life of a lang.—belong here only in so far as they bear upon our knowledge of older word-forms. The numerous laws, e.g. in Sk., which come into play only when words are composed into sentences, may here be mostly omitted, since we are treating of words taken separately.

We find, esp. in written lang., forms of different periods beside each other, e.g. Sk. yuk-ta-s for *yug-ta-s, √yuḥ (iungere), after an earlier mode of formn. than iś-ta-s for *ig-ta-s, *ik-ta-s, f.f. yag-ta-s, √yaḥ (open, v. § 53, 1, n.); here the sound-law by which ṣt becomes st is clearly later than the preservation of the origl. combination gt, i.e. kt (bef. t, k must naturally occur for g).

Generally speaking we may call the Sk. very rich in conson. sound-laws; its conson. system is thus manifoldly unorigl. from this point of view also. Consonn. often exercise influence on one another, not only in the middle of words, but also between the end of one word and the beginning of another when they are combined in a sentence, a process which we can scarcely attribute to the lang. at this early condition; the laying-down of these laws belongs, as we have said, in a great measure elsewhere.

Medial Sound-laws.

1. Assimilation. § 59.

a. Medially also sometimes occurs complete assimilation of a preceding to a follg. sound, e.g. bhīnna- for *bhīd-na-, past part. pass. √bhīd (split); panna- for *pad-na-, likewise fr. √pad (go, fall), and so often in similar cases.

b. Lightening of conson.-groups by loss of one sound is likewise not rare, e.g. kāštē for *kakṣ-tē (t for t on acct. of ś, v. sqq.), 3 sg. pres. med. √kakṣ (see), etc.; ā-tut-ta, 3 sg. med. aor. compos. √tud (push) for *a-tut-s-ta, and so frequently in case of s betw. two mom. consonn. in like cases.

c. Bef. sonant mom. sounds sonants only, bef. mutes mutes
§ 59. only, are found, e.g. st. vâk (voice), instr. pl. vâg-bhis; yu-ná-ţ-mi, 1 sg. pres. √yuţ (jungere), but 2 sg. yu-ná-k-śi, 3 sg. yu-ná-k-ti for *yunag-si, *yunag-ti (cf. § 53, 1); ád-mi, 1 sg. pres. √ad (edere), but át-si, 2 sg. pres. át-ti, 3 sg. pres. for *ad-si, *ad-ti; bhârad-bhis, instr. pl. fr. st. bhârant- (ferens) for *bharat-bhis fr. *bharant-bhis, etc.

The influence of spirant s on follg. mom. sounds has been already handled under 's.' In the case of the combination of s with a follg. t, th, the latter becomes assimild. to s because it is a lingual, e.g. superl. sf. origl. is-ta; fr. yans, compar. sf. shortened is + ta, arises next *is-tha (§ 51, sqq.), and since after vowels other than a, ā, s must occur for s, *is-tha, whereby also th becomes th, so that in Sk. išṭha stands for ista, e.g. st. ác-išṭha=Z. ác-ista-, Gk. ἀκ-υτό-, origl. āk-ista- (fr. açú-, origl. āku-, swift). For the group çt occurs št, e.g. st. dršṭa- for *drç-ta-, past part. pass. √darç, origl. dark (see); st. ašṭa-, aštan- (eight), for *açta-, *açtan-, f.f. akta- (cf. ἀκτό, octo); vâṣṭi for *vaç-ti, 3 sg. pres. √vaç (will, wish).

For the changes of s produced by assimiln. v. § 55, 2; by nasals, § 56, 2.

An example of dissimilation worth notice is found in the change of s to t at the end of a root bef. the termn. in s of fut. and aor., e.g. √vas (dwell), 3 sg. fut. vat-syáti, 3 sg. aor. á-vat-sit for *vas-syati, *á-vás-sit. Doubled s was generally avoided, e.g. ási, 2 sg. pres. √as (esse), for as-si=ēs-śt, cf. § 55, 2.

Note.—The s of √vas (dwell) is origl. and perh. not due to t, cf. Goth. √vas (remain, be), pres. vis-ā=vas-āmi.

2. The aspirates stand bef. vowels and son. prolonged conson. only, and therefore never in termn. The collision of a sonant gutt., dent., or lab. aspirate with follg. t (th) is common. In this case the aspp. throw their aspiration on follg. t, which in its turn becomes like the preceding sound in that it assumes vocal-sound; fr. sonant aspp. + t arise therefore son. unaspr. conson. + dh;
accordingly \( gh + t = gdh; \) \( dh + t = ddh; \) \( bh + t = bdh, \) e.g. \( \sqrt{budh} \). § 59.

(learn, know), step-formed \( bōdh + tum \) (infin. termn.) = \( bōddhum \); \( √lōbh \) (hold) + tum = \( lābdhum \), etc.: \( h \) here also often is clearly equivalent in force to \( gh \) (cf. § 54, 1), e.g. \( √duh \) (milk)+ta, sf. past part. pass., composes the fm. \( dughdā-ds \), further \( dugh-dhi \) (2 sg. imper.) for \( ^{*}dugh-dhi, dōg-dhi \) for \( ^{*}dōgh-ti, 3 \) sg. pres., collectively formed as sounds from still existing \( √dugh \). Other roots (whose initial is not \( d \)) also treat their \( h \) otherwise, e.g. \( rh \) (increase)+a for \( *dugh-dhi, dēg-dhi \) for \( *dēgh-ti, 3 \) sg. pros., collectively formed as sounds from still existing \( √dugh \). The aspiration is thus throughout postponed to the follg. consonant.

When the aspiration of a root-termn. cannot remain, e.g. in termn. or bef. \( s \), and the root begins with an origl. sonant un-aspd. conson., the aspn. passes over to the latter, e.g. st. \( sarva-budh- \) (all-knowing), n. sg. should be \( ^{*}sarva-budh-s, s \) is necessarily lost, acc. to termination-laws, \( dh \) became \( t \), the aspn. passes over to the \( b \), and the word is \( sarva-bhūt \); precisely so the loc. pl. \( sarva-bhūt-su \) fr. \( ^{*}budh-su; \) \( h \) here too was treated like \( gh \), e.g. 3 sg. aor. \( √duh \) (milk) is \( ādūh-kāt \), with \( s \) for \( s \) acc. to rule (§ 55, 2), for \( *a-dugh-sat; \) likewise where the final aspn. disappears through loss (assimiln.), e.g. \( dēhēhi \) (2 sg. imper. act.) for \( ^{*}dhāhi \) (§ 15, e), and this for \( ^{*}dā-hi \) fr. \( *dadh-ki, *dadh-dhi; dadh- \) for \( da-dha- \) is pres. st. of \( √dha \) (set), \( hi, dhi \), termn. of 2 sg. imper. act.

3. Law of reduplication. In redupln. the gutt. are changed into palatals: \( kā-kāra, pf. √kar \) (make); of more than one conson. or consonantal double-sounds (aspp.; \( h=gh \)) only the first was maintained; \( dā-dhā-mi, pres. √dha \) (set, lay); \( ēu-kō-mi, √hu \) (open; cf. also § 54, 3, sub. fin.); \( ēu-črā'-a, pf. √čru \) (hear); only in case of \( s+mom. \) sounds does the second
§ 59. of these sounds remain; ti-ṣṭha-ti, pres. ṣṭha (stand), origl. fm. of pres. is sta-sta-ti.

In other cases the Sk. still shows a more archaic kind of redupln. by which gutt. and aspp. remain unchanged; so esp. in ancient intensive-sts., e.g. kō-ku (3 sg. med. kō-kū-ya-tē), ṭu (raise a cry); kari-kar-, ṭar (make); bhari-bhar-, ṭhar (bear); ghari-ghar-, ṭhar (slay, kill); in noun-sts., e.g. ghar-ghara-s (clatter, crackling), etc. (cf. Benf. G. g. 1864, st. 39, p. 1539 sqq.).

Termination.

§ 60. 1. In termn. only one conson. is tolerated, of more than one only the first remains, e.g. st. vák (voice, acc. vák-am) should be in n. sg. *vāk-s, or rather (acc. to § 52, 1) *vák-s, or (acc. to § 55, 2) vāk-ś, wherefore vák is now seen. Since aspp. are double-sounds, they must lose their aspn.; thus we find, not *sarva-budh, but *sarva-bhud, with aspn. transferred (acc. to § 59, 2), for which, acc. to the follg. law (no. 2), sarva-bhút with t for d occurs.

Only r + mom. conson can stand in fine, a case which nevertheless occurs but seldom; moreover bef. follg. k, t, ṭ, and ḍh, ṭh, ṭh, the combn.'s stands with their representatives, e.g. ácva, acc. pl. of n. sg. ácva-s (equos), f.f. is *ācva-s or *ācva-s, hence e.g. ácva-s tatra (equos ibi); črī-mān (pleasant), n. sg. masc. f.f. *črī-mant-s, hence e.g. yet črīmāč karati (felix it; č for s acc. to § 55, 2); āsan, 3 pl. impl. ās (esse) fr. *āsant, *āsant, t is esp. often subject to a change into s, as in stems in -ant, which are interchanged with fms. in -ans, further in termn. of 3 pl. -us for -ant, hence e.g. āsās tatra (erant ibi) for origl. āsant tatra. In all other cases, however, n only remains acc. to the general rule.

2. As only mute mom. consonn. (when no distinctly influencing clearer sound follows upon it; in pausa) could stand in fine, the son. consonn. pass over into the mutes of their quality; hence
for *sarva-bhūt, not *sarva-bhud, but sarva-bhūt is found. h, § 60.
i.e. gh, becomes t in termn., earlier k (for g, gh) has been re-
tained in such roots only as begin with d, e.g. fr. uḥ (licking)
comes in nom. (f.f. liḥ-s) liś (liṣ bef. sonants), but fr. duḥ
(milking), dhūk (dhug).

Note.—That palatals are not retained in termn. was remarked
above in § 51, sub. fin.

Consonants of Greek. § 61.

v. Table in § 16.
The consonl. system of the Gk. has retained 1. the origl.
aspirates, not, however, as sonants, but as mutes: χ = kh, θ = th,
φ = ph, these can be proved to be the oldest equivalents of the
Gk. sounds; the pronunciation of χ, φ, as spirants, i.e. χ =
Germ. ch, φ = f, and that of θ as a sibilant (nearly like tś), is of
later origin, and arose first partially and afterwards in all cases.
The passing of origl. sonant aspp. into Gk. mute aspirates is not
inexplicable according to the physiology of sounds. Arendt
(Kuhn und Schleicher, Beitr. ii. 283) conjectures, prob. rightly,
that the un-sonant h of the origl. aspp. gh, dh, hh, changed the
preceding sonants g, d, b, into the mutes κ, τ, π, and indeed no
one will deny that kh, th, ph, are much easier to pronounce than
gh, dh, hh. Thus the Gk. already permits of an assimilation.
Change of sonn. to un-sonn. is seen also in Teutonic (origl. g, d =
Germ. k, t). The agreement of the Indo-Eur. langg. collectively,
and also of those langg. which are nearest of kin to the Gk.,
prevents us from accepting the supposition that the Gk. alone
has preserved the oldest equivalents for the Indo-Eur. aspirates
(that the sounds kh, th, ph, existed in the origl. lang. instead of
Gk. shows a dislike of the origl. spirants; y even, in the earliest
accessible state of the lang., is found merely remaining in its
effects, but lost as a separately existing sound; v is retained
§ 61. as \( F \) in the archaic lang.; \( s \) stands its ground only in terminations and bef. and after mutes (\( \xi, \psi \)); moreover, when another sound has assimilated itself to it (\( s \)); before vowels it becomes \( h \), and generally falls out between vowels. In Gk. as in all other Indo-Eur. langg., except Zend, \( l \) already occurs often beside \( r \).

Generally, therefore, the consonantal-system of the Gk. is nearer to that of the origl. lang. than that of the Sk. or of most other Indo-Eur. langg.

As for consonl. sound-laws, the loss of origl. spirants and the variations which arise through this loss, and through the effects of origl. spirants on neighbouring sounds, bring about a considerable deviation from the older system of sounds. Assimilation has already acquired a widely extended sway: dentals generally have fallen away before \( s, n \), mostly with a lengthening of preceding vowel. The palatal sounds (\( y, i \)) already show their influence in many cases (zetakismos). Further, but few consonn. are tolerated in termin.; in short, in its consonantal sound-laws Gk. much resembles a lang. which is already in a comparatively late stage of existence.

§ 62.

Examples.

Origl. momentary mute unaspirated consonants.

1. Origl. \( k = \text{Gk. } \kappa, \gamma, \pi, \tau (\kappa\gamma = \sigma\sigma, \text{cf. sound-laws).} \)

Gk. \( \kappa = \text{origl. } k, \text{ e.g. } \kappa\rho\delta\text{-lia (heart), cf. Lat. } \text{cord-, Lith. } \text{szird-}, \text{ScL. } \text{srūd-lee, Goth. } \text{harrt-ð, Indo-Eur. lang. collectively presuppose an initial } \kappa, \text{ Sk. } \text{hrd- thus stands for } \text{*khard-, origl. } \text{hard-; } \text{kei-μai (I lie), } \text{koi-πη (bed), } \sqrt{\kappa}, \text{ Sk. } \zeta, \text{ ScL. and origl. } \kappa; \text{ κύνω, κυν-δς (hound), Sk. st. } \text{γφαν-, origl. } \text{κφαν-; } \text{kλυ-τός (famed), } \sqrt{\kappa\lambdaυ (hear), Sk. } \text{γρυ, Goth. } \text{λυ, origl. } \text{κρυ; } \text{δάκ-νω (bite), } \sqrt{\delta}, \text{ Sk. } \text{dας, origl. } \text{dακ; } \text{δείκ-νυμι (show), } \sqrt{\delta}, \text{ Sk. } \text{δις, Goth. } \text{tih, origl. } \text{δικ; } \text{δέκα (ten), Lat. } \text{decem, Sk. } \text{δαςan-; Goth. } \text{taihun, origl. } \text{dakan-; } \text{λευκ-δς (white), } \text{άμφι-λύκ-η (morning-twilight), } \sqrt{\lambdaυκ, Sk. } \text{rukB, origl. } \text{ruk, etc.} \)
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Note.—ξ is merely a character for κ, e.g. δεξιω (I will show) § 62. =*δεξι-σω; δεξιος (right) =*δεξι-τιος, *δεξι-τιος, cf. dexter, Sk. δακτυλινας, etc.

Gk. γ is sometimes a later softening fr. κ, which often remains beside it (cf. G. Curtius, Gr. Et. 2 467 sqq., 600 sqq.), e.g. ϕραγ in ἐ-ϕράγ-νυ bes. pres. ϕράσσω (fence in) =*ϕρακ-γω (v. sound-laws), Lat. fārc-ius (on the difference of meaning v. G. Curt. Zeitschr. xiii. 399); μαγ in ἐ-μάγ-νυ, μάγ-ευς (pastry-cook), but μάςσω (knead) =*μακ-γω, cf. mac-erare, Lith. mink-γτι (knead) bes. mink-sztėti (soften), root therefore mank fr. mak; μίγω, μιγνυμι (mingle), bes. Lat. misceo, Sk. miks-gami; πλαγ in πλαγ-ή (blow), εξ-ε-πλάγ-νυ bes. πλήσσω (strike), i.e. *πληκ-γω, cf. Lith. plak-ti (strike), pres. plak-ą, f.f. plak-ąmi, etc. (cf. Lat. post).

Gk. π = origl. k (cf. G. Curt. in Kuhn's Zeitschr. iii. 401 sqq.), e.g. πεπ (cook) in πέ-πεπ-ται, πέψω, i.e. πέπ-σω, πέπ-ων (ripe), bes. πεκ in πέσσω (cook) =*πεκ-γω, origl. kak, Lat. coe; πέντε (five), Aiol. πέμπε, πέμπ-το-ς (fifth), πεμπ-άξεω (count by fives), Lat. quinque, origl. kankan; πτω in πτω (where), πως (how), πτότες (whether, uter), Ἰόν. still καδ, κός, κότερος, Lat. quo-, Goth. ḫna-, Sk. Lith. Selav. and origl. ka—; ἐπ in ἐπ-ομαι (follow), origl. sak, Lat. seg; ἐρε in ἐρέτος (word), εἰπων (I said) =*Fερεπον, *Fορ-ς (voice) =ως-ς, origl. vak (speak), in ὁκα (voice) =*Fοκα (v. sound-laws), k has remained; ἀπτ in λειτ-ω (leave), λοιπ-ός (left over) = Lat. lic (linguo), Sk. ῥικ, origl. ῥικ; ὁπτ in ὁψομαι (I shall see), ὁμα (eye), Aiol. ὁπ-πα = ὁπ-μα, Lat. oc in oc-ulus, Lith. ak-is (eye), etc., but dual ὀσε =*οκυν, fr. a st. ὁκα- (eye), Lith. and origl. aki-with k retained. Acc. to G. Curt. Gk. τ is in 17 cases= origl. k, whilst in 104 cases it remains k, thus about one-sixth of origl. k has been changed to τ.

Gk. τ = origl. k occurs mostly in pronl. and num. stems, thus τι-ς (who), Lat. qui-s, Sk. *ki-s (in na-kis, no one, mā-kis, O.Bulg. mā-kis, ne quis), origl. ki-s; τε (and), origl. ka, Sk. -ka, Lat.
§ 62. -que, Goth. -u-h for *-ha, cf. πό-τε (when), Dòr. πό-κα, ἄλλο-τε (another time), Dòr. ἄλλο-κα; πέντε (five) bes. Αἰολ. πέμπτε (see ab. π = k), origl. haukan, cf. quinquè; téσσαρες (four), origl. katváras, cf. Lat. quatuor(es), Sk. katvá-ras, Lith. keturi. This correspondence of sounds occurs but rarely in other roots, e.g. ύτι in τί-ω (honour, valuate), τί-μῇ (honour), τί-νω, τί-νυμι (punish, fine), Sk. κί in κάγ-έ (I punish), apa-κi-λα-s (honoured), origl. therefore κi.

2. Origl. τ = Gk. τ (τυ = σο, v. sound-laws), e.g. τό(τ) origl. and Sk. τατ (nom. acc. sing. dem. pron. st. origl. τατ); τατ, τεν in τέ-τα-κα, τά-νυ-μαι (stretch myself), τελω (stretch, lengthen) = τεν-γεω, origl. and Sk. τατ, τατ; st. τρι- (three) in τρείς, origl. and Sk. τρι-; στα (stand), in στα-τός (placed), στά-σις (setting, revolt), ι-στη-μι (set up), origl. and Lat. sta, etc.; στεγ in στεγ-νος (roof), στεγ-ω (cover), cf. Lith. στεγ, origl. stag; πετ in πετ-ομαι (fly), πι-π(ε)τ-ω (fall), origl. and Sk. πατ (fly, fall); πλατύς (broad), origl. pratus, Sk. prithús; suff. το of pf. pass. part., origl. and Sk. τα, etc.

The combination κτ is in most cases preserved only in Gk., while in other langg. it is softened to κς, e.g. st. τεκτον- (carpenter), Sk. τάκσαν-, cf. O.H.G dēhsa, dēhsela (axe); ἀρκτος (bear) = Lat. ursus, by Lat. sound-laws for *urcscus fr. *urcctus, Sk. ἀκιάς, f.f. *ark-ta-s.

Note.—Upon the very uncommon softening of τ to δ in Gk. cf. G. Curt. Gr. Et.² p. 469 sqq. It occurs almost without exception in obscure etymologies, not in words accurately corresponding with their kindred langg.

3. Origl. p = Gk. π (cf. π = origl. k), e.g. ύπο, πυ (drink), in πό-σις (draught), πέ-πο-μαι, πέ-πω-κα, πί-νω (drink); πό-σις (husband), f.f. and Sk. πά-τις (lord); st. πα-τέρ- (father), origl. πα-λα-, fr. ύπα (protect); πλα, e.g. in πλυ-πλη-μι, πυμ-πλά-ναι (fill), origl. pra fr. par, e.g. Sk. πι-παρ-μι (1 sing. pres. act.); πλατύς (broad), origl. pratus, Sk. prithús; ύπλυ in πλέ-ω (sail), πλύ-φ-ος (voyage), πλυ-τός (washed), Sk. πλυ, origl. πυ;
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\( \sqrt{\epsilon \rho \pi} \) in \( \epsilon \rho \pi-\varepsilon \tau \omicron \) (creeping thing), \( \epsilon \rho \pi-\omega \) (creep) = Sk. and § 62. origl. \( \text{s} \text{ar} \text{p-am} \text{i} \), Lat. \( \text{s} \text{e} \text{r} \text{p-o} \), origl. \( \text{s} \text{ar} \text{p} \); \( \upsilon \pi-\nu \omicron \omicron \) (sleep), origl. and Sk. \( \text{s} \text{e} \text{r} \text{p}-\eta \omicron \omicron \), cf. \( \text{s} \text{o} \text{m-n} \text{u} \text{s} \) = *\( \text{s} \text{o} \text{p-n} \text{u} \text{s} \), etc.

**Note 1.**—The softening of \( \pi \) to \( \beta \), likewise uncommon, and only found in words of obscure etymology, has been treated of by G. Curt. elsewh. p. 471 sqq.

**Note 2.**—On unoriginal aspiration of tenues caused by operation of sound-laws, v. ‘sound-laws.’ Sometimes in Gk. as in Sk. aspirates make their appearance without visible reason. This occurs comparatively frequently in the case of \( \pi \), cf. \( \alpha-\lambda \epsilon \iota \phi-\omega \) (anoint), \( \alpha-\lambda \nu \iota \phi-\eta \) (ointment) bes. \( \lambda \iota \pi-\alpha \), \( \lambda \iota \pi-\omicron \) (grease), \( \lambda \upsilon-\alpha \rho \omicron \) (greasy, shiny), cf. Sk. \( \sqrt{\text{lip}} \) (anoint), O.Bulg. \( \text{lep}-\alpha \) (plaster), Lith. \( \text{lip}-\tau \) (cleave to); \( \beta \lambda \epsilon \phi-\alpha \rho \omicron \) (eyelid) bes. \( \beta \lambda \epsilon \nu-\omega \) (glance); \( \kappa \epsilon-\phi-\alpha \nu \) (head) bes. Lat. \( \text{cap}-\text{u} \text{t} \), Sk. \( \text{k} \text{a} \text{p}-\alpha \lambda \alpha \), \( \text{k} \text{a} \text{p}-\alpha \lambda \lambda \) (shell, skull); \( \sigma \alpha \phi-\eta \) (clear), \( \sigma \phi-\omicron \) (sap-iens), cf. Lat. \( \text{sap}-\text{i} \text{o} \) (smack, am wise), O.H.G. \( \sqrt{\text{s} \text{a} \text{b}} \) (understand; in pf. \( \text{int}-\text{s} \text{u} \text{a} \text{b}, \) *\( \text{a} \text{n} \text{t}-\text{s} \text{u} \text{a} \text{b}, \) he understands, notices), etc. Moreover, \( \mu \delta-\omicron \) (bustle) must not be coupled with Sk. \( \sqrt{\text{math}} \), \( \text{man} \text{h} \) (i.e. mat, mant, stir, move), and O.Bulg. \( \text{met}-\alpha \) (trouble), \( \text{met}-\varepsilon \text{i} \) (uproar, tumult). In \( \varepsilon-\text{tu} \text{h}-\nu \omicron \) (I chanced), \( \text{tu} \text{h}-\eta \) (chance), \( \text{te} \nu \text{x}-\text{e} \text{n} \) (prepare), and Iön. \( \text{te}-\text{tu} \text{k}-\text{ou} \text{t} \) (they prepared), \( \text{tu} \text{k}-\omicron \) (mason’s tool), we cannot suppose different roots; so too \( \delta \epsilon \chi-\text{o} \text{ma} \text{i} \) (receive) bes. Iön. \( \delta \epsilon \kappa-\text{o} \text{m} \text{a} \text{i} \), \( \delta \text{o} \text{k}-\omicron \) (beam), \( \delta \text{o} \text{k}-\alpha \nu \) (fork) has the look of an unorigl. asp. In the perf. this unorigl. asp. has developed into a kind of medium for stem-formation, v. sub. Perf. G. Curt. Gr. Et.² p. 439 sqq. has treated at length of Unorigl. Aspiration in Gk.

**Momentary sonant unaspirated consonants.** § 63.

1. Origl. \( g \) = Gk. \( \gamma \), \( \beta \).

Gk. \( \gamma \) = origl. \( g \) (on \( \zeta = \gamma \gamma \), v. sound-laws), e.g. \( \sqrt{\gamma \nu \nu} \) in \( \gamma \nu \nu-\omicron \) (race), \( \gamma \lambda-\gamma \epsilon \nu \omicron-\text{o} \text{m} \text{a} \text{i} \) (I am born, become), Sk. \( \gamma \alpha \nu \), origl. \( \text{gan} \); \( \sqrt{\gamma \nu \nu} = \text{g} \text{a} \text{n} \) fr. \( \gamma \nu \nu-\text{s} \text{k} \text{w} \) (I learn), \( \gamma \nu \nu-\nu \) (thought, opinion); \( \gamma \omicron \nu \nu \) (knee) = Sk. \( \gamma \alpha \nu \nu \), cf. Lat. \( \text{g} \text{e} \text{n} \) u, Goth. \( \text{k} \text{n} \text{i} \text{v} \) u; \( \sqrt{\xi \gamma} \), origl. \( \gamma \nu \) (iugere) in \( \zeta \epsilon \nu \gamma-\nu \nu \nu \) (I yoke), \( \xi \gamma-\text{b} \text{v} \) (yoke); \( \sqrt{\alpha} \gamma \nu \nu \) in \( \alpha \gamma-\omega \) (lead) = Sk. \( \alpha \gamma-\text{a} \text{m} \) i, Lat. \( \alpha \gamma-\omega \), O.Norse inf. \( \alpha \kappa-\alpha \), 1 sing. pres. \( \text{ek}, \) pf. \( \dot{o} \kappa \), etc.

**Note 1.**—It is only in quite detached cases that Gk. \( \delta \) seems = origl. \( g \) (like \( \tau \) = origl. \( h \)); thus prob. \( \delta \lambda \epsilon \phi-\upsilon-\zeta \) (uterus) must be
§ 63. placed beside Sk. gárth-a-s (id.), esp. since a form ἀδελφεῖος corresponds perfectly to Sk. sa-gárthyas (co-uterinus) in its formn. It is worthy of note that βρέφος, too (v. sq.), stands close to Sk. gárthas.

Note 2.—On Gk. γ and Sk. h, cf. § 53, 1.

Gk. β = origl. g (cf. § 68, 1, e); √βα in βή-βη-μ, βά-σκω (go) = Sk. and origl. ga (go), in Sk. γι-γα-μι, origl. ga-ga-mi, Sk. γα-κκάμι; ἑρός (heavy) = Sk. gurūs for origl. garus, βάρμπος = Sk. γαρύθας, origl. garistas (heaviest), cf. Lat. grauis = *garu-i-s, Goth. karus (heavy, earnest) for *kaũri-s, and this prob. for *kaur-ī-s fr. *kaur-ī-s; βρέφος (neut. offspring, child), Sk. gárthas (masc. matrix, offspring), O.Bulg. žrêbi, žrêbic (to foal), Goth. kalbō (fem. cow-calf); Boiōt. βαβί = γυνή (wife) with root vowel a retained, f.f. of both ganā, √gan (gignere); βάλλανσ (acorn), cf. Lat. glans, gland-is (acorn); βλήσ (life) = Sk. ĝiēas, Lith. gévas, Goth. keius, f.f. prob. gigvas (lively); βοός (bull) = Sk. and origl. gūs; βή-βρό-σκω (eat), βόπ-ά (food), √βόρ, βρό, origl. gar, gra, Sk. √gar (swallow); Lat. (g)uor-arē, Lith. gér-ti (drink), Scl. žrē-ti (swallow); ε-ρεβ-ος (gloom of lower world), cf. Sk. ráy-as (gloom, dust), Goth. rihe-is (neut. darkness); √νβ in χέρ-ντφ (water for washing hands) for *χερ-μβ-ς, *χερ-ντβ-ος, Sk. √νίγ, origl. nig, in Gk. retained in νίκω (wash) = *νυ-γο.

2. Origl. d = Gk. δ (on ζ = δγ, cf. § 68); √δο, origl. da (give), pres. δῖ-δω-μι, origl. da-đa-mi; √δακ (bite), pres. δάκ-νω, Sk. √δας, origl. ἀκ; √δαμ in ἀδαμ-ώ, ἀδ-νμι (tame, bind), Sk. and origl. dom (domare); δόμος (house), Lat. domus, Sk. damās or damā, Scl. domu; √φέ (see), origl. √vid (uidere), pf. Foida (knew), Goth. vita, f.f. vi-vaida; √ē, origl. and Sk. √sad (sedere) in ἔςυμαι = *sed-yo-mai; √ς, origl. and Sk. √ad in ἐς-ω, ἐς-ομαι (eat, shall eat), Lat. ed-o, Goth. it-a, etc.

3. Gk. β, whose origl. existence can be proved, is found very rarely (cf. § 46), e.g. βλη-χή (bleating), βλη-χόμαι (bleat), Lat. bäl-are, Scl. ble-ga, O.H.G. blä-gan; βραχύς (short), Lat.
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breu-is, fr. *bregu-is, Scl. brüz-û; βδέ-ω (pedo), Bohem. bzdí-ti, § 63. Lith. bezd-éti, Germ. fist (flatus uentris sine crepitu), thence fist-en (flatus uentris emittere), Scl.-Germ. thus with spirant bef. d (whether this spirant was inserted in Germ. or lost in Gk., H.G. does not correctly correspond to b of other langg.), the f.f. of the root is thus bda or bsdad = bad.

Note.—χ, θ, φ, instead of γ, δ, β, in Gk., is barely seen in one single certain ex.; even the cases which G. Curt. (Gr. Et. 2 p. 449 sqq.) allows are more or less doubtful. Θεός (god) is in no way related to Δις-ός (gen. fr. Zeiós), διός (godlike), Lat. deus, diius, but, as G. Curt. makes probable, to θεός (Gr. Et. 2 p. 450) (pray), in θεό-σεσθαι, πολύ-θεο-τός (much-implied), Πασι-θέν (implied by all), θεό-φατος (said by god), θέσ-κελός (godly), θεός for *θεός fr. st. θε-ο-, *θεο-, with regular loss of o bef. origl. suff. y, and loss of s (cf. ἀλήθεια, i.e. άληθεια fr. st. ἀλήθεος—), Lat. fes in fes-tus; μέθη (drunkenness) does not belong to Sk. σμαίν (be drunk), but to μέθυ (n. intoxicating drink, wine), Sk. and origl. mádhu (honey-mead, intoxicating drink), etc. Only in pf. act. we see in later formations χ and φ bes. γ and β (εἰ-λαχ-α fr. λέγ-ω, τε-θλιφ-α fr. θλίβ-ω, etc., v. post).

Original momentary sonant aspirated consonants. § 64.

1. Origl. gh=Gk. χ (on χύ=ος, cf. § 68), e.g. χύν (goose), cf. Germ. gans, f.f. gansis, Sk. hāsā-s, i.e. ἡγανσα, Lith. žasis, Scl. gatš; χυ in χέ-ω (pour), χύ-σις (pouring), Goth. γυ-τ, H.G. gu-ţ (gieβ-en); χάχ, χρυχ in χρυ-ω (throttle), χαρμαι (am grieved), χαρ-ομαι (id.) χορ-ος (pain, grief), χαρ-ος (burthen), χαρ-ομαι (am burthened), origl. agh, Sk. āh, Lat. ang, Goth. agev; στιχ in στειχ-ω (go), στειχ-ος (rank), στοιχ-ος (rank, file), Sk. and origl. στιγ, Goth. stig in steigan (step vb.), staiga (path, the Sclavo-Lith. do not regard aspirates); χ in λειχ-ω (lick), Sk. līh, earlier rīh, i.e. rīgh (lick), Goth. lih in bi-laig-ôn (ἐπι-λειχ-ευ) ; μιχχ in ὀ-μιχ-εω (urino), ὀ-μιχ-άν (mist), Sk. mīh, i.e. migh in mēh-āmi (urino), mēg-h-ās (cloud), Germ. mig, e.g. Dutch mige (urino); δολιχός (long), Sk. darghás, f.f. darghas, etc.
§ 64. In ἐγγύς (near) = Sk. āhūs, i.e. *aughus (narrow), — the Goth. aggeus (narrow) corresponds to the aspirated fms., which we hold to be origl. in this case, since we assign ἐγγύς to ᾱχ, origl. agh, in ᾱγχ-ω, ᾱχ-ομαί, etc. (so G. Curtius).

Other isolated cases in which Gk. sonants, mostly after nasals, stand for origl. aspp., are treated by G. Curtius (Gr. Et. 2 p. 460 sqq.).

Note.—In νίφ-α (acc. snow), νιφ-ετό-ς (snow-storm), νίφ-ε (it snows), θ stands for χ, cf. Lat. nix, nius-is, for *nig-s, *nigu-is, (v. post), ning-it; the root had an initial s lost in Graeco-Italic, cf. Lith. snēg-ti (to snow), snēg-as (snow), O.Bulg. snēg-ū (snow), Goth. snaiw-s (snow), Zend ʃnēž-enti, 3 pl. pres. 'it snows,' lit. 'they snow'), Sk. ʃsnih (be damp), f.f. of root is therefore snigh.

2. Origl. dh = Gk. θ (on θυ=σό, cf. § 68), e.g. ʃθε, origl. dha (set), pres. τι-θ-μυ, Sk. and origl. dā-dhā-mi, Goth. ṣda, (do), H.G. ta, e.g. in 1 pres. tuo-m fr. *ti-tō-mi=dhaddhāmi; μέθυ (intoxicating drink), Sk. and origl. mádhu, O.H.G. mētu (mead); ṣθ in aith-ω (kindle), Sk. and origl. ṣidh; ἕρωθ-πός (red), ṣρθ, Sk. rudhirās, origl. rudhras, ṣrudh, Goth. ṣrud inraud-s, H.G. rut in roṭ, Lat. rūf-us, etc.

Note.—In θερμός, Sk. gharmās (heat), Lat. formus, cf. Scl. gre-ti (to warm), Germ. warm fr. *gvœrm, ʃθερ, θέρ-ομαι (am warm), θέρ-ος (neut. summer), origl. and Sk. ghar, θ stands where we should expect χ.

3. Origl. bh = Gk. φ; ʃφα (shine) in φα-ινω (show), φάω-ις (a showing), ʃφα (speak) in φη-μι, φά-σκω (say), φά-τυς (speech, rumour), φω-νύ (voice), Sk. and origl. bha, Sk. bhā-mi (shine), bhā-s (give light, shine), bhā-ς (speak), Lat. fa-ri; ʃφερ, 1 sing. pr. φέρ-ω (bear), Lat. fer, fero, Sk. and origl. bhar, bhār-āmi, Goth. bar, bairā; ʃφυ in φύ-ω (bring forth), φυ-τόν (plant), Lat. fu in fu-turus, fu-i, Sk. and origl. bhu, O.H.G. pi in pi-m, weakened fr. *pu, *pi-un; ʃφέος (cloud), veβελη (a cloud), Sk. nabhās (a cloud), O.H.G. nēpal (cloud); ὃ-φρύς (eyebrow), Sk. bhrūs, O.H.G. prāwa, etc.
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Note 1.—In \( \sqrt{\lambda \beta} \) (\( \lambda \alpha \mu \beta \alpha \nu \omega \), take, seize) bes. § 64. \( \lambda \alpha \phi - \nu o n \) (booty), \( \delta \acute{m} \phi - \lambda \alpha \phi - \eta \varsigma \) (clasping), Sk. \( \sqrt{\lambda b h} \) (keep, get), \( \beta \) is very prob. a representative of origl. \( \beta h \), caused perh. by the nasalized pres. \( \lambda \alpha m \beta \alpha \nu o \), cf. supr. \( \acute{e} \gamma \nu \) fr. \( \sqrt{\alpha g h} \); also \( \beta r \acute{e} - \nu - \omega \) (roar) has \( \beta \) for origl. \( \beta h \), cf. Lat. \( \text{frem-} \), Sk. \( \beta h r \acute{a} m - \acute{a} m i \) (swarm, rove). On other isolated exx. cf. G. Curt. Gr. Et.² p. 460 sqq., Grassmann, Kuhn’s Zeitschr. xiii. 91 sqq.)

Note 2.—\( \sqrt{F r a y} \) in \( \acute{p} \gamma - \nu m u \) (break, tear), \( \acute{p} \gamma - m a \) (rent), \( \delta \alpha r \acute{p} \omega \) (broken through) for \( \delta \alpha - \alpha F r a y - s \) has \( F \) for origl. \( \beta h \) (as in case-sf. origl. \( \beta h i \) the \( \beta h \) may even be entirely lost, v. sub. declens.), cf. Lat. \( \sqrt{f r a g} \) in \( f r a n g - o \), \( f r a g - m e n \), \( f r a g - i l i s \), Goth. \( \sqrt{b r a k} \) in \( b r i k - a n \) (break), pf. \( b r a k \). The same change occurs in \( \sqrt{F a y} \), \( \acute{d} - \nu m u \) (break), \( \acute{d} - a r - \eta \varsigma \) (unbroken), cf. Sk. \( \sqrt{b h a g} \) in \( b h a - n \acute{a} - j - m i \) (I break), \( b h a n g i - s \) (breakage). It is uncertain whether the roots \( b h a g \) and \( b h r a g \) are akin.

Roots which origly. began and ended with an asp. also lose in Gk. their initial asp., whereby there thus arises a tenuis (cf. sup. § 64). Thus e.g. \( \pi \acute{h} \chi u - s \) (fore-arm) stands for \( \phi \eta \chi u - s \), cf. Norse \( b \ddot{o}g-r \), O.H.G. \( b u o c \), like Sk. \( b \ddot{a} h u - s \) (arm) for \( \beta h \acute{a} g h u - s \); \( \pi v \theta - m \nu \) (base) for \( \phi v \theta - m \nu \), like Sk. \( b u d h - n \acute{a} - s \) (floor) for \( \beta h u d h - n a - s \), cf. O.H.G. \( b o d - a m \), Lat. \( f u - n - d - u s \); \( \pi e v \theta - e p \acute{o} \) (father-in-law), \( \pi e v \theta - e p \acute{a} \) (mother-in-law), \( \pi e \sigma - m a \) (bond, halser) for \( \pi e v \theta - m a \) fr. \( \sqrt{e v \theta} \) for \( \phi e v \theta \) (bind), like Sk. \( b a n d h \) for \( \beta h a n d h \) (in Sk. also ‘relationship’ derived fr. ‘bonds,’ e.g. \( b a n d h - u - s \), a relation); so too the Goth. fm. \( b a n d \) points to this (pres. \( b i n d - a \), pf. \( b a n d \) ); \( \sqrt{e v \theta} \) for \( \phi v \theta \) in \( \pi v \nu \theta - \acute{u} n o m a i \), \( \pi e v \theta - o m a i \) (learn, ask), Sk. \( b u d h \) for \( \beta h u d h \) (be awake, know, be wise), Lith. \( \sqrt{b u d} \) (\( b u d - \acute{e} - t \) be awake, \( b u d - r \acute{u} - s \) wakeful), O.Bulg. \( b u d \) (\( b u d - \acute{e} - t \) be awake, \( b u d - i t \) wake), Goth. \( b u d \) (\( b i n d - a n \) bid, though with a considerable change of meaning). A perfectly analogous phenomenon is seen in redupln.-laws (§ 68); cf. Grassm. Kuhn’s Zeitschr. xii. 110 sqq.

Consonantal Prolonged-sounds.

§ 65.

Origl. spirants; \( y \), \( s \), \( v \) (the changes of origl. \( y \), \( v \) have been treated at length by G. Curt. Gr. Et.² pp. 491–611).
§ 65. 1. Origl. $y=$Gk. $i$, $e$, $z$, $\acute{e}$, is lost (on $y$ in $\zeta$, $\sigma$, cf. § 68, 1 b, d, e). From assimiln. of $y$ to other consonn. ($\kappa\varepsilon\pi\rho\omega$ for $*\kappa\nu\rho-\gamma\omega$, $\epsilon\lambda\alpha\sigma\sigma\omega\nu$ for $*\epsilon\lambda\alpha\chi\nu\omega\nu$, etc.), it follows that it was not lost till late in Gk. To the existence of $y$ in Gk. evidence is given by the operation of the consonantal beginning of Hom. $\acute{a}$s (as) =origl. $\acute{y}a$ (abl. of st. $y\alpha$-), and that of $\iota\epsilon\tau\alpha$, $\iota\mu\epsilon\nu\nu\sigma$, etc., origl. $\sqrt{y}a$ (go); even the writing of $F$ for $y$ in $\acute{F}o\tau\iota$ and $\Theta\lambda\alpha\sigma\lambda\alpha\Phi\omicron$ proves it, on which point we may follow G. Curt. Gr. Et.² no. 606, p. 354.

a. Gk. $i=$origl. $y$, e.g. in the common st.-formative sf. origl. $\gamma\alpha$, Gk. $\iota\omega$, thus $\pi\alpha\tau\rho-\iota\omega$-ς (fatherly), origl. $p\alpha\tau\alpha-\gamma\alpha$-ς; $\tau\epsilon\lambda\epsilon\omega$, thence $\tau\epsilon\lambda\epsilon\omega$ (finish), for $*\tau\epsilon\lambda\epsilon\sigma-\gamma\omega$, pres. fm. in $\gamma\alpha$ fr. st. $\tau\epsilon\lambda\epsilon\sigma$- ($\tau\epsilon\lambda\alpha\sigma$, neut. end), etc., vid. § 26.

Here there occurs also a transposition of origl. $y$ after a liquid cons. to Gk. $i$ before the liquid, e.g. $\phi\theta\epsilon\iota\rho\omega$ (destroy) fr. $*\phi\theta\epsilon\rho-\gamma\omega$, etc., v. § 26, 3.

b. Gk. $e=$origl. $y$, e.g. $\kappa\nu\varepsilon\delta\sigma\varsigma$ (empty) for $*\kappa\nu\varepsilon\gamma\sigma\varsigma$, as is shown by Aiol. $\kappa\nu\varepsilon\nu\sigma$ fr. Sk. $\varsigma\iota\nu\nu\varsigma$ beside $*\kappa\nu\varepsilon\gamma\sigma\varsigma$ we may infer an origl. $\kappa\nu\nu\nu\nu\varsigma$-ς common to both; $\sigma\tau\rho\varepsilon\sigma\varsigma=$ $\sigma\tau\rho\varepsilon\sigma \rho\varsigma$ (hard, solid) fr. $*\sigma\tau\rho-\gamma\sigma\varsigma$; $\Theta\nu\rho\varepsilon\sigma\varsigma$ (door-stone, door-shaped shield) fr. $*\Theta\nu\rho\gamma\sigma\varsigma$, with origl. sf. $\gamma\alpha$, fr. $\Theta\rho\alpha$, door. v. § 26, 2.

c. Gk. $z=$origl. $y$, e.g. $\sqrt{y}\gamma\nu$ in $\xi\epsilon\gamma\nu\nu\mu\nu$ (bind), $\zeta\rho\gamma\nu$ (yoke), Lat. $iug$-um, Sk. $yug$-άμ, etc., Lat. Sk. origl. $\sqrt{y}u$ (iungere); $\zeta\epsilon\sigma$ (seethe, intr.), $\sqrt{y}e\varsigma$, cf. $\epsilon$-$\xi\epsilon\sigma$-$\mu\alpha$, $\xi$-$\sigma$-$\tau\varsigma$, O.H.G. $j\epsilon\sigma$-$\alpha\nu$ (H.G. $g\epsilon\sigma$-$\alpha\nu$), f.f. of root is $y\alpha$; $\xi\epsilon\alpha\nu$ (spelt), Lith. $\gamma\nu\alpha\varsigma$, pl. $\gamma\nu\alpha\varsigma$ (barley), Sk. st. $y\alpha\nu\alpha$- (grain).

Note.—A $d$ has been here developed bef. origl. $y$, for $z$ =dz or $dy$, precisely as in other langg. we find a change fr. $y$ to $d\acute{y}$, and further to $d\acute{z}$, e.g. Lat. maiorem, middle-Lat. madiorem. It. $m$aggiore, i.e. madowre; Prakrt $\gamma$utta-, i.e. $d\acute{z}$utta-=$yukta$-.

G. Curtius (Gr. Et.² p. 550 sqq.) compares this $d\acute{y}$ for $y$ with $g\nu$ for $v$, which appears not unfrequently in later periods of speech (e.g. It. $g\nu$astare fr. Lat. $u$astare). Curt. also adds $\delta$ =origl. $y$, in sf. $d\omicron$- (e.g. $\kappa\rho\nu\pi\tau\alpha$-$d\omicron$-$\sigma$, secret) =origl. $\gamma\alpha$, and $\delta e=*d\acute{y}$=origl. $y$ in sf. $\delta$-$e$- (e.g. $\acute{a}$$\delta$e$\phi$-$d\omicron$-$\sigma$, nephew), and
further δ = origl. y by entire loss of y after the δ wh. it pro-
duced, through intermed. step. *δγ. This case is indisputable in
Boiot. δύγω-ν (yoke) = *δύγω-ν = ἔγω-ν = origl. γυμα-ν (yoke);
Futher G. Curt. assumes it in δη (i.e. for *δη, *η, perh. an
instr. pron. st. origl. ya, cf. Lat. iam, Lith. yaū, Goth. H.G.
ju, and others fr. same st.; it then becomes evident that the δ
of apparent sf. -ιδ- is nothing but iy for i, e.g. μη-νυ-ς and
μη-νιδ-ς fr. μη-νυ-ς (wrath; χμα, think, also be wroth, sf. nι)
θε-τιν-ς and θε-τιδ-ς (each case formed by sf. ti), also φρον-τιδ-ς,
εριδ-ς bes. ἕρω-ν, etc.; everywhere therefore we must presuppose
in these cases a Gk. f.f. such as *μη-νυ-ς, *θε-τυ-ς. Also
the sf. aδ and others with δ are due to origl. y acc. to Curtius.
Though we cannot treat in detail of the deductions of G.
Curtius, we may remark in general on his opinion, that whilst
y is remarkably common in st.-formation of Indo-Eur., d is
a rare element, so that we see scarcely any other possibility of
bringing the above-named Gk. fms. into harmony with those
of the kindred langg. The assumption of so many terms, in
special cases of later Gk. forms is, however, not perfectly cer-
tax; nevertheless that y = δ in δυγων is beyond doubt. Further
the dental certainly corresponds to origl. y in χθς = *χδς,
χυνς, *χυς = Sk. hyas (yesterday), f.f. ghyas, cf. Lat. her-i,
hes-terminus, Goth. gis-tra-dagis. What we admit in these
cases is possible in others too.

d. Gk. * = origl. y, e.g. ἵππαρ (liver), cf. Lat. iecur, Sk. yākt;
ἀγνος (holy), Sk. yaγγας (to honour, worship), origl. ἵγαγ;
ἀρα (season), cf. O.Bulg. jāre (n. year), Goth. yēr, O.H.G. jār;
υν-μιδ- (retained only in loc. sg. υν-μιν-δ), υν-μιν (combat),
ὑς bef. μ for ὑθ = Sk. yυδη (fight), e.g. in yυδη-μα-ς (fight, 
fighter), yυδη-μα-μ (fight), which agrees with the Gk. in
the sf. also; ὑμε-ις (you), cf. Sk. yυσμα-τ (abl.; it here depends
of course from the stem only), Lith. jūs (you), etc.
e. In Gk. y is entirely lost (cf. § 27), e.g. initial y in Aiol.
υμε-ς (you), cf. Sk. yυσμα-τ (abl.); οττί in Sappho fr. st. ὀ-
= origl. ya-. In the middle of words this loss is more frequent;
after consonn., e.g. in termn. of fut. -σω for *συω, cf. Dôr. fm.
-σω = Sk. and origl. -sỵ-μι; betw. vowels the loss of y is
commonest of all, as in the termns. of derivative vs. -εω, -άω,
-όω, which alike represent the origl. and Sk. -αμι, e.g. φορέω
§ 65. (bear) = Sk. and origl. bhar-ayami; in cases like τελεω fr. τελειω, for *τελεσ-γω, with origl. sf. ya fr. st. τελες (τέλεσ neut. end), in -ων for *-νω (φυω earlier φυω, f.f. bhuyami, etc.); in gen. sg. masc. and neut. of o-st., origl. a-st., e.g. ἢππου fr. ἢππο, and this certainly fr. ἢππο, which stands for *ἵπποσγο, origl. akvasya; πλέω (more) bes. πλειων, f.f. πρα-yans, comp. fr. √par, pra in πολ-υ- (many), f.f. par-υ-. Thus in most cases, before y entirely disappeared, it became i.

Note.—The assimiln. of y to other consonns., e.g. ρλ=λγ and the like, and its combination with gutt. and dentt. as ζ, σσ, is treated of under ‘sound-laws,’ § 68.

2. Origl. s = Gk. σ, is lost.

a. Gk. σ = origl. s in termn. and bef. mutes, more rarely bef. vowels, e.g. √ές, origl. as (esse), έσ-τι, Sk. and origl. άς-τι (he is); st. μενε- n. μένος (might, strength), origl. and Sk. mānas; sf. of nom. sg. masc. fem. -s, e.g. τόσι-ς, ὁψ = Φός-ς, Sk. and origl. πατι-ς, origl. vāk-s; sf. gen. sg. -ος, origl. -as, e.g. Φοτ-ος, origl. vāk-as, Sk. vāk-ās, etc.; √στορ, Sk. and origl. star, e.g. in 1 sg. pres. στορ-έννυμι, στόρ-νυμ (spread), Sk. str-νομι, origl. star-naumi, etc.; √στα, ίστημι (set), origl. sta-στα-μι, Lat. and origl. sta; σύς bes. ὧς (swine), Lat. sūs, O.H.G. sū; σέβ-ομαι (be in awe of), σεμ-νος (awful) for *σεβ-νος, σοφ-ός (wise), and others show likewise init. s bef. vowel; σγάω (am silent) bes. O.H.G. swīgn has exceptionally σ for older sv, which regularly should become η; it is also found in σελ-ήμη (moon), fr. origl. √σναρ (shine), and perch. in some other insttt., cf. σελ-ας (sheen), έλ-άμη (torch), with usual sound-change, fr. same root (cf. G. Curt. Gk. Et. 2 p. 625). This σ bes. η, we must prob. consider to be an archaïsm, which has been partially retained.

b. Gk. ρ = origl. s, when it is initial before a vowel or origl. τ, e.g. √έδ, εδ-ος, εδ-ρα (seat), εξομαι (set myself, sit) for *έδ-γομαι, Lat. sed, origl. and Sk. σαδ (sit); επτα (seven), Lat. septem, origl. and Sk. σαπτάν-; √έτ in ἤπ-ο, ἤπ-ομαι (follow),
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Lat. sequ-or, Sk. √ sak, origl. sak; ἑπνος (sleep), origl. and Sk. § 65. ἱπνος (sweet), f.f. Sk. and origl. Hvaius; pron. √é, ó, in óv, ol, ε (sui, sibli, se), ὁς (suos), origl. and Sk. sev-; ἐκυρός (father-in-law), f.f. svakuras, Sk. ἐφαύρασ for ἐφαύρασ, Lat. socer, Goth. svathra, etc.

Note.—It is not probable that the ′ (which regularly represents s) in words which origly. began with sv compensates for the v, and that s afterwards entirely disappeared from before it. If the earlier lang. shows F even then, we may prob. assume that the sign of the asp. was not written bef. F, and that we must theref. read Fé and the like as hev; the long duration of s in Gk. seems proved by parallel fms. in diall., such as σφός.

Not uncommonly we find medial ′ after vowel transferred to initial ′ bef. vowel; e.g. ἑρός (strong, holy) fr. *ēróς, *ίερος- =Sk. ἰερά-s (strong, fresh); εἰπόμην fr. *ἐ-ἐπομην, *ἐ-σεπομην, √έπ (follow) for *σεπ, origl. sak; εἰωτήκεν fr. *ἐ-ἐστήκεν, *ἐ-σεστήκεν, √στα (stand), redupld. sa-sta, *σε-στα; εὕω bes. εὐω (kindle), √ός, origl. us, Sk. ὦ (burn), f.f. ausámi, in Gk. first *εύω, *εὐό; ἕως (dawn) for *ἐός fr. *εὐός, *ἐFός, cf. Aiol. αὐς for *αύσος (ἡώς by compens. lengthening for *ἀFσός), f.f. of st. is aus-as-, cf. Sk. us-ás- (f. dawn), fr. same √us, Lat. auróra for *aus-ös-a, likewise, as in Gk., with stepformm. of root; ἥμαι (sit) for *ἡσ-μαι, cf. Sk. ἄσ-ε for *άς-μαι, here in Gk. the init. ′ became fixed by analogy throughout, and is added also in ἡσ-ται for *ἡσ-ταί=Sk. ἄσ-τε; ἡμείς (we), cf. Sk. as-má-t, ἡμεῖς thus stands by compens. lengthening for *άσ-μεις, whence the parall. fm. ἡμείς=*Aσmes, in which the σ has become assimilated to the μ; in ἡμείς therefore the real s is doubly represented.

Note.—At first sight ἕως bes. σφός and ὁς seems clearly fr. a Gk. f.f. *σFός, viz. ἕως for *ἐός (chos) fr. *ἐFός (ehvos), and this fr. *ἐσFός, *ἐ-σFός for *σFός, with the favourite vowel-prefix, which does not occur in σφός and ὁς; but when we recollect the Lat. suus, earlier souos, i.e. *seunos (§ 33, 2), we are
§ 65. led back to a special Gr.-Ital. f.f. *sevos (cf. Lith. sávo fr. an unused *sava-s suus), which necessarily becomes in Lat. souos, suus, in Gk. ἕΦος; then too we must understand τεός = *τεΦος = tuus, i.e. *toros, *tevos, Lith. tāra-s (tuus). Cf. § 26 n.

Sometimes ′ appears as a later addition; it seems that the sensibility of the lang. to the distinction betw. ′ (h) and ′ (Semit. ′elif′) began to decay rather early (cf. c.), thus e.g. in ἵππος (horse) fr. *iκΦος, cf. the extant fm. ἵκκος, Lat. equos, Sk. ἀγας, f.f. akvas; that ′ occurs here only in later times is proved by forms like Λεύκιππος, Ἀλκιππος, which otherwise would have been pronounced *Λευκιππος, *Ἀλκιππος; ὑστερος (later) = Sk. ὑτ-ταρας; ὑ is so frequently an initial sound, for origl. su, seva, that the more uncommon beginnings which would properly be ὑ, followed the analogy of ὑ; here belongs prob. ὑδὼρ (water), cf. Boiot. ὑδωρ, Lat. unda, Sk. ud-am, ud-akám (water), Goth. catō, Lith. vandū (with earlier vad = ud); ὑϕ-ν, ὑϕ-ως (web), ὑϕ-αἶω (weave), cf. Germ. ὑωβ (weave), Sk. ὑρμα-νάβ-ι-ς (m. spider, lit. woolweaver), ὑβαβ, fr. which therefore may arise regularly a fm. ubh, Gk. ὑφ; for *ὑδ-, *ὑϕ, in these words, we must presuppose an origl. vad, vabh, for which through loss of a arose ud, ubh.

c. In Gk. origl. s, or rather ′, which arose fr. origl. s, is entirely lost (cf. § 28). This occurs regularly in middle of words betw. vowels, and more rarely in initio bef. vowels, whilst it is regular bef. initial ὑ and ρ; e.g. μένος, gen. μένους fr. μένεος, *μενεαος, f.f. and Sk. mánasas; φέρη fr. *φερεσαυ, origl. bharasai; μῶς (mouse), gen. μῶς = Lat. mus, muris, both fr. *musas; Φίδος (poison) for *Φίδος = Lat. uírus, Sk. viása-s and viása-m; etc. Yet we also find s kept betw. vowels, e.g. δίδο-σαι, τίθε-σαι, ἵστα-σαι.

In initio bef. vowels ′ has fallen out in ἰ- (for and bes. ἰ-), ἰ=origl. and Sk. sa- (with), e.g. in ἰ-δελφειός, ἰ-δελφός (brother, lit. couterinus, cf. δελφός uterus); ἰ-λαχός (spouse, consors tori, cf. λέχος, bed); ἰ-πατρος (having the same father, cf. πατηρ), etc., bes. ἰ-πας (all); ἐτεός (true, correct) = Sk. satyá-s; ἕχ
(in ἑχ-ω hold, have)=Sk. sah (sāh-alē, he holds, carries; this § 65. 

\[\sqrt{\text{έχ}}=\text{sagh}\] is confused in Gk. with \(\sqrt{\text{vagh}}\), uheure); ἴδω (sweat), Sk. and f.f. \(\text{svidýami}\), bes. ἴδ-ρῶς (sweat); ἴδ-ος (pleasure, delight) bes. ἴδ-ῦς (sweet)=Sk. and origl. \(\text{svad-ūs}\), \(\sqrt{\text{svad}}\); ὀδο-ς (Old-Ep. and Ἰόν.) bes. ὀλος (whole), Gk. f.f. \(\text{solvo-s}=\text{Lat. salvo-s}\), \(\text{sofeo-s}=\text{Lat. saluo-s}\), \(\text{sofeo-s}=\text{Sk. sdrva-s}\); ἐ-ἀρατ-κα, pf. fr. pres. 

\(\text{στέλα-ω}\) (place, send) for ἐ-σταλ-κα, \(\ast\)σε-σταλ-κα; ἐ-σπαρ-μαι, 

pf. pass. fr. \(\text{σπέλσω}\) (sow)=*σπερ-γω, similarly for *ἐ-σπ, *σε-στ. 

We see that the dropping of the \(\nu\)-sound, which has taken 

place throughout in mod. Gk., began even very early (G. Curt. 

Gr. Et.² p. 612 sqq.). The feeling of the lang. for \(\nu\) was 

weakened even in early Gk. (cf. supr. 2, b.). 

\[\text{Note.—The st. ἧντ- in ὀντ}=-*ὀντ-ς, ὀδο-α=*ὀντγα, ὀν=*ὀντ= 

origl. as-ἀντ-, pres. part. act. of origl. \(\sqrt{\text{ας}}\) (esse), only 

apparently belongs here. The earlier fms. of this part. \(\epsilon\)ων, etc., 

point to a once-existent fm. *ἐ-ὀντ-, *ἐ-ο-ὀντ-, with \(\sqrt{\text{ε}}\) preserved, 

fr. which fm. the \(\text{s}\) regularly dropped out, *ἐ-ο-ὀντ- thus became 

ἐ-ο-τ-, later the \(\text{e}\) fell off, and thus arose ἧντ-. 

\(\text{s}\) falls away bef. \(\nu\) in νυός (bride, daughter-in-law), Lat. nurus, 

but O.H.G. \(\text{snur, snura, Sk. snūdā, O.Bulg. snūcha, accordingly we} 

must assume also a Gk. f.f. *σνυσγ-ς; \(\sqrt{\text{νυ}}\) in νέ-\(\text{ω}\) (swim), 

impf. however in Hom. ἱννεων fr. *ἐ-σνε-\(\text{ω}\)-ον, Sk. and origl. 

\(\sqrt{\text{σνου}}\) (flow, drip). 

\(\text{s}\) is lost bef. \(\rho\) in \(\sqrt{\text{ρυ}}\) (flow), ᾱρω, ῥυός=Sk. and origl. σρυ, 

Germ. \(\text{stru, with inserted } t, \) in \(\text{strōm, Lith. } s\nu \text{ and } \text{stru, Scl.} 

\(\text{stru in } o-\text{strov-}ū \) (περι-\(\rho\)υτος, i.e. isle). Also here \(\text{s}\) is preserved 

by assimiln. to \(\rho\), e.g. ἔρρυν, ἔρρευσα for *ἐ-σρυ-\(\text{υ}\), *ἐ-σρευ-σα. 

Also in \(\sqrt{\text{μερ}}\) in μέρ-μερ-\(\text{ος}\) (careful), μέρ-μινα (care), μάρ-\(\text{τυς}\) (witness), as in Lat. \(\text{me}-\text{mor and Germ. } \text{māri}\) (felt), the \(\text{s}\) is 

lost which is preserved in Sk. \(\text{smar, pres. smārāni}\) (I remember, 

recall). The same loss perh. occurs elsewhere, though \(\sigma\mu\) was 

not disliked as an initial sound. 

Before other sounds the loss of \(\text{s}\) is rarer, yet cf. ταὐρο-\(\text{-ς}\) 

(bull), Lat. \(\text{tauru-s, O.Bulg. turū, with Sk. sthurā-s}\) (bull), Zend
§ 65. *tαορα- (larger cattle, draught-oxen), Goth. *στιουρ (bull, calf); sts. the interchange betw. στ and τ is prob. merely a dialectical one, e.g. τεγ-ος (roof), στεγ-ος (roof), στεγ-τι (to cover), Sk. √sthag, origl. *stag (cf. Lat. teg-o, Germ. decken, √dak; without initial s). For further exx. of this phenomenon, which is hard to decide upon, vid. G. Curt. Gr. Et. ² p. 621 sqq.

The assimiln. of s to other consonns. is treated, § 68; the loss of s with compens. lengthening, § 28.

3. Origl. v=Gk. ν, F, which was lost in the later langg.; origl. v is expressed by ̅.

a. Gk. v=origl. v, e.g. δύω, δύο, which bes. δώδεκα proves an early Gk. st. δύο:=Sk. δέα-; the same holds good in κύον (dog), bes. Lat. canis for *quani-s, Sk. χεά (nom. sing. for *ξεαν-s, st. γεαν-, γον-), and in some other cases. It is very hard to decide whether v or u was the origl. here; perh. uv (Engl. w) is the earliest.

On the Aiolic vocalisation of v between vowels (χεύω=Χέφω, etc.), so too on the transposition of v near liquid consonants, as e.g. γοννός=Aiolic γόννος from *γοννός, st. γονν- (knee), with -ος of the gen. sg., before which v, that is u, passes over into F, δούρος, δούρατος, fr. *δορός, *δοράτος, from which are explained also δορός, δόρατος, by loss of v, cf. nom. δόρο (spear), v. supra § 26 b, 1, 3.

b. Gk. F, ¹ which was lost in the later stage,=origl. v (cf. § 27), e.g. Φόνος (wine), cf. Lat. uīnum, O.Lat. uēnom, f.f. of st. vaina- (or, acc. to Gk., vāina-); Φόικος (house), Lat. uācus, i.e. O.Lat. uēcos, Sk. vēca-s, origl. vaika-s; Féργον (work), √Fergy=Sk. vṛgh, urb, Germ. vark (work, to work), origl. varg; √Fiδ (see, know), origl. Sk. vid, Lat. uīd, Germ. vih, e.g. in Fīδ-μεν=Sk. and origl. vid-māsi, Fōīdā=Sk. vēda, Goth. vait,

¹ J. Savelsberg, “de ḡigammo eiusque immutationibus dissertatio,” pars i. Aquisgrani, 1864; pars ii. 1866.
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f.f. vivâída; √Feπ, speak = Lat. voc for *uec, Sk. vâk, origl. vâk, § 65. e.g. in Fêπ-ôs (word) = Sk. vâk-as (speech); ὅφις (sheep) = Lat. ouis, Lith. and origl. avis; ὀου for *颔Fou, f.f. aeva-m, fr. origl. avi-s, Lat. auí-s (bird); νέFôς (new) = Lat. novus for *neuos, Sk. and f.f. náva-s; πλêF-ô (sail), √πλυ = Lat. *plou-o for *pleu-o (plou), Sk. and origl. plâv-ami; ἐF-ô (flow), √ῥυ, origl. and Sk. srâv-âmi, √srũ, cf. ἰων-μα (stream); sf. -Feντ- = Sk. and origl. -vânt- (e.g. in στονό-Feσσαν = -Feτ-γαν, with loss of nasal); νάῦς (ship), gen. νάFôς = Sk. and origl. nâús, gen. náv-âs; after consonn. e.g. in δόδεκα (twelve), δǐς (twice), for *δFω-δεκα *δF-ô, st. δFe, -FeF-, origl. δεα- (cf. διό); δόρς, γόνατος, fr. *δῷρFôs, *γουFάτoς, cf. δόρu (spear), γόνu (knee), etc.

Note.—Thus vů can disappear in medio betw. vowels; this occurs in sf. tâv-ya, formed by ya and step.-formn. of stem termn. of abstracts in tu, sounded in Gk. as τέο, e.g. δοτέος (dandus) = Sk. dûtâyes; θετέος (ponendus) = Sk. dhâtâyas.

c. Gk. ‘= origl. v in ἥσπερος, ἥσπέρα (evening), cf. Lat. uesper, uespera; ἵσ-τοπ bes. ἵσ-τορ, a fm. which we expect according to Fûδ-μευ, st. Fûδ-τορ- (knowing, witness), thence ἵστο-ρα (questioning, history), √Fûδ; ἐνυμû (clothe), εîμα (garment), Αιολ. Φûμα=*>Feû-νυμû, *Feσ-μα, √Feς, cf. Lat. ues-tive, Sk. and f.f. of √vas: ‘ may, however, here have arisen also fr. s, and then been transposed: cf. supr. 2 b.

Note.—In isolated exx. β= origl. v, βουλμαί (I will), which we hold stands for *βολμαί (cf. Sk. vnrê, f.f. var-nu-nai); to which Αιολ. βόλλμαί and βόλλα=βουλή (will, council) seem to bear evidence; ov would thus arise fr. o by compensatory lengthening, in place of the lost v; √βόλ for *Fολ corresponds to the Lat. uel, uol (in uel-le, uol-t), Sk. and origl. var (choose, will); ὑρφβο-ς (vetch) bes. Lat. eriou-m, O.H.G. araueig, cf. H.G. erbse. For other exx. of this correspondence of sound v. G. Curt. Gr. Et.² p. 514 sqq. Dialectically β for origl. v occurs more often, e.g. Λακôν. Βέγγον, βίδεϊν, for Fêγγον (work), Fîδεϊ (see), origl. θαιγ, θαιδ; Λεσβ. Αιολ. βρίτα (root), Βρόδον (rose), for Frîca, Frôðon, etc. Yet it is not unlikely that here (except in comb.
§ 65. $\beta\rho=F\rho$ $\beta$ is practically only a character representing the $v$-sound instead of $F$.

Quite beside the ordinary rule we find $\sigma\phi=$earlier $sv$ in pron. st. $\sigma\phi\varepsilon\tau$-origl. $\sigma\phi\varepsilon\tau$, you, $\sigma\phi\varepsilon\tau$-tauos, $\sigma\phi\varepsilon\tau$-s, your $=$ Sk. and $\sigma\phi\varepsilon\tau$; in $\sigma\phi\varepsilon\tau$ (you two) for $*\sigma\phi\varepsilon\tau\theta$, fr. $\sigma\varepsilon\tau$, Dör. $\tau\uptheta$, origl. $\tau\upsilon$ (thou); here $\sigma\phi$ arises, prob. early, for $sp$, in consequence of the aspirating force of $s$ (v. sub. § 68); so, too, $\sigma\phi\gamma\gamma\gamma$ originl. $\sigma\phi\gamma\gamma\gamma$, $\sigma\phi\gamma\gamma\gamma$, which corresponds in root to the Goth. $s\omega\nu\mu\nu\nu\nu$, st. $s\omega\nu\mu\nu\nu$- (Lat. $f\omega\nu\nu\nu$ is perh. borrowed fr. Gk.); $sp$ here occurs exceptionally for $sv$, as takes place sometimes in Zend; in Hom. $\phi\gamma$ (as) for $*\sigma\phi\theta\gamma$, cf. Goth. $s\nu\varepsilon$ (as), the initial $s$ has been lost (G. Curt. p. 387).

Origl. $v$ is said to be $=\mu$ in $\mu\nu\nu\nu\nu\nu$ (lamb) for $*\delta\nu\nu\nu\nu\nu$, fr. origl. $\mu\nu\nu\nu\nu$, Gk. $\delta\nu\nu\nu\nu$ (sheep), and in other single inst. more or less doubtful (G. Curt. p. 521).

Still more doubtful is the change from $v$ to $\gamma$ (G. Curt., p. 527 sqq.).

On the assim. of $v$ to other consonn. e.g. $\tau\varepsilon\sigma\σ
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ε-λαβ-νυ; γ bef. gutt., e.g. λαγχ-άνω (get by lot), cf. ε-λαχ-νυ. § 66. The same interchange is seen besides naturally in compds. where σύν- is changed to συμ-, συγ-, according to the quality of the following conson.

Note 1.—√γαμ in γάμ-ος (marry), γαμ-εω (marry), is, like Lith. √gam (gin-ti, am born, pri-gin-tis, nature, gam-in-ti, beget, furnish), a further fmn. fr. √γα (γε-γα-ως), developed early to γα-ν (the mean. 'beget' through that of 'marry'); µ is here not fr. ν in γεν. In γαμ-βρός (son-in-law) for *γαμ-ρο-ς we conjecture a 'popular' etymology fr. γαμ-εω, through which an earlier *γαυ-ρο-ς=Lat. gener, i.e. *gen-ro-s (son-in-law), may have passed to *γαμ-ρο-ς; cf. Lith. žen-ta-s (son-in-law), f.f. gan-ta-s, O. Bulg. želî (id.), f.f. gan-li-s, similarly fr. √gan; cf. § 75, 2, n.

Note 2.—Αλλος (other) =Lat. alius, Goth. aîis, we hold to be unconnected with Sk. anýa-s (other), with G. Curt., and see in it a fmn. fr. origl. pron. √αr. That such a root existed is proved by st.-fmative sf. ra (v. post). Corss. (Krit. Beitr. p. 295 sqq.) divides them thus: α-λι-s, α-liu-s, *ά-λυό-ς, because he holds the α to represent pron. √α (dem. e.g. Sk. gen. sg. masc. nt. a-syá), li, lyo, to be sf. tâ-li-s, quá-li-s.

2. Origl. m.=Gk. µ, ν (the latter in termn.), e.g. st. µε-, µο-, εµε-, εµο- (pron. pers. 1)=Lat. me-, Germ. mi- (in mi-ch, mi-r), Sk. and origl. ma-, thence -µ, pl. -µeν, Dôr. -µes, 1 sg. pl. vb. =origl. and Sk. -mi, -masi (e.g. ε-µε=origl. ai-mi, Sk. ε-µì; ε-µeν=Sk. and origl. i-mási); µέσο-ς (µέσος)=*µeθ-γος (v. post, § 68, 1, e)=Lat. mediu-s, Sk. and origl. mándhya-s, Goth. mèdji-s; st. µήτερ- (mother), Sk. and origl. mátár-; √µeν, µna, origl. and Sk. man (think), in µ-µνή-σκω (remember), µέν-ος (mind, might)=Sk. and origl. mánas; µéθu (intoxicating drink), Sk. and origl. mádhu, O.H.G. mëtu; āµa (together, with), οµό-ς=Sk. sama-s (similar, like), sama-m, samaa (οµοί), cf. Lat. sim-ilis, sim-ul, Goth. sama (same); √Fµ (εµέω)=Lat. uom in uom o, for *uemo, Lith. vem (1 sg. pres. vem-iû), Sk. and origl. vam (spue, 1 sg. pres. vám-âmi). Final m becomes ν, e.g. sign of acc. ν=origl. m, e.g. τó-ν=Sk. and origl. ta-m, cf. Lat. is-tu-m; ν=m as sf. of 1 pers. sing., e.g. εφερο-ν=Sk. and origl. ábhara-m.
§ 66. *Note.—The exx. which are intended to prove medial \( v \) to be a representative of origl. \( m \) (cf. Curt. Gr. Et.² p. 476 sqq.) are all doubtful. Thus e.g. \( \betaαλω \) (go) \( \ast \betaαυ-\gammaω \), which must not be assigned to Sk. \( \sqrt[4]{\text{gam}} \), but to \( \sqrt[4]{\text{ga}} \), comes fr. the common formatives of the present st. \( na \) and \( ya \); in \( \chiθων \) (earth), st. \( \chiθου- \), bes. \( \chiθαμαλος \) (lowly, on the earth), cf. \( \chiαμαl \) (on the earth), Zend st. \( \zeta\text{em} \) (earth), O. Bulg. \( \text{zemya} \), \( \text{zemlya} \), Lith. \( \text{zême} \) (earth), the \( v \) seems to have penetrated inwards from the term.:
so, too, perh. st. \( \chiαν- \) (\( \chiβον \), snow) bes. Lat. \( \text{hiem(p)s} \), Sk. \( \text{hima-s} \) (snow, cold), Zend st. \( \text{zim-} \), \( \text{zima-} \) (winter, cold), O. Bulg. \( \text{zima-} \), Lith. \( \text{žemá} \) (winter).

§ 67. \( r- \) and \( l- \) sounds.

Origl. \( r=Gk. \rho, \lambda \).

Gk. \( \rho= \)origl. \( r \), e.g. in \( \sqrt[4]{\text{pVT}} \) (be red), Sk. and origl. \( \text{rudh} \); suff. \( -ρo \), Sk. and origl. \( -ra \), both in \( \varepsilon-\rho\nuθ-ρό-ς \) (red) \( = \) Sk. \( \text{rudh-irú-s} \), Lat. \( \text{ruber} \), i.e. \( *\text{rub-ros} \), origl. \( \text{rudh-ra-s} \); \( \sqrt[4]{\text{dr}} \) in \( \acute{\text{pr-ou}} \) (plough), \( \acute{\text{pr-otpov}} \) (a plough), cf. Lat. \( \text{ar-o} \), \( \text{ar-atrium} \), Goth. \( \text{ar-yan} \), Lith. \( \acute{\text{ar-ti}} \), Scl. \( \text{or-ati} \) (plough); \( \sqrt[4]{\text{dr}} \) in \( \text{p-pvum} \) (rise), Lat. \( \acute{\text{or}} \), Sk. \( \text{ar} \) in \( \text{r-nómi} \) (orior); \( \sqrt[4]{\text{dr}} \), Sk. and origl. \( \text{sru} \), flow, etc.

Gk. \( \lambda= \)origl. \( r \), e.g. in \( \sqrt[4]{\text{luw}} \) in \( \text{leuk-ός} \) (white), Lat. \( \text{lic} \), Germ. \( \text{lih} \), Sk. \( \text{ruk} \), origl. \( \text{ruk} \) (shine); \( \sqrt[4]{\text{pöl}} \), \( \text{płe} \), Sk. and origl. \( \text{par} \) (fill), in \( \text{pólóς} \) (many), Sk. \( \text{parús} \) for origl. \( \text{parus} \), \( \text{píμ-πλη-μ} \) (fill); \( \varepsilon-\text{hakoς} \) (small) \( = \) Sk. \( \text{laghus} \); \( \text{dolhakoς} \) (long), Sk. \( \text{dirghás} \), Zend \( \text{dareghó} \), origl. \( \text{dargha-s} \); \( \delta\text{los} \) (whole) for \( *\delta\text{Fos} \), Lat. \( \text{sollus} \) for \( *\text{soulos} \), Sk. \( \text{sárea-s} \), etc.

§ 68. Some important Sound-laws.

Medial.

1. Assimilation.

a. Perfect assimiln. of a preceding to a following sound; e.g. of \( s \) to \( v \), \( \mu \) following, \( \varepsilonννυμ \) (clothe) \( =*\varepsilon\nu-\nuμ \); Aiol. \( \dot{o}\text{penvos} \) (mountainous) \( =*\dot{o}\text{penos} \) fr. \( \dot{o}\text{pos} \) (mountain), st. \( \dot{o}\text{pos-} \) sf. \( -νo \); Aiol. \( \dot{\varepsilonμ} \) (am) \( =*\dot{\varepsilon-μ} \); \( \text{ei-μ}l \), \( \dot{o}\text{pen-νόs} \), represent the double cons. by compensatory lengthening. Not unfreq.-

ently consonants which were afterwards lost are preserved in
such assimilns., e.g. περιφράυτος (sea-girt) for *περι-σφυ-το-ς, \(\sqrt{\nu}\) § 68. (flow, \(\rho\) \(\epsilon\)-\(\omega\)) for \*\(\sigma\)-\(\rho\)-\(\nu\), Sk. and origl. \(\sigma\)-\(\rho\)-\(\nu\), Germ. \(\sigma\)-\(\rho\)-\(\nu\) (with inserted \(\iota\)), etc.; ᾠδήκτες (unbreakable, unbroken) for \*\(\alpha\)-\(\rho\)-\(\gamma\)-\(\tau\)-\(\sigma\)-\(\varsigma\), \(\sqrt{\varphi\gamma}\) \(\gamma\)-\(\nu\)-\(\mu\), break, \(\varphi\)-\(\rho\)-\(\epsilon\), rent, for \*\(\varphi\)-\(\gamma\)-\(\tau\)-\(\iota\)-\(\varsigma\); φιλομειδής (freely smiling) for \*φιλο-σμει-δης, \(\sqrt{\mu}\) for \*\(\sigma\)-\(\mu\), Sk. and origl. \(\sigma\)-\(\mu\), O. Bulg. \(\sigma\)-\(\mu\), etc.

The assimiln. of momentary labb. to following \(\mu\) is well known; e.g. γράμμα (writing) for *γραφ-μα (γέ-γραμμαί for *γεγραφ-μαί, 1 pf. med. fr. γράφ-ω, write), etc., and the assimilns. which perh. occur only in compds., e.g. συλλέγω, συγρέω, and the like.

In the commonest of these cases, i.e. in assimiln. of all the dentals (including \(\nu\)) to a following \(\varsigma\), the double \(\varsigma\) so produced was not tolerated in the later form of lang., even when \(\varsigma\) was medial and followed a short vowel: only the archaic (Hom.) lang. shows such forms as ποσσί fr. *ποδ-\(\sigma\)ι (loc. pl. fr. st. ποδ-, foot); throughout \(\varsigma\) is the only trace of the process of assimiln., not, seldom (especially in nom. sing. and where \(\nu\), \(\nu\), were originally existent) accompanied by compensatory lengthening of preceedg. vowels (cf. § 28), in which cases, perh. not common, we must assume an assimiln. of the \(\nu\) by resolution into a vowel-sound. This is a well-known sound-law, to which belong such exx. as loc. pl. σώματ\(\tau\)-\(\sigma\)ι, πο(\(\delta\))-\(\sigma\)ι, κόρ\(\nu\)(\(\theta\))-\(\sigma\)ι, δαίμο(\(\nu\))-\(\sigma\)ι. The \(\nu\) which produces the assimiln. is often unorigl., i.e. has arisen, through the action of a previous sound-law (v. infr.), from \(\tau\), e.g. πείς (feeling) fr. st. πενθ- (cf. πένθος, grief) and suff. -\(\sigma\)ι-\(\varsigma\) fr. -\(\tau\)-\(\varsigma\). Compensatory lengthening occurs in such cases as εἰδώς=\*\(\pi\)εδ\(\phi\)οτ-\(\varsigma\), δαίμων=\*\(\delta\)αιμ\(\omega\)ν-\(\varsigma\), φέρουσι=\*φερουσι fr. φέρωντι; \(\nu\)-dent. must both be lost before \(\varsigma\), e.g. σπείς fr. \*σπενδ-\(\sigma\)ω, πείς fr. \*πενθ-\(\sigma\)μαί, τιθελ̣ς fr. \*τιθεντ-\(\varsigma\), χαρ-\(\epsilon\)ις fr. \*χαρ-\(\epsilon\)ντ-\(\varsigma\) (φέρων, however, fr. \*φερωντ-\(\varsigma\), v. § 28, 3; χαρίς fr. \*χαρι-\(\epsilon\)ντ-\(\gamma\) [v. e], without compensatory lengthen- ing, because no \(\nu\) was originally there).

Moreover, in this place belong the cases in which the assimiln. takes place together with the loss of the former consonant, e.g.
§ 68. διδάσκω (learn) for *διδαχ-σκω, cf. διδαχ-ή (teaching); λάσκω (cry out, speak) for *λακ-σκω, cf. ἐ-λακ-ον; ἐφευκα for *ἐφευδ-κα fr. ἰεύδ-ω (tell lies), etc.

b. Complete assimiln. of a following to a preceding sound.

This kind of assimiln. is, like the former, an especial favourite in the Aiol. dialects, whilst elsewhere, instead of the double consonn., compensatory lengthening (§ 28) of the preceding vowel, or transposn. of v and y generally occurs. Thus F, y, and σ become assimilated to a preceding liquid, F and y sometimes to other sounds also, viz. σ, y, to τ, δ; e.g. γόννος = γουνός = *γονοῖς, gen. fr. st. γονό- (knee); st. πολλό- for *πολλοῖς, a further fmn. through o, origl. α, fr. st. πολύ- (many), origl. παρ-ι; ἵππος (horse) fr. *ἵππος, λκός (cf. sideform θκος), origl. ακ-πα-ς; κτέινω (kill) = κτείνω = *κτεν-γω; χερρών = χείρων (worse) = *χερ-γων, etc. In the case of χγ the assimiln. has been retained in other diall.; στελλόω (send) = *στελ-γω; ἄλλος (other) = *ἄλγος, Lat. alius; except ὀψείω (owe) fr. ὀψείγων, and perh. a few others; πτισσόω (peel) = *πτισ-γω (ἐ-πτισ-μαι), cf. Lat. ῥύς in pinso, pis-tor, Sk. ῥὺς (e.g. pi-nás-τι, Lat. pinxit); this does not often happen, s usually is lost, and also y at a later period, cf. supr. § 65, 1, a, e; πόδ-εσσι fr. *ποδόσσι, -οῖς = origl. -εσσι, is termn. of loc. pl., ποδε- is the noun-st. fr. earlier πόδ- (foot); in this case also the later lang. has only one σ, e.g. πόλεσι, γλυκέσι, which never disappears from between the two vowels, because it stands for σσ. τέτπαρε, τέσσαρε (four), fr. *τετπάρας (f.f. katévra), and thence *τεσπάρας is an ex. of F assimiln. to a mom. sound. ττ for τγ, θγ, κγ (apparently γγ, v. infr. e, β), χγ is produced in the same way, since κγ first became τγ, as this sound-change occurs in many langg., and the aspiration (of θγ, χγ) becomes lost before y.

Thus, e.g. ἑρέττω (I row) fr. *ἐρετ-γω, cf. ἑρετ-μός (oar); ἠττάω (less, worse) fr. *ἠτγαώ for *ήκε-γων, cf. ἠκε-ιστός (superl.); ἐλαττών (less, smaller) for *ἐλατγαώ, and the latter for *ἐλαθ-
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yw, *éla-γων, cf. élak-ιστός and élak-ις (little). These §68.
forms in ττ have by-fms. in σσ (v. infr. e, β), and have not
arisen through an unparalleled change of σσ into ττ, but one
produced by a divergence of diall. in the treatment of the same
fund-fms. as underlie the fms. in σσ. Accordingly, since e.g.
πτίσσω (v. supr.) stands for *πτισ-γω, no t-sound ever was in
existence here, and so no parallel fm. *πτιττω occurs.

δδ, initial δ, for δυ, γγ, a sound which did not become δγ until
late, is likewise dialectic; e.g. Böiot. Δεύς for *Δγευς
(Ζεύς); Böiot. σφάδω for *σφαδ-γω fr. *σφαγ-γω (σφάγω, cut
the throat), σφαγ (e-σφαγ-γω); σαλπίδω for *σαλπιδ-γω,
*σαλπνγ-γω (σαλπίξ, trumpet); st. σαλπνγ- (σαλπνγς, σαλ-
πνγγ-ος (trumpet). This also is the explanation of Att. Iön.
έρδω (δο) fr. ύεργη (pf. έργα, i.e. Fέργα, Fέργω-ν, work),
Goth. vark, for *Fερδ-γω, Fεργ-γω, from which we ought to have
found *Fεργω acc. to the rule, but this form seems to have been
avoided on account of the unpleasant combination ρξ, cf. Iön.
Fρέξω, Böiot. Fρέδω =*Fεργ-γω, which differs from *Fερδ-γω
merely in transposition from Fεργ to Fεργ. So also δ fr. δγ is
produced in place of origl. y (v. supr. §65, c, n.).

The same assimiln. occurs, except in archaic remains such as
έρσω, όρσα, χέρσος (χέρρος), θάρσος (θάρρος), πέφανσαi (which
perh. is hardly authenticated), beside medial combinations, as
υς, ρυς, υος, μρος, e.g. Aiol. έστελλα=έστελλα=*έστελ-ςα; Aiol.
όρράτω=όρσάτω; Aiol. εγέννατο = εγείνατο =*εγεννατο; Aiol.
ένεμμα = ένεμμα =*ένεμμα; thus έφηνα stands for *έφαν-σα
ηγγειλα for *ηγγειλ-σα, etc. Thus χήν (goose), gen. χήν-ος fr.
*χεν-ς, *χενσ-ος, cf. Lat. (l)ans-er, Sk. ἅ-σας, Ο.Π.Γ. st. gansi-
Lith. žąsi-s, O. Bulg. гаси; μήν (month), Iön. Aiol. μείς, gen.
part. act. av ma, measure); ὃλλυμι (destroy) stands for *όλ-νυμι.

c. An assimiln. of preceding to following sounds.
It is well known that τ and σ can be preceded only by mute
mom. sounds (λεκ-τός, λέκ-σις, i.e. *λεγ-σις, γλευ), δ by none
§ 68. but sonant mom. sounds (γραθ-δην, γραφ), θ by none but asp. (λεχ-θήναι, λεγ).

Before ν labb. pass into their nasals, e.g. σεμ-νός (awful) for *σεθ-νος, cf. σεβ-ομαι (I dread), yet they are found, e.g. ὑπ-νος (sleep), in opposition to som-nus (*sop-nus).

Bef. labb. ν notably passes into the lab. nasal μ (e.g. ἐμ-πειρος for *ἐν-πειρος), bef. gutt. into the gutt. nasal γ (e.g. συγ-καλέω for *συν-καλεω), cf. § 66, 1.

Bef. μ the dentt. τ, δ, θ, often pass into their spirants, e.g. ἀνυσ-μαι fr. ἀνύτ-ω (bring to pass, finish), πε-πειθ-μαι for *πε-πειθ-μαι, etc.; yet Ἰόν. ὄδ-μη occurs beside later ὅσ-μη (smell), √δδ; ἓ-μεν (we know) bes. ἕ-μεν; ἀριθ-μός, ἀτ-μός, κεκορυθ-μένος, and others, do not show the change to σ.

Further, the change of gutt. κ, χ, before μ into γ is well known, e.g. δόγ-μα, √δόκ; τέ-τυγ-μαι, √τυχ; yet χ often remains, e.g. δραχμή. This law was likewise incompletely applied in the earlier (Ἰόν.) langg., e.g. ἵκ-μενος, ἀκαχ-μένος.

Sometimes nasals seem to change preceding mom. sounds into asp., e.g. λυχ-νος (light, torch) fr. √λυκ (λευκ-ός, white), origl. ῥυκ; ἀκ-άχ-μένος (sharpened, pointed), redupl. √ἀκ (be sharp); cf. ἀκ-ώκ-ή (point), and others.

The same influence is exercised by ρ, λ, in many cases, e.g. suff. -θρο, -θλο, bes. origl. τρα, Zend thra (here the spirants have the force of asp.), e.g. βά-θρον (base), √βα (go); κλεῖ-θρον (lock), fr. κλεῖω, κληύω, κλήω (lock); θέμε-θλον (ground-work), etc., bes. ἀρ-τρο-ν (plough) = Lat. arā-tru-m (άρω, I plough), etc.

Before ι in stem- and word-formative particles (except in Δόρ. dial.) τ is changed to σ, e.g. φησι (he says), Δόρ. φατί; the -τι of 3rd pers. sing. is kept in ἐσ-τί (he is); the abstracts in -σις for -τις, e.g. φά-σις, in Hom. and tragg. φά-τις (speech); πέψις (cookery, πεπ, f.f. κακ, cook) fr. *πεπ-τις, f.f. κακ-τις; suff. γά, Gk. -ιο, forming -τα, with stems ending in τ-, τα- (the stem-termin. a of τα being lost, which is regularly the case bef. suff. γα), Gk. -τιο, and hence -σιο, e.g. fr. πλοῦτο-ς (wealth) is
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fmd. Dôr. πλούτ-ιω-ς, and hence πλούσιος (rich); fr. ἐναυτός § 68. (year), Dôr. ἐναυτ-ιο-ς, and hence ἐναυσιος (yearly); st. γεροντ- (n. sing. γέρων, old man) with sf. γα, Gk. ia, makes γεροντία, and thence γερονσία (senate); f.f. (d) vikati, Dôr. Flkati, eikati (perh. fr. *ἐικατί), Att. εἴκοσι (twenty); from Dôr. φέροντι, τιθέντι (3 pl.), f.f. bharanti, dadhanti, come *φεροντι, *τιθεναι, and thence by rule (v. super.) φέρουσι, τιθέοι (Iôn.), etc. Yet in Att. and Iôn. is found φά-τις (speech), √φα, and the like.

Also bef. ν this change of τ to σ sometimes takes place, thus in σύ for Dôr. τύ (thou), cf. Lat. and Lith. tu; suff. -συ-νη, f.f. -τυ-να, further fmn. of common abstract sf. -τυ (-τε-α).

d. An assimiln. of following to preceding sounds. y in the combn. dy is so similar to the preceding dent. sonant d, that it becomes a dental sonant spirant (French or Polish z), dy thus becomes dz (acc. to Sclav. or French pronun.), written ς, e.g. Ζεύς fr. *Διεύς=Sk. dyâus (√dyu=div), cf. early Lat. Dioi-is; Aiol. ζά=δ' ya for διά (through); ἐξομαι (sit, seat myself)=*σεδ-γομαι, √ἐδ=σεδ; σχιξω (split) for *σχιδ-γω, √σχιδ; τρά-πεζα (table) for *τετρα-πεδ-γα (four-footed), cf. Lat. st. ped- (pes, ped-is, foot), etc.

Here belongs the aspiration of origl. unaspirated consonn. through influence of preceding prolonged-(liquid) sounds. In Greek this influence is especially exercised by s, cf. Sk. § 52: i.e. *σχιδ-γω, σχιδ-ν (splinter), √σχιδ, for and bes. √σκιδ in σκιδ-νημι (divide, scatter), cf. Lat. seid in scindo, Goth. skid in skaida (cut), Sk. khid, i.e. origl. skid, in kʰi-nú-d-mi (slit); πᾶσχω (suffer) for *πα-σκω or perh. *παν-σκω, √πα in πα-θ (ἐ-παθ-ον), and πε-ν, πέν-ομαι (endure, tire myself), further formations in θ and ν; the σ sometimes disappears before the aspp. which it has called into existence, e.g. ἐρχομαι (come), for *ἐρ-σχομαι, ἐρ-σκομαι, √ἐρ (come, go), cf. Sk. rkkhâmi, also árkkâmi=*έρχο, origl. 1 sing. act. ar-škâ-mi, med. ar-ška-mai; κρίθη (spelt) for *χρίθη (cf. § 64, sub fine, and 2 infr.), and this for *χρύση, *χρυση, cf. Ὀ. Ὁ. Ἐ. γέρστα, etc.
§ 68. The nasals also seem to have this aspirating effect sometimes, e.g. Boiot. -vdi for -vte, 3 p. pl. act. vb.; òµψ-ή (voice) for *Φωτ-η fr. √Φετ, origil. vax (speak); έγχ-os (nt. spear) fr. √άκ (be sharp), cf. άκ-ουτ- (άκων, javelin).

Perh. ρ, λ, are the cause of aspiration in τρέφ-ω (nourish), which thus by assumption may be for *τερφω bes. τέρπω (sate, delight, cf. τέρπεσθαί ἐδητύος), Sk. tarp (be sated, delighted), Lith. tarp-ti (thrive); πλάθ-νος, πλαθ-άνη (flat cake), bes. πλατ-ύς (broad), Lith. plat-ús, etc., πλάτ-η (plate, ear-blade).


e. Mutual assimilation (complete or partial) of two sounds, each affecting the other.

a. γγ becomes ζ=δζ (v. d supr.), as γ bef. y becomes δ, y after δ becomes z, e.g. κράζω (cry), i.e. *κραδζό fr. *κραδγω, and this fr. *κραγ-γω, √κραγ, cf. κέ-κράγ-α; ἄξομαι (dread) fr. *όγ-γομαι, cf. άγ-ιος (holy); μέξων, μελξων (greater), the latter having, moreover, y transferred to the preceding syll. (cf. § 26), fr. *μεγ-γων, cf. μεγ-άλη, μέγ-ας (great), etc.

In νίξω (wash) bes. χέρ-νιθ-ος (χέρνυψ, water for handwashing), νίπτω (wash)=*νυβ-τω, the earlier root-fm. niγ, Sk. niγ, is retained (cf. § 63). Λάξομαι (grasp) bes. ναμβάνω (take) is obscure, unless it be the unique ex. of ζ=βγ, formed perh. on the analogy of the common fms. in -αξω, -αξομαι.

β. τγ, θγ, κγ, χγ, become σγ; in τγ and θγ, y perh. became the dent. mute spir. s, after dental mutes, whereby arose τς, θς, then the preceding mute dentt. assimilated themselves to this σ; because σγ=τγ, θγ, also in Dór., we must not assume that τγ (θγ) passed next into σγ, as τι into σι (v. sup. e), and this σγ into σσ by rule (b), for in Dór. τ remains before i; κγ, χγ, became firstly τγ, θγ, as of course gutt. so often pass into dentt. bef. y, and then these sounds became σσ in the way above described; e.g. ἔρεσσω (row) fr. *ἐρετ-γω, cf. ἐρετ-μός; κρέσσων, κρείσσων (stronger, better), with transposn. of y (cf.
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Not unfrequently οὐ has apparently arisen from γγ : in these cases thus much is clear, that in the older state of langg. a fundamental κ is always found still preserved, and that this κ was not softened to γ till a later period, after κγ had been incorporated into a fixed group of sounds.; e.g. πλήσσω (strike) bes. πέπληγγον, πληγή (blow), but origl. √πλάκ, cf. πλάξ, πλακ-ος (flat, plate), Teut. flah, Lith. plok-ti (strike), whence plok-szas (flat, adj.); φράσσω (inclose)=*φρακ-γον, but ἐ-φράγ-ιν with softening of κ to γ, cf. Lat. fare-io, etc. Cf. supr. § 62.

Note 1.—βράσσων must be assigned to βραχ-ύς (short), not to βραδ-ύς (slow); so G. Curt. Gr. Ét.² p. 600.

Note 2.—Likewise we mentioned in § 62, above, that κγ is still preserved in cases such as τέσσω (cook) bes. τέψω, τέπων (ripe); ὀσσα (voice) bes. ἐπος; ὀσσε (eyes) and ὀσσομαι (see) bes. ὀσσομαι (*πεκ-γον, Sk. πακ, Lat. coe; ὀσσα═*Φοκια, √Feκ, √Fοκ, origl. vak; ὀσσε═*οκ-γε, ὀσσομαι═*οκγομαι, √οκ, origl. ak, cf. oc-ulus, Lith. ak-ís).

f. Apparent insertion of a consonant between two concurrent consonants. υρ and μρ, also μλ, as in other langg. (e.g. French gen-d-re fr. Lat. gener, generum, *genrum; nombre fr. Lat. numerus, *numerus; humble fr. Lat. humilis, *humilis), become νδρ, μβρ, μβλ, i.e. n and m thereby are joined with follg. r and l, in an easier combination, because they preserve the extremities of momentary consonn.; n becomes nd, m becomes mb, to which the subsequent r- or l-sound was merely lightly joined; e.g. ἀν-δρ-φς for *ἀνρ-ος, gen. st. ἀνερ- (man); μεσ-μυ-β-ρία (mid-day) for *-μυ-ρία, cf. ἡμέρα (day); ἄ-μυ-β-ροτός (deathless) for *ἀ-μυρο-τός, √μυρό═Lat. mor (mori); με-μβλω-κα (pf.) for *με-μλω-κα, fr. μολ-είν (go, come), √μολ, μλο; in βροτός the μ has fallen away from bef. β, βροτός stands for
§ 68. *μβροτοσ (preserved in ἂ-μβροτοσ), and this for *μρο-τοσ, past part. from /μαρ, /μαρα (mori), cf. Sk. /μαρτα-σ (a mortal, man, Rigved. I. 84, 8, acc. to Kuhn, Beitr. iii. 236); the same process takes place in βλιττω (cut honey) for *μβλιττω, fr. *μελιτ-γω, st. μελιτ- (μέλι, honey); βλάωσκω (go, come) for *μβλαωσκω fr. *μλωσκω, √μολ in μολ-ειν, etc.

Note.—In πτόλις, and such like cases, bes. πόλις (city), cf. Sk. /πυραμ, /πυρι, √παρ (fill); πτόλεμος bes. πόλεμος (war), cf. πελεμίζω (brandish), and Lat. pello; πτίσσω (peel)=*πτισ-γω for *πισγω, √πις=Lat. pis (pinso), Sk. /πις, πτ stands for π without any visible cause. They seem to be dialectic fms.

g. The ejection of s from between consonns., e.g. τένυφ-(σ)θε, is well known.

Loss of s between vowels is treated of § 65. In like cases τ also disappears, but not so often; e.g. κέρως for κέρατ-ος (gen. sing. st. κέρατ-, horn); φέρει (3 sing. pres. act.) fr. *φερε-τι, origl. bhara-ti. The dent. nasal also is subject to similar decay in known cases, e.g. μειζόνια for μειζον-ες (n. pl. masc. fem. st. μειζόν-, greater).

h. Transposition, as in θάρσος bes. θράσος, δέδορκα bes. δεδακον: it is not easy to ascertain which arrangement is here the primitive one.

Note.—τέ-θνη-κα bes. ε-θαυ-ον, and the like, are primitive deviations from root-fms., and must not be treated according to Gk. sound-laws. Cf. ‘root-formation.’

2. Dissimilation. Here belong the known changes of mom. dent. bef. τ and θ to σ, so as to facilitate pronunciation; this change is found in Eran. Lat. and Sclavo-germ. also, e.g. λύνσ-τος fr. λύντ-ω; θύρ-τεου fr. θύδ-ω; πεισθήναι fr. πειθ-ω; πισσ-τός for *πιθ-τος, etc.

Sometimes two consecutive asppl. are avoided by changing the former or latter into an unasp. conson., e.g. ε-τέ-θνη, ε-τύ-θνη, for *ε-θε-θνη, *ε-θυ-θνη, √θε, θυ, cf. τι-θη-μι, θύω; σω-θη-τι for *σω-θη-θι, the termn. of 2 p. sing. imp. is -θι, origl. dhi, cf.
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κω-θ, origl. kru-dhi, etc. This change scarcely ever takes § 68. place except in the case of θ (in φ and χ perh. only in compds., e.g. ἀμπ-έχω, ἐκε-χειρα).

For a similar phenomenon in the case of root-fms., which origly. began and ended with aspp., v. supr. § 64, sub fine).

Moreover, the attempt to avoid pronouncing similar sounds close together causes the contraction of two similar or like consonn. into one, by means of evaporation of the vowel that lies between them, e.g. τράπεζα (table) for *τετρά-τρεξα (four-footed); τέτραχμον for earlier τετρά-τραχμον (four-drachm piece); ἄμφορεὺς (two-handed jug) for earlier ἄμφι-φορεύς, etc.

3. The aspirates. Whenever by sound-laws aspp. which terminate a root become unasp. consonn., the aspiration falls back upon the τ which begins the root; the same change takes place when θ follows upon the root-terminn., notwithstanding that the asp. remains before θ, e.g. st. τριχ-, cf. τριχ-ός, but *θρικ-ς, i.e. θριξ (hair); τρέχ-ω (run), but θρέξομαι; τύφω (fume), but θύψω; τρέφ-ω (nourish), but θρέφθην, etc. In cases like the last mentioned the aspiration before the θ appeared to the Greek instinct for language to be caused by it (the θ), and similarly also where the aspiration occurs in the case of e.g. π, β; accordingly the sound that ended the root was only characterized as aspirate by the retrogression of the aspiration upon the initial conson.

For the law by which, in the case of roots which origly. began and ended in aspp., the initial consonn. lost their aspiration, v. supr. § 64, sub fine.

4. Law of Reduplication. Of two initial consonn. the former only was admissible into the syll. of redupln.,—hence the aspp. are redupld. through their first element alone (χ, i.e. kh, through κ; θ, i.e. lh, through τ; φ, i.e. ph, through π)—e.g. ἵ-στη-µι (set), i.e. *στι-στη-µι for στὶ-στα-µι; γρ-γραφ-ά (have written) for *γρ-γραφ-ά; πέ-φυ-κα (have been born) for *φε-φυ-κα;
§ 68. τι-θη-μι (place) for *θι-θη-μι; κη-χρη-μι (lend, borrow) for *χη-χρη-μι, and this for *χη-χρη-μι, etc.

In the case of more consonantal combinations, the first consonant also falls away, so that instead of redupln., only a vowel appears, e.g. ε-γνω-κα (have learnt) for *γε-γνω-κα; ε-κτου-α (have killed) for *κε-κτου-α, etc. Cf. Sk. redupln., § 59.

§ 69. TERMINATION.

The only conson. tolerated in fine in Gk. were ζ and υ (generally fr. μ; this is also the case in the N. European langg. of the Teut. stem), e.g. τόσι-ζ, origl. pati-s; τόσι-υ, origl. pati-m; and further θ also, e.g. πάτερ, voc. f.f. patar, n. sing. πατήρ, f.f. patars (κ is found only in έκ, shortened fr. έξ ‘out,’ and in ούκ ‘not,’ which likewise is prob. a shortened fm.). Other conson. were either cast off, or changed into ζ or υ.

Thus the frequent final t of Indo-Eur. is thrown off in Gk. (cf. Lat. nov-o fr. nov-ōd, origl. navāt, abl. sing.), or changed to s, e.g. τό (the, neut.), Sk. and origl. ta-t, Lat. (is)-tu-d, Goth. tha-t-a; εφερε (3 sg. impf.), Sk. and origl. ābharat; εφυ (3 sg. aor.), Sk. ābhit; εφερον (3 pl. impf.), origl. abharant; φέρον (acc. sg. neut. pres. part. act.) for *φεροντ; τέρας (wonder, sign) for *τερατ, cf. gen. τέρατ-ος; εἰδός (neut. pres. part. act. ‘knowing’) for *εἰδέοτ, cf. gen. εἰδότ-ος, etc. In consequence of loss of final τ, θ became final; when this occurred, θ also became ζ, e.g. δός (give) fr. *δόθ for *δο-θ, origl. da-dhi (imper. aor. √δο, origl. da, dare). θ drops off: παι (voc.) for *παιδ (n. sg. παῖς, child); so also η in γυναι (voc. woman) for *γυναικ (cf. e.g. gen. γυναικ-ος); κτ in ἀνα (voc.) for *ἀνακτ (ἀναξ, gen. ἀνακτ-ος, lord), γάλα (n. acc. milk) for *γαλακτ (e.g. gen. γαλακτ-ός), etc. From ντ only τ is lost, e.g. γέρον (voc. fr. n. γέρον for *γεροντ-ς, gen. γεροντ-ος, old man) for *γεροντ.

The final m so common in Indo-Eur., esp. as sign of acc. and element of 1st sing. of vb., is usually replaced by ν in Gk., e.g. πόσι-ν, Sk. and f.f. πατί-μ; νέφο-ν, Sk. and f.f. νάνα-μ; εφερο-ν...
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(1 sing.), f.f. and Sk. ábhara-m, etc. More rarely it coalesced § 69. with the preceding vowel; this is probably the reason why preceding a was lengthened, and hence also in the above lang. it remained as á, and did not change into e, e.g. πατέρ-α = *πατερ-ά fr. *πατερ-αυ, f.f. patar-am; ὑδαιξά (1 sg. aor.) = *ἐ-δεικ-σά, f.f. of termn. -sa-m, cf. Sk. á-dik-šam; ἁέκα, cf. Lat. decem, Sk. dáçan-, etc.

Where there are more than one consonn. of which s is the last, the last s is cast off regularly, in the n. sing. generally, with compensatory lengthening, e.g. φέρων for *φεροντ-ς, μήτηρ for *μητερ-ς, ποιμήν for *ποιμεν-ς, εὐμενής for *εὔμενες-ς; yet s is retained also, as e.g. in τιθεῖσ, διδοῦς, etc., fr. *τιθεντ-ς, *διδουντ-ς, and, in known cases, the foregoing sounds also, e.g. φάλαγξ (gen. φάλαγγ-ος, phalanx), λύγξ (gen. λυγκ-ός, cough), φλόξ (gen. φλογ-ός, flame), ὀψ (gen. ὀπ-ός, voice); even ἐλμὺς for *ἐλμυθ-ς (gen. ἐλμυθ-ος, intestine worm), περνυ-ς for *περνυθ-ς (gen. περνυθ-ος, hamper), ἄλς (gen. ἄλ-ός, salt), which end in displeasing combinations.

The well-known ν ἐφελκυστικόν is no relic of an earlier state of the lang., but a peculiar and late phenomenon in Gk., e.g. ἐφέρε-ν, Sk. and f.f. ábhara-t (3 sg. impf.); in these cases the ν does not appear, therefore, until the origl. t had already been lost, and the feeling for lang. had become accustomed to treat the form as ending in vowel; φέρονσι-ν, Sk. and f.f. bhárti (3 pl. pres.); ποσσί-ν, f.f. pad-svi (loc. pl.).

On the 1st pers. pl. of the vb. this ν has taken firm hold; the f.f. of this termn. is -masi, hence rose -mas, which is kept in Dór. -mes; through the loss of final s—which occurs here and there even in Gk. (in Lat. it is notoriously common), e.g. in οὖτω bes. and for οὖτος (thus)—fr. -mes arose *-me, and upon this was grafted ν, at first prob. ephelkustik, and thus was produced -mev, e.g. Sk. and origl. bhárāmasi, hence Sk. bhárāmas, Gk. (Dór.) φέρομε, *φερομε, φέρομε-ν (we must not think of a change of s to n in this case, any more than elsewhere throughout the range of the Indo-Eur. lang.).
§ 70. **Consonants in Latin.**

The table of consonn. is to be found in § 30.

The Lat. lang. is esp. characterized by lack of the aspp., which were represented by the corresponding unaspirated sonants, and by unorigl. spirants $f$, $h$; the latter in such a way that $f$ (repres. by $b$, in medio) may stand for any origl. asp., $h$ almost exclusively=origl. $gh$.

$k$ (written $c$, $g$) remains always unchanged, but here and there drops away in initio; it does not become $p$ or $t$, as in the other Indo-Eur. langg. The origl. spirants $y$, $s$, $v$, are generally retained, though $s$ very often passes into $r$, and $y$ and $v$ often drop out, and are interchanged with $i$ and $u$.

The consonn. are subject to numerous sound-laws: assimilation; dissimilation; change from $t$ to $s$; from $s$ to $r$; medial, initial, and final loss (the latter in a still higher degree in archaic Lat.)—all remove the consonantal system of Lat. widely from the origl. condition of the Indo-Eur. lang.

§ 71. **Examples.**

Origl. mom. mute unaspirated consonn.

1. Origl. $k=Lat. k$, i.e. $c$, $g$. Origl. $k$ often attaches to itself a $v$, by a sound-law not yet understood (cf. Goth.). The written character, with a few archaic exceptions, represents $k$ by $c$; before $u$ (when other vowels follow $=v$) $k$ is represented by its equivalent $q$ (at an earlier period also before the $u$ which forms the syll., e.g. *pequinia), e.g. $\sqrt{coe}$ in *coec-tus, *coqu-o (cook), origl. kak, cf. Gk. $\pi\epsilon\pi$, Sk. pak; quinque (five), origl. kankan, cf. Gk. $\tau\epsilon\nu\tau\varepsilon$; $\sqrt{guo}$ in *guo-$d$ (which), etc., origl. ka, cf. Gk. $\pi\omicron$, earlier ko; -que (and), Sk. -ka, origl. ka, cf. Gk. $\tau\epsilon$; *quatuor (four) for *quatuores, origl. katcarias, cf. Gk. $\tau\epsilon\tau\alpha\rho\epsilon\varsigma$; st. cord- in cor (heart) for *cord, gen. cord-is, origl. kard, cf. Gk. $\kappa\rho\alpha\delta-la$; $\sqrt{qui}$ in qui-$s$, qui-$d$ (what), origl. ki, cf. Gk. $\tau\omicron$-$s$, $\tau\omicron$; $\sqrt{qui}$ in qui-$es$ (rest), origl. ki, cf. Gk. $\kappa\iota$ in kei-$tau$; $\sqrt{elu}$ in elu-$o$ (hear),

In Lat. as in Gk. (cf. § 62) k is sometimes softened into g, e.g. ui-gin-ti, tri-gin-ta, bes. ui-cen-sumus, tri-cen-sumus (uigetic-nus, trigesimus, cf. ei-ko-st, πρία-κον-τα), -gin-, -cen-, is here a relic of (de)cem, f.f. dakan; neg-otium = *nec-otium; gubernator bes. κυβερνήτης, etc.

Note 1.—This is prob. the case also in glória (glory) for *clória, *clósia, a further finn. of st. *cloíos- for *cloeus-, *cleuos- = Gk. κλέφες, Sk. γράβας (glory), Sclav. sloves- (n. acc. slovo, word), root origl. kru (hear), as Sk. γράβας-ya (famous), gravas-yá (famousness, Kuhn, Zeitschr. iii. 398), yet the ð is strange, for we should have expected ū, cf. in-iūria = *ious-ia, fr. ious, iūs, a further fm. fr. *iouos, *ieuos.

Note 2.—The pronunciation of c bef. i became, as in other langg., that of palat. ð (perh. like Germ. k in kind): the preference for c before i, where another vowel follows, was the stronger, because in these cases i was nearly the same as y, so that the combinations cio, ciu, etc., were not only sounded like kio, kiu, but tolerably early (precisely as in other langg. also) were pronounced tyo, tuy (Ital. cio, ciu), whence arose the common fluctuation in writing about the end of the second or the beginning of the third century A.D. (Corss. Krit. Nachtr. p. 48). The change of i, y, after t, into s, ð (tyo = tso), does not occur till the Romance period.

Note 3.—In the pronoml. stems, hi-, ho- (hi-nc, ho-nc), notwithstanding the regularly corresponding Sk. *ghi-, gha- (in hi, then, ha, gha, important particles), ought not prob. to be separated from Goth. hi-, hza-, Sclav. si-, ká-, Lith. szi-, ka-, i.e. origl. ki-, ka-, on account of the perfect similarity of their functions; further, in /hab in hab-co, hab-ēs = Goth. hab-a, hab-ais (I have, thou hast), cf. Osk. hip-us (habuerit), haf-iest (habebit),
§ 71. whose initial conson. is, as in Goth., k (Goth. √hab also cor-
responds to Lat. √cap in cap-io); Lat. h seems to be origl. k, a
permutation which is found sporadically in Sk. hrd-, hrid-aya-
(heart)=origl. kard- (cf. Lat. cord-, Gk. καρδ-ia, Goth. hārt-ò)
[the antiquity of this h in Aryan is shown by Zend šērēthaēm
=Sk. hirdayam]. With Bopp, therefore, I now hold the Lat.
pron. stems hi-, ho-, to be parallel-fms. to origl. ki-, ha-, regu-
larly represented in Lat. by qui-, ci-, quo-, cu- (qui-s, ci-tra,
quo-d, cu-ius, used as interrog. and relat.), and so, too, √hab in
hab-ère, as a parallel-fm. to cap in cap-ere, for Goth. b can be= 
origl. p, and b may possibly arise in Lat. through softening
from p (bibo, drink, =origl. papāmi). The correspondence of
Lat. h to Goth. h remains none the less remarkable, but esp. the
conformity of the two langg. as regards habère, whose perfect
identity, nevertheless, no one denies. But we must not suppose
words were borrowed in either case. Other views are found in

Note 4.—Accordingly p is not in Lat. =origl. k (but cf. Osk.
and Umbr.); words in which p seems=origl. k are therefore
borrowed. Thus Petronius, Epona, are Keltic, cf. Lat. quattor,
equus; popina is Osk., cf. Lat. coquina, coquere; palumbes, bes.
Lat. columba, must prob. be derived fr. Osk., and limpidus, too,
bes. liquidus, must be a dialectic, and not originally a Roman
by-form, in which case both words, as is often maintained, were
identical; if lupus is really=Gk. λύκος, it must therefore also
be attributed to Osk., Sab., or Umb., but beyond doubt it be-
ongs to Zend; u-rup-i-s, raop-i-s (name of wild beasts of the
breed of dogs), √rup, lup (rend, cf. Spiegel, Zeitschr. xiii. 366);
sap-io (taste of), sap-iens (wise), does not belong to sucus, Gk.
οπός (sap), but to O.H.G. √sab (understand, pf. int-suab; Mid.
H. G. pres. ent-sebe, pf. ent-suop), Gk. σαφ-ός (wise), σαφ-ής
(intelligible, clear), with unorigl. asp. (v. supr. § 62, 3, n. 2);
saep-io (hedge in), praec-seae-e (crib, stall), does not agree with
Gk. στιχός even in root-vowel (Lat. ae=ai, Gk. η=α); trepit
(vertit; Paul. Ep., 367; Curt. Gr. Et. 2 411) seems to be bor-
rowed from Gk. τρέπει.

2. Origl. t=Lat. t; e.g. in tu (thou), origl. tu, cf. Gk. τῶ, 
τῷ; √to in is-tu-ā (dem.), origl. ta, ta-t, cf. Gk. τό; √ten in
ten-tus (held, stretched), ten-or (holding, length), ten-co (hold),
ten-do (stretch), origl. tan, cf. Gk. τά, τέν; st. tri- (three) in tréș,
tréis, treis, origl. tri-, cf. Gk. τρε- in τρέει; √sta (stand) in sta-tus,
sta-re, origl. sta, Gk. στά; \(\sqrt{\text{teg}}\) (cover), origl. staig, Gk. σταγ; § 71.

\(\sqrt{\text{pet}}\) in pet-o (make for), im-pet-us (onset), penna fr. pes-na, *pet-na, origl. pat (fly, fall), cf. Gk. πετ; \(\sqrt{\text{ur}}\) in urt-ere (turn), origl. vart; suff. -to, fem. -ta=-tā, cf. Gk. -τό-, -τη, e.g. in da-tu-s, origl. da-ta-s, Gk. δο-τό-ς; -t, 3 p. sing., -nt, 3 pl. vb., origl. -ti, -nti, cf. Gk. -τε, -ντε, e.g. fer-t, fero-nt(i), Sk. and origl. bhāra-ti, bhāra-nti, Gk. φέπε-(τ)ί, φέρο-ντί, etc.

Note 1.—On final t, cf. § 79: for Lat. br=Gk. θρ, origl. tr, § 77, 1, c.

Note 2.—The change fr. τε bef. vowels to ts (z) occurs first in Romance langs.

3. Origl. \(p\)=Lat. p, e.g. \(\sqrt{p}o\) in po-tus (drink), origl. pa, cf. Gk. πα in πά-σις; in bi-bo (drink), f.f. pa-pāmi, \(p\) has been softened into b, a change occurring also in other isolated cases (cf. Corss. Krit. Nachtr. p. 176 sqq.); *po-ti-s in impos, compos, im-po-tem, com-po-tem (unable, able), po-t-est (he can), -po-te, -pte (a noticeable affixed particle, e.g. ut-pote, suo-pte), Sk. and origl. pā-ti-s (lord), Gk. πό-σις, origl. \(\sqrt{p}a\) (protect); pa-ter (father), origl. pa-tar-s, cf. Gk. πα-τήρ, same root; \(\sqrt{p}lè\) in plē-nus (full), origl. par, pra, cf. Gk. πά-ε; ped-īs (gen. n. pes, foot), Sk. and origl. pad-ās, cf. Gk. ποδ-ός; \(\sqrt{sp}e\)c in spec-io, spic-io (see), specs-ies (appearance), Sk. paç for *spaç, O.H.G. spah (in spēh-ōn, espv, spah-i, shręwd), origl. spāk, \(\sqrt{sp}e\)p (tep in tep eo (am warm), tep-or (warmth), Sk. and origl. tap; \(\sqrt{sp}o\)p in sop-ire (make sleepy), som-nus (sleep) for *sop-nus, Sk. and origl. svap, cf. Gk. ἁπ-. etc.

Note.—\(\sqrt{fl}u\), flug (fluc-tus), a later and further fmn. fr. flu, in *flou-o, flu-o (flow), does not belong to τλυ, Sk. plu, Sclav. plu, etc., for Lat. \(f\) is not=origl. \(p\): this root is represented by Lat. plu (plu-it, i.e. *plou-it, it rains); perh. Lat. flu is to be placed beside Gk. φλυ-ω (swell, overflow), ωινό-φλυξ, -φλυγ-ός; so Curt. Gr. Et.§ 271; we can scarcely take flu for *sflu, and this for *sflu fr. *stru for sru (flow), with Ad. Kuhn (Zeitschr. xiv. 223); in the latter case Lat. fluo, i.e. *flouo, stands equal to Sk. srāvāni, Gk. ρέφο; flu-men for *sroumen, *sroumen, essentially =ρεῦμα for *σρεῦμα, O.H.G. stro-um, Pol. strumieñ (running stream).
§72. Momentary sonant unasp. consonants.

1. Origl. \( g \)=Lat. \( g, gv \) (\( gu \), \( v \).

Lat. \( g \)=origl. \( g \), e.g. \( \sqrt[4]{\text{gen}} \) in \( gi-g(e)n-o \) (beget), \( \text{gen-}us \) (race), \( gna \) in \( gn\-\text{tus} \) (one born, son), origl. \( gan \), cf. Gk. \( \gamma \epsilon \nu \nu \); \( \sqrt[4]{\text{gno}} \) in \( gn\-\text{tus} \) (learn), \( gn\-\text{tus} \) (known), origl. \( gna \), transposed fr. \( gn \), cf. Gk. \( \gamma \nu \nu \), Sk. \( \gamma \nu \nu \), Goth. \( \text{ki}n\u0103 \); \( \sqrt[4]{\text{ag}} \) in \( ag-o \) (beget), \( gen\-\text{us} \) (race), \( gna \), \( \gamma \nu \nu \), \( \text{ki}n\u0103 \), \( \text{ki}n\u0103 \).

Lat. \( gv \) (\( gu \))=origl. \( g \). As origl. \( k \) developed into \( qu \) (\( kv \), so also \( g (=\) origl. \( g \) and \( gh \), cf. §73, 1) into \( gv \): this \( gv \) is, however, retained only after \( n \); it also occurs after \( r \), bes. \( g \), in \( ur\-\text{g} \-\text{geo} \) bes. \( ur\-\text{geo} \) (urge), \( \sqrt[4]{\text{urg}} \), origl. \( var\-\text{g} \), cf. Sk. \( var\-\text{g} \) (shut out), Lith. \( \text{v}\-\text{d}r\-\text{t} \-\text{i} \) (urge). Between vowels this \( g \) has become assimilated to the \( v \) (without lengthening of a previous short syll.), so that the \( v \) alone therefore remains. In this way it happens that Lat. \( v \) between vowels may be origl. \( g \) and \( gh \), e.g. \( \sqrt[4]{\text{uig}} \) for *\( guig \), cf. Germ. quick in \( uixi \) (pf.)=*\( u\-\text{ig-si} \), \( u\-\text{ig-tus} \), but \( u\-\text{iu-} \) (alive), \( u\-\text{iu-o} \) (live) for *\( u\-\text{igu-} \), *\( u\-\text{igu-o} \). For further exx. of this interchange of sound v. sub ‘\( gh \’ \) (v. Corss. Krit. Beitr., p. 68, on interchange of \( g \) and \( gv \) in Lat.).

**Note 1.**—\( \text{fluxi, fluc-tus, con-flug-es} \) (confluence), bes. \( \text{flu} \), i.e. *\( \text{flow-o} \) (flow), show indeed a further frmn. of \( \sqrt[4]{\text{flu}} \) to \( \text{flug} \), as Gk. \( \phi \lambda\nu \) to \( \phi\nu\\gamma \) (§71, 3 n.) ; we see, however, no ground for the assumption that \( \text{flu} \), *\( \text{flow-o} \), together with \( \text{flu} \-\text{tus} \) (river), have passed through fms. *\( \text{flogu-o} \), *\( \text{flugu-ium} \) (Corss. Ausspr. etc., i.¹ 44). In this case the root-frm. is preserved without \( g \).

**Note 2.**—Cf. exx. cited under \( gh \), §73, 1, and sound-laws, §77, 1. a.

**Note 3.**—In \( \text{bos, bouis (ox) =Gk. \betaω\varepsilon, \betaο\phiος =Sk. \text{ga\-us} \) (gen. \( \text{gos} \) prob. represents origl. \( g\-\text{av}\-\text{as} \), cf. O.H.G. \( \text{ch}u\-\text{u} \), \( b=\)origl. \( g \), a correspondence of conson. otherwise foreign to Lat.; accordingly the word is probably borrowed. G. Curt. Gr. Et.² nos. 639, 642, brings forward \( \text{super-bus, super-} \-\text{bia} \) (proud, pride), which he takes to stand for *\( \text{super-bios} \), as=Gk. \( \upsilon\-\text{p}\-\text{b} \-\text{ios} \) (overween-
ing), -βα (presumption), -βος however=Sk. ǵi, pres. ǵdy-āmi § 72. (triumph), f.f. ǵi; bo-ere, bou-are (cry, sound), re-bo-are (resound), with Gk. βό-ν (call, cry) fr. Sk. ǵu (let sound), Old Bulg. gov-orū (noise); super-bus is, however, not precisely similar to υπρ-βος, a word compounded according to Gk. principles (for we should then be obliged to consider it borrowed), but rather a special Lat. fmn, like acer-bus, mor-bus (Corss. Krit. Beitr. 61), and boare with βο-ν need not by any means be referred to Sk. gu, O. Bulg. gov-orū. It seems to me to be a mere imitative sound.

Note 4.—c and g were not distinguished in earlier Lat. writing, but prob. in the spoken lang. only.

Note 5.—Bef. n we are now accustomed in pronunciation to change Lat. g to gutt. ˊ, i.e. the g becomes assimild. to n, according to its scale, becoming nasal: instead of mag-nus, dig-nus, etc., we say man-nus, din-nus. This is the same interchange of sound which is seen quite early in the lang., e.g. in Sam-nium for *Sab-nium, som-nus for *sop-nus. Spellings such as singnum make it probable that even as early as the times of the later Caesars, people had begun to pronounce signum as sinnum. Yet we cannot consider this pronunc. of gn as ˊn to be ancient, because the Roman grammarians do not mention it. From later pronunciation of gn we must distinguish the principle on which gn was treated in Romance langg., where it became a palatal ˊ, e.g. Ital. magno, degno (pron. mańo, deńo), Fr. magne, digne (pr. mań, diń). Therefore the above-named pronunciation of Lat. gn cannot have arisen through Romance influence.

2. Origl. d=Lat. d, rarely l.

Lat. d=origl. d, e.g. ǵd in dā-tus (given), Sk. and origl. ǵd, cf. Gk. δό; ǵdom in dom-are (tame), Sk. and origl. ǵdam, cf. Gk. δαμ-άω; dom-us (house), Sk. and origl. dam-as, cf. Gk. δόμ-ος; dent-em (tooth, acc.), Sk. and origl. dánt-am, cf. Gk. δόντ-α; ǵuid in uid-ere (see), Sk. and origl. vid, Gk. ήδ; ǵed in ed-o (eat), Sk. and origl. ad, cf. Gk. ήδ; ǵsed in sed-ve (sit), Sk. and origl. sad, cf. Gk. ήδ, etc.

Lat. l=origl. d in initio, and, more rarely, medially bef. vowels, e.g. lacrima (tear) fr. lacrima (Festus), cf. δάκρυ, Goth. tagr, O.H.G. zahar; lēvir (father-in-law), cf. δάρ-, st. δαρ-, for *δαμρ-, *δαίρερ- (Ebel, Zeitschr. vii. 272), Sk. st. dēvār-, n. sing.
§ 72. dévā, also a-st. dévarā-s, O.H.G. zeihhur, Lith. dêveri-s (known to me through the Dictionary only), O. Bulg. dêvert; lingua (tongue), earlier dingua, cf. Goth. tuggō, Germ. tunge; ol-ere (smell) bes. od-or (scent), cf. ðð-ôð-ä, êô-ûh, ëôûh. Sometimes both the d- and l-forms remained extant; thus im-pelrimentum bes. im-ped-imentum (hindrance), fr. st. ped- (pes, foot); de-dic-are bes. de-lie-are (dedicate), ^dic (dic-o, ^dic-û, etc.), etc. 3. Lat. b may be origl. b (v. § 46, 3), e.g. in bal-are (bleat), cf. Gk. βλη-χψ (a bleating), βλη-χίωμαι, Sclav. blê-ja, O.H.G. blâ-جاز (bleat), an onomatopoetic word; breuis (short), corresponding to Gk. βραχίς, Sclav. brázù (quick); ^lab in lab-itur (glides, sinks), lap-sus=lab-tus (past part.), Sk. ^lab, lamb in lâmb-atê (he sinks, falls).

§ 73. Momentary sonant aspirated consonants.

Note 1.—f may represent any of the aspp., and is placed mainly in initio; medially b occurs instead of f; yet rūfu-s (red), scrofa (sow), Afer (African), sifilus and sifilare (Fr. siffler, Zeitschr. xvi. 382) bes. usual sibilus (whistling, piping), sibilare (to whistle, pipe), etc., with medial f betw. vowels, according to the principles of the other Italian langg., whose influence perh. made itself felt in these words (Corss. Krit. Nachtr. p. 194, sqq.). In signi-fer, pesi-fer, and the like, f evidently arises from the perceptible connexion with ferre, whilst in ama-bam, etc., fr. ^fu (fu, etc.), origl. bhu was no longer felt.

Note 2.—ch, th, ph, are not Latin but Gk. sounds, which did not come into use till a comparatively late period, and are yet unknown in the earlier lang. Further details as regards the history of these ways of spelling belong to the special gr. of Lat.

1. Origl. gh=Lat. g, gv (gu), v, h, f.

Lat. g=origl. gh, e.g. ^ger, gra, in ger-men (bud),=Lith. žel-mû, st. žel-men- (sprout), grâ-men (grass), origly. a side-form of ger-men, cf. O.H.G. gruo-ni (green), gra-s (grass), Sk. hâr-it-, har-itâ- (green), Zend zairita- (yellowish-green), Gk. χαο-û (green, grass), O. Bulg. zel-enû (green), Lith. žel-ti (grow green,
wax), žāl-ias (green), žol-ē (grass, greens), origl. ghar, ghra § 73. (be green, yellow, grow green); gra-đu-s (pleasant), cf. Osk. Umbr. her (wish), χαρ-ις (grace), χαλρω, i.e. χαρ-ις (rejoice), Sk. har-yămi (love, desire), Germ. gar (desire), e.g. in O.H.G. gēr-ōn (desire), origl. ghar, ghra; grando (hail) bes. Sk. hrăd-ună, Gk. χάλαξα, i.e. χάλαξ-τα, χάλαξα (v. § 29, 1), origl. root therefore ghrad; except before r and in ger-men Lat. g=gh is confined to the middle of words; ang in ang-o (throttle, kill), ang-ustus (narrow), ang-or (pain), ang-ina (quinsy), origl. angh, Gk. ἀγχ ἀχ in ἀγχ-ω, ἀχ-υμαι, ἀχ-ος, Sk. ah, āh, Goth. agg, origl. agh; lig in lig-urio, li-n-g-o (lick), origl. righ, Sk. rih, lih, Gk. λίχ in λεόχ-ω, λίχ-νος, Goth. lig; mig in mi-n-g-o, mēio, for *migio, origl. migh, Sk. mih, Gk. μιχ in δ-μιχ-ω, ὁ-μυχ-λη.

Lat. gu (gu), v=origl. gh (cf. § 72, 1, and § 77, 1, a), e.g. angu-is (snake), angu-illa (eel), cf. Gk. ἀγχ-ις (viper), ἀγγ-ελυς (eel), Sk. ah-is, i.e. *agh-is, Lith. ang-is (snake), ung-urys (eel), O.H.G. unc (snake); in nix (snow) i.e. *nigos fr. *snigh-s, gen. niu-is for *nigu-is, *snigh-as, is found—as also we see fr. Lith. snig, in snig-ti (to snow), snęg-a-s (snow), and Gk. νίφ-α (snow, acc.), νίφ-ει (it snows)—an origl. snigh as a basis, which is clearly shown in Sk. snih (be moist); breu-is (short) for *bregu-is, Gk. βραχύς; leu-is (light) for *leguis, cf. ἐ-λαχύς, Sk. laghu-s. In breu-is and leuis the correspondence of v to gu ought prob. to be explained as occurring through change of origl. gh to gv, but rather through the introduction of a secondary i into the previously existing stems bregu-, legu-, =braghu-, raghu-. Nevertheless even thus the origl. gh is involved in the v, because the gh, or rather its Lat. equivalent g, has become assimild. to the v.

Note.—Therefore g may represent both origl. gh and g; in such cases as mag-nus (great) bes. μεγ-ας, ego (I) bes. ἐγώ (§ 64, 1), we must not permit ourselves to determine that Lat. g is =origl. gh, merely on account of Sk. mah-ánt-, ahám,
§ 73. since the corresponding Goth. fms. mik-iks, ik, show the unasp. conson.

Lat. _h_ = origl. _gh_, esp. _in initio_, very rarely _in medio_, e.g. _hiem-ps_ (winter), cf. Gk. _χιών_ (snow), _χείμα_ (storm), _χειμών_ (winter), Sk. _himá-s_ (snow, cold), Sclav. _zima_ (winter, cold), Lith. _žėmė_ (winter); _homo_ (man), earlier _hemo_, st. _homen-_, cf. Goth. _guna_ (man), st. _guman-_, Lith. _zmu_ (snow, cold), Sclav. _zima_ (winter, cold); _homo_ (man), earlier _hemo_, st. _homen-_, cf. Gk. _γυνή_, _ημι_ (woman), _hemen-_, cf. Goth. _guma_ (man), st. _guman-_, Lith. _zmu_, st. _zmen-_ (mankind), which collectively point to a f.f. _ghanam-_; _holus_, _hétus_, _heluola_ (greens), _vghar_ (be green), cf. _χλο-ν_, Sk. _hár-ita_ (v. sub _g=gh_); _haed-us_ (he-goat, Cod. Medic. _Vergili_), cf. Goth. _gaits_ (f. she-goat), O.H.G. _geis_ , the initial conson. of this word was therefore _gh_; _veh_, pres. _ueh-o_ (carry, draw), _vagh_, pres. _vagh-āmi_, Sk. _vah_, pres. _vāh-āmi_, Zend _vaz_, pres. _vaz-āmi_, Gk. _Φεχ_ in _Φοχ-ος_ (waggon), Goth. _vag_ in _ga-(_)vig-a_ (move), _vig-s_ (way), Sclav. _vez_, pres. _vez-q_, Lith. _vez_, pres. _vez-ū_.

The _h_ easily comes to be entirely lost, e.g. in _anser_ (goose) for _*hanser_, cf. Sk. _hāsā-s_, O.H.G. _gans_, st. _gansi-_, Sclav. _gysi_, Lith. _žasī-s_; _ulus_ for earlier _holus_ (v. _supr._); _uiā_ (way) fr. _*ueh-ia_, _*ueia_ , _*uiā_, _vēh_, cf. the completely analogous Lith. _vėzė_ (track), i.e. _*vežya_, f.f. of Lith. and Lat. word, thus _vagh-yā_; _nēmo_ (no man), fr. _*ne-hemo_, etc.

_Note._— _h_ is often found where it should not be, by false analogy, e.g. _humerus_ for _umerus_, which is warranted by MSS., cf. Gk. _ἄμο-σ_, Sk. _āsa-s_ and _āsa-m_, Goth. _ansa_, st. _amsan-_; in later times _h_ was noticeably often placed bef. initial vowel: _h_ must therefore have fallen out of use in many cases tolerably early.

Lat. _f_ = origl. _gh_, e.g. _fel_ (gall), st. _felli-_, clearly fr. _*felli-_, cf. Gk. _χολ-ν_, _χόλ-ος_, O.H.G. _galla_, Sclav. _žlǔti_, _vghar_ (be green); _for-mu-s_, _for-midus_ (hot), cf. Sk. _ghar-ma-s_ (heat), Scl. _grē-ti_ (to warm), _gor-čti_ (burn), Germ. _warm_ for _*gwarm_ fr. _*gar-m_, all of which point to a _vghar_ (on Gk. _θερ-μός_, _θερ-ομα_, v. _supr._ § 64, 2. n.); _fra-gra-t_ (fragrar, emit odour), provided it really comes from a redupln. of _vghra_, cf. Sk. _gi-ghrā-ti_, _ghrā-ti_ (stinks,
Latin. Consonants.

Benf. Or. u. Occ. iii. 69) ; *fu-tis (tub), *fu-tiis (unstable, cf. Curt. § 73. Gr. Et.² no. 203, p. 156), *fu-α, fundo (pour), cf. Gk. *χύν in χέF-ω, Teut. gu-t, in Goth. giut-an (pour).

Since f and h correspond to origl. gh, and h easily disappears altogether, we can explain such forms as *faedus, *fēdus, bes. haedus, aedus, ēdus (cf. geīz) ; folus bes. holus and olus (*γαρ) ; *fōtis bes. hostis (foe; Goth. gasts, guest, points distinctly to the origl. initial gh ; in both langg. the meaning has been developed in divergent lines, cf. Corss. Krit. Beitr. 217 sqq.) ; fördēum bes. hordeum, prob. for *horteum, *horsteum, cf. O.H.G. gersta, Gk. κριθή for *χριστή (§ 68, 1, d ; on this word cf. Corss. Krit. Nachtr., p. 104 sqq.) ; festūca (stalk, switch) bes. haste (spear), cf. Goth. gaads (thorn), O.H.G. gart (thorn), *gartyja (gardea, kertia, gerta), initial origl. gh therefore ; and the like. Cf. the change fr. gh to f in cases such as Engl. enough (pron. inūf), A.S. genōh (genug) ; laugh (pr. läf), A.S. hleahhan, Goth. hlahyan (laugh), etc.

Note 1.—No ex. of b=origl. gh seems to be found.

Note 2.—The origl. *ghar (be green) is found also in fms. ger (germen), gra (grāmen), hel (helus), hol (holus), ol (olus), fol (folus), and fel (fel). In the other langg. also the feeling of relationship of the different words which spring from this root has been lost.

2. Origl. dh=Lat. d, f, b.

Lat. d = origl. dh, e.g. mediu-s (middle-) = origl. and Sk. mādhya-s, Gk. µέσος, i.e. *µεθας, Goth. midjī-s ; aed-es (house, origly. fire-place, cf. aes-tus, aes-tas, fr. *aed-tus, *aed-tas), ëidh, origl. Gk. αίθ-ω, Sk. indh, cf. O.H.G. eit (fire) ; uidua (widow), cf. Sk. vidhavā, Goth. vidvō.

Hence it arises that the origl. roots da, dha (give, set), may become intermixed, e.g. ab-do (do away, hide), con-do (found), cre-do (believe), belong not to da-re (give), but to a root lost in its uncompounded fm., corresponding to Gk. τιθ-η-μι, Sk. dá-dhā-mi, O.H.G. tuo-m, cf. Sk. çrad-dadh-āmi (believe) ; of the coin-
§ 73. Cidence of the origl. *da, dha (as in Zend), we find proof in 
*dvema = Sk. and origl. *vamas dadhati, 
*tathya, dat therefore stands here most likely as representative of dha, Gk. *te, not of *do, Gk. *do; further, *do which has become 
like a sf., e.g. in ali-du-s, ari-du-s, sordi-du-s, is prob. to be 
referred to this root, as the similar roots also in Lat. are elsewh. 
still practically used as suffixes (e.g. laua-cru-m, ludi-cru-s, ala-
cris, uolu-cris, cf. *kar (make); late-bra, *fune-bri-s, cf. *bhar, 
ferre, etc.). In uncompounded words *dha is in Lat. *fa, *fe; 
v. post.

Note.—r for d fr. d is altogether sporadic, in meri-dies (mid-
mit-tag, Sk. madhyānna-s fr. madhya-, medius, and ahan-, day); 
in the case of ar=ad (ar-uorsus, etc.), the comparison with 
words of the kindred langg. is not easy (cf. regular change of 
d to r in Umbrian).

Lat. *f=origl. *dh, e.g. *fūmus (smoke), cf. Sk. dhūmās, Lith. 
dūmai (pl. n. sing. would be dūma-s), Selav. dymū, O.H.G. *toum, 
Gk. *θύ-os (burnt sacrifice), *dhu; fores (pl. door), foris (passage), 
foras (outwards), cf. Gk. θόπα, Goth. dāur, O.H.G. *tor, *turi, 
Scl. ąverī, Lith. durys, Sk., however, dvār-m, dvār-, Ved. dur-
with d, not dh, to which the S.- and N.-European langg. point; 
fer-us, fer-a, fer-ox (wild), cf. Gk. *θύρα, *θύρ-ouv; *for-mus (fast), 
frē-tus (trusting to), frē-num (bridle), for-ma (shape), cf. Sk. 
ahar-īmān- (id.), *dhar (hold); *fio=*feio (become), f.f. dhayāmi, 
*dha (set, do), Gk. *θε, Goth. *da, from which also the secondary 
*fac is formed (fac-io, make), likewise *fā-ber (wright), st. 
*fā-bro-, cf. Sk. dhā-tar- (founder, ordainer; Kuhn, Zeitsch. xiv. 
229 sqq.).

In rūfus (red)=Goth. raud-s, f.f. rāudha-s, *rudh, medial f 
stands also for origl. *dh, whilst rub-*er (red), rub-igo (rust), are 
regular, and show b for f (v. supr. n. 1), but collateral raud-us 
(clod), origl. *rudh, cf. Sk. rudh-irā-m (blood), Gk. ἐ-πυθ-πός, and 
hence we find this root in Lat. as rud, *ruf, rub (for rutilus, v.
Cf. the ⟨f⟩-like pronunc. of th in Eng. and θ in mod. Gk.; § 73. in Russian Gk. θ=⟨f⟩ in pronunciation.

Lat. b=origl. dh in medio, e.g. rub-er, st. rub-ro=ἐ-ρυθ-ρό-, Sk. rudh-i-rá-, origl. rudh-ra-, √rub, Sk. rudh, Goth. rud, O.H.G. rut, Scl. rūd (be red); über (udder), i.e. *ouber, Gk. οὔθαρ, Sk. ádhar-, ádhas-, ádhan-, M.H.G. üter, iuter, root-syll. origl. audh; über (adj. rich), i.e. *oiber, cf. Sk. édh-até (increases), √idh (Walt. Zeitschr. x. 77); uruber (word)=Goth. waúrd, H.G. wort, f.f. vardha-m, cf. Lith. vârda-s (m. name); barba (beard), stands bes. Norse bardhr, H.G. bart, Lat. b=Germ. t, d, must be der. fr. origl. dh.

3. Origl. bh=Lat. b, f, h.

Lat. b=origl. bh in medio, e.g. ambō (both)=Gk. ἄμφω, cf. Sk. ubehāu, earlier ubehā, Goth. bai, nt. ba (with loss of init. sound), Scl. oba, f.f. of st.=ambha-; lubet (pleases), Sk. √lubh (desire), Goth. lub (in liub-s, dear, -lubō, love, etc.); nēbula (mist), nūbes (cloud), Gk. νεφέλη, νέφος, Sk. nābhas (cloud, sky), O.H.G. nēbal, Scl. nebo (sky); -bi in ti-bī, i-bī, (c)u-bi, corres. to Sk. -bhyaṁ, sf. dat. sg. (only preserved in certain cases, e.g. tu-bhyaṁ, -bhya=Lat. ti-bī); -bus, sf. dat. abl. pl.=Sk. -bhyaς, cf. Gk. -φίν, both alike containing particle bhi: √fu in verb. fms. composed by it begins with b, e.g. ama-bam, ama-bo, for *ama-fam, *ama-fo (v. post. "conjugation").

Lat. f=origl. bh, e.g. √fa in fa-ri (speak), fā-tum (utterance, fate), origl. bha, cf. Gk. φα in φη-μλ, φω-νή, φά-τις, Sk. bhāς (speak); √fer, pres. fem-ο (bear), cf. Gk. φερ in φερ-ω, origl. and Sk. bhar, pres. bhar-άμ; √fu (be) in fu-turus, fu-am, Sk. and origl. bhū, Gk. φυ in φύ-ω, φυ-τός; √fug in fug-iō (flee), fug-a, cf. Gk. φυγ in φεύγ-ω, φυγ-ή, Sk. bhug, Goth. bug, pres. biuga, origl. bhug; frater (brother), origl. bhrātar-s, cf. Gk. φράτωρ, Sk. bhrātā, Goth. bróðar, etc.

Lat. h is very rarely=origl. bh; e.g. in hor-da bes. for-da (bearing), √fer, origl. bhar; in mi-hī, -hi stands for -bi, which we should have expected, as also in Sk. mà-hyam for *ma-bhyam,
§ 73. cf. ti-bi, Sk. tu-bhyam; in both langg. the initial m seems to have had a dissimilating influence on the bh. We must not hence venture to assign a fm. ma-hyam to the origl. lang., for the origl. could only be sounded ma-bhyam (or ma-bhiam, ma-bhiiyam, cf. § 3), a f.f. which diverged later into Sk. ma-lyam, Lat. mi-hei; in dat. pl. of a-st., in -is fr. -ois, -ais, origl. -a-bhyams, -a-bhyams (v. ‘decl.’), origl. bh has entirely disappeared, perh. through intervening h (cf. mihi); so too prob. ama-ui for *ama-fui, √fu, origl. bhu (be).

Note.—In some exx. a Lat. tenuis stands apparently for an asp.; these are rutilus (fiery red) bes. Sk. √rudh, Gk. ἰδή; pati (suffer) bes. Gk. παθέωv; pútére (stink) bes. Gk. πῦθε-εσθαί; putáre (calculate) bes. Gk. πυθέσθαι (learn), otherwise distinct from it in use; sapiens (wise) bes. Gk. σοφός; latére (escape notice) bes. Gk. λαθέωv, Sk. √rah for origl. radh. Cf. L. Meyer, Gr. of Gk. and Lat. Langg., i, p. 51; G. Curt. Gr. Et., p. 374, Kuhn’s Zeitschr. ii. 355; Grassmann ap. Kuhn, id. xii. 86 sqq.; Corss. Krit. Beitr. p. 75 sqq., 79 sqq. Herein we concur in the conclusions of Curt. and Corss., which amount to this,—that in the above-named words also t and p are not=origl. dh, bh, Gk. θ, φ. ru-tillus (cf. fu-tillis, mu-tillus) seems to have sf. -tiô, and to stand peculiarly for *rud-tillus, *rus-tillus (v. post.), like early Lat. ad-gre-tus, e-gre-tus, for *gres-tus, *gres-tus (class, gressus, √grad, gred, in grad-ior, step), pa-tior however is a later fmn. fr. √pa, which is otherwise formed in Gk. Πα-θ, Πεν-θ (πενθός, suffering, grief); to the origl. existence of the shorter root-fm. pa, πα, the fns. πέν-ουαι (am in want), που-έω (suffer, labour), point; therefore τε-ν, το-ν, give evidence to πα, just as γε-ν, γο-ν (beget), do to a real pre-existent γα (n is a common secondary root-termin.). The same explan. holds good in puteo, where t belongs to the origl. root as little as does θ in τυ-ουαι; the root is pu, which clearly occurs in Lat. pūs, gen. pūris (matter), i.e. *pou-os, *pou-es-os, f.f. pav-as, pav-as-as; cf. πῦ-ου (id.), Sk. pū-yatē (becomes foul, stinks), pū-yas (matter), Lith. pū-li (be-foul), O.H.G. fū-l (foul), f.f. pau-ra-s. Pu-tare fr. putus (pure), lit. =‘make clean, clear,’ and has therefore nothing to do with Gk. πυθέσθαι, Sk. √buḏh, etc.; σοφός stands for *σορνός with unorigl. aspns., cf. suppl. § 62, 3, n. 2. Thus latére alone remains unexplained bes. λαθέωv, a solitary instance, for which we must not try to make good a consonantal change which is otherwise unknown.
CONSONANTAL PROLONGED-SOUNDS.

Spirants y, s, v.

1. Origl. y = Latin j (written i), i.

Lat. j = origl. y, initial and medial, yet not commonly between vowels, and almost only after long vowels, e.g. că-ius, plebē-ius, or when a conson. has assimilated itself to the y, as in āio, māior, mēio (v. post.), e.g. viug, Sk. yuḡ, Gk. ἱγν, origl. yug, in iu-n-go, (join), iug-unm (yoke) = origl. and Sk. yug-um, Gk. ἵγν-όν, Goth. yuk, O.Bulg. igo = *jāg-o; pronl. ɣa in ia-m (already), cf. Lith. yau, Goth. yu (already); ius (broth), cf. Sk. yūša-s, yūša-m ('pease-soup,' 'the water in which pulse of various kinds has been boiled;' Wilson), Scl. iucha; iuuenis (young man), cf. Sk. yūvan-, Goth. yuggs, Scl. yunū, Lith. yainas (young); āio (say) for *ag-io, pres. fmn. in sf. origl. ya, ɣag, origl. ɣagb, cf. ad-ág-iunm (saying), Sk. əh (say); māior (greater) fr. *mag-ior, comp. sf. -ior, earlier -ios, Gk. -ov, Sk. -yās, -iyās, origl. -yans; mēio = *migio, i.e. *mig-yāmi, pres. fmn. in origl. ya, etc.

Lat. i = origl. y after consonn., e.g. med-ius = origl. and Sk. mādhyas, cf. μέσος = *mēθ-yos; patr-ius (father-), origl. patar-ya-s, cf. πάτρ-ος, Sk. pitar-ya-s, st. origl. patar-, sf. ya; siem, siet (1, 3, sg. opt. pres.), origl. as-yā-m, as-yā-t, cf. eiŋν, eiη, fr. *eiŋ-ŋ-μ, *eiŋ-ŋ-τ, Sk. syā-m, syā-t, opt. pres. ɣas (be); capio for *cap-yō, i.e. *kap-yā-mi, pres. in origl. ya, etc.

Not uncommonly y disappears entirely, thus regularly betw. vowels, as, e.g. moneo (remind, warn), f.f. mānayāmi, causative from ɣmen (men-tem, me-min-i), origl. man (think); sēdo (seat, set), fr. *sēdao, *sēdayo, Sk. and origl. sadāyāmi, caus. from ɣsed (edere), origl. sad; further before i and e which stands for i (§ 35, § 38), e.g. capis, capit, for *capyis, *capyit, i.e. kap-ya-si, kap-ya-ti, bes. capio, i.e. kap-yā-mi; obex (obstacle, hindrance), gen. obicis, for *obyex = *ob-yic-s, ob-yic-is, ɣiac (cf. iac-io, ob-ic-iō, ob-ic-io); yet elsewh.
§ 74. after consonn. also, e.g. minor, minus (less), for *min-ior, *min-ius, origl. sf. -yans, compar.-fmmn.; ero, eris, erit, fr. *eso, *esis, *esit, for *eso, *esis, *esiit, f.f. as-ya-mi, as-ya-si, as-ya-ti, pres.-fmmn. through ya of √as, which expresses fut. meaning, cf. Sk. s-ya-mi, s-ya-si, s-ya-ti, Gk. ἐσομαι for *ἐσ-γο-μαί; -bus sf. of dat. and abl. pl. origl. -bhyams, Sk. -bhyas, etc.

2. Origl. s=Lat. s, r.

Lat. s=origl. s. Initially, generally also finally, medially betw. mute consonn.; betw. vowels s passes over into r almost always in the class. lang. Before sonant consonn. s partly falls out (becomes assiml.), partly likewise becomes r (v. 'sound-laws'), e.g. ñed (sed-ere), origl. and Sk. sad, Gk. ἑ, Goth. sat (sit); septem (seven), Sk. and origl. sáptan, Gk. ἑπτά; ñta (stand), e.g. in sta-tus, origl. sta, Gk. στά, Sk. stha; ñter in ster-no (strew), Sk. and origl. star, Gk. στόρ; ñes in es-t, origl. and Sk. as, Gk. ἐσ in ἐσ-τ; ñus (burn) in ur-o, us-tus, origl. us, Sk. uś; -s, sf. of nom. sg., origl. and Sk. -s, Gk. -ς, Goth. Lith. -s, e.g. equo-s, origl. akva-s, Gk. ἐκπο-s, Sk. účva-s; sf. -os, -es, e.g. gen-os, gen-us (race), gen. gen-er-us, gen-er-is, origl. gan-as, gan-as-as, cf. Gk. γέν-ος, *γεν-εσ-ος=γένος, Sk. ján-as, ján-as-as, etc.

Lat. r=origl. s (cf. sound-laws, § 77, 1. f.).

3. Origl. v=Lat. v (in writing undistinguished fr. u), u.

Lat. v=origl. v, e.g. ñid in uideo (see), Sk. and origl. vid, Gk. Φίδ; ñom for *vom in uom-o (spue), Sk. and origl. vam, Gk. Φεμ; ñoc for *voc in voc-are (cry), uóc-em (acc. voice), origl. vak, Sk. vak, Gk. Φέτ; ñeh in ueh-o (carry), origl. vagh, Sk. vah, Gk. Φεχ, Goth. vag; ñol in vol-t (he wills), Sk. and origl. var (uelle); oui-s (sheep), origl. avi-s, Lith. avi-s, Sk. ávi-s, Gk. ἀφις; nouo-s (new), orig. and Sk. náva-s, Gk. νέφο-ς, etc.

Note.—Though quis, quod, anquis, suavis are the usual ways of writing those words, yet here, too, u=v (thus quis, quod, anquis, suavis), because this u is not metrically=vowel.
LATIN. CONSONANTS.

Lat. \( u = \) origl. \( v \) after mom. consonn. and \( n \), e.g. quatuor (four), § 74.
Sk. kätvāras, Gk. τέταπες = *τετάπες, Goth. fideor, origl. kät-vāras; this \( u = v \) seems secondarily to have a force of a conson., whence e.g. the lengthening by position of the short \( a \), expressed in the spelling quattuor; esp. often \( u = \) origl. \( v \) in the origl. st.-fmlative sf. -va = Lat. -uo, -vo, later uu, vu, which in Lat. were sounded -uo (later -uu), fem. -ua, after most consonn., except \( r, l, q \), e.g. al-uo-s (‘the nourishing — ’), \( \sqrt{a}l \) (al-o, nourish); ar-uo-m (‘the ploughed — ’), \( \sqrt{a}r \) (plough); eq-uo-s (horse), origl. \( \sqrt{a}k \) (run), etc.; but uac-uo-s (empty), \( \sqrt{u}ac \); noc-uo-s (hurtful), re-lic-uo-s (left over) bes. re-lik-uo-s, \( \sqrt{n}oc \), lic (altogether usage often wavers betw. \( v \) and \( u \), as aqūa, acuam, bes. aqua; tenvia, genva, bes. tenuia, genua, etc.); con-tig-uo-s (contiguous), \( \sqrt{t}ag \) (tango); de-cid-uo-s (falling off), \( \sqrt{c}ad \) (cad-o); in-gen-uo-s (inborn, free), \( \sqrt{g}en \) (gi-gn-o, gen-us); süd-or (sweat), süd-are (sweat), prob. for *suíd-or, *suid-are (as e.g. gen. senatus for senatuís), and this for *svid-or, *svid-are, \( \sqrt{s}vid \), cf. iðiðo for *σFíδ-ω, Sk. svid-yāmi, O.H.G. swizzan, sweiz, swiz, earlier svit, origl. svid (sweat), etc.

Note.—suós (his) is not = svā-s, but was sounded sovos in the earlier lang. ; accordingly we have also tuís = tovos; in Lat. and in Gk. there is here a step-fmlative of \( u \) to eu, ou (éós, τέός = *seu-os, *teu-os), whilst the other langg. show \( v \).

Not unfreq. \( v \) disappears entirely, thus e.g. se, si-bi (himself), etc., for *see, *svi-bi, fr. st. origl. svā-s; te (thee), ti-bi (to thee), for *tve, *tvi-bi, cf. Sk. tva-m (n. sg.); for origl. initial svā-s, so-occurs regularly (v. supr. § 33); canis (hound) for *cvan-is, cf. κύων, Sk. st. ɣvan, f.f. kvan-; suadeo (recommend) for *suadveo, fr. suavis (sweet) = *suadv-i-s, cf. G. ἰδύ-ς, Sk. svādū-s; deus (god) = *dēus, *dēvo-s, *deivo-s, *dīvo-s, f.f. daiva-s, cf. Sk. dēvā-s, Lith. dēva-s. The later lang. permits frequent loss of \( v \) from betw. vowels, e.g. suus, suum, for earlier (inscr.) souos, souum (*suvus, *suvum); fluunt, earlier (inscr.) flouont; fui = *fiur, and so, too, in other like cases; boum for bouum; prudens fr. prouidens;
§ 74. nōlo = *neuolo; amarunt = amauerunt, etc. Yet novos, ovis, etc., with v preserved, are the only fms. found.


§ 75. Nasals.

1. Origl. n = Lat. n. As in other Indo-Eur. langg., so also in Lat., origl. n bef. gutt. consonn. becomes gutt., bef. labb. it becomes lab., i.e. m, (n = gutt. n, § 4). Exx.: ne (negation), in ne-c, ne-fus, etc., Sk. and origl. na; in-, Umbr. an-, Gk. ἀν-, Sk. and origl. an- (neg. in composn.); /nec in nec-are (kill), noc-ēre (hurt), Gk. ἑκ, Sk. naç, origl. nak; st. noc-ti (night) in noc-te-m, origl. nak-ti-, cf. Lith. nak-tė-s, Gk. st. vνεκτ-, Sk. nākta-m (adv. by night); nāuis (ship), Sk. and origl. nāus, Gk. ναῦς; /gen in gen-us (race), gi-g(e)n-o (beget), Gk. γεν, Sk. γαν, origl. gan; n is common in suff., e.g. origl. -na in pλe-nu-s (full), f.f. prā-na-s, origl. par-na-s, /par (full), na fms. the perf. part. pass., but has also various other functions, e.g. som-nu-s (sleep) for *sop-nu-s, origl. and Sk. sváp-na-s, Gk. ἐπ-νυ-ς; sf. -man, e.g. in *gnō-men, nō-men (name), Sk. nā-man-, origl. gnā-man-; -nti, -nt, fm. 3 pl. vb., e.g. *fero-nti, feru-nti = φέρω-ντι, Sk. and origl. bhāra-nti, etc.

Exx. of change of n to ſ, m, are found in pres. fmn., e.g. iu-n-go (join), /iug, ru-m-po (break), Sk. lu-m-pāmi, /rup, Sk. lup, which in f.f. were prob. yug-nāmi, rup-nāmi; only later did the nasal pass into the root, whereby arose yuṅgāmi, rum-pāmi, i.e. iungo, rumpo.

Note.—On gn v. suppl. § 72, 1, n. 5.

2. Origl. m = Lat. m, e.g. /men in me-min-i (remember), men-tem, mens (mind), moneo (warn), Gk. μεν, origl. and Sk. man (think); mā-ter (mother), μή-της, Sk. mā-tá, origl. mā-tar-s;
\[ \sqrt{\text{mor}} \text{ in mor-i (die), mor-tuos (dead), Sk. and origl. mar}; \sqrt{\text{uom}} \text{ in uom-o (spue) (§ 33), Gk. Feµ, Sk. and origl. vam, etc.} \]

In sff. also \( m \) often occurs, e.g. sf. -men, origl. man, as in *gnō-men, nō-men, Sk. nā-man-, origl. gnā-man; origl. sf. -ma, an intensive, most often forming superl., esp. in combination with sf. -ta, as ta-ma, Lat. e.g. in pri-mu-s, optu-mu-s; -m 1 pers. sg., -mus 1 pl., e.g. (e)s-u-m fr. *es-mi, Gk. ei-µl fr. same f.f., Sk. and origl. ās-mi; feri-mus, Gk. φερο-μεν, Dör. φερο-μες, Sk. and origl. bhārā-masi; -m of acc. sing., e.g. equo-m, Sk. áṣva-m, cf. Gk. ἵππο-ν, with \( v \) for \( µ \), acc. to Gk. sound-laws of termn., origl. akva-m, etc.

Note.—In tene-brae (darkness), prob. for *tenes-brae, *temes-brae, \( \sqrt{\text{tam}} \text{ in Sk. tám-as (darkness), O.H.G. dēm-ar (dawn), etc., } n \text{ has arisen by dissimiln. fr. } m, \text{ to avoid the labialism } *\text{temebrae; in nōnus (ninth) for } *\text{nōmus,*nouimus, cf. nouem (nine), septime bes. septem, decimum bes. decem, primus, etc., the init. } n \text{ has had an assimilating influence; } \text{gener (son-in-law) does not stand for } *\text{gerner on acct. of } γαμβρός (on which cf. § 66, 1, n. 1), because } *\text{gerner would have stood its ground like } nōmer (ploughshare), \text{ also Sk. } āmātar- (son-in-law) proves nothing, because it is a compd. of } āmā (come after) from \( \sqrt{\text{ga}}, \text{ origl. } ga \text{ (gi-gn-ere), and } mā-tar- \text{ (bearing, bringing forth); } \text{gen-er, st. } \text{gen-ero- for } \text{gen-ro-}, \text{ is derived rather fr. } \sqrt{\text{gen}} \text{ (beget), sf. } ra \text{, in this case with auxil. vowel } i, \text{ pronounced } e \text{ bef. } r \text{ (§ 38).} \]

r- and l-sounds.

Origl. r = Lat. r, l. § 76

Lat. r = origl. r, e.g. rex (king), i.e. *rēg-s, origl. rāg-s, cf. Sk. st. rāję (id.); \( \sqrt{\text{rub}} \text{ in rub-er (red), rub-ru-m, cf. } \dot{e}-\text{rho-ρο-ς, } \dot{e}-\rhouθ-ρό-ν, Sk. rūdhi-rō-m, origl. rūdhi-ra-s, rūdhi-ra-m; } \sqrt{\text{rup}} \text{ in ru-m-p-o (break), rup-tu-s, cf. Sk. lūp (rumpere) in lu-m-p-āmi, lup-tā-s, Lith. lup in lup-ťi (flay); } \sqrt{\text{or}} \text{ in or-ior (rise), or-tus, cf. } αρ-νυμ, Sk. and origl. ar; } \sqrt{\text{ar}} \text{ in ar-o (plough), cf. } āp-ōw, Sel. or-γγ, ar-aturm (plough), cf. āp-ατρον, O. Bulg. ar-alo for *or-allo; } \sqrt{\text{fer}}, 1 \text{ sg. pres. fer-o (bear), Gk. φερ, 1 \text{ sg. pres. } φερ-ω, Sk. and origl. bhar, 1 \text{ sg. pres. bhār-āmi; } frā-ter (brother), } φρά-τωp, Sk. bhrațā, origl. bhra-tar-s, etc. } r \text{ is frequent in}
§ 76. stem-formative particles, thus in sff. ro, ru, origl. ra (rub-ru-m, origl. rudh-ra-m); tör, origl. tär (da-tör, origl. da-tar-s, n. sg.); tro, tru, origl. tra; in word-formative particles, i.e. in case- and person-terms., it does not occur.

Lat. $l =$ origl. $r$ (cf. 'sound-laws,' upon Lat. interchange of $l$ with $r$ for purposes of dissimiln.), e.g. $\sqrt{loc}$ (speak) in loqu-or, loc-utus, Gk. λακ, Scl. rek (rek-$q$, loquor), origl. rak; $\sqrt{rue}$ in luc-erna (lamp), luc-em (acc. light), Gk. λυκ, Sk. ruk, Goth. lub, origl. ruk; $\sqrt{rue}$ in lingo (leave), re-lio-tus, Gk. λπτ (λείπω), Sk. rik, origl. rik; $\sqrt{rue}$ in lingo (lick), Gk. λχ (λείχω), Sk. luh, origl. righ; $\sqrt{rue}$ in lub-et (it pleases), Goth. lub (hubs, love), Sk. lubh (desire), origl. rubh; leuis (light) fr. *legu-is, cf. Gk. ε-λαχύς, Sk. laghú-s, origl. ragh-us; plē-nu-s (full), f.f. pră-na-s, parall. fm. to par-na-s, Zend perenō, Sk. pūrṇa-s, i.e. origl. par-na-s, Goth. fulls for *ful-na-s; sollus (whole, Fest.) for *soluo-s, parall. fm. to sal-uo-s (whole), Gk. *ολφω, Sk. and f.f. sár-va-s; $\sqrt{rue}$,uel, in uol-t (he wills), f.f. var-ti, uel-le (will), for *uel-se (v. post), Sk. and origl. var (choose), etc. In st.-formative particles also $l$ is common.

§ 77. Sketch of some Sound-laws which are important for Comparative Grammar.

Medial.

1. Assimilation. We omit here the assimilns. which occur in prepositional compds.; they bear a subordinate meaning for Compar. Gr., and belong to the Special Gr. of Latin. Further, except that they are treated as well known, they are not at all, or only briefly, mentioned.

a. Complete assimiln. of foregoing to following consonn. This occurs after long vowels, after which doubled conson. cannot easily be made audible, and can scarcely be distinguished from evanescence (ejection) of the former conson.; whilst after short vowels the doubling of the conson. is the distinctive mark of real assimiln. As, however, the evaporation of one conson. bcf. another can hardly be conceived of as con-
ditioned in any other way than by assimiln. to the follg. cons., we § 77. likewise treat here of cases where consonn. are lost before consonn.

The doubling of consonn. was not characterized in writing before Ennius; in inscrr. it does not appear in frequent use until after 640 a.v.c.

*Note.—Upon the doubled tenuis in Lat. cf. C. Pauli, Zeitschr. xviii. i sqq., where many words of difficult etymol. are considered. Acc. to Pauli the doubling is not seldom unorigl., and arises ‘through sharpened pronunciation.’


Complete assimiln. of foregoing to follg. consonn. after long vowels; the spelling does not show the doubling in these cases. The assimiln. (dropping out) of d, t, and often n before s, is well known; a foregoing short vowel therefore becomes long, wherein we believe we see an evidence that a doubling of the conson. was once really in existence, e.g. suđsi fr. *suđd-si, pf. fr. suđd-co, etc.; pēs=*pēd-s, cf. pēd-em; milēs, milēs only later, fr. *milēt-s, cf. milit-em; formōsus fr. *formonsus, sf. origl. -vans fr. -vant, whose v disappeared; equōs fr. *equon-s, i.e. acc. sg. equo-m + pl.-sign s; consul bes. cōsul; quotiens=*quotient-s bes. quoties; censor, censeo, bes. rarer cēsor, cēseo, etc. Thus the lang. has sometimes decided early in favour of loss of n, whilst at others the n has stood exclusively for a longer time, and until a later period of written lang.

A follg. j assimilates itself not seldom to precedg. g; j is then written indivisibly, but the foregoing vowel, if short before, now becomes long (cf. § 39, 1), e.g. mā-ior fr. *māg-yor, cf. mag-nus, √mag, origl. magh (wax); ā-io fr. *āg-yo, cf. ad-āg-ium,
§ 77. /ag, Sk. ah, origl. agh (say); mē-īo by dissimiln. (cf. § 38) fr. *mi-yo for *mīg-yo, cf. mi-n-g-o, /mīg/, Gk. μῦχ, origl. mīgh (cf. § 74, 1). Bef. origl. sf. -ya, g remains, because here y changes into i (§ 74, 1), e.g. ad-āg-iu-m, nau-frāg-iu-m. Cf. the extensive loss of consonn. before y with compensatory lengthening in composition, e.g. se(d)-iungo, pe(r)-iero, di(s)-iudico, tra(ns)-ioio, etc. Loss of g bef. v without compensat. lengthening occurs, e.g. in brēu-is for *bregu-is, cf. βραχύς; ēlu-is for *lēgu-is, cf. έλαχύς; niu-is for *nigu-is, cf. nīx=*nīg-s, nīgu-o; accordingly the same process must be assumed in uāu for *uāgu-o, cf. uīxi, i.e. *uig-si, /uīg/ (v. §§ 72, 1; 73, 1).

d disappears bef. v in suāu-is for *suād-uīs, cf. Gk. ιδοῦ-ς, Sk. svādū-s.

Bef. nasals sometimes g, oftener c, disappears (c may also remain and become g, v. c in this section), more rarely without, more often with compensatory lengthening, e was evidently softened to g before it fell out (v. c), e.g. stī-mulus (goad), stī-mulo (I goad), /stīg/, raised a step to stīg (in-stīg-o, urge), nasalized in in-stīn-tus (urged) =*in-stīng-tus, cf. Gk στίχω (prick) =*stíg-yo; ex-ā-men (swarm of bees, rank) for *ex-āg-men, /ag in a-gere bes. ag-men, teg-men, seg-mentum (g is common bef. n, e.g. lig-num, dig-nus, mag-nus, etc.); uānus (empty) fr. *uāc-nus, cf. uāc-uos (empty); dē-ni (ten pie) fr. *dēc-ni, cf. dēc-em; pī-nus fr. pīc-nus, cf. pīx, pīc-is (pitch; pīnus, on acct. of the vowel, cannot be akin to πεῖκ-η, Germ. vieh-te, which point to a /puk/); nc disappears thus in quī-ni (five pie) for *quina-ni, cf. quīnque (five).

Before m, c disappears in lū(e)-men (light), where it is doubtful whether the vowel is simple or whether it is raised in the scale, whether fr. *lūc-men or *louc-, *lūc-men; cs, i.e. x, disappeared bef. m in sē-mestris (six-monthly) for *sex-mestris, prob. also in tē-mo (pole) for *tex-mo, cf. O.H.G. dihs-ila, and Sk. /takš (compose, make).

Bef. m, b disappears, e.g. glūma (shell) for *glāb-ma, cf. glūb-ere (pare); grēmium (lap) for *greb-mium, cf. Sk. gārbha- (masc. id.), etc. (Corss. Krit. N. p. 236).
Bef. \( l, x \) has died out in \( \text{tē-la} \) (web), which, however, can only § 77. be explained as prob. coming fr. *\text{tex-la}, cf. \text{tex-ere} \) (weave).

Bef. \( c, \theta \) and \( t \) disappear in \( \text{hoc} \) for *\( \text{hod-c}, \text{hod-ce} \), cf. \( \text{quod} \); \( \text{ac} \) for *\( \text{at-c}, \text{atque} \).

Bef. \( s \) disappears, thus e.g. bef. \( n \) in \( \text{pō-no} \) for *\( \text{pos-no} \), cf. \( \text{pos-ui} \); \( \text{cē-na} \) for *\( \text{ces-na} \), cf. Umbr. \( \text{ces-na} \); \( \text{penis} \) for *\( \text{pes-nis} \), cf. \( \text{πέος} \) for *\( \text{πεο-ος} \), Sk. \( \text{pās-as} \); in \( \text{penna} \) for earlier \( \text{pesna} \) the assimiln. has been kept, \( \text{pesna} \) stands for *\( \text{pet-na} \) (v. \( c \)), \( \sqrt{\text{pet}}, \text{περ}, \text{Sk. pat} \) (fly), cf. \( \text{praet-pet-es} \) (aues; Fest.), O.H.G. \( \text{fēd-ara}, \text{fēd-ah} \), Gk. \( \text{πτη-λον}, \text{πτε-ρόν} \) (feather, wing), etc.

Bef. \( m, s \) is lost in \( \text{rē-mus} \) (oar), cf. \( \text{tri-resmus} \) (three-oared) Col. Rostr., \( \text{res-mus} \) stands for *\( \text{ret-mus} \), cf. \( \text{έ-per-μός} \); \( s \) is lost without compensatory lengthening in \( \text{Cā-mēna} \) for \( \text{Cas-mena} \), \( \sqrt{\text{cas}}, \text{cf. car-men} \), Sk. \( \sqrt{\text{gas}}, \text{gās} \) (count, say).

Bef. \( n \) and \( m, s \) also becomes \( r \). v. e.

Bef. \( l, s \) is lost in \( \text{corpu-lentus} \) for *\( \text{corpus-lentus} \), cf. \( \text{corpus}, \text{corpor-is} \).

Bef. \( d, s \) is lost in, e.g. \( \text{iū-dex} \) for *\( \text{iūs-dex} \), \( \text{i-dem} \) for *\( \text{is-dem} \), \( \text{di-duco} \) for *\( \text{dis-duco} \), etc., but it remains in \( \text{trans-duco}, \text{trans-do}, \) bes. \( \text{trā-duco}, \text{trā-do} \), further in cases like \( \text{eius-dem}, \text{cuius-dam} \).

Bef. \( b \), also, \( s \) is lost, e.g. \( \text{tene-brae} \) for \( \text{tenēs-brae} \), and the like; v. post.

Bef. \( d, r \) is lost with compensat. lengthening in \( \text{pēd-o}, \text{pōd-ex} \), bes. \( \text{τερδ-ω} \), Sk. \( \sqrt{\text{pard}}, \text{O.H.G. farz}, \text{Lith. perd} \) (1 sg. pres. \( \text{pērdžu}=\text{*perd-yu} \)).

The change of \( r \) to \( s \) by assimiln. is well known, e.g. \( \text{rūsum, russum} \), bes. \( \text{rur-sum, sū-sum} \) bes. \( \text{sur-sum, retrō-sum} \) bes. \( \text{retror-sum} \), etc.

Bef. \( sc \), consonn. are lost, prob. only to make pronunciation simpler and easier; thus in \( \text{di-sco} \) for *\( \text{dic-sco} \), cf. \( \text{di-dic-i} \); \( \text{po-sco} \) (where \( sc \) became fixed, though origl. only in pres., cf. \( \text{po-posc-i} \)), prob. for *\( \text{porc-sco} \), cf. \( \sqrt{\text{proc}}, \text{prec} \), in \( \text{proc-ax}, \text{proc-us}, \text{prec-or} \), cf. Germ. \( \text{frah, frag} \) (in Goth. \( \text{frah-nan-}, \text{N.H.G. frag-en} \); \( \text{mi-sceo} \) for *\( \text{mig-sceo} \), cf. \( \text{μυγ-νυμ} \) (here, too, has the \( sc \) in Lat. grown into the root).
Similarly _mis-tus_ stands for and bes. _mics-tus, mix-tus_, and this prob. for *_misc-tus_, cf. _misc eo_; _tos-tus_ for *_tors-tus_, cf. _torr eo_ for *_tors eo_, Germ., _durs-t_, Sk. √ _tars_ (thirst), i.e. _tars_, to which prob. belongs _tes-ta_ (crock, jar) for *_ters-ta_ (lit. ‘baked,’ ‘burnt’); cf. _terra_ (dry land) for *_ters-a_.

It is certain that certain groups composed of more consonn. were lightened by the evaporation (ejection) of one of these consonn. Thus after _r, l_, are lost gutt. _c, g_, when folld. by _t_ or _s_, e.g. _sar-tus_ for *_sarc-tus_, cf. _sarc-io_; _tor-tus_ for *_torc-tus_, cf. _torqu- eo_; _ul-tor_ for * _ulc-tor_, cf. _ulc-iscor_; _in-dul-tus_ for * _in-dulc-tus_, and this for * _in-dulg-tus_ fr. _in-dulg eo_, and so others; _sar-si_ for * _sarc-si_, cf. _sarc-io_; _tor-si_ for * _torc-si_, cf. _torqu-eo_; _mul-si_, _mul-sus_, for * _mulg-siy_ * _mulg-sus_, fr. _mulg-tus_, cf. _mulg-eo_; _spar-si_ for * _sparg-si_, _spar-sus_ for * _sparg-sus_ fr. _sparg-tus_, cf. _sparg-o_, etc.; _par-simonia_ fr. * _parc-simonia_, like the underlying fr. _par-sus_ fr. * _parc-tus_, cf. _par-co_; thus also _ursus_ for * _urc sus_ fr. * _urctus_, cf. Gk. ἄρετος, Sk. Ἰκσας.

On the other hand, _res_ was tolerated in _fine_, in _arx, merx_.

Also the combinations _s-br, r-br_ are avoided by the evaporation of the _s, r_, bef. _b_, e.g. _mulie-bris_ for * _mulier-bris_ (or * _mulies-bris_; _fune-bris_ for * _funes-bris_ bes. _funer-a, funus_; _tene-brae_ for * _tenes-brae_, * _temes-brae_, (§ 75, 2, n.); _fe-bris, he-bris_, for * _fer-bris_, √ _fer_ (in _fer-uor_, etc.), origl. _ghar_ (§ 73, 1; Corss. Krit. Beitr. 204 sqq.; Ebel, Zeitschr. xiv. 78; cf. L. Meyer, Comp. Gr. ii. 235, 241). Similarly in above-mentioned _tos-tus_ for * _tors-tus_, etc. _Quintus_ for _Quinc-tus_ is late, cf. common _Quin-tius_ bes. later _Quin-tius_; the same holds good in _au-tor_ for _auc-tor_ fr. *aug-tor_, etc. Yet it cannot be doubted that _c_ was lost bef. _t_ sporadically even at an earlier period of the lang. in such cases as _in-uitus_ fr. * _in-uc-(i)-tus_, √ _uc_, _uec_, Gk. _Fec_ (ἐκ-ών), Sk. _eç_, i.e. _eck_ (will): _in-uitare_ fr. * _in-uc-(i)-tare_, √ _uc_, _uec_ ( _uoc-are_), Gk. _Fep_, Sk. _eçk_, origl. _eck_ (speak), etc. (cf. Corss. Krit. B. p. 4 sqq., and Krit. N. p. 47 sqq. where other views, however, are expressed). Also _Vitoria, Viorius_, are supported.
LATIN. CONSONANTS.

by inscr. as by-forms of Victorius, -a (Corss. Krit. N. p. 45 § 77. sqq.). v. another explanation of inuātare, etc., in § 39, 2.

b. Complete assimiln. of following to foregoing consonn. This branch of assimiln. is well represented in Lat.; thus e.g. t of superl. termn. -timu-s (orīgl. and Sk. -tama-s, retained in op-timus) is assimil. to s in -is-simus = *-is-timus; is, the shortest fm. of orīgl. -yans, which is in Lat. iōs, iōr, ius, is accordingly the compar.-sf. to which the superl. is added, e.g. longis-simus fr. *longis-tumu-s; so too t of -imus becomes assimil. to r and l in those superl. which are fmd. fr. an unraised adj.-stem, e.g. celer-rimus fr. *celer-timu-s, *facil-timu-s, etc., unless these superl. stand (as G. Curt. conjectures in a letter) for *celer-is-timus, *facil-is-timus, *celerstimus, *facilstimus, *celerisimus, *facilsimus.

s is assimil. to r in torr-eo for *tors-eo bes. tos-tu-m for *tors-tu-m, terra for *ters-a, origl. √tars (be dry), as in Germ. dürr-e bes. durs-t; fer-rem, uel-lem, are fr. *fer-sem, *uel-sem, cf. ama-rem for *ama-sem, fac-sem, etc. (cf. Corss. Krit. B. 402 sqq.).

Perh. y has become similar to the preceding consonn. in pres. fmns. with doubled root-termns., as pello, fallo, curro, mitto, etc., though the combinations iō, rio, tio, are ordinary (v. pres.-st.).

v seems assimil. to preceding l in pallor, pallidus, for *pal-uor; *pal-uidus, cf. O.H.G. falo, falau-er, falu-er, Lith. and f.f. pāle-as (fallow—of deer); mōlis, prob. fr. *molvis, *moldu-is = Sk. mardu-s, f.f. mardu-s; sollus (totus) equal to salu-o-s, Sk. sārua-s, Gk. ὅλος for *ὅλος. In these double fmns. (sollus:saluoos::pello: aliōs) we must prob. recognize traces of a mixture of dialects.

t after s becomes assimil. to it, in censor, census, √cens + sff. -tor-, -tu-, cf. Osk. cens-tur, cens-tom = censum. Moreover, assimiln. of t to foregoing s occurs in the many cases where fr. d, t + t arise (subsequently st, cf. 2, Dissimiln.); after short vowels the doubling is expressed in writing as well, after long vowels, and after consonn. we find regularly only one s; yet we find by their side spellings such as fussus, cassus, diuissio, rissus, etc.,—which have therefore a good foundation in the lang.,—

c. Partial assimiln. of foregoing to follg. consonn.

It is well known that bef. mutes mom. sonant consonn. become mute; e.g. ac-tus for *ag-tus, cf. ag-o; scrip-tus, scrip-si, for *scrib-tus, *scrib-si, cf. scrib-o, etc.; in uec-tus bes. neh-o, origl. vagh-āmi, we must assume a representation of origl. gh by Lat. g: origl. vagh-ta-s, Lat. *ueg-to-s, uec-tu-s. On the other hand, sec-are, salic-em, stand bes. seg-mentum, salig-nus, etc.; the sonant consonn. m, n, here change c to son. g.

Lab. moment. consonn. pass into their nasals bef. n: *som-nus, Sam-nium, for *sop-nus, *Sab-nium (cf. sop-ire, Sab-īni, Sab-elli).

The earlier lang. still shows s bef. nasals, softened fr. t, as res-mu-s (rēmus) fr. *ret-mu-s (ē-per-μό-s); pes-na (penna) fr. *pet-na (/pet, fly, v. a).

Quadra-ginta bes. quatri-duo is peculiar; t bef. sonant r has become d.

From origl. tr in Lat. there have arisen sometimes *thr, dhr, br, through the aspirating force of the r (v. supr. Gk., also Zend), (on b as a representative of origl. dh, v. § 73, 2), e.g. consobrinus (cousin) for *sosbrinus (s bef. b is lost regularly, v. sup.), and this for *sosdhrinus, *sothrinus, *sostrinus, fr. *sostor-inu-s, st. *sos-tor-, usu. *sosor-, soror- (sister); salābris fr. *salus-bris, and this for *salus-dhris, *salus-thris, *salus-tris, *salut-tris (salus, salut-is). Cf. Ebel, Zeitschr. xiv. 78; Kuhn, Zeitschr. xiv. 222, xv. 238. On the other hand, Cors. Krit. N. p. 186 sqq.
d. Partial assimilation of following to foregoing § 77. consonants. This takes place esp. in the case of t, which, after nasals and liquids, commonly changes into spir. s; the same tendency is seen after gutt. (after c),—the latter occurs also in Sk. (v. § 52, 2, n. 2); e.g. man-sum for *man-tu-m (man-eo); in Leu-cesie—important on actct. of eu, v. § 36—(voc.; title of Iuppiter) for *leucetie, fr. *Leucentie, cf. Leucetios, Loucetios, for *leucent-ios, *loucent-ios, further fnm. fr. *leucent-, loucent-, pres. part. act. fr. *leuc-o, *louc-o, f.f. rauk-ami, √luc, origl. ruk (Corss. Krit. B. 471); t has become s after origl. n, which afterwards was lost, in the same way; pul-su-s for *pul-tu-s (pel-lo, pe-pul-i), spar-sus for *spar(y)-tu-s (sparg-o), etc.; but by their side occur ten-tu-s (and ten-su), sepol-tu-s (sepel-io), tor-tu-s for *tor(o)-tu-s, (torqu-eo), etc.; *mac-simu-s thus is for *mag-timu-s (mag-nus; cf. op-timu-s); fixus, i.e. fic-su-s, for *fig-tu-s (figo); noxa, i.e. *noc-sa, for *noc-ta (noc-eo), etc., bes. ac-tu-s (ag-o), fic-tu-s (√fig in ft-n-g-o), and many others with retained t.

Regularly t does not pass into s after n, when nt belongs to one and the same word-formative particle, e.g. feru-nt, fere-nt-em, etc. (yet cf. above-mentioned Leucesios for *Leucentios).

Lapsus for *lap-tu-s, *lab-tu-s, is singular (cf. lab-i), bes. scrip-tu-s (scrib-ere), cf. Corss. Krit. B. 420 sqq. (Ebel, Zeitschr. xiv. 245 sqq. here assumes an inserted s: *lap-stus, *man-stum, to which t was assimild.)

Note.—Yet mend-ax belongs prob. to ment-iri, according to the system laid down by Schuchardt, Vocalismus des vulgär-lateins, Lpz. 1866; cf. however on this point Aufrecht in Zeitschr. ix. 232; Corss. Krit. B. 117 sqq.

e. Change of s to r betw. vowels, or betw. vowels and sonant consonn., also after vowels in termination (in the lang. in question). The sonant consonn. here change the mute s into sonant r. The same process takes place, e.g. in Germ. also (war, wären, for was, wäsen, √was, cf. ge-wes-en, etc.), and in Sk. So, e.g. in gener-is (genus) for old Lat. *genes-os; maiiores fr. *maiores; erat fr. *esat, √es, etc.;
§ 77. ueter-nus fr. *uetes-nus (uetus, ueter-is); car-men fr. *cas-men, cf. Old-Lat. Cas-mena, *cas; diur-nus, ho-dier-nus, from an otherwise lost st.*dios-, *dies = origin. divas (in dies, diei, the final s of the root has been lost), etc.; arbor for earlier arbos; amor fr. *amos, *amo-se, etc. In fine this r for s is caused through analogy of the other fms. (arbor-is, amar-is). Betw. vow. s has remained but rarely, e.g. nasus, cf. Sk. nas, ScL nos, etc., miser, uasa, posui; regularly s only remains instead of ss, e.g. casus for cassus fr. *cad-tu-s, etc. (v. b).

f. Loss of conson. betw. vow. Here too we see a kind of assimiln., in that sonant conson. become thereby similar to the surrounding vowels, and are swallowed up by them, so that only the attendant accent remains.

In the Romance langg. this process is very common (e.g. ducatus, It. ducato, Sp. ducado, Fr. duché). The commonest case is the loss of y and v, as moneo, monës, fr. *moneyo, *moneyis, f.f. mänayäm, mänayasi; amasti fr. *amaisti, amaistì; fluont, fluunt, fr. flouont, etc. Exceptionally s has been lost betw. two vow. (Corss. Krit. Beitr. 464 sqq.), thus e.g. in vër (spring) fr. *veser, cf. Gk. ἔσπ for *Fēspar, Lith. vasard (summer), Sk. vas-antá-s (spring), O. Bulg. ves-na; uis, uim, bes. uires, virium, st. uisi-, uiri-; prob. through analogy fr. origin. *divas- arose a fm. diës, diei, bes. ho-dier-nus, fr. *dies-no-s; fr. origin. and Sk. nábhas-, nûbes, nûbi-s; fr. origin. and Sk. sadas- (cf. Gk. ἔς), sèdes, sèdi-s, and other like forms. Further, loss of origin. bh, Lat. f, b, has certainly occurred in ama-ui for *ama-fui, etc.; in dat. pl. e.g. eqûis, f.f. akva-bhya(m)s (v. § 73, 3). On the doubtful loss of c betw. vow., cf. § 39, 2; § 77, a, sub fin.; on loss of h, cf. § 73, 1.

g. Evident insertion of conson. betw. concurrent conson. The change fr. m to mp, for the accommodation of m to the follg. s, t, is well known; it occurs in the best MSS. (e.g. in Cod. Medic. Vergili), e.g. hiem-p-s, sum-p-i, sum-p-tus, etc. Bef. the s, t, m became an audible conclusion, i.e. changed to mp.

2. Dissimilation.

t, d, before follg. ð, change into s (as in Zend, Gk., ScL.-Germ.),
e.g. eques-ter, pedes-ter, for *equet-ter, *pedet-ter, cf. equit-is, § 77.
pedit-is; es-t, es-tis, for *ed-t, *ed-tis, cf. ed-o; claus-trum for
*claud-trum, cf. claud-o; st. potes-tātī- (potesatos) for *potens-tātī-
fr.*potent-tātī-, st. potent- (potens) +sf. -tātī-, etc.

Likewise through the striving after dissimiln. -ātī-s is inter-
changed with -āri-s; the latter is found in those cases where the
word-st. to which this secondary sf. is added contains an l, e.g.
mor-tali-s, but uolg-ari-s, popul-ari-s, epul-ari-s.

In the dislike of the immediate succession of two like sounds
is found also the cause of the contraction of two like or similar
consonn., which are separated by only one vowel, into one,
through evanescence of the intervening vowel (cf. Gk. § 68, 2;
a similar phenom. in M.H.G. has been mentioned by me in
Kuhn's Zeitschr. x. 160); thus consuētūdō for *consuēti-tūdō
(con-suētus)-, st. aestātī- for *aestitātī- (aestus)-, st. nūtrīc- for
nūtrī-trīc- (nūtrī-re), stipendium for *stipī-pendium (stip-s, stip-is),
uenēficus for *uenēni-ficus (uenēnu-m), etc. (L. Meyer. Comp. Gr.
i. 281).

Initial.
§ 78.

In Lat. more than in the other kindred langg., where loss of
initial consonn. occurs in the main only sporadically, initial
consonn. are exposed to evaporation: of two initial consonn.
the former often falls away, yet even one single conson. is found
to disappear bef. a follg. vowel (c bef. u).

Thus no Lat. word begins with sn, sm, sr; where these combi-
inations origl. occurred initially, the s is lost, and only the
second conson. remains, e.g. nix, niuis, fr. *snig-s, *snigv-is (v.
supr. § 72, 1), cf. Zend √sniz (snow), O. Bulg. snēg-ū (snow),
Lith. snig-ti (snow, v.), snēg-as (snow, n.), Goth. snaiv-s (snow);
nurūs (daughter-in-law) fr. *snurus, cf. O.H.G. snur, Sk. snušā,
me-mor (mindful) fr. *sme-mor (cf. spo-pond-i, ste-ī for *ste-sti,
etc.), and this fr. *sme-smor, as Sk. and origl. √smar (bethink;
on √flu̇=origl. sru, v. § 71, 3 n.).

Neither does initial vr, vl, occur in Lat., e.g. laqueus (noose),
cf. Goth. vruggō (sling), *vriggan (wring, wind); lacer (torn),
§ 78. cf. ἰάκος (rag), Αιολ. βράκος, i.e. Φράκος, Sk. vəraʃ, i.e. vrak (tear); radix (root), cf. ἰζα, Lesb. βριζδα, i.e. Φριζα, *Φρο-ya, Goth. vaĩrts (root), O.H.G. wurza, wurzala, f.f. of root therefore = vrad, etc.

Bef. f, s has disappeared in fallere (deceive) bes. σφάλλευ, fungus (id.) bes. σφόγγος, funda (sling) bes. σφενδόνη, ὄδε (lyre) bes. σφίδη; on the conjectured loss of s bef. p, v. Corss. Krit. B. 457.

More singular, on the other hand, are cases like teg-o (cover) for *steg-o, cf. i-steg-a for *in-steg-a (cover), Gk. στέγ-ω, στέγ-η, bes. τέγ-η, Lith. stōgas (roof), in Germ. likewise the s is lost, cf. deck-en, dach; tundo (thump), /tud, bes. Goth. stauta, /stut, but Sk. /tud; taurus (bull), /tūrōs, O. Bulg. turü, but Goth. stiur, Sk. sthūra-s; cau-ere (beware) bes. Goth. us-skav-yan (be wakeful), origl. /skav, etc.; bes. freq. initial st, sc. Whilst, inversely, of sc only the s remains in sirpeus (rush—), sirpea, sirpiculus, -la, (junket), sirpare (bind), bes. seirpus (withe), seirpeus, seirpea, etc., cf. O.H.G. scalaf, sciluf, N.H.G. schilf, and perh. in some others (Corss. Krit. B. 31 sqq.). Also in lā-tum for *tlātum, cf. /tol (tollo), init. t is lost. p bef. l has clearly been lost in lien (milt) bes. Sk. plihān-, pļūhān, σπλήν; perh. in lanx, lance-is (dish), bes. πλάξ, πλακ-ός (flat-, plate), O.H.G. flak; whether lae-tus (glad) is for *plai-to-s, and belongs to Sk. /pri (love, cheer), lau in lau-ere, lauare (wash), stands for *plav, and here a causative fmn. of /plu is seen, may seem doubtful (lau belongs prob. to same root as luo, and not to root plu). Upon loss of c bef. l, which is not yet beyond doubt in my opinion, cf. Corss. Krit. B. p. 2 sqq., Krit. N. p. 35 sqq. On the whole there is still considerable doubt and uncertainty in this branch, because we are confined to a few examples.

It is well known that it was not till historic times that men simplified gn into n, as e.g. in nō-seo, nō-tus, nō-men, fr. older gnō-seo, cf. co gnō-seo, gnō-tus, gnō-men, cf. co gnō-men; narrare fr. earlier gnā-rigare, from same gnā-rus, where the initial conson. is fully preserved, fr. same root as gnō-seo, origl. gna fr. gan (nosse: cf. γι-γνώ-σκω, Sk. יוa, Germ. kan and kna, etc.):
Latin. Consonants.

Nā-tus for earlier gnā-tus, preserved in co-gnā-tus, √gna fr. gan § 78. (gignere), cf. gen-us. The same sound-law, by which an initial gutt. + n becomes n, occurs also in Eng.: the old initials gn, kn, are still noticeably written in Eng. of this day, in words like gnat, gnaw, knowledge, etc., but g, k, are no longer heard. Cf. loss of gutt. bef. nasals medially (§ 77, 1, a).

Similarly at a later period of the lang. st was lost before l (Corss. Krit. B. 461, cf. 149) in st. stleiti-, stleiti-, leiti-, liti- (lis, suit), bes. which we place O.H.G. strit, N.H.G. streit (in st.-terminations, it is true, this does not occur in Lat. words), in Inscr. stil is seen, stil thus becomes l through sl : stlātu-s, lātu-s (broad), which is derived from origl. √star (ster-no, strā-tus, ὁστό-έννυμυ, etc.)—thus the origl. word means “spread”; stlocu-s, locu-s (place), which we refer to Sk. √sthāl, further fmn. of stha, origl. √sta (stand), and others whose derivation is not quite clear.

As suāuis for *suaduis (§ 77, 1, a), so uiginti for *duiginti, cf. duo, Sk. dva; the dropping away of the d occurs nevertheless in Gk. too (eikost), in Kelt. (Erse fich, ficht, i.e. uiginti), in Aryan (Sk. vičāti, Zend vičaiti), and thus dates from the earliest times. If *duiginti had stood its ground to a later time, *biginti would have arisen, as bis fr. *duis, bellum fr. duelum, bonus fr. duonus (duonoro; Epit. Scip. Barb. f.): here through mutual influence b has arisen, as an assimiln. of d and v, since d became assimilated to v as regards quality (labial quality), and v became like d as regards quantity, i.e. became a momentary sonant conson.

Bef. y, d is lost in Ioui, etc., for *Dyouis, cf. Old Lat. Dioue (Ioui), and Osk. Diuvel (Momms. Unterital. Diall. p. 255), Sk. dyāu-s (heaven), Gk. Zeus= √dyeu-s, etc., √du (=dīv, shine). The same loss is seen in Iuno for *Diou-no, fmd. fr. same root (Corss. Krit. N. p. 142).

Even the favourite initial sound qu appears simplified to u in uermis (cf. Germ. wurm) for *quermis, f.f. karmi-s, Sk. krm-i-s, Lith. kirm-ėlė (worm; but cf. G. Curt. Gr. Et.² p. 485 sqq.)
§ 78. so too v appears to stand for gv in vuen (uenire) = *guen for *ge-n (§ 77, 1), further fmn. fr. vga (go), by means of n. At a very late period arose the loss of init. c bef. u in several fms. of interrog. pronn., e.g. in u-bi for *cu-bi or *quo-bi, kept in compd. ali-cu-bi, cf. Umbr. puse (p = Lat. c); u-nde for *cu-nde, kept in ali-cu-nde; u-ter for *cu-ter (compar. fm. st. cu-=quo-), cf. Osk. puiturus-pid (i.e. utrique) with p = Lat. c, Gk. πότερος, earlier Ión. κότερος, Sk. and f.f. ka-tardás.

§ 79. Final.

The Lat. lang., as we have it, generally permits only single conson. at the end of a word, but also groups of two and even three conson., viz. nasal or liq. + mutes; mutes, r, l, m, n+s; s+t, e.g. ferunt, hunc, uolt, fert; scrobs, ars for *art-s, and so in similar cases (but uir for *uirs, quatuor for *quatuors, fr. *uiro-s, quatuor-es), fers (fr. feris), puls for *pult-s (but uis for *uir-s, f.f. varsi, "thou wilt," sal for *sal-s, s lost), hiem(p)s, fersens for *ferent-s, and so in such cases (but nouōs, nouās, for *nouuns, *nouans); the combinations rs, ls, ns, were therefore tolerated in these cases where they stand for rts, lts, nts, i.e. when s alone = ss; est; nasal or liq. + mute + s, e.g. hiemps, urbs, arx, i.e. arc-s, falx, i.e. *fales; indeed our present final conson., for by far the greatest part, did not become final until vowels had evaporated, and were not compressed until vowels had been lost. Yet in no case was a doubled conson. tolerated, in fine, e.g. os, fel, not *oss, *fell, cf. oss-is, fell-is; moreover, the combination of two mom. conson. was not admissible, e.g. lac for *lact, cf. lact-is, and rd, cor for *cord, cf. cord-is; where these combinations should have been final, the latter conson. was discarded.

It was not until Lat. became a fixed written language in classical times that the termn. assumed a more definite existence. The earlier national archaic lang. shows in spelling a great indifference towards final conson. In fact, the consonantal terms. s, m, t, important as they are for word-formm., were sometimes expressed in writing, sometimes omitted, which
we find to be the case in Umbr. also. This fact proves that in § 79.
earlier times (and later also in the unformed branch of the Roman) the final consonants were heard with difficulty, perh. as in many Romance langg. (e.g. d in Span., t, nt, etc., in Fr.). The correct lang. here introduced a fixed rule, after the pattern of the Gk.; the conson. was now either always written (the rule), or regularly discarded (the exception). A few exx. of the unsettled treatment of the termn. have remained in spelling even as late as the classical period.

We will treat separately of the final consonants, origl. s, m, t, since they are most important for grammar.

s is omitted in writing in the oldest inscr. in cases like Tetio, Furio, n. sg. for Tetio-s, Furio-s; Corneli, Clodi, etc., for Cornelis, Clodis = Cornelios, Clodios (Ritschl, Progr. of 12 March, 1861). Yet in the earliest lang. the loss of final s is mainly confined to n. sg. It is well known that even at a later time the poets were wont to neglect final s bef. initial conson., and that the weak pronunciation of final s is otherwise attested. The written lang. in most cases decided in favour of the retention of the s. Nevertheless the wavering betw. retention and loss of final s in 2 p. sg. med. is obvious, e.g. amabaris, amabare; further in magi-s and mage, poti-s, pote, where, at the same time i was dulled to e.

The loss of s was regularly allowed, e.g. in n. pl. masc. of o-st., which in the older lang. still shows the s here and there, e.g. heis, magistreis, etc., bes. hei, magistrei; a later fm., as hi, magistri, was the one afterwards exclusively fixed upon; the same process takes place in gen. sg. fem. of a-stems, e.g. suaes, dimidaes, later ae only is found, etc.

Through evaporation of the vowel of the last syll. s after r is lost, as in puer, uir, quatuor, acer (with auxil. vowel bef. r), for *pueros, *uiros, *quatuores (cf. τέσσαρες), acris; more rarely this occurs after l, vigil for vigilis, *vigils.

m, only faintly audible in fine, is likewise often unexpressed in earlier monuments of the lang., e.g. oino, uiro, duonoro (Epit.
§ 79. Scip.), bes. pocolom, sacrom, etc. In popular diall. this faint pronunciation of final s remains, as later inscr. prove; the written lang., however, firmly maintained the letter in spelling. One effect of the weak pronunciation of final m must here be noticed, viz. that in verse it was not considered a conson. bef. vowels.

Also final n seems to have become only faintly heard, cf. alioqui bes. alioquin and the like (cf. however, Corss. Krit. B. 272).

Origl. final t had in earlier Lat. a weak sound, like a scarcely audible d; accordingly it is freq. omitted in writing, e.g. patre (Epit. Scip. Barb.) bes. Gnaiuod, etc. In classical Lat. d for origl. t was sometimes retained in writing, thus e.g. in ntr. pronl. decl. e.g. quo-d=origl. ka-t, id=origl. i-t, etc. (the spelling in t is rarer in these cases), sometimes completely discarded, as in abl. sg., where d=origl. t has been retained in archaic Lat. only, but was not written in class. Lat., e.g. equo-d, equo =origl. akvā-t, Sk. āçvā-t; in termn. to of imper. t has likewise been lost, e.g. origl. as-tāt, Osk. es-tūd, Lat. esto fr. *es-tōd. Final t in Lat. is not origl., but has become final after vowel-loss, and thus remains in class. Lat., whilst archaic Lat. does not show this t, e.g. it, f.f. *ei-ti, origl. āi-ti; uehīt(i), uehunt(i), *uehonti, origl. vaghati, vaghanti, etc., but archaically dedē= dedet, dedit, and even indeed dedro=dedront, dederunt.

Thus nt also in earlier times and colloquial lang. was barely audible in pronunciation; wherein lies the cause of the double fms. of the later fixed spelling of 3 p. pl. pf., as fecerunt (with entire termn. retained) and fecere (with lost nt and weakened vowel).

The clipping of final consonn. was even more prevalent in Umbr. than in Old Lat.; whilst the Osk. does not show this phenomenon, since there was a generally-received Samnite orthography before the time from which our earliest inscr. date, and the popular variations in pronunciation were no longer followed in spelling.
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