## Bennett's Latin Series

## The Latin Language

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# JOHANNIS FLETCHER 

PER DUO ET VIGINTI
annos Linguae Latinae in Collegio UNIVERSITATIS

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## Bennett's Satin \$erics

## The Latin Language

A HISTORICAL OUTLINE

## OF ITS

SOUNDS, INFLECTIONS, AND SYNTAX

## (susnos)

BY

## CHARLES E. BENNETT

PROFESSOR OF LATIN IN CORNELL UNIVERSITY

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## PREFACE.

This book is a revision of my Appendix to Bennett's Latin Grammar, published in 1895. That book was originally prepared as a series of lectures to advanced students on subjects not covered in any Latin Grammar published in America. The title "Appendix," however, was misleading and gave to many a wrong impression of the purpose and scope of the book, which was in reality written long in advance of the publication of my Latin Grammar and entirely without reference to that work. The new title is more appropriate to the views discussed and the facts brought out; hence the change.

In the revision some dozen pages of old matter have been omitted, while nearly forty pages of new matter have been introduced; but the general plan and scope of the book are unchanged.

I am indebted to Professor J. C: Rolfe, of the University of Pennsylvania, and to Professor Charles L. Durham, of Cornell University, for valuable suggestions made while the book was passing through the press.
C. E. B.

Ithaca, March, 1907.

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## LIST OF ABBREVIATIONS AND SIGNS.

Archiv $=$ Wölfflin's Archiv für Lateinische Lexikographie und Grammatik. Vols. I.-XV. Leipzig, 1884-1907.
CIA. $=$ Corpus Inscriptionum Atticarum. Berlin, $\mathbf{1} 873 \mathrm{ff}$.
CIG. $=$ Corpus Inscriptionum Graecarum. Berlin, 1828 ff .
CIL. $=$ Corpus Inscriptionum Latinarum. Berlin, 1863 ff.
E. L. D. = Lewis, Elementary Latin Dictionary. New York, 1895.

Gr. or Grammar $=$ the author's Latin Grammar. Boston, 1895.
Gröber's Grundriss $=$ Gröber's Grundriss der Romanischen Philologie. Strassburg, 1888 ff.
Keil $=$ Grammatici Latini, ed. Keil. Leipzig, 1855 ff.
Körting, Wörterbuch $=$ Körting, Lateinisch-Romanisches Wörterbuch. 2d edition. Paderborn, 190r.
Marx = Marx, Hülfsbüchlein für die Aussprache der Vokale in positionslangen Silben. 3d edition. Berlin, $\mathbf{1} 901$.

References by § are to the Latin Language itself.
Words marked with a star are hypothetical forms.
Vowels printed without the macron (e.g. $a, e$ ) are short ; for greater precision these are sometimes printed with a breve (e.g. $\breve{a}, \breve{e}$ ).

## CHAPTER I.

## THE ALPHABET.

1. 2. The Latin alphabet is a development of that type of the Greek alphabet known as the Chalcidian. In the widest sense * the term 'Chalcidian' is applied to all the non-Ionic Greek alphabets; in a narrower sense it designates the special alphabet of the Chalcidian colonies of lower Italy and Sicily. These colonies, settled originally from Chalcis in Euboea, date from very early times. Cumae, in fact, is said to have been founded as far back as 1050 b.c. But most of the Chalcidian settlements do not antedate the eighth century b.c. It was probably from the Campanian colonies of Cumae and Neapolis that sometime in the sixth century b.c. the Chalcidian alphabet was introduced into Latium. Special peculiarities of this alphabet are the following :
1. The character $\Xi$ was lacking, X was used as $x$, and $\Psi(V)$ as ch. Lambda, which in Ionic had the form $\wedge$, took in Chalcidian the form V, while Gamma (Attic Г) was C. Besides K, another character for the $k$-sound existed, viz. 9 , called Koppa. For Rho, R was employed as well as $P$, the ordinary Attic form of that letter.

In conformity with its Chalcidian origin the earliest Latin alphabet consisted of the following twenty-one characters: A B C (=g) DEFI(Z) HIKVMNO「? R S TVX.
3. Of these characters, $V$ subsequently became $L$. $C$ in course of time came to be used for $K$, which then disappeared except in a few words: Kalendae, Kaes $\overline{,}$, Karth $\bar{a} g \bar{o}$. For the $g$-sound a new character, G, was invented, by appending a tag to the older C. But permanent traces of the original value of $C$ as $g$,
remained in the abbreviations $C$. for Gāius and $C n$. for Gnaeus. The new character $G$ took the place hitherto occupied by I, which now disappeared. These changes are ascribed, with some degree of probability, to Appius Claudius, Censor 312 b.c. $\Gamma$ was at first open as in Greek, but subsequently became $P$.

The Greek alphabet had no character to represent the sound of $f$, but the Greek Digamma (F) represented a closely related sound, $v$. This F , combined with H (apparently to indicate the voiceless character of the sound, as opposed to that of the Greek Digamma), was introduced into the early Italian alphabets to designate the sound of $f$. An example is FHEFHAKED ( $=$ fefaced, i.e. fecit), in the earliest extant Latin inscription, CIL. xiv. 4123. Later, the $H$ was discarded and $F$ used alone.
4. The Greek letters $\odot(\theta), \oplus(\phi)$, and $\mathcal{Y} \vee(X)$, being aspirates, represented sounds which did not originally exist in the Latin language. These characters were accordingly introduced as numerals, $\odot$ as $100, \odot$ as $1000, V$ as 50 . Subsequently $\odot$ became $C$, and finally $C$. This last form resulted perhaps from associating the character with the initial letter of centum. (1) became first $M$, and later $M$, a change facilitated probably by association with the initial letter of mille.

The half of (1) viz. $D$, was used to designate $500 . \mathrm{V}$ (50) became successively $\downarrow, \perp$, and $L$.
5. In Cicero's day Y and Z were introduced for the transliteration of Greek words containing $v$ or $\zeta$. Previously Greek $v$ had been transliterated by $u$, and $\zeta$ by $s$ (initial), ss (medial), as, Olumpio, sona ( $\zeta \dot{\omega} \nu \eta)$, atticisso ( $\dot{a} \tau \tau \iota \kappa \iota \zeta \omega)$.

The Emperor Claudius proposed the introduction of three new characters, $\exists$ to represent $v($ i.e. our $w)$, ว (Antisigma) for $p s$, and $\vdash$ to represent the middle sound between $\breve{u}$ and $\breve{\imath}$, as seen in optumus, optimus, etc. These characters were employed in some inscriptions of Claudius's reign, but gained no further recognition. See Tacitus, Ann. xi. 14 .

On the alphabet in general, see Kirchioff, Studien zur Geschichte des Griechischen Alphabets. 4th ed., Berlin, 1887.
Lindsay, Latin Language. Clarendon Press. Oxford, 1894. p. I ff.
Encyclopaedia Britannica, Article Alphabet.
Johnson's Encyclopaedia, Article Alphabet.
Sommer, Handbuch der Lateinischen Laut-und Formenlehre. p. 25 ff.
2. In writing $j$ in the Grammar to represent the Latin $i$-consonāns, reference has been had mainly to practical considerations. Typographical distinction of the vowel and consonant sounds of $i$ is absolutely essential to enable the pupil to tell them apart. Where $i$ is written for both sounds there is nothing to show the student that iam is $j a m$; that etiam is et-i-am; or that Ga$i u s$ is $G \bar{a}-i-u s$. Moreover, it is still usual to distinguish between the vowel and consonant $u$, by writing $u$ for the former, and $v$ for the latter. The two cases are perfectly parallel. See Deecke, Erläuterungen zur lateinischen Schulgrammatik, p. 8, Zusatz 2.

## CHAPTER II.

## PRONUNCIATION.

3. Sources of Information. - Our sources of knowledge concerning the ancient pronunciation of Latin are the following:
a) Statements of Roman writers. - Much has been left by the Roman grammarians on the subject of pronunciation, - far more in fact than is commonly supposed. The remains of the grammatical writers as collected and edited by Keil under the title Grammatici Latini (Leipzig, 1855-1880) fill eight large quarto volumes. These writers cover the entire field of grammar, and most of them devote more or less space to a systematic consideration of the sounds of the letters. As representative writers on this subject may be cited: Terentianus Maurus (fl. i85 A.D.), author of a work entitled di Litteris, Syllabis, Metris; Marius Victorinus (fl. 350 A.D.) ; Martianus Capella (fourth or fifth century A.D. ; not in Keil's collection) ; Priscian (fl. 500 A.D.), author of the Institutionum Grammaticaium Libri xviii. Even the classical writers have often contributed valuable bits of information, notably Varro in his de Lingua Latina, Cicero in his rhetorical works, Quintilian in his Institutio Oratoria, and Aulus Gellius in his Noctes Atticae.
b) A second important source of evidence is found in inscriptions. The total body of these is very great. The Corpus Inscriptionum Latinarum, in process of publication since 1863 , consists already of fifteen large folio volumes, some of them in several parts, and is not yet completed. These inscriptions disclose many peculiarities of orthography which are exceedingly instructive for the pronunciation. Thus such spellings as vRPS,
pleps, by the side of vrbs, plebs, clearly indicate the assimilation of $b$ to $p$ before $s$. Even the blunders of the stone-cutters often give us valuable clues, as, for example, the spelling acletarvm for athletarvm, which shows that the $t h$ was practically a $t$; otherwise we could not account for its confusion with $c$. See § 31 .
c) Greek transliterations of Latin words constitute a third source of knowledge. Not only Greek writers (especially the historians of Roman affairs), but also Greek inscriptions, afford us abundant evidence of this kind. Thus the Greek Kıкép $\omega \boldsymbol{v}$ (Cicero) furnishes support for the $k$-sound of Latin $c$; while Aıovía and Ov́àєvтía bear similarly upon the $w$-sound of Latin $v$. The inscriptions are naturally much more trustworthy guides in this matter than our texts of the Greek authors, for we can never be certain that the Mss. have not undergone alterations in the process of transmission to modern times.
d) The Romance Languages also, within limits, may be utilized in determining the sounds of Latin. See Gröber's Grundriss der Romanischen Philologie, Vol. I., Strassburg, 1888 ; W. Meyer-Lübke, Grammatik der Romanischen Sprachen, Vol. I., Leipzig, 1890.
e) The sound-changes of Latin itself, as analyzed by etymological investigation. Modern scholars, particularly in the last fifty years, have done much to promote the scientific study of Latin sounds and forms, and, while much remains to be done, the ultimate solution of many problems has already been reached. As representative works in this field may be cited:

Brugmann, K. Grundriss der Vergleichenden Grammatik der Indogermanischen Sprachen. .Vol. I., 2d ed. Strassburg, 1897.
Brugmann, K. Kurze Vergleichende Grammatik der Indogermanischen Sprachen. Strassburg, 1902.
Stolz, F. Lateinische Grammatik in Müller's Handbuch der Klassischen Altertumswissenschaft. Vol. II., 3d ed. Munich, 1900.

Stolz, F. Lautlehre der Lateinischen Sprache. Leipzig, I894.
Lindsay, W. M. The Latin Language. Oxford, 1894.
Giles, P. A Short Manual of Comparative Philology for Classical Students. 2d ed. London, igor.
Sommer, F. Handbuch der Lateinischen Laut- und Formenlehre. Heidelberg, 1902.
Riemann, O., et Goelzer, H. Grammaire Comparée du Grec et du Latin. Vol. I. Paris, 1897.
Henry, V. Grammaire Comparée du Grec et Latin. 5th ed. Paris, 1894. As special works on pronunciation alone may be cited :

Seelmann, E. Die Aussprache des Latein. Heilbronn, 1885. The most important work on the subject yet published.
Roby, H. J. Latin Grammar. Vol I., 4th ed. pp. xxx-xc. London, i88I. Ellis, Alexander. The Quantitative Pronunciation of Latin. London, 1874. A discussion of special problems.

See also the chapter on 'Pronunciation' in the work of Lindsay above cited.

SUMMARY OF THE EVIDENCE.

## THE VOWELS.

4. A. The consensus of the Romance languages indicates clearly that $\bar{a}$ was pronounced substantially as in English father. In the absence of any specific evidence to the contrary, we may safely believe that $\breve{a}$ had the same sound qualitatively; in quantity, of course, it was less prolonged.
5. E. Long $e$ was probably close, i.e. spoken with the vocal organs (more particularly the tongue and hard palate) nearer together than in the utterance of short $e$. Short $e$, on the other hand, was open, i.e. spoken with the tongue and hard palate relatively further apart. These differences in the pronunciation of $\bar{e}$ and $\breve{e}$ are confirmed by the testimony of the grammarians, e.g. Marius Victorinus (Keil, vi. 33.3) ; Servius (Keil, iv. 42 1. 17); Pompeius (Keil, v. 102. 4). The Romance languages also, though they have lost the original quantitative distinctions of
the Latin, have preserved with great fidelity the qualitative distinctions of the close and open $e$. See § 36.5 . It is to be noted that the relation between Latin $\bar{e}$ and $\breve{e}$ stands in marked contrast with the relation existing between Greek $\eta$ and $\epsilon$. In Greek it was the long $e$-sound ( $\eta$ ) that was open ; $\epsilon$ was close. It should further be observed that in our normal English speech it is unusual and difficult to pronounce a pure $\bar{e}$. We regularly add an $i$-sound and pronounce a diphthong, $e^{k}$, e.g. in fatal, paper, etc.

6: I. I. Long $i$ was relatively closer than short $i$, as shown by the fact that $\bar{\imath}$ appears unchanged in Romance words descended from the Latin, while $\check{\imath}$ regularly appears as $e$. This relatively open character of $\breve{\imath}$ is also indicated by the occasional occurrence of $\breve{e}$ for $\breve{\imath}$ in Latin inscriptions, e.g. tempestatebvs ( $=i b u s$ ).
2. Before the labials $p, b, f, m$, an earlier $\breve{u}$ changed to $\breve{\imath}$ in many words at about the close of the Republican period. This is confined regularly to unaccented syllables. Examples are :

| recuperō | reciperō |
| :--- | :--- |
| lub̄̄dō | libīd̄ |
| pontufex | pontifex |
| lacruma | lacrima |
| maxumus, optumus, etc. | maximus, optimus. |

Quintilian, i. 7. 21, tells us that Julius Caesar was said to have been the first to introduce the new orthography. In i. 4. 8 Quintilian further states that the sound was intermediate between $i$ and $u$. The Emperor Claudius, it will be remembered, endeavored to secure recognition for a special character $(\vdash)$ to represent this intermediate sound, which probably was approximately that of French $u$, German $i u$. This view gains support from the occasional employment of $y$ for $i$ in words of the category under discussion, e.g. CONTYBERNALIS CIL. ix. 2608 ; illacrymant. This $y$ had the sound of $u$. See below under $y$.
7. 0. Long $o$ was close, i.e. nearer the $u$-sound; short $o$ was relatively open, that is, nearer the $a$-sound. This is clearly indicated by the descriptions of the sound as given by the Roman grammarians, e.g. Terentianus Maurus (Keil, vi. 329. 130-134); Marius Victorinus (Keil, vi. 33. 3-8); Servius (Keil, vi. 42 I. 17-19) ; it is further confirmed by the testimony of the Romance languages, which, as in case of $e$ (see above), have faithfully preserved the qualitative character of Latin $\bar{o}$ and $\breve{o}$, while they have lost the original quantitative distinction. See § 36.5 .

Short $o$ should never be pronounced like English ŏ in hot, top, rock, not, etc. English $\breve{o}$ in these words really has a short $a$-sound. Latin $\check{o}$ was a genuine $o$-sound. English ŏbey and melody well exemplify it.
8. U. Short $u$ was relatively more open than $\bar{u}$, as is shown by the frequency with which Latin inscriptions show $\breve{o}$ for $\breve{u}$, as eroditvs, secondvs, nomero. The Romance languages also have $o$ for Latin $\breve{u}$, as Italian sovra (super) ; ove (ubi), etc.
9. Y. In conformity with its origin, Latin $y$ ( $=$ Greek $v$; see § 1. 5) had the sound of French $u$, German $i u$. Cf. Quintilian, xii. 10.27, who mentions the sound as different from any existent in native Latin words. See Blass, Pronunciation of Greek, § 12 .

## THE DIPHTHONGS.

10. AE. 1. The original form of this diphthong was $a i$, a spelling which prevailed till about ioo b.c., e.g. Aidilis, qvairatis in the Scipio inscriptions (CIL. i. 32. 34). The sound was a genuine diphthong (that of ai in English aisle), and continued such throughout the classical period. Cf. the use of $\alpha \iota$ in Greek transliteration of Latin words, e.g. $\pi \rho \alpha i ̂ \tau o \rho$, Kaî $\alpha \rho$. Terentius Scaurus (first half of second century A.D.) bears testimony to the diphthongal character of the sound, when he says (Keil, vii. I6. 9),
$\grave{a}$ propos of the orthography, that $a e$ is a more accurate designation than $a i$, as the second element is an $e$-sound. He thus clearly indicates that there was a second element in the combination, i.e. that the sound was diphthongal. This difference between ai and $a e$, though a real and perceptible one, was probably not very great.
11. By the fourth century A.D., however, $a e$ had altered its character and had become a monophthong. This change had begun in the first century A.D. or even earlier. It originated probably in the rustic and provincial speech, but did not become general till late. Conclusive evidence of the new pronunciation is found in the frequent occurrence in inscriptions of such spellings as Cesar, hec ( $=$ haec), qvestor, etc. But this orthography does not become frequent till after 300 A.D. See Seelmann, Aussprache des. Latein, p. 224 f.
12. $\mathbf{O E}$. The earlier form of oe was oi. But oi regularly developed to $\bar{u}$, e.g. $\bar{u} t i l i s$ for earlier oitilis; $\bar{u} n u s$ for oinos. In a few words oi resisted this change and became later oe, e.g. moenia (yet mūniō), foedus, etc. The sound was a genuine diphthong throughout the classical period. In the vulgar language we find traces of a monophthongal pronunciation in the third and fourth centuries A.D., a change which ultimately became prevalent. The evidence tends to show that $a e$, $o e$, and $e$ in the late centuries became extremely similar in sound, a fact which gives us the key to the hopeless confusion of spelling in our mediaeval Mss. of the Latin writers. Thus we find caelum written as coelum, a spelling doubtless suggested in part by its fancied derivation from the Greek кoî̀os 'hollow '; cèna, 'dinner,' appears variously as caena and coena, the latter spelling being perhaps a result of association with Greek kotvós 'common,' i.e. 'the common meal'; né, the asseverative particle, is often written nae, probably another instance of Greek influence. Cf. vai 'verily.' Other instances of
confusion are cerimōnia for caerimōnia; cemétèrium for coemé-
 caeterī for cèter̄̀ (probably owing to the influence of Gr. каì $\bar{\epsilon} \tau \epsilon \rho о \iota)$; coelebs for caelebs; coecus for caecus. Some of these false forms are unfortunately still printed in our texts of the classical writers.
13. AU was a true diphthong, pronounced like Eng. ow in how. Cf. Greek transliterations of Latin proper names such as חaovג入ív (Paulina), Фaootîvos (Faustīnus).
14. EU appears in Latin in only a few words, and in these is of secondary origin. Primitive Latin eu early became ou, whence $\bar{u}$. The chief Latin words that have eu are: ceu, neu, seu, heu. The combination appears also in numerous proper names borrowed from the Greek, e.g. Eurōpa, Teucer. In all these the sound was that of a genuine diphthong, i.e. an $e$-sound quickly followed by an $u$-sound, both being uttered under one stress.
15. UI appears to have been a genuine diphthong in cui, huic, and hui (the interjection). In the first two of these words $u i$ was certainly of secondary origin. Quintilian tells us (i. 7. 27) that in his boyhood (about 50 A.D.) quoi was still in use, and that its pronunciation was substantially identical with that of $q u \bar{i}$ (the Nom.). Some scholars have accordingly inferred that quī and cui were simply graphically distinct, being alike in pronunciation. Consistently with this view they regard the $u$ in $c u i$ as $=v$, and mark the $i$ long, viz. cui. But if the facts were thus, we should expect cui, when resolved into two syllables in verse by metrical license, to be an iambus ( $\cup-$ ). Such is not the case. On the other hand, we find it appearing as a pyrrhic $(\checkmark \cup)$, and that, too, at just about the time when, if we may credit Quintilian, cui began to supersede quoi, viz. soon after 50 A.D. Apparently the earliest instance of the resolution mentioned is in Seneca, Troades
$85^{2}$ сййситque (about 55 A.D.). Subsequently, in Martial and Juvenal, such resolutions are frequent. See Neue, Formenlehre der Lateinischen Sprache, 3d ed., ii. p. 454. Very late writers (e.g. Prudentius, 400 A.D., Venantius Fortunatus, 600 A.D.), it is true, sometimes have cŭ $\bar{i}$ in verse, but there is apparently no trace of any such resolution in the early centuries of the Empire. Another argument may be found in the verse treatment of huic. The $u i$ in both huic and $u u i$ is obviously of the same nature, and those who write cuī also write huīc. But if huic were huīc, then $h u$ - must stand for $h v$-, since the word is a monosyllable. But if it begins with $h v$-, it would not permit elision of a preceding vowel in poetry. But elision does occur before huic. Therefore huic begins with $h u$-. That being the case and the word being monosyllabic, $u i$ goes together to form a diphthong, the $i$ being short, as in all diphthongs ending in $i$. The $i$ of huic and cui would therefore seem to have been short, and to have blended with the $u$ to produce a diphthong. It must, of course, be conceded that the pronunciation of cui could not have been widely different from quì ; yet it must have been sufficiently so to keep the two words distinctly separate in Roman speech, a view which receives the very strongest confirmation in the fact that the modern Italian has $c h i$ as the descendant of Latin $q u \bar{\imath}$, but $c u i$ (with diphthongal $u i$ ) as the descendant of Latin cui.

## THE CONSONANTS.

## The Semivowels, $j, v$.

15. J. 1. $J$ (Seelmann, Aussprache des Latein, p. 231 ff .) was like our $y$ in yes. Evidences :
a) A single character ( 1 ) sufficed with the Romans to indicate both the vowel $i$ and the consonant $j$ ( $i$ consona $\bar{n} s$ ). This would indicate a close proximity in sound between $i$ and $j$, a proximity manifestly existing if Latin $j$ was English $y$. Cf., for example,

English New York with a hypothetical New Ĭ-ork. In any English word the vowel $i$ may easily be made to pass into the semivowel $y$ by energetically stressing either the preceding or the following vowel.
b) The Roman grammarians nowhere suggest any essential difference in sound between the vowel and consonant functions of the character, as they almost certainly would have done, had the consonant been other than the corresponding semivowel. On the other hand, the grammarians repeatedly suggest a close proximity in the pronunciation of $i$ and $j$. Thus Nigidius Figulus is cited by Gellius (Noctes Atticae, xix. 14. 6) as warning against the conception that I in Iam, Iecvr, Iocvs is a vowel. Such a warning can have no meaning whatever, except upon the assumption that the sound of $j$ was very close to that of $i$, i.e. was the semivowel $y$. $\quad C f$. Quintilian, i. 4. ıо.
c) In the poets, $i$, when followed by another vowel, often becomes consonantal, uniting with the preceding consonant to make position ; e.g. abietis, parietem, ariete become abjetis, parjetem, arjete. In these cases the consonant sound can have been none other than that of the semivowel $y$. Cf. also nunciam (trisyllabic), compounded of nunc and jam; etiam, compounded of et and jam.
d) Greek transliterations of Latin words employ $\iota$ as the nearest equivalent of Latin j, e.g. 'Iov́へıos (=Julius).
2. In the last centuries of the Empire, $j$ seems to have progressed, at least in the vulgar speech, to a genuine spirant, probably similar in sound to that of $z$ in the English word azure. Thus in late inscriptions (from the third century on) we find such spellings as Zesu (=Jesu), zunior (= junior), sustus ( $=$ justus), Grove (=Jove). Cf. Seelmann, Aussprache des Latein, p. 239.
16. V. i. $V$ is a labial semivowel, with the sound of English $w$. It corresponds to the vowel $u$, just as $j$ corresponds to the vowel $i$.

The evidence:
a) A single character (V) sufficed with the Romans to indicate the vowel $u$ ( $u$ vōcālis) and the consonant $u$ ( $u$ consonāns). This indicates a close proximity in sound between $u$ and $v$, -a proximity which manifestly existed, if Latin $v$ was English $w$. For the vowel $u$ naturally passes into $w$ before a vowel whenever either the preceding or following syllable is energetically stressed. For example, tenvia easily becomes tenvia, and must repeatedly be so read in verse.
b) The Roman grammarians (at least down to the close of the first century a.D.) nowhere suggest any essential difference in sound between the vowel and consonant functions of the character $V$, no more than in the case of the analogous $I$. On the other hand, just as in the case of I, they repeatedly suggest that $u$ and $v$ were very similar. Thus Nigidius Figulus, cited above in connection with the discussion of $j$, observes in the same passage (Gellius, xix. 14. 6) that initial V in Valerivs, Volvsivs, is not a vowel, an observation which would be pointless unless the sound of $v$ had been closely similar to that of $u$, i.e. had been that of $w$. Quintilian in i. 4. ro gives a similar warning.
c) The same Nigidius Figulus (Gellius, x. 4.4) says that in pronouncing $v \bar{o} s$ we thrust out the edges of our lips, which conforms physiologically to the pronunciation of $v$ as English $w$.
d) The Greek ordinarily transliterates Latin $v$ by means of $o v$, as Ov̉a入́́pıos (Valerius), Ov̉o入бкоí (Volscī), ^ıovía (Lìvia).
e) $U$ and $v$ often interchange in the same words. Thus early Latin lā-ru-a (e.g. Plautus, Captivi, 598) appears later as a dissyllable, lārva. Similarly $m \overline{\text { in}}$-lu-os appears later as mìlous. In verse, silva occurs repeatedly as si-lu-a, e.g. Horace, Odes, i. 23.4. On the other hand, tenuis, puella, etc., often appear as tenvis, pvella, etc. This interchange is conceivable only upon the supposition that the vowel and consonant sounds were closely akin. $C f$. also Velius Longus (close of the first century a.d.) in Keil, vii. 75. 10,
to the effect that $a-c u$-am, ' I shall sharpen,' and aquam, 'water' (where $q u$ is simply the traditional inconsistent spelling for $q v$ ), were liable to confusion in his day. Caesellius (see Seelmann, Aussprache des Latein, p. 234) cannot say whether tenuis is a dissyllable or a trisyllable; while in the Romance languages we sometimes find doublets pointing to parallel Latin forms, one with $u$ vōcālis, another with $u$ cōnsonāns, e.g. Old French teneve (representing a Latin te-nu-is) and tenve (representing a Latin ten-vis). Italian soave points to the existence of a Latin su-ā-vis by the side of $s u \bar{a}-(i . e . s z \bar{a}-)$ vis. Cf. Seelmann, p. 234.
$f$ ) The phonetic changes incident to word-formation also point in the direction of the $v$-sound of $v$. Thus from fave $\bar{o}$ (root fou-) we get fau-tor (for *fav-tor); from lavè (root lav-) we get lau-tus (for *lav-tus). In such cases the semivowel $v$ naturally becomes the vowel $u$ and combines with the preceding vowel to form a diphthong. Had $v$ been a spirant, either labiodental, like our English $v$, or bilabial, it would naturally have become $f$ before $t$ in the foregoing examples. Cf., for example, our English haf to (colloquial) for hav(e) to.

The evidence given under $f$ ) holds, of course, only for the formative period of the language; but it is valuable as corroborative testimony. For Latin $v$ is all the more likely to have been a semivowel in the historical period, if it was such immediately anterior to that period.
$g$ ) The contracted verb-forms, such as $a m \bar{a} s t \bar{\imath}$ for $a m \bar{a} v i s t i \bar{\imath}$, dētēstī for dētēvistī, audīstī for audīvistī, commōssem for commōvissem, all point to a semi-vocalic sound for $v$, since this sound easily disappears between vowels in an unstressed syllable. $C f$. English Hawarden, pronounced Hārden; toward, pronounced tōrd.
$h)$ Several anecdotes found among ancient writers give further confirmation of the similarity in sound of $u$ and $v$. Thus Cicero (de Divinatione, ii. 84) relates that, when Marcus Crassus
was preparing to set sail from Brundisium on his ill-fated expedition to the East, he heard a vender of figs on the street cry out Cauneās, really the name of a variety of figs, but which Cicero suggests was intended by the gods as a warning to Crassus, viz. cav(e) $n(\bar{e})$ eās, don't go.
2. While the above evidence may be accepted as fairly conclusive for the pronunciation of Lat. $v$ as $w$ in the best period, indications are not wanting that $v$ had begun to change to a spirant sound before the period of the decline. The earliest testimony on this point is that of Velius Longus (close of the first century A.D.), who speaks of $v$ as having a certain aspīi $\bar{\imath} t i \bar{o}$, e.g. in valente, primitīvō (Keil, vii. 58. 17). This reference to aspirātiō hints at the development of $v$ from its earlier value as a bilabial (i.e. produced by the two lips) semivowel to a bilabial spirant, somewhat similar to our English $v$, except that our $v$ is labio-dental (i.e. produced by the teeth and lower lip). This view is confirmed by the fact that, beginning with the second century A.D., we note that $v$ is confused with $b$, which had also become a bilabial spirant at this period. This confusion, which increases as time goes on, reaches its height in the third century A.d. Examples are : biginti (= vigintī); vene (=bene) ; Favio ( = Fabiō).
3. Some scholars have sought further confirmation of the spirant character for the period referred to (ioo A.D. and afterwards) in the use of Greek $\beta$ as a transliteration of Latin $v$. Beginning with about ioo A.D. we find $\beta$ frequently employed in Greek inscriptions in place of earlier ov for such transliterations, e.g. коvßévios (conventus) ; $\beta$ épva (verna); Ka入ßєîvos (Calvīnus). Similarly our text of Plutarch (about ioo A.D.) usually has $\beta$ in Latin words (e.g. Ba入є́plos, Bévovs =Venus) where earlier Greek writers mostly employed ov. Now it is believed (cf. Blass, Pronunciation of Greek, p. 109) that Greek $\beta$ at this time (beginning of the second century A.D.) had become a bilabial spirant. How-
ever this may be, little support would be gained from that fact for the pronunciation of Latin $\%$. For while it is true that the use of $\beta$ for $v$ assumes great frequency from 100 A.D., yet the earlier spelling ov still remains the predominant one. Eckinger, Orthographie Lateinischer Wörter in Griechischen Inschriften, p. 87, gives 234 instances of ov as against 100 of $\beta$ in Greek inscriptions of the second century A.D., while often the same inscription exhibits both spellings. Moreover, occasional instances of $\beta=v$ occur as early as the last years of the Republic, Eckinger, p. 87, cites five examples from the first century b.c., and twenty one from the first century A.D. The facts seem to indicate that the Latin sound was not adequately represented by either ov or $\beta$; consequently no permanent equivalent was ever adopted. It is, therefore, perfectly conceivable that Latin $v$ should have been transliterated by Greek $\beta$, even at a time when the latter sound had not progressed to its spirant stage. In fact, it is quite possible that the confusion in Latin itself, which resulted in writing $b$ for $v$, may have contributed to the increasing frequency in the employment of $\beta$ as against earlier ov in Greek transliterations of Latin words. The two phenomena coincide so accurately in time that the connection suggested becomes extremely probable.

Even if Greek $\beta$ had by 100 A.D. become a bilabial spirant (as it certainly did ultimately), yet this would not necessarily prove anything for the pronunciation of Latin $v$. For the bilabial spirant is very easily confused with the semivowel. Thus the dialectal pronunciation of German Wein, Winter with an initial bilabial spirant easily deceives American and English travellers, to whom this sound is not familiar, and produces the impression that an English w is pronounced. The evidence of the Greek, therefore, is purely negative, and while it seems probable, as already indicated, that Latin $v$ at about the beginning of the second century A.D. had begun to become a bilabial spirant, this
conclusion rests upon other grounds than the evidence of Greek transliterations.
4. Gothic and Anglo-Saxon loan-words have been thought by some to confirm the $w$-sound of Latin $v$, but without reason. Gothic and Anglo-Saxon $w$, it is true, appears regularly as the representative of $v$ in words borrowed from the Latin, e.g. Gothic wein, 'wine' (Lat. vīnum) ; aizeraggeli, 'gospel' (Lat. evangelium); Anglo-Saxon weall, 'wall' (Lat. vàllum); -wic, 'town' (Lat. vīcus). But here again it is not only possible but extremely probable that the Gothic and Anglo-Saxon gave only an approximate representation of the Latin sound. Gothic could hardly have borrowed from the Latin before the fourth century, AngloSaxon not before the fifth, and it has been shown above that at this period Latin $v$ had already become a bilabial spirant.
5. Others have cited Claudius's attempted introduction of $\rfloor$ for $v$ as an indication that $v$, as early as Claudius's day (50 A.D.), had progressed beyond the semivocalic stage. Claudius, it is urged, while suggesting the employment of a new character for $u$ cōnsonāns ( $($ ), did not suggest a new character for $i \cdot \overline{c o n}$ sonāns $(j)$. Hence it is claimed that the relation of $v$ to $u$, at this time, must have been different from that of $j$ to $i$. As $j$ was a semivowel, $v$, it is claimed, could have been nothing less than a spirant. But these conclusions would be valid only upon the assumption that Claudius was a competent phonetic observer, and was not acting from mere caprice. Neither of these assumptions would be safe. Moreover, there is no other indication that $v$ had progressed beyond its value as a semivowel as early as Claudius's day.
6. It may be added in conclusion that the development of Latin $v$ was not complete even when the sound had passed from that of a semivowel to that of a bilabial spirant. Later still (fifth century A.D.?) it became a labio-dental spirant (Eng. v), and with that value passed into the Romance.

The Liquids, $l, r$.
17. L seems to have been pronounced differently, according to its position in a word. No fewer than three different sounds of the letter were recognized by Pliny the Elder, as cited by Priscian (Keil, ii. 29.9), viz. 1) an exilis somus, as in the second $l$ of ille, Metellus; 2) a pinguis sonus, after a consonant or at the end of a word or syllable, as in clārus, sōl, silva; 3) a medius sonus, viz. when inital, as in lectus. Just what the differences were which were involved in these three modes of articulation cannot now be determined. Lindsay (Latin Language, p. 90) thinks that Pliny's exilis sonus and medius sonus were our normal English l, as is the case in the Italian descendants of the Latin words cited by Pliny. The pinguis sonus, Lindsay suggests, consisted in an l-glide preceding or following the $l$ itself, e.g. $a^{l} l t e r ~ c l^{\prime} \bar{a} r u s$. The basis for this view he finds in the Romance development of this $l$ pingue; e.g. clārus becomes Italian chiaro; fūmen becomes fume; alter becomes French autie.
18. $\mathbf{R}$ was trilled with the tip of the tongue, as is clearly described by Terentianus Maurus (Keil, vi. 332. 238 f.) and Marius Victorinus (Keil, vi. 34. 15 ). The name littera canina, given to $r$ as early as Lucilius (ix. 29, M.), agrees excellently with the enunciation attributed to the letter.

## The Nasals, $m$, $n$.

19. M. Initial and medial $m$ probably had the sound of normal English $m$. As regards final $m$, the true pronunciation can probably never be satisfactorily determined. When the following word began with a vowel, final $m$ was only imperfectly uttered. Cf. Quintilian, ix. 4. 40 : 'When $m$ is final and comes in contact with the initial vowel of the following word so that it can pass over to the latter, though it is written, yet it is only slightly uttered, as in
multum ille, quantum erat, so as to give the sound of a new letter, as it were. For it does not absolutely vanish, but is obscured, and is a sort of sign that the two vowels do not become merged.' In ix. 4. 39 Quintilian tells us that Cato the Elder wrote diee for diem, evidently in recognition of the vanishing value of the final nasal. Velius Longus also tells us (Keil, vii. 80, 12 ff .) that Verrius Flaccus, who lived under Augustus, proposed a mutilated M, viz. N, to indicate the sound of final $m$ before an initial vowel. Seelmann (Aussprache des Latein, p. 356), following the above statement of Quintilian, defines the sound in question as a 'bilabial nasal spirant with partial closure.' This seems a just statement. Cf. also Lindsay, Latin Language, p. 62. Evidently the sound must have been quite inconsiderable, as it did not interfere with the slurring of final syllables in - $m$ with a following initial vowel, as is abundantly shown in poetry by the frequency of elision. Ellis (Quantitative Pronunciation of Latin, p. 60 ff., especially p. 65) interprets the testimony of Quintilian above cited to mean that final $m$ was not omitted (neque eximitur), but was inaudible (obscūratur) before an initial vowel. The same scholar also maintains that every final $m$ was inaudible, irrespective of the initial sound of the following word. In case this initial sound was a consonant, Ellis (pp. 55, 65) holds that the consonant was doubled in pronunciation ; e.g. quörum pars, he thinks, was pronounced quōruppars, etc. This view, however, is based on the improbable assumption that the Italian with its giammai (for gia mai), ovvero (for o vero), etc., gives the clue to the pronunciation of Latin final $m$. Latin inscriptions, it is true, in the earliest times show that final $m$ was frequently omitted in writing. Thus the Scipio inscriptions, the earliest of which may antedate $25^{\circ}$ B.C., show $m$ omitted before consonants as well as before vowels, but in good inscriptions of the classical period final $m$ was not omitted with any frequency; hence no argument can be drawn from this source.
20. N. i. $N$ was the dental nasal, as $m$ was the labial. When initial, $n$ could hardly have differed materially from English $n$ in the same situation. The same is true also of $n$ in the interior of a word when followed by other dental sounds (as $t, d, s, n$ ) or a vowel. Before the gutturals, $n$ took on the sound of $n g$ in sing, e.g. in angō, uncus; i.e. $n$ here became the guttural nasal, a sound as different from dental $n$ as is $m$, and quite as much entitled to representation by a separate character. Nigidius Figulus recognized the individuality of the sound in calling it $n$-adulterinum (Gellius, xix. 14. 7). Certain Roman writers, according to Priscian (Keil, ii. 30. 13), followed the analogy of the Greek, and used $g(=\gamma$ nasal) for the $n$-adulterinum, e.g. Agchīsēs, agceps, agoulus. The Greek phoneticians gave $\gamma$ in such situations the name Agma (as distinguished from Gamma), and their Roman successors sometimes employed the same designation for the sound, e.g. Priscian in the passage just cited.
21. The vowel before $n f, n s$, as is well known, was regularly long in Latin. See § 37. Some have assumed, in consequence, that a nasal vowel was pronounced in such cases, particularly Johannes Schmidt (Zur Geschichte des Indogermanischen Vokalismus, I. p. 98 ff.). The chief basis of this hypothesis was found in the omission of $n$ before $s$ in inscriptions, e.g. Cosol (for cōnsul), Cesor, trasitv. Adjectives in -ènsimus and adverbs in -ièns were also often written -èsimus, -iès, e.g. vicēsimus or vicènsimus; víciès or vīciens. Velius Longus (Keil, vii. 78-79) tells us that Cicero pronounced forēnsia as forésia, and Megalènsia as Megalēsia, while in adjectives in -ōsus the $n$ was permanently lost. Greek transliterations of Latin words also frequently show $\sigma$ for $\nu \sigma(\nu s)$, $e . g$. K $\lambda \dot{\eta} \mu \eta \mathrm{s}$ (Clèmèns) ; $\mathrm{K} \eta \sigma \omega \rho i \hat{v o s}$. But all this evidence may indicate nothing more than that $n$ before $s$ was unstable and inclined to disappear. Whatever conclusion be drawn with regard to the nasalization of the vowel before $n s$ would seem to hold also for the vowel before $n$ when followed by other dentals,
$v i z$. before $n t$ and $n d$. For here, too, the $n$ shows quite as strong a tendency to disappear, if we may judge by the testimony of inscriptions, e.g.. secvdo ( = secundō); testameto ( = testamentō). No instance of the disappearance of $n$ before $f$ occurs prior to the fourth century A.D., and even then the phenomenon is of extremely rare occurrence, being confined to four instances, all of which are in the word inferus.

See the discussion of Seelmann, Aussprache des Latein, pp. 283-290.
3. It should be added that the omission of the nasal occurs sporadically in case of $m$ when followed by labial sounds, as Decebris ( = Decembris); Capānum (= Campānum); so also in case of $n$-adulterinum before gutturals, as iquīrant ( $=$ inquīrant) ; pricipis (= principis). The phenomenon under discussion is, accordingly, a general one, and may be stated thus: The Latin nasals $m$ (labial), $n$ (dental), and $n$-adulterinum (guttural), exhibit a tendency to disappear before labial, dental, and guttural sounds respectively.
4. GN. Many scholars hold that $g n$ was pronounced as $n g n$, $i . e$. as $n$-adulterinum $+n$. The evidence for this view lies mainly in the fact that $e$ before $g n$ not infrequently changes to $i, e . g$. dignus for * deg-nus (from *dec-nus; see §73). Now it is a regular law that this change takes place before ng, e.g. ting $\bar{o}$ for *tengó (§73) ; hence the inference that $g n$ in such cases was pronounced ngn. See Brugmann, Grundriss, I ${ }^{2}$., p. 122 ; Sommer, Handbuch der Lateinischen Laut- und Formenlehre, p. 241. But the Roman grammarians nowhere attest this pronunciation of $g n$ as ngn, and in view of their silence it is doubtful whether the considerations urged by Brugmann and Sommer are sufficiently weighty to warrant the adoption of their view.
5. Besides the three nasals already considered ( $m, n$, and $n$ adulterinum), Seelmann (Aussprache des Latein, p. 270) recognizes another, midway in sound between $m$ and $n$. The evidence
for the existence of this sound he finds in the statement of Marius Victorinus (Keil, vi. 16. 4 ff .) to the effect that such an intermediate sound (neither $m$ nor $n$ ) was recognized in antiquity. Marius Victorinus compares the sound in question with the sound of the Greek nasal in $\sigma a ́ \mu \beta v \xi$, where likewise, he observes, neither $v$ nor $\mu$ accurately designates the pronunciation. Seelmann suggests that such inscriptional forms as qvamta, tamta, damdvm, semtentiam on the one hand, and Decenbris, senper, ponpa, inconparabilis on the other, support by their vacillating spelling the theory propounded. The facts, however, do not seem sufficiently clear to warrant a positive conclusion in this matter.

## The Spirants, $f, s, h$.

21. F. $F$ is the labial spirant. In the earlier period it is probable that $f$ was bilabial. This theory accords with the origin of $f$, which in most cases is the descendant of an original $b h$; it agrees also with such spellings as COMFlvont, COMvallem of the Minucii inscription, CIL. i. 199 ( 122 B.C.). Subsequently $f$ became a labio-dental spirant as it is in English and in most modern European languages. At just what time this change took place is uncertain. It was complete by the close of the second century A.D., as appears from the testimony of Terentianus Maurus (Keil, vi. 332. 227).
22. S. $S$ was a voiceless dental spirant, like English $s$ in $\sin$. Some scholars have thought that intervocalic $s$ was voiced in Latin (i.e. sounded like English $s$ in these), but there is no valid support for this view, nor do the Roman grammarians anywhere hint at more than a single sound for the letter. The Gothic in loan-words transliterates intervocalic Latin $s$ by $s$, which represented a voiceless sound in Gothic, e.g. Kaisar (Lat. Caesar). The Gothic possessed also a character for the voiced $s$-sound
(i.e. z), and would undoubtedly have made use of it, had the Latin intervocalic $s$ been voiced.
23. H. $H$ was a guttural spirant and was voiceless like English $h$. The same uncertainty manifested itself in the employment of initial $h$, as is noticeable among the lower classes in England. As a result of this uncertainty, words etymologically entitled to initial $h$ frequently dropped it in the speech of the less cultivated, while other words acquired an $h$ to which they were not historically entitled. Thus harēna, haruspex, hirund $\bar{o}, h o l u s$, represent the correct spelling; but these same words were frequently pronounced arēna, aruspex, etc., and appear repeatedly in that form in our Mss. of the classical authors. Occasionally a word permanently lost its initial $h$ even in the speech of the educated. A case in point is $\bar{a} n s e r$, which comes from an IndoEur. word with initial $g h$, and should appear in Latin as hänser (§97.3). On the other hand erus, $\bar{u} m o r$, umerus are the correct forms, but these were frequently supplanted by herus, hūmor, humerus. The Romans were fully conscious of their defects in this particular, and Catullus in his 84th poem humorously refers to one Arrius, who said hīnsidiās for insidiās, and Hiöniōs for Īniōs.

Intervocalic $h$ easily vanished between like vowels, as is shown by such contractions as nèm $\bar{o}$ for *ne-hem $\bar{o}$; prènd $\bar{o}$ for prehend $\bar{o}$; praeda for *prae-heda; etc.

## THE MUTES.

## The Voiceless Mutes, $t, c, k, q, p$.

24. T. $T$ was pronounced as in English satin. In English, $t$ before $i$ followed by another vowel is regularly assibilated, i.e. acquires an $s h$-sound, as, for example, in the word rational; but Latin $t$ was always a pure $t$ in the classical period. $C f$. such Greek transliterations as Oviàєvтía (Valentia). In late imperial
times (not before the fourth century) $t i$ when followed by a vowel begins to show traces of assibilation. Inscriptions of this period exhibit such forms as Voconsivs (for Vocontius); Sepsies (for septiés). Probably this orthography was not exact, as the sound was rather that of our English $s h$; but the Latin had no more accurate designation. The phonetics of the change are as follows : An original Vocontius, for example, became first Vocontyus, i.e. the vowel $i$ (very likely under the influence of extra stress upon the preceding syllable) become the semivowel $y$. In the next stage this semivowel became a spirant, the sound represented by German palatal ch, viz. Vocont-chus. From this, the transition to the assibilated pronunciation was easy and natural.
25. C. I. $C$ was always pronounced like $k$. This is abundantly proved by the evidence. Thus :
a) $C$ and $k$ interchange in certain words, e.g. Caelius, Calendae, Carthago.
b) We have the express testimony of Quintilian (i. 7. 10), who says: 'As regards $k$, it should not be used. Some write it before a, but c has the same sound before all vowels.'
c) In Greek transliterations of Latin words we always have $\kappa$, not only before $a, o, v$, but also before $\epsilon, \iota$, where if anywhere we should have expected the $s$-sound of $c$ to have arisen. Examples are: Kıкє́ $\rho \omega \nu$, Kaî $\sigma \alpha$.
d) Gothic and German loan-words borrowed from Latin (probably in the early centuries of the Christian era) show $k$ for Latin $c$ in all situations, e.g. Gothic lukarn (= Lat. lūcerna); karkara (= Lat. carcer) ; Kaisar $(=$ Caesar $) ;$ German Keller $(=$ cellārium) ; Kiste (= cista).
e) The Old Umbrian of the Iguvine Tables uses in its enchoric alphabet $\gg$ for $c$ and $d$ for $\varsigma$ (an $s$-like sound developed from $c$ before $e$ and $i$ ). The New Umbrian of the same tables is written in Latin characters, and uses $C$ for $c$, but $S^{\prime}$ (or $S$ )
for the s-like sound represented in Old Umbrian by d. This makes it clear that at the time the New Umbrian tablets were written, Latin $c$ before $e$ and $i$ had not yet become assibilated. Otherwise the New Umbrian would not have resorted to the use of a special character ( $S^{\prime}$ or $S$ ) to designate this sound. See Jones, Classical Reviere, No. 1, 1893. The exact date of the New Umbrian tablets is not certain, but they can hardly have been written many years before the beginning of the Christian era.
$f$ ) No Latin grammarian ever mentions more than one sound for $c$, as some one certainly would have done had $c$ had an $s$-sound before $e$ and $i$. In paradigms like $d \bar{i} \bar{c} \bar{o}$, $d \bar{\imath} c i s, d \bar{c} c i t$, the change of sound, had it occurred, would have been too striking to escape comment.
g) Pulcher (originally pulcer, and often so written in inscriptions) shows by its aspirated $c$ (i.e. ch) that $c$ must have been 'hard.' Similarly anceps, with its n-adulterinum, shows that $c$ could not have had the sound of $s$. Otherwise the nasal would not have become guttural, as we are assured it did.
26. Beginning with the fourth or fifth century A.D., $c$ before $i$ followed by a vowel becomes assibilated, exactly as explained above in the case of $t$. Inscriptions of this period exhibit such forms as felissiosa (=fēlīciōsa); Marziae (=Mārciae). The phonetics of the change are precisely analogous to those already described under $t$. Later still, every $c$ before $e$ or $i$ became $s$, e.g. paze (for $p \bar{a} c e$ ) in an inscription of the seventh century A.D.
27. This development of $t i$ and $c i$ (before vowels) to the same sibilant sound led naturally in mediaeval times to the greatest confusion of orthography in our Mss. of the Latin writers. Thus condiciō appears frequently as conditiō ; suspīciō as suspītiō; negōtium as negōcium; convícium as convitium. In the case of some of these words, the false forms have not yet been entirely eliminated from our texts of the classic writers.
28. $K$ and $Q$ are simply superfluous duplicates of $c$, as was
recognized by the Romans themselves. Cf. Terentiarus Maurus (Keil, vi. 33 r. 204 f.).
29. P. $P$ was apparently a plain English $p$ and presents no peculiarities.

$$
\text { The Voiced Mutes, } b, d, g \text {. }
$$

27. B. $B$ was like English $b$ except before $s$ and $t$, where it had the sound of $p$. This was simply the result of the natural assimilation of the voiced sound to the voiceless. Inscriptions show repeated instances of the phonetic spelling, e.g. pleps, APSENS, OPTINVIT, OPSIDES, but ordinarily such words made a concession to the etymology, and were written with $b$. Quintilian (i. 7. 7) prescribes the use of $b$ : 'When I pronounce obtinuit our rule of writing requires that the second letter be $b$; but the ear catches $p$.'
28. D. $D$ was like English $d$. Late in imperial times $d i$, when followed by a vowel, became (through the medium of $d y$-) a sound somewhat like our $j$. The Romance languages retain this peculiarity, e.g. French journce, Italian giorno, from Latin diurnus.

Inscriptions show that final $d$ had a tendency to become $t, e . g$. aput, haut, at, quit, for apud, haud, ad, quid. Mss. also exhibit the same spelling.
29. G. $G$ had the sound of English $g$ in get. That before $e$ and $i$ it did not have the sound of $g$ in $g e m$, seems clear from the following evidence:
a) The Roman grammarians give but a single sound for the letter. Had $g$ before $i$ been pronounced like our $j$, the alteration of sounds in a paradigm like legō, legis, or lègès, légum, would not have failed to elicit comment.
b) In the Greek transliteration of Latin words $g$ is always represented by $\gamma ;$ e.g. Г'́ $\lambda \lambda \iota o s(G e l l i u s)$.
30. Distinction between 'Guttural' and 'Palatal.' 'Guttural' and 'Palatal' are not interchangeable terms. Strictly speaking, 'Guttural' applies to the $c(k)$ and $g$ sounds produced in the throat, while 'Palatal' applies to those produced against the hard palate. The guttural or palatal character depends upon the following vowel. Before $a, o$, or $u$ the $c$ or $g$-sound is guttural ; before $e$ or $i$ it is palatal. Cf. English kill, gill with call, gall. Latin $k$ (used only before $a$; see § 1.3) was, accordingly, always guttural; the same was the case with $q$, while $c$ and $g$ varied in character according to the following vowel.

$$
\text { The Aspirates, } p h, c h, t h .
$$

31. 32. The Latin originally had no aspirates of its own, and was not concerned with the representation of these sounds until the Romans began to borrow Greek words containing $\phi, \chi$, or $\theta$. These Greek letters (as explained in the Grammar, § 2. 3) were equivalent to $p, c$, or $t$ with a following $h$-sound. ${ }^{1}$ It is not surprising, therefore, that at first the Romans rendered $\phi, \chi, \theta$ by $p, c, t$ respectively. This is regular in early inscriptions (down to about 100 b.c.), e.g. Corintvs, Delpis, Aciles. In the Captivi of Plautus, verse 274, the evident pun on Thalem . . . talentō, shows that the $t h$ was felt as substantially a $t$, and in fact there can be little doubt that $t$ is what Plautus actually wrote.
1. Beginning, however, with about 100 b. c., Greek $\phi, \chi, \theta$ came to be represented with increasing frequency in Latin by $p h, c h, t h$, and by Cicero's day this had become the standard orthography. The multitude of Greek words employed in Latin at that time, along with the constantly increasing attention paid by educated Romans to the Greek language and to Greek culture generally, naturally led to this striving for greater exactness.

[^0]3. As a result we notice the aspirates gaining a foothold in certain genuine Latin words, e.g. pulcher, originally pulcer; Gracchus (after Bacchus = Ва́кхоs), originally Graccus; Cethégus, originally Cetēgus. An English analogy is seen in such words as island, rhyme. Island comes from the Anglo-Saxon igland, Middle English îland. The $s$ was introduced at a comparatively recent date as a result of associating îland with French îsle (from Latin insula). Rhyme comes from Anglo-Saxon rim, Middle English rime, 'number.' The spelling rhyme is due to the influence of rhythm (Greek $\dot{\rho} v \theta \mu$ ós), with which rime was associated in the folk consciousness. Cicero (Orator, 48. 160) tells how he himself, in deference to popular usage, was forced to abandon the pronunciation pulcer, triumpōs, Cetegus, Kartāōo, in favor of the aspirated forms, pulcher, triumphōs, etc. But he adds that he refused to pronounce an aspirate in sepulcrum, corōna, lacrima, and some other words, where apparently a popular tendency existed in favor of $c h, p h, t h$, as against the genuine Latin $p, c, t$. Catullus, in the epigram already cited (Carmen 84), humorously alludes to Arrius's pronunciation of commoda as chommoda.

In Bosphorus (Bóratopos) the Romans introduced an aspirate for a tenuis; yet the spelling Bosporus also occurs.
4. With the exception of $p h$ the Latin aspirates retained their original character throughout the history of the language. A proof that th was still an aspirate in the time of the Empire is seen in the spelling acletarvm for àthlētārum, and aclheticvm for $\bar{a}$ thlēticum, in an inscription of about 360 A.D. (Wilmanns, No. 2639). Cf. also CIL. viii. 5352, Termas ( $=$ thermas $)$; Huebner, Inscriptiones Hispaniae Christianae, 142, aetereas ( = aethereas); and the variant Chyesten for Thyesten in Horace, Odes, i. 16. 17. This orthography is capable of explanation only on the ground that $t h$ was still very close to $t(v i z . t+h)$. For the confusion of $c$ and $t, c f$. the occasional English pronunciation of at least as ac least. There is not the slightest indication that Latin th, either
in the flourishing period of the language or in its decline, had a spirant sound like our English th in this or thin. The Romance languages regularly have $t$ as the descendant of Latin th, e.g. Italian teatro (Latin theātrum); cattolico (catholicus). Similarly ch must have always been either a genuine aspirate or else the simple mute $c$, as shown by the Italian in such words as carta (Lat. charta), coro (Lat. chorus).
5. As regards $p h$, the aspirate seems in late imperial times (not before the fourth century a.D.) to have developed into the spirant $f$. Some have thought that this change occurred much earlier, basing their opinion upon the fact that Greek $\phi$, which was regularly represented in Latin by $p h$, was always employed to transliterate Latin $f$. But $\phi$ was simply the nearest equivalent that the Greek alphabet possessed for representing $f$. Quintilian (i. 4. 14) shows that the two sounds were quite different, by his account of the Greek witness mentioned by Cicero who could not pronounce the Latin word Fundanius. This seems to show that the Greeks, not having the sound of Latin $f$ (a bilabial spirant), chose $\phi$ (a bilabial aspirate) as the nearest equivalent, very much as Slavs and Lithuanians to-day reproduce the $f$ of modern languages by $p$.

In the speech of the educated classes at Rome, ph seems to have followed the history of $\phi$ in Greek. The latter sound, according to Blass (Pronunciation of Greek, § 28), did not become the equivalent of $f$ before the third century A.D., a view substantiated for Latin by the interchange of $f$ and $p h$ in inscriptions of this and the following centuries. The phonetics of the change are as follows : First, we have $p+h$, i.e. the labial mute + a guttural spirant; secondly, the $h$ is assimilated from the guttural spirant to the labial, $f($ i.e. $p f)$; finally, the $p$ is assimilated to $f$, giving $f$, which is then simplified to $f$. Thus an original Philippus becomes successively Pfilippus, Ffilippus, Filippus. Cf. German Pfalz (the name of the district about Heidelberg).

The mediaeval Latin designation of this was Palatium, whence Phalatium, German Pfalz, but dialectically often pronounced Falz.

## The Double Consonants, $x, z$.

32. $\mathbf{X}$. $X$ is always equivalent to $c s$, never to $g z$, as it sometimes is in English. This conclusion follows from the voiceless character of Latin $s$, before which a guttural was necessarily assimilated.
33. Z. The value of $z$ is somewhat uncertain. The character is confined exclusively to foreign words, chiefly Greek. Though introduced in the first Latin alphabet, it was early dropped (see § i. 3), its place being taken by $g$. Long afterwards, - apparently about Cicero's time, - it was again introduced for the more accurate transcription of $\zeta$ in words borrowed from the Greek. Prior to this time the Latin had transliterated Greek $\zeta$ when initial by $s$, and by ss in the interior of words, e.g. söna (= $=\zeta \dot{\omega} \nu \eta$ ) ; atticissō ( $=\dot{\alpha} \tau \tau \iota \kappa i \zeta \omega$ ). But with the increasing use of Greek at Rome, a more accurate designation of the sound was felt to be necessary, and accordingly the Greek character itself was introduced. $C f$. the care exercised at the same period in designating the aspirate in Greek loan-words.

The pronunciation of $z$ in Latin must have followed the pronunciation of Greek $\zeta$ for the corresponding period. As regards $\zeta$, while it almost certainly had the sound of $z d$ in the Attic of the fifth century b.c., it is likely that by the beginning of the Macedonian period (approximately 300 B.c.) it had become a simple $z$ sound (as in English gaze), - though probably somewhat prolonged; for it still 'made position,' as though a double consonant. See Blass, Promunciation of Greek, §31. The same sound probably attached to Roman $z$. For while certain Roman grammarians explain $z$ as equivalent to $s d$ or $d s$, their statements are probably but the echo of Greek discussions concerning the sound of $z$. It is worthy of note that one Roman grammarian, Velius Longus, a
most competent witness on phonetic questions, specifically denies that $z$ is the equivalent of $s d$, and asserts that it is not a double consonant at all, but has the same quality throughout. (Keil, vii. 50.9 .)

## Doubled Consonants.

34. When the mutes were doubled ( $t t, d d ; p p, b b ; c c, g g$ ) there were two distinct consonant articulations. Thus in mitto, the first $t$ was uttered with a definite muscular effort, involving closure of the organs in the $t$-position; then after a momentary pause a second muscular effort followed, with the organs in the same position. See Seelmann, Aussprache des Latein, p. rıo. Such doubled consonants do not occur in English. We often write $t$, $p p, c c$, etc., but pronounce only a single $t$, $p$, or $c$, e.g. ut $(t) e r$, $u p(p)$ er, etc. But in Italian and several other modern languages these doubled consonants are frequent, e.g. Italian bocca, conobbi, cappello.

The same double articulation is probably to be assumed in case of doubled liquids ( $l l, r r$ ), doubled nasals ( $m m, n n$ ), and doubled spirants ( $f f, s s$ ), though it is possible that in some words where these combinations followed a long vowel they merely indicated a liquid or spirant that was prolonged in utterance, as, for example, vāllum, $\bar{u} l l u s$.

## Division of Words into Syllables.

35. The principles given in the Grammar (§4) for the division of words into syllables are the traditional ones; yet the validity of some of them is open to question, - particularly of the principle embodied under § 4.3 : 'Such combinations of consonants as can begin a word are joined to the following vowel.' In support of this principle may be cited the testimony of the Roman grammarians, who practically agree in prescribing the rule given above, and some of whom even include such combinations of
consonants as can begin a word in Greek, e.g. pt, ct, bd. See for instance Caesellius, cited by Cassiodorus (Keil, vii. 205. 1) ; Terentianus Maurus (Keil, vi. 351. 879).

On the other hand it may be urged that the principle laid down by the Roman grammarians is merely an echo of rules maintained by Greek scholars for their own language. Cf., for example, Bekker, Anecdota Graeca, iii. p. 1127 ; Theodosius (ed. Göttling), p. 63, where the same laws for syllable division may be found. We have already seen indications of such irresponsible borrowing in the case of the testimony of the grammarians concerning the pronunciation of $z$. See §33. Moreover, we find Quintilian (i. 7. 9) advocating an etymological principle of division, e.g. haru-spex, abs-temius.

When we come to examine the mode of dividing words followed in our best Latin inscriptions, the evidence is strikingly at variance with the traditional rule which prescribes joining as many consonants as possible with the following vowel. In about 80 per cent of all the cases in which words are divided at the end of a line, one of the consonants is joined with the preceding vowel, - evidently a systematic violation of the grammarians' rule. Even greater is the proportion of violations of the rule in those words which exhibit interpunctuation in inscriptions, i.e. separation of the syllables by dots, e.g. EGES.TAS; vIC•TO•RI; $\mathrm{OP} \cdot \mathrm{TA} \cdot \mathrm{TvS}$. For a full presentation of the epigraphic evidence bearing upon this point, see Dennison, in Classical Philology, Vol. I. p. 47 f .

There is also evidence of a phonetic nature bearing upon this question. A syllable containing a short vowel followed by two consonants is phonetically long, as recognized by all our grammars and demonstrated in every line of Latin poetry. But open syllables containing a short vowel are short; and in such words as doctus, minister, hospes, if we divide according to the grammarians' rule (i.e. dŏ-ctus, minŭ-ster, hŏ-spes), we get pre-
cisely these open syllables containing a short vowel, i.e. short syllables. For with this utterance, there is no more reason why the $d \breve{o}$ - of $d \breve{o}$-ctus should be long than the $d \breve{o}$ - of $d \check{o}$-cet; or the $n \check{-}$ of minü-ster any more than the $n \check{\imath}$ - of minü-mus. In both cases we have open syllables containing a short vowel, i.e. short syllables. Hence it is clear that the Romans in actual utterance must have joined one of a group of consonants to a preceding short vowel. This gives a closed syllable (i.e. a syllable ending in a consonant), and it is a fundamental phonetic principle that a closed syllable is long. These principles also throw light on the nature of common syllables. A common syllable is one containing a short vowel followed by a mute with $l$ or $r$ ( $p l, c l, t l, p r, c r, t r$; etc.). In verse such a syllable may be either long or short. But naturally a difference of pronunciation must have accompanied this variation of quantity. In a word like pătrem, for example, when the first syllable was used as long the $t$ was joined with the $a$ ( $p a ̆ t-r e m$ ), thus closing the syllable; but when the first syllable was used as short, the $t$ was joined with the $r$ ( $p \breve{a}$-trem), thus leaving the syllable open.

Evidence contradicting the grammarians' rule is found also in the division of words in examples cited by ancient writers on Latin prosody. When these writers separate a verse of poetry into its component feet, they divide the syllables not according to the grammarians' rule, but according to the principle explained above as demanded by phonetic considerations, e.g. :

Conticu ere om nes in tenti que ora te nebant Turnus ut infractos ad verso Marte La tinos Ut belli sig num Lau renti Turnus ab arce.

See especially Hale, Harvard Studies, Vol. VII. p. 268.
The rule of the grammarians, therefore, seems thoroughly discredited. It is contradicted by the testimony of inscriptions, by considerations of phonetics, and by syllabification followed
in metrical illustrations by the writers on prosody. It should accordingly be rejected, as resting not upon competent phonetic observation of contemporary speech, but rather upon the traditional rules which the Greek grammarians set up for their own language, - rules, by the way, which were no more phonetically accurate for Greek than for Latin. Very likely their phonetic accuracy was never claimed by the ancients themselves. It is more probable that they were simply copyists' rules intended to furnish a convenient standard for practical use.

The phonetic principle for the division of syllables where two or more consonants are involved may be formulated as follows : In case of such combinations of consonants, a mute $+l$ or $r$ is joined to the following vowel, except when a long syllable is needed, in which latter case the mute is joined to the preceding vowel. Thus regularly pa-tris, volu-cris, a-grì ; but $a g-\bar{r}$, when in poetry the first syllable is used as long. In prepositional compounds, also, whose first member ends in a mute, and whose second begins with $l$ or $r$, the mute is always joined to the preceding vowel. i.e. the preceding syllable is always long, e.g. ablàtus, ab-rumpos. In all other combinations of consonants, the first consonant is joined to the preceding vowel, as al-tus, an-go, hos-pes, dic-tus, minis-trī, mag-mus, mōn-strum. This principle obviously demands that $x$ should be divided in pronunciation, as was undoubtedly the case. Thus $\breve{a} x i s$ must have been pronounced ac-sis, lă-xus as lac-sus; so, also, very likely after a
 after a long vowel such division is not phonetically necessary.

As regards the rule of the ancient grammarians laid down in the Grammar (§4.4), to the effect that prepositional compounds are separated into their component parts, the phonetic evidence seems altogether against this when the preposition ends in a single consonant and the next letter of the compound is a vowel. The division per-eō, inter-e $\bar{a}$ gives us a closed (i.e. long) syllable;
whence it would appear that the actual division in such cases was $p e-r e \bar{o}$, inte-re $\bar{a}$, exactly as in $g e-r \bar{o}, t e-r o ̄ ; ~ i . e . ~ c o m p o u n d s ~ o f ~$ this kind at least were divided precisely like other words.

Rule 4 in § 4 of the Grammar may therefore, for all scientific purposes, be abandoned, since, except as already indicated, compounds call for the application of no special principles.

## CHAPTER III.

## HIDDEN QUANTITY.

36. A hidden quantity is the quantity of a vowel before two consonants. Such a quantity is called hidden, as distinguished from the quantity of a vowel before a single consonant, where the metrical employment of the word at once indicates whether the vowel is long or short. The quantity of a vowel before a mute with $l$ or $r$ is hidden unless the syllable containing it appear in verse used as short.

The methods of determining hidden quantity are the following: ${ }^{1}$

1. Express testimony of ancient Roman writers, e.g. Cicero, Orator, 48. 159, where the principle for the length of vowels before $n f, n s$ is laid down (see § 37) ; Aulus Gellius, Noctes Atticae, ii. 17 ; iv. 17 ; ix. 6 ; xii. 3. Nearly every Roman grammarian furnishes some little testimony of this kind, and though some of them belong to a comparatively late period, their evidence often preserves the tradition of earlier usage, and hence is entitled to weight.
2. The versification of the earlier Roman dramatists, especially Plautus and Terence, with whom a mute before a liquid never lengthens a syllable whose vowel is short. Hence, before a mute followed by a liquid, the quantity of the vowel always appears in these writers, being the same as the quantity of the syllable, just as in case of a vowel followed by a single consonant.

Furthermore, Plautus and Terence not infrequently employ as short many syllables which in classical poetry would be invariably

[^1] cited below, p. 39 .
long by position. Examples are the following : juvĕntūs, Plautus, Mostellaria 30 ; Curculio 38 ; volüntās, Trinummus 1166 ; Pseudolus 537 ; Stichus 59 ; volŭptās, Mostellaria 249, 294; Amphitruo 939, and elsewhere. These cases are to be explained by the fact that the vowel was short and the following consonants failed to ' make position.'

In some instances, it must be confessed, even long vowels are used as short, e.g. bonı̆s mīs, Plautus, Trinummus 822, foris pultāabo , 868. But these cases are of a peculiar sort and may be explained on metrical grounds, or by the iambic nature of the words, as in the examples cited. Cf. § 87.3 .
3. Inscriptions. - Since the middle of the first century b.c. the apex (or point) appears added to the vowels $a, e, o, u$ to indicate their length. Long $i$ was designated originally by $I$ (rising above the other letters and hence called $i$ longa) and by $e i$; later, $\bar{i}$ took the apex. Examples are tráxi, CIL. x, 23 II; PRíscvs, CIL. xi. 1940 ; ólla, CIL. vi. rooo6; quInqve, CIL. vi. 3539 ; mIllia, Monumentum Ancyranum, i. 16 ; fecei, CIL. i. 55 I.

Before the employment of the apex the length of the vowel in case of $a, e, u$ was indicated by doubling the vowel, e.g. pastores, CIL. i. 55 ${ }^{\text {r }}$; Peqvlatvv, CIL. i. 202 ; 0 is never doubled in this manner. This peculiarity belongs to the period from $\mathrm{r}_{3}$ 都弹ов.с.

A thoroughly consistent use of these methods of designating the vowel quantities is found, it must be admitted, in but few inscriptions. Of the vowels contained in syllables long by position only a portion are marked, as a rule, in any single inscription. Certain official inscriptions of the late republican and early imperial period form an exception to this, and exhibit very full and reliable markings, e.g. the speech of the Emperor Claudius (Boissieu, Inscriptions de Lyon, p. 136) and the Monumentum Ancyranum, containing the Rēs Gestae Dīv̄̀ Augusti. This latter, among a great number of correct markings, contains also some false ones, e.g. CLV́PEI, SVMMÁ. Such errors also occur occasionally elsewhere.
4. Greek transcriptions of Latin words. - This method is most fruitfully applied in case of the vowels $e$ and $o$. The employment of Greek $\epsilon$ or $\eta$, o or $\omega$ makes the quantity of the Latin vowel certain, wherever faith may be reposed in the accuracy of the transcription. Thus we may write $\bar{E}$ squiliae in view of 'H $\sigma \kappa v \lambda i v o s$, Strabo, v. 234, 237; Vĕrgilius, after Ov́єpyí入ıos; Vesŏntiō, after Ov̉єбovтímv, Dio Cassius, 1xviii. 24 .

The quantity of $i$ may also often be determined by Greek transliterations. Thus $\epsilon \iota$ before two consonants regularly points to Latin $\bar{\imath}$, e.g. Beíquvıos, CIG. 5709, $=$ Vīpsānius ; Greek $\iota$ points to Latin $\check{\imath}$, e.g. ${ }^{*} \mathrm{I} \sigma \tau \rho o s=$ ster.

Inscriptions are naturally of much greater weight in such matters than are our texts of the Greek writers. Cf. § 3.c).
5. The vocalism of the Romance languages. - These languages, particularly the Spanish and Italian, treated $e, i, o, u$ with great regularity according to the natural length of the vowel. It will be remembered that Latin $\bar{e}$ and $\bar{o}$ were close; Latin $\breve{e}$ and $\breve{o}$ open. Now the Romance languages have not preserved the original quantity of Latin vowels; for both the long and the short vowels of the Latin have become half-long in Romance ; but they have very faithfully preserved their quality. Thus Latin $\bar{e}$ appears as a close $e$ in Italian and Spanish; Latin $\breve{e}$ as an open $e$ or as $i e$. Latin $\bar{o}$ appears as a close $o$ in Italian and Spanish; Latin $\check{o}$ as an open $o$ or as $u o(u e)$. Similarly Latin $\bar{\imath}$ remained $i$, but $\grave{\imath}$ became a close $e$; Latin $\bar{u}$ remained $u$, but $\breve{u}$ became close $o$. Examples:

| Latin. | Italian. |
| :---: | :---: |
| mènsis. | mese (with close $e$ ). |
| honĕstus. | onesto (with open $e$ ). |
| mōnstrāre. | mostrare (with close 0 ). |
| doctus. | dotto (with open o). |
| dīxī. | dissi. |
| dĭctus. | detto (with close e). |
| dīxī̀. | -dussi. |
| düctus. | -dotto (with close o). |

The Romance languages, however, authorize conclusions only with reference to the popular language as opposed to that of the better educated classes. In the popular speech the tendency was rather toward the shortening of long vowels than toward the lengthening of short ones. Hence where the Romance languages point to a long vowel in the popular language, it is safe to assume that the vowel was long in the literary language. When, on the other hand, the Romance languages point to a short vowel, this testimony is not necessarily conclusive, particularly if other facts point clearly in the opposite direction.

Again, the Romance languages authorize conclusions only in case of words inherited from the Latin. Many Romance words represent mediaeval borrowing by the learned class, as Italian rigido, cibo, metro, tenebre, pustula, lubrico. All such words retain the Latin vocalism. In some cases it is difficult to decide whether a word has descended by the popular or the learned channel, e.g. luxus, urna.

With all the assistance furnished by the methods above enumerated, there nevertheless remain some words whose vowel quantity cannot be determined. It is customary to regard all such vowels as short, until they are proved to be long.

The following are the most important works of reference on this subject:

Marx, Hülfsbüchlein für die Aussprache Lateinischer Vokale in Positionslangen Silben. 3d ed. Berlin, 1901. A work valuable for its collection of evidence, but frequently untrustworthy in its conclusions.
Seelmann, Die Aussprache des Latein. Heilbronn, 1885. p. 69 ff.
Gröber, Vulgärlateinische Substrata Romanischer Wörter, a series of articles in Wölflin's Archiv für Lateinische Lexikographie, vols. i-vi.
Körting, Lateinisch-Romanisches Wörterbuch. 2d ed. Paderborn, 1901.
Lindsay, The Latin Language. Oxford, 1894. p. 133 ff .
D'Ovidio, in Gröber's Grundriss der Romanischen Philologie. Strassburg, 1888, i. p. 497 ff.
Meyer-Lübke, Grammatik der Romanischen Sprachen. Leipzig, 1890.

Christiansen, De Apicibus et I Longis. Husum, 1889.
Eckinger, Orthographie Lateinischer Wörter in Griechischen Inschriften. Munich, 189 I.
Heraeus, Beiträge zur Bestimmung der Quantität in Positionslangen Silben in Wölffin's Archiv für Lateinische Lexikographie, Vol. xiv. pp. 393 ff.; 449 ff .

Further literature up to 1901 is cited by Marx, p. xiv f.
GENERAL PRINCIPLES FOR THE DETERMINATION OF HIDDEN QUANTITY.

Vowels before $n s, n f$.
37. A vowel is always long before ns and nf, e.g. consul, infētēx. This principle rests upon the following evidence:
a) Cicero, Orator, 159, expressly states that in compounds of con and in, the vowel was pronounced long when followed by $f$ or $s$.
b) Before $n s$ the vowel is often marked in inscriptions with an apex, as CIL. xii. 3 Ioz Cénsor; CIL. vi. 1527 d. 64 Cónsto; CIL. xi. ifi 8 ménsvm; the apex occurs less frequently before $n f$, $e . g$. CIL. xi. ifi 8 cónficivnt. But $i$ longa occurs repeatedly before both $n s$ and $n f, e . g$. CIL. iii. 67 Inspexi; vi. 647 Instrvxervnt ; CIL. ii. 4510 Inferioris; CIL. xiv. i738 Infanti; CIL. x. 4294 Inferri.
c) Greek transliterations of Latin words often indicate a
 ( = Prüdēns).

## Vowels before gn, gm.

38. Until recently the doctrine was current that all vowels are long in Latin before $g n$. In the Appendix to my Latin Grammar, I showed that this general principle was altogether too sweeping and that at most we could go no farther than to recognize with Priscian the length of the vowel before the suffixes -gnus, -gna, -gnum and in such other individual words as may be sup-
ported by specific evidence. Admitting the validity of Priscian's testimony for the length of the vowel before -gnus, -gna, -gnum, I showed that there was certainly no evidence to support the doctrine of Marx (see his Hülfsbüchlein, p. 1) that the vowel is long before gn in gign $\bar{o}, ~ a g n \bar{o} s c \bar{o}, ~ a g n a \bar{a} t u s, ~ c o g n \overline{o s c o}, ~ c o g n a ̄ t u s, ~$ ignārus, ignāvus, ignōrō, ignōscō, etc. Marx holds that the vowel in these latter forms was long as the result of compensatory lengthening, ignārus being for *in-gnārus, cognōscō for * con-gnōscō. But no such theory of compensatory lengthening is tenable. Marx's appeal (p. r) to the fact that Plautus always uses the syllable before $g n$ as long, is of no weight, since we should naturally expect $g n$ to ' make position' in Latin just as $\gamma v$ regularly does in Greek.

But there has been a growing tendency in recent years to reject even Priscian's testimony in favor of the length of the vowel before the suffixes -gnus, -gna, -gnum. The passage is found in Keil, Vol. ii. p. 82: "Gnus" quoque vel "gna" vel "gnum" terminantia longam habent vocalem paenultimam, ut " regnum," "stāgnum," "benīgnus," " malīgnus," "abiēgnus," "privīgnus," "Pelignus." Some scholars, as Havet, regard this statement as an interpolation. Others, while admitting the genuineness of the passage, impugn its correctness. Buck (Classical Revieze, Vol. xv. p. 311, ff.) has discussed the question here at issue with great thoroughness and candor, and urges (p. 312) against the long vowel before -gnus, -gna, -gnum: " (1) the fact that, except in words with an original long vowel, the Romance languages point to a short vowel before $g n$; (2) the fact that the Celtic and Germanic words borrowed from Latin signum also point to a short vowel ; (3) the total absence on inscriptions of the apex or I longa in the case of the great majority of words with $g n$, some of them, like magnus, of so frequent occurrence that this absence can hardly be accidental ; (4) the citation of dignitas as an anapaest by Diomedes (Keil, Vol. i. p. 470), who has in mind only vowel
quantity, not syllabic quantity. " Nevertheless certain words of this class seem occasionally (in special localities, perhaps, or in special social strata) to have had a long vowel before $g n$, as seen in sIgnum, CIL. vi. 10234 ; seignvm, xiv. 4270 ; sIgnificabo, vi. 16664 ; DIGni, x. 5676 ; PRivIGno, vi. 354 I ; IGnis, xi. 826. But these Buck regards as abnormal and exceptional pronunciations. Buck's argument is a very strong one, and his conclusions deserve at least provisional acceptance. It should be noted, however, that three words, rēgnum, stāgnum, abiēgnus, being derived from stems with a long vowel, were legitimately entitled to their long quantity and always retained it.
39. Before $g m$ the vowel is long in porgmentum (see CIL. viii. 1344, pIgmen[T) and in ségmentum (cf. Greek $\sigma \eta \gamma \mu \boldsymbol{\epsilon} \boldsymbol{v} \tau \alpha)$, but there is no evidence warranting the formulation of a broad rule embracing all vowels before $g m$, as is done by Marx (p. i). Marx appeals to the analogy of $g n$ in support of his attitude; but apart from the dangers of this kind of reasoning, we have already seen that the case for vowel length before $g n$ is of the weakest possible kind, so that, even if we admit the validity of the analogy, there is nothing to indicate regular vowel length before $g m$.

## Vowels before nt, $n d$, ss.

40. 41. All vowels are regularly short before $n t$ and $n d$, e.g. amandus, montis, amant, monent.
1. Exceptions :
a) Before $n t$ the vowel is long in
a) quintus.
$\beta$ ) the following contracted words : cōntiō (for coventiō), jēntāculum (for *jéjūntāculūm), jēntātiō (for *j'ējūntātiō), nüntius (for *noventius).
$\gamma$ ) Greek proper names in -ūs, Gen. - $\bar{u} n t i s$, e.g. Selīnūs, Selīnūntis (Greek, ミ̇edıvov̂vtos).

ס) Greek proper names in -ōn, Gen. -ōntis, e.g. Xenophōn, Xenophōntis (Greek, ヨєvoфஸैvтos).
b) Before $n d$ the vowel is long in
a) the following contracts and compounds : prēnd $\bar{o}$ (for prehend $\bar{o})$, nōndum (nōn + dum $)$, vèndō (vēnumd $\bar{o})$, nündinus (novem diēs), qū̄ndecim (quīnque), ūndecim ( $\bar{u} n u s$ ).
$\beta$ ) some Greek names, e.g. Charōndās, Epamīnōnd̄̄̄s (- $-\mathbf{v} \delta a s)$.
3. The evidence for the short vowel before $n t$ lies in the fact that, while in the Nominatives of such words as clèmèns, créscèns, clièns, föns, gèns, parēns, pōns, praesèns, the long quantity of the vowel is assured either by the presence of the apex, or by a long vowel in Greek transcriptions, in the oblique cases the apex is lacking, and in Greek transcriptions the vowel is short, e.g.
 3757 ; K $\lambda \dot{\eta} \mu \epsilon v \tau \iota$, CIG. Addenda, 1829 c. ; CRÉscéns, CIL. xii. 4030, but créscenti, CIL. vi. 9059 ; K $\rho \eta \sigma^{\sigma} \kappa \eta \nu$ s, CIG. 6012, c.;



Even where a vowel is naturally long, it sometimes becomes shortened before $n t$, e.g. in linteum from linum; cf. Greek $\lambda$ év $\tau$ ov, CIG. 8695 .

For the vowel before $n d$ the evidence is not so full. We find the Greek transcriptions Kadévoats, Lydus, de Mens. iv. 53, 57 ; Фovóvivos (i.e. Fundānius), Bulletin de Correspondance Hellénique, ix. p. 439 .
4. Vowels are also regularly short before ss, according to the express testimony of Quintilian, i. 7. 20. But see § 47 . I.

Pontem, fontem, montem, frontem, frondem.
41. A slight uncertainty exists as to the quantity of the vowel before $n t$ in the oblique cases of $f \bar{o} n s, m \bar{o} n s, p \bar{o} n s, f r o ̄ n s$
(frontis); and before $n d$ in frōns (frondis). Three sets of facts are to be considered:
a) The analogy of other words in -ns (Gen. -ntis). Such words, so far as they are genuine Latin words, have, without exception, a short vowel before $n t$ in the oblique cases. See § 40 .
b) The testimony of the Romance languages. This is as follows for the different words under discussion :
fōns. The Romance languages seem to point to an antecedent föntis, fönti, etc. Thus the Italian fonte has close $o$; so the Provençal fon. Spanish alone with its fuente points to föntem (Gröber, Archiz, ii. p. 426 ; Körting, Lat.-Romanisches Wörterbuch).
frōns (-ndis). 'The Romance languages all agree in pointing to fröndem (Gröber, Archiv, ii. p. 426 ; Körting, Wörterbuch).
frōns (-ntis). Provençal fron and Italian fronte, with close $o$, point to frontem. So the other Romance languages, except Spanish, which has fruente, pointing to fröntem. (Gröber, Archiv, ii. p. 426 ; Körting, Wörterbuch.)
mōns. The Romance languages point unanimously to mōntem (Gröber, Archiv, ii. p. 426 ; Körting, Wörterbuch).
pōns. Provençal pon and Italian ponte with close $o$ point to pōntem; so the other Romance languages, except Spanish, which has puente, pointing to pŏntem.

If mere numerical preponderance were decisive, we might at once conclude that all these words went back to Latin forms with $\bar{o}$ in the oblique cases, and might explain Spanish fruente, fuente, puente (which should be fronte, fonte, ponte, to represent Latin $\bar{o}$ ) as exceptions to the prevailing law of development. A glance at certain facts, however, in Italian and Provençal, suggests another conclusion. We find it to be a regular law in these languages that an original open Latin $o$ (i.e. short $o$, see §36.5), when followed by $m$, $n$, or $l,+$ another consonant, becomes close. Thus Latin tŏndet with open $o$, becomes Italian
tonde, with close o. Similarly respŏndet becomes risponde; rhŏmbus becomes rombo; pŏl(y)pus becomes polpo, all with close $o$. Just what has brought about this change is not certain. D'Ovidio in Gröber's Grundriss der Romanischen Philologie, i. p. 522, thinks it was the analogy of words in on + consonant, $o m+$ consonant, and $o l+$ consonant, in which close $o$ had developed regularly from an earlier $\breve{u}$ (see § 36.5 ), e.g. rompe (=rumpii) ; onda (=unda) ; dolce (= duilcis). In accordance with this principle, whose operation is certain, Latin fŏntem, frŏndem, frŏntem, mŏntem, pŏntem, would (assuming these to be the original forms) regularly become in Italian: fonte, fronde, fronte, monte, ponte, with close $o$, exactly as we find them. The admission of a long $o$ in the oblique cases of these Latin words is, therefore, not necessary in order to account for Italian and Provençal close $o$ in their Romance descendants. In fact, when we consider Spanish fuente, fruente, puente, all of which point to Latin ŏ, it seems more reasonable to regard Spanish monte and fronde (which point to $\bar{o}$ ) as the exceptions. Gröber, who (Archiv, vi. p. 389 ) expresses himself in favor of assuming an original fontem, etc., in these words, suggests that Spanish monte, fronde, are loan-words, while fuente, fruente, puente represent an original inheritance.

Briefly, then, a fair interpretation of the evidence of the Romance languages seems to warrant the belief that the oblique cases of the words under discussion came into the Romance languages from the Latin with a (short) open $o$; that in Italian and Provençal this open $o$ subsequently became close in accordance with a regular law of wide operation. Spanish regularly developed the open $o$ to $u e$ in those words which it inherited from Latin (ziz. in fuente, fruente, puente); while Spanish monte and fronde are probably loan-words from Italian.
c) The third bit of evidence comes from Greek transliterations of Latin words as found in Greek inscriptions and Greek authors.

Thus we find Фovт $\dot{\imath} \iota \boldsymbol{\circ}$ ( $=$ Fönteius) in Plutarch and Appian ; also in an inscription, CIG. iii. 5837 , b (59 A.D.) ; Фроитîvos, CIA. iii. 1154 (between 150 and 200 A.D.) ; Фрovtєivos, CIA. iii. 1177 (about 220 A.D.) ; Фрóvt $\omega v$, CIA. iii. 1113, 21, 26 (before 161 A.D.), and in texts; all of which point to Latin Frŏnto, and Frŏntinus, and indirectly to frŏnt-em. Latin Montānus appears as Movtavós, CIG. Addenda, 4805 b ; and we find $\tau \rho \iota \mu$ óvтıov, Ptol. iii. 11, 12, et passim ; $\pi o ́ v \tau \epsilon \mu(=$ Latin pŏntem) is the text in Plutarch, Numa, 9; $\pi$ ovti申ı $\xi$ ( $=$ pŏntifex), in Dionysius, Dio Cassius, and Zosimus ; $\pi о \nu \tau i \phi \epsilon \xi$, in Lydus, de Mens. iii. 21 ; $\pi о \nu \tau i-$ фєкєя, in Plutarch, Numa, 9 ; and тоутіфıка, in an inscription in Kaibel's Sylloge Epigrammatum, Addenda, 888 a. The Greek never shows an $\omega$ in any of these words, either in inscriptions or in Mss. The evidence furnished by that language therefore is unanimous in favor of $\breve{o}$ for the Latin. Nor can recognition be refused the inscriptions above cited on the ground that they are late. As the annexed dates show, they all belong to the good period of the language.

We thus have the strongest possible grounds for writing fontis, frŏndis, etc. The analogy of other words in -ns (Gen. -ntis) favors this view ; the Romance languages favor it, and the testimony of Latin words in Greek dress, as exhibited both in texts and in inscriptions, favors it. In fact, the evidence is complete.

The isolated apex in Frónt (for fróntem, as the context shows), CIL. v. 2915, is certainly a mere blunder of the stonecutter, as is often the case in other words, even in carefully cut inscriptions (see §36.3). Christiansen, De Apicibus et I Longis, p. 57, cites thirteen such instances for vowels before $n t$.

## Hidden Quantity in Declension.

42. 43. It is maintained by some scholars (e.g. Marx, Hülfsbüchlein, p. 2 ; Lane, Harvard Studies, i. p. 89) that the ending -um in the Genitive Plural of nouns of the First and Second

Declensions has $\bar{u}$ in such forms as Aeneadum, deum, nummum; also in nostrum and vestrum. The facts in evidence are the following :
a) On early Latin coins prior to the First Punic War, we find the final $m$ of many Genitives Plural omitted, e.g. Romano, Corano. Coins of the same date regularly retain final $m$ of the Nominative or Accusative Singular, e.g. Volcanom, propom ( $=$ probum). This has led Mommsen (CIL. i. p. 9) to infer that there was a difference in the quantity of the $o$ in the two instances. As the $o$ of the Nominative and Accusative Singular was short, Mommsen thought that in the Genitive Plural it must be long. But the material with which Mommsen deals is extremely scanty. Genitive Plural forms occur in some number; but only a few Nominative and Accusative forms are found, viz. Volcanom, propom. Again, Romanom (CIL. i. i) and Aeserninom (i. 20) show that Genitives sometimes retained the $m$. Mommsen attempts to solve this difficulty by taking Romanom and Aeserninom as the Nominative Singular Neuter of the Adjective ; but that is awkward. The natural inference must be that there was no system in the omission of final $m$ on these coins. The coins represent no dialect ; in fact they represent widely separated localities; hence it is no wonder if the final $m$ (always weak) was sometimes written, sometimes omitted. In the Scipio inscriptions, the oldest of which may date within a quarter of a century of these coins, we find final $m$ freely omitted in the Accusative and Nominative Singular just as elsewhere. It is, therefore, extremely unlikely that Mommsen's hypothesis concerning the coins is correct.
b) An inscription of Nuceria (CIL. x. 1081) has dvv́mviratvs, which Schmitz (Rheinisches Museum, x. 110) and Lane (Harvard Studies, i. p. 89) regard as evidence that the $u$ of duum (Gen. Pl. of duo) was long. But even conceding the correctness of the apex in this isolated instance, it remains to be shown that the
duum- of duumvir and duumvirātus is in origin a Genitive. Such an etymology would involve the assumption that the duum- of the Genitive Plural, duumvirum, became transferred to the other cases, replacing duo in earlier duovirì, etc. Such an assumption is extremely improbable. It is much more likely that duumvir and triumvir are formed after the analogy of centumvir. In the singular especially such forms as duovir, trésvir would have been extremely awkward, and it seems probable that the singular duumvir, triumvir were for that reason historically anterior to duumvirí, triumviri. The apex in the Nucerian inscription, if this etymology be correct, would then be simply a blunder of the engraver, as is altogether probable. The evidence in favor of $-\bar{u} m$ in these Genitives must, therefore, be regarded as of no weight, especially in view of the regular shortening of vowels before final $-m$ in Latin. Certainly if $-\bar{u} m$ did by any possibility exist in the days of Augustus, the $u$ had become shortened by 90 A.D. For Quintilian (i. 6. ı8), as noted by Lane (p. 90), shows that to his ear nummum, Genitive Plural, was nowise different from nummum, Accusative Singular.
2. Words in eer of the Second Declension, and words of the Third Declension in eer and $-x$, have in oblique cases the same quantity of the vowel as in the Nominative, e.g. ăger, ăgrī; frāter, frātris; ācer, ācris; pāx, pācis; tenāx, tenācis; făx, făcis; rēx, regis; nŭx, nĭvis; cornūx, corn̄̄cis; calı̆x, calı̆cis; fel, fellis; ŏs, ŏssis ; plèbs, plēbis. Thus sometimes the Nominative gives the clue to the hidden quantity in the oblique cases (as $\breve{a} g e r, ~ \breve{a} g r \bar{u}$ ); sometimes the oblique cases give the clue to the hidden quantity of the Nominative (as cornīcis, cornīx).
3. Words of the Third Declension ending in -ns (Gen.-ntis) uniformly have a short vowel in the oblique cases, as already explained in § 40. 3. Greek words in -ās (Gen. -antis), e.g. Aiās, Aiantis; gigās, gigantis, have the same quantity as in the


Greek names of cities in -ov̂s, -ov̂vtos, e.g. Selīnūs, Selīnūntis; and proper names in - $ิ \nu$, - $\omega v \tau o s, ~ e . g . ~ X e n o p h o ̄ n, ~ X e n o p h o ̄ n t i s . ~ A c h e r o n ~$ (not a contract form) has Acherüntis.
4. In all words of the Third Declension ending in two or more consonants (excepting -ns and $-x$ preceded by a vowel), the hidden vowel before the ending is short, e.g. $\breve{u} r b s$, sŏrs, $\breve{a} r x$. Exceptions to this principle are plēbs and compounds of ūncia ending in -ūnx, e.g. dē̄$n x$, deūncis; quīncūnx, qū̀ncūncis. Before $-x$ the vowel is sometimes long, sometimes short, as already explained in 2 , above.

## Comparison of Adjectives.

43. In the terminations -issimus, -errimus, -illimus, the hidden vowel is short, e.g. cař̌ssimus, acĕrrimus, facillimus. Apparent traces of a long $i$ in the termination -issimus are found in inscriptional forms with $i$ longa. The word of most frequent occurrence is piIssimus ; besides this we find a few other words, e.g. CARIssimo, CIL. vi. 5325 ; DVLCIssimo, vi. r6926; FortIssimo, vi. if32. But many of these inscriptions belong to the last centuries of the Empire, when the use of $i$ longa had become an extremely untrustworthy guide, as may be seen by palpable errors. As regards the frequent occurrence of piIssimae, piIssimo, these may perhaps be explained on the theory that $i$ longa was here used to indicate not merely $i$, but also the $j$ which developed in pronunciation between the two $i$ 's, i.e. pijissimo. $C f$. the similar use of $i$ longa in words like PompeIivs, CIL. ix. 3748. At ail events, in the absence of the apex in these superlatives, and in view of the absolute silence of the grammarians, it seems unwise to attach great weight to the occurrence of the $i$ longa alone. Against $\bar{i}$, Lindsay (Latin Language, p. 405) urges the occurrence of late spellings like merentessemo, karessemo, CIL. ii. 2997. Cf. §6. 1.

## Numerals.

44. As separate words are to be noted:
a) quăttuor, but quārtus (see § 53 under arca).
b) quìnque and its derivatives, all of which have $\bar{\imath}$, as quīndecim, qū̄ntus, qū̄ngenti, quīnquāgintā.
c) the derivatives of ūnus: ūndecim, ūndèvègintī, etc.
d) mîlle, millia, and mïllēsimus.

## Pronouns.

45. 46. Nōs, wōs; but nŏster, vĕster; nostrī, vestrī, etc.
1. Hunc and hanc have a short vowel.
2. Ille, ipse, iste have $\grave{i}$.
3. The suffix -cunque has $\breve{u}$.
4. Compounds retain the quantity of the elements of which they are compounded, as qŭ̆squis, cūjŭsque.

## CONJUGATION.

Root Forms.
46. I. Presents formed by means of the infix $n$ have a short vowel, e.g. fündō (root fud-) ; frăngō (root frag-) ; jüngō (root $j u g$-). Before a labial, $n$ becomes m, e.g. rumpō (root rup-); lambō (root lab-). Care should be taken not to confuse derivative and contract Presents like qīndō, prēndo, with genuine nasal formations.
2. In most Presents the hidden vowel is short, e.g. necto, serp $\bar{o}$, vertō. But the following exceptions are to be noted:
a) First conjugation: jūug $\bar{o}$ (for jūrigō), n $\bar{a} r r \bar{o}, \bar{o} r n \bar{o}, ~ p \bar{u} r g \bar{o}$, trāctō.
b) Second Conjugation: $\bar{a} r d e \bar{o}$.
c) Third Conjugation: all verbs in $-s c \bar{o}(r)$, except compesco, discō, poscō, vescor.
d) Fourth Conjugation: nūtriō, ōrdior.
3. The quantity of the vowel in the Present regularly remains unchanged (when it becomes hidden) throughout the entire conjugation of the verb, e.g. :

| $\bar{a} r d e o ̄$ | ärdère | $\bar{a} r s \bar{\imath}$ | ärsūrus |
| :---: | :---: | :---: | :---: |
| gerō | gerere | gessī | gestus |
| scrībō | scribere | scrīpsī | scrīptus |
| vīvō | vivere | vīxì | vīctürus |
| figō | figere | $f \bar{i} x \bar{i}$ | fixus |

Thus inscriptions give fIxa, scrIptvm, conscreiptvm, vIxit, veixit.

But the following exceptions to this general principle are to be noted :

| a) | dīcō | dīcere | dìxì | dïctus |
| :---: | :---: | :---: | :---: | :---: |
|  | dū̄cō | dūcere | $d \bar{u} x \bar{\imath}$ | düctus |
| ) | cēdō | cēdere | cèssī | cèssūru |

The short vowel of the Perfect Participles düctus and dŭctus is assured by the statement of Aulus Gellius (Noctes Atticae, ix. 6) and by the testimony of the Romance languages. (See § 52. s.zv.)
b) The short vowel of the Present is lengthened in the Perfect Indicative and Perfect Participle, if hidden, in the following verbs :

| agō | agere | $\overline{e g} \bar{i}$ | āctus |
| :---: | :---: | :---: | :---: |
| cingō | cingere | cinxi | cinctus |
| dèlinquō | dèlinquere | dêtôquì | dèlīctus |
| distinguō | distinguere | distīnxi | distinctus |
| emō | emere | $\bar{e} m \bar{\imath}$ | èmptus |
| exstinguō | exstinguere | exstinxi | exstinctus |
| fingō | fingere | finxi | fictus |
| frangō | frangere | frēgi | fräctus |
| fungor | fungz | fünctus sum | - |
| jungō | jungere | jūnxī | jūnctus |
| legō | legere | lēgì | lēctus |
| pangō | pangere | pepigī | pāctus |
| pingō | pingere | $\operatorname{pin} x \bar{\imath}$ | pictus |


| pungō | pungere | pupugi | pünctus |
| :---: | :---: | :---: | :---: |
| regō | regere | rēxì | rēctus |
| relinquō | relinquere | relīquī | relīctus |
| sanciō | sancire | $\operatorname{san} x \bar{i}$ | sānctus |
| struō | struere | strūxī | strūctus |
| tangō | tangere | tetig $\bar{\imath}$ | tāctus |
| tegō | tegere | tēxi | tèctus |
| tinguō | tinguere | tinxī | tinctus |
| traho | trakere | trāxī | trāctus |
| ungo | ungere | ìnxi | ünctus |

So also in compounds and derivatives of these verbs.
4. The evidence for the long vowel in the Perfect Participles of the foregoing list is found :
a) In the statements of Gellius, who testifies (Noctes Atticae, ix. 6) to the quantity of the vowels of $\bar{a} c t u s$, léctus, $\bar{u} n c t u s$, and in xii. 3.4 to that of strüctus.
b) In the testimony of inscriptions, which show the following : Áctis CIL. vi. I 377 ; Redácta vi. 7 OI ; exáctvs Boissieu, Inscriptions de Lyon, p. 136; CInctvs CIL. x. 4104 ; Defv́nctis CIL. v. 1326; DIléctvs vi. 6319 ; Léctvs xi. 1826; EXStInctos vi. 25617 ; INFRÁCTÁ ix. 60 ; IV́NCTA x. 1888; SEIV́NCTVM vi. ${ }^{1} 527$ e. 38 ; récte xii. 2494 ; téctor vi. 5205 ; Coémto Monumentum Ancyranum iii. II ; TRÁ[CTA (not certain) CIL. vi. 1527 e. I4; SÁNCTA v. 2681; Oscan SAA(N) нтом (= sānctom).
c) In the retention of $a$ in compounds of actus, tactus, fractus, pactus, tractus (e.g. coactus, attactus, refractus, etc.), which shows that the $a$ was long; short $a$ would have become $e$ in this situation, as for example in cōnfectus for an original * cōnfăctus; acceptus for an original *accăptus; èreptus for *érăptus.
d) For cinctus, delīctus, distīnctus, exstīnctus, fïctus, pìctus, pünctus, relīctus, tinctus, the long vowel is assured by the evidence of the Romance, e.g. Italian cinto, delitto, fitto, relitto, tinto.
5. The evidence for the quantity of the vowel in the Perfects of the foregoing list is found :
a) In inscriptional markings, as coniv́nxit (Wilmanns, Inscript. Latinae 104); téxit (CIL. x. 1793); RÉxit (CIL. v. 875); tráxi (CIL. x. 23if, 18).
b) In Priscian's statement (Keil, ii. 466) that rexi and texi have $\bar{e}$.
c) In the testimony of the Romance languages, which point to

d) The long $\bar{a}$ in $s \bar{a} n x \bar{\imath}$ rests upon no specific evidence, but may perhaps be safely inferred after the analogy of sanctus.

Until recently the principle was maintained (e.g. by Marx in his first edition) that all monosyllabic stems ending in $b, d$, or $g$ had the hidden vowel long in the Perfect Indicative and Perfect Participle wherever euphonic changes occurred. According to this theory we should have e.g. scindō, scindere, scidī, scīssus; mĕrgō, mërgere, mèrsī, mèrsus. This principle was first laid down by Lachmann (on Lucretius, i. 805) for Perfect Participles alone, and was subsequently assumed by other scholars to apply to the Perfect Indicative as well; but this position is now entirely abandoned. Each long vowel must be supported by specific evidence.
In the 3d edition of his Hülfsbüchlein (p. r), Marx lays down the principle that all vowels are long in Latin before $n x$ and $n c i$. These combinations occur almost exclusively in the verbs given on pp. 51, 5 2. Whether the general principle is sound, may be questioned. For example, we have no definite evidence in favor of the long vowel before $n x$ in anxius, lanx, or phalanx.

## Verbal Endings.

47. I. The hidden vowel is short before ss (§ 40.4) and st in the terminations of the verb, e.g. fü̆ssem, amärŭsse ; füstī, fuüstis. This is shown not only by the historical origin of these formations, but by such metrical usage as Plautus, Amphitruo, 761, dedǐse; Menaechmi, 687, dedistit where iss and ist are treated as short
syllables by neglect of 'position' (see § 36.2). Contracted forms are, of course, an exception to the above principle, as amāsse, commōssem, redīsse, audīsset, amāstī, nōstis.
48. Formations of the type : $d \bar{\imath} x t \bar{\imath}$ (for $d \bar{i} x i s t \bar{\imath})$, accĕstis (for accessistis), jüstī (for jussistī), trāxe, surrēxe, exstīnxem, etc., have the same quantity as the regular forms.

## Compounds.

48. Marx (p.8) holds that the vowel of a monosyllabic preposition, if hidden, is long in composition when the preposition loses a final consonant. Thus he maintains a long vowel for the initial syllable of ascendō (for ${ }^{*}$ ad-scandō) ; di-stinguō (*dis-stingūō); suspiciō (for *sub-spiciō). But this principle rests upon an untenable theory of compensatory lengthening; see § 89 .

## Inchoatives.

49. Inchoatives in $-s c \bar{o},-s c o r ~ h a v e ~ a ~ l o n g ~ v o w e l ~ b e f o r e ~-s c, ~$ e.g. labāascō, flōrēscō, nitēscō, tremīscō, adipīscor. Gellius (Noctes Atticae, vi. 15) mentions a number of words of this class as having a long vowel, and implies that this was generally true of all. The Romance languages show that -scō and -iscō (-iscor) had $\bar{e}$ and $\bar{i}$. But the hidden vowel is short in compesco, disc $\bar{o}$, poscō, vescor.

## Irregular Verbs.

50. i. The root vowel of esse is short under all circumstances, e.g. ĕst, ĕstis, ĕsto, ĕssem.
51. Ed̄े, 'eat,' has a long $e$ in the forms ès, ēst, ēstis, èssem, èsse, èstur, èssètur. Cf. Donatus on Terence, Andria, 8ı; Servius on Virgil, Aeneid, v. 785.
52. Marx (p. 9) lays down the principle that in compounds of $\bar{e} \bar{o}$, forms containing $i i$ have the second $i$ long before st, as $e . g$. in
interiist $\bar{\imath}$. This theory rests solely upon the occurrence of inteRIEISTI in CIL. i. 1202. But ei occurs elsewhere in inscriptions, incorrectly written for $\grave{\text { í e.g. parenteis ( }=\text { parentĭs), CIL. i. ıо०9; }}$ faceivndae ( = faciundae). It is altogether probable that interiEISTI is another instance of the same sort.

Word Formation.
51. 1. Substantives in -abrum, -acrum, -atrum, derived from verbs, have $\bar{a}$, e.g. flābrum, lavācrum, arātrum.
2. The derivative endings eellus ( $a$, um), -illus ( $a$, um), regularly have $\breve{e}$ and $\breve{\imath}$, but the following have a long vowel, viz.: catēlla, 'little chain,' anguìlla, Bovillae, hīllae, ovìllus, stilla, suìllus, vìlla.
3. The vowel is short in -ernus (-ernius, -erninus), -urnus (-urnius, -urnīnus), e.g. hībĕrnus, tab̆ĕrna, Sātürnus. In vērnus (from verr) the $r$ is not a part of the suffix.
4. The vowel is short in the endings -estus (-ester, -estris, -esticus, -estās), -ister (-istrum), -uistus, e.g. caelëstis, domĕsticus, tempĕstās, cap̆ıstrum, venŭstus. In sèmēstris, jūstus, the long vowel belongs to the stem.
5. The vowel is short in the endings -unculus, -unciō,-erculus, -usculus, e.g. ratiuncula, paterculus, maiusculus, homunciō; plūsculus (from pluss) naturally has $\bar{u}$.
6. In compounds, the connecting vowel $i$ is short, e.g. nāvifragus, lectïsternium.

## 52. List of the Most Important Words containing

## a Long Vowel before Two Consonants. ${ }^{1}$

## A.

abiëgnus: see §38, end.
acatalēctus: Gr. áкатá $\lambda \eta \kappa \tau о$.
$\bar{a} c t i \bar{o}, \bar{a} c t i t \bar{i}, \bar{a} c t o r:$ see agō.
$\bar{a} c t u ̄ t u m: ~ l i k e ~ a ̄ c t u s . ~$
adèmptiō: see adimōo. adimō, adèmptus: like emō.
afflictō: like ficctus.
$\bar{A} f r i c a, \bar{A} f r \bar{l}:$ from $\overline{\text { fer }}$.
agō, agere, $\overline{e g} \bar{\imath}$, àctus : see § 46.3.b).
Alcēstis: Gr. " $\mathrm{A} \lambda \kappa \eta \sigma \tau$ ıs.
$\bar{A} l \bar{e} c t o ̄: ~ G r . ~ ' А \lambda \eta \kappa \tau \omega ́$.
aliōrsum: for *alio-vorsum.
alīptès: Gr. ả入єinv $\bar{\alpha}$.
Amāzōn : Gr, 'A $\mu a ́ \zeta \omega \nu$.
ambüstus: see $\bar{\imath} \imath \bar{o}$.
Amsānctus: see sānctus.
anguilla: $\bar{i}$ acc. to the Romance.
Aquīllius: A叉vIllivs: CIL.vi. 12264. arātrum: see §51. I.
ārdeō, -ère, àrsī, ārsūrus: like āridus, ārdus.
Arginūssae: Gr. 'A $\rho \gamma \iota \nu 0 \hat{\sigma} \sigma \sigma a \iota$.
$\bar{a}$ spernor: from $\bar{a}$ and spernor.
äthla: Gr. $\dot{\alpha}^{\hat{a}} \theta \lambda_{o \nu}$.
äthlētès : Gr. $\dot{\alpha} \theta \lambda \eta \tau \eta{ }_{n} s$.
ātrāmentum: like āter.
ātrium: from àter; also Átrivm, CIL. vi. 10025.
āxilla: Priscian, iii. 36.

| B. <br> $b \bar{a} r d u s$, 'stupid': from $b \bar{a} r o ̄$. <br> Bēdriacum: B$т \tau \rho \_a \kappa b \nu$, Plutarch, Otho, 8, $1 \mathbf{I}$. <br> bēllua: for bès-lua. <br> béstia, Bèstia: B $\eta \sigma \tau i a s ; ~ P l u t a r c h, ~$ Marius, 9; Cicero, 3; the Romance would point to $\check{e}$. <br> liförmis: see förma. <br> bilibris: like lībra. <br> biméstris: from mènsis. <br> bovillus: from bovinus. <br> hīubrēstis: Gr. $\beta$ oú $\beta \rho \eta \sigma \tau \iota s$. <br> bivrus: $\bar{u}$ acc. to the Romance. <br> büstum: $\bar{u}$ acc. to the Romance ; $c f$. combuistus and üstus. <br> Būthrōtum: Boú $\theta \rho \omega \tau 0 \nu$. |  |
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C.
catalēctus: Gr. катá $\lambda \uparrow \kappa \tau о s$.
catella: from catēna; catella,'bitch,' has $\check{e}$.
catillus: from catīnus.
cetra: better orthography is caetra; see §61.
chïrürgus: Gr. $\chi \in \iota \rho o u \rho \gamma$ bs.
cicātrīx: $\bar{a}$ in Plautus, Amphitruo, 446; see § 36. 2.
ciccus, $-u m$ : $\bar{i}$ acc. to the Romance.
${ }^{1}$ The following classes of words are omitted from this list: -
a) Most derivatives and compounds.
b) All words containing $n s$ or $n f$.
c) Inchoatives in - $\bar{a} s c \bar{o},-\bar{e} s c \bar{o},-\bar{i} s c \bar{o}$.
d) Some rare Greek loan-words and proper names.
e) Nouns and adjectives in $-x$, whose Genitive (acc. to §42.2) shows the preceding vowel to be long.

Cincius: CINCIA, CIL. vi. 14817 et passim.
cingō, cingere, cinx $\bar{i}$, cinctus : $\bar{i}$ in the Perfect and Perfect Participle acc. to the Romance; see Körting (Wörterbuch) : d'Ovidio (Gröber's Grundriss, i. p. 501 f.); cInctvs, CIL. x. 4104 ; see § 53 s. v.
clandèstinus: from clam and dès(i)tus from dêsin̄̄ (cf. positus from pōnō, i.e. po-sinj ); hence 'secretly put aside.'
clītra, clātrī: Gr. $\kappa \lambda \hat{\eta} \theta \rho a$.
Clytèmèstra: Gr. K $\lambda \nu \tau \alpha \mu \eta \sigma \tau \rho a$.
Cnōssus: Gr. K $\boldsymbol{\nu} \omega \sigma \sigma \sigma$.
cōgō, cögere, coēgì, coāctus: see agō.
combūrō, combūrere, combussī, combūstus: see $\bar{u} r o ̄$ and būstum. Marx also marks the o long, regarding cōmbūrō as for co-ambūrō, and comparing cogitō (for co-agitō).
comedō, comèstus : cf. edō ; see §50. 2. cōmō, cōmere, cōmpsī, cōmptus : $\bar{o}$ acc. to the Romance.
compingō, compingere, compēgī, compāctus: see §46.3.b).
conjünx: CONIV́Nx, CIL. vi. 6592 et passim; but conjux has $\check{u}$.
conting $\overline{\text {, }}$-ere, contigĭ, contäctus: like tangō.
cōntiō: for co-ventiō; § 40. 2. a).
corōlla: from corōna.
crābrō: $\bar{a}$ in Plautus, Amphitruo, 707; see § 36. 2.
crāstinus : from crās.
crēscō: CRÉsCÉNS, CIL. xii. 4030 et passim; Gr. K $\rho \eta \eta_{\sigma \kappa \eta \nu s ; ~ a l s o ~ a c c . ~}^{\text {a }}$ to the Romance.

## Crēssa: K $\rho \hat{\eta} \sigma \sigma \alpha$.

crībrum: $\bar{\imath}$ in Plautus, Mostellaria, 55 ; see. § 36.2.
crispus: Creispinvs, CIL. x. 3514.

K $\rho \epsilon \iota \sigma \pi \epsilon$ îvov, CIG. Addenda, 4342, d. 4. The Romance would point to $\check{\imath}$; but see $\S 36.5 \mathrm{fin}$.
crūsta, crī̀stum: $\overline{\mathrm{v}}$ in CIL. i. 1199 ; the Romance points both to crūstum and also to a collateral form with $\breve{u}$. Gröber (Archiv, vi. 384); Körting (Wörterbuch).
Ctēsiphōn, -ōntis: Gr. - $̂ \nu$, - $ิ \nu \tau o s$.
cucūllus, 'hood': the Romance points to two forms, - one with $\bar{u}$, another with $\breve{u}$; see Gröber (Archiv, i. 555; vi. 384); Körting (Wörterbuch); cucullus, 'cuckoo,' has $\check{u}$.
cūnctus: cV́ncti, CIL. ix. 60.
cūstōs: Kovatஸ́dךs, Lydus, de Magistratibus, i. 46 ; $\bar{u}$ acc. to the Romance.
Cyclōps: Gr. Kúкл $\omega \boldsymbol{\psi}$.

## D.

dèligō, -ere, dèlēḡ̀, dèlēctus: like legō. dèlinquō,-ere, dèlīquì, dèlīctus: ì acc. to the Romance.
dèlūbrum: $\bar{u}$ in Plautus, Poenulus, II75; see § 36. 2.
dèmō, dēmere, dèmpsī, dèmptus; like emö.
deūnx: from dè and $\bar{u} n c i a$.
dēxtāns: from dē + sextāns.
dī̀ō, dīcere, dīx $\bar{\imath}, ~ d i ̄ c t u s: ~ s e e ~ § 46 . ~$ 3.a). Certain of the Romance languages (Fr. dit; Old Ital. ditto, etc.) point to a collateral dīctus, which Osthoff (Morphologische Untersuchungen, iv. 74) thinks belonged to the colloquial language. But possibly those Romance languages which point to $\bar{i}$ have simply adapted the Participle to the vowel of the Present and the Perfect. See Gröber (Archiv, vi. 385).
dictèrium: Gr. $\delta \in \iota \kappa \tau \eta \eta^{\prime} \rho o \nu$.
Diēspiter: for diès and pater.
digladior: for dis + gladior by compensatory lengthening ; see § 89 . dīgredior: for dis + gradior by compensatory lengthening ; see § 89 . dilèmma: Gr. $\delta \iota \lambda \hat{\eta} \mu \mu a$.
dīligō, -ere, dîlèxī, dīl̄ēctus: like legō. dirigō,-ere, dī̀ēxū, dī̀ēctus: like regō. dirimō, -ere, dirēmí, dirc̄mptus; like emō.
distinguo,--ere, distinnxi, distinctus: ī
acc. to the Romance ; see d'Ovidio (Gröber's Grundriss, i. p. 502);
Körting (Wörterbuch); cf. exstinguō; see § 46. 3.b.
dolābra: cf. § $5 \mathbf{1}$. 1.
dū̀cō, dūcere, dūxxī, dŭctus: see § 46 . 3. a) ; perdv́xit, CIL. xii. 2346 et passim.
E.
èbrius: è regularly in Plautus, e.g. Trinummus, $8 \mathbf{1 2}$; see §36. 2.
eclīpsis: Gr. є́клєı廿!s.
edō, 'eat' : èst, èstis, èsse, etc. See § 50. 2.
effringō, -ere, effrēgī, effrāctus: like frangō.
emō, emere, èmī, èmptus: see § 46. 3. b).
èmungō, -ere, -, èmūnctus : $\bar{u}$ acc.
to the Romance ; see d'Ovidio (Gröber's Grundriss, i. p. 515).
ērigō, -ere, ērēxī, ērēctus: like regō.
èsca: è acc. to the Romance.
Ēsquiliae, Esquilīnus: Gr.' ${ }^{\text {'H } \sigma \kappa \nu \lambda i ̀ v o s, ~}$ in Strabo, v. 234, 237.
Etrūscus: cf. Etrūria; Gr. 'Eтpô̂бкos.
existimō: from ex and aestimō; ExI-
stimavervnt, CIL. v. 5050.
exōrdium: from ōrdior.
exstingū̄, -ere, exstīnxī, exstinctus: EXTINCTOS, CIL. vi. 25617; of. distinguō; see § 46. 3.b.
extraōrdinārius: from ōrdō.

## F.

fāstus, a, um; cf. fās.
favilla: favIlla, CIL. v. 3143. The Romance also seems to point to $\bar{i}$. fēllō: from same root as fêmina; Gr. $\theta \hat{\eta} \lambda u s$.
festivus: from fēstus.
féstus: from the same root as fëriae ( $=$ * fês-iae), 'holiday' ; Féstvs in CIL. i., Iasti Praenestini for April 25th. So also in the proper name:
Fēstus: Féstvs, CIL. xii. 3179 ; Fésti, v. 2627; Féstae, iii. 5353; Gr. $\Phi \hat{\eta} \sigma \tau 0 \mathrm{~s}, \mathrm{CIA}$. iii. 635 and frequently. The Romance points to $\breve{e}$, indicating that $\bar{e}$ of the classical period ultimately became reduced; see § 36. 5 .
fïgō, figere, fīxī, fīxus: FIXA, Monumentum Ancyranum, vi. 18; ī acc. to the Romance.
fingō, fingere, finxī, fīctus: $\bar{\imath}$ acc. to the Romance ; see § 53 s. v.
firmus: FIrmvm, CIL. iv. 175 et passim; the Romance points to $\check{\imath}$, showing that $\bar{i}$ of the classical period had become reduced; see § 36. 5 .
fābrum: see §51. I.
flīgo, -ere, -fīxī, -fictus: afleicta, CIL. i. II75; the Romance also points to $\bar{i}$.
fōsculus: from $f \bar{o} s$.
fliuctus: $\bar{u}$ acc. to the Romance.
$f l u \bar{o}$, -ere, flu$u \bar{u} \bar{u} ; \bar{u}$ is probably long in $f l \bar{u} x \bar{\imath}$ in view of flūxus.
f $\bar{u} x u s: \bar{u}$ acc. to the Romance.
forma：see Donatus on Terence， Phormio，28；$\phi \dot{\omega} \rho \mu \eta$ in Greek in－ scriptions；the Romance also shows $\overline{0}$ ． förmula：from förma．
frangō，－ere，frëgī，frāctus：see § 46. 3．b）．
frīgeō，－ēre，frīxī：§ 46． 3.
frī̄ō，－ere，frīxī，frītus： $\bar{\imath}$ acc．to the Romance．
früctus： $\bar{u}$ acc．to the Romance．Old
French froit points to a collateral
früctus；see Osthoff，Geschichte des Perfects，p．523．
fruor，fruī，frūctus sum： $\bar{u}$ acc．to the Romance．
frūstrā：FRv́strá，CIL．vi． 20370.
fruistum： $\bar{u}$ acc．to the Romance．
fungor，funḡ̄，fünctus sum：DE－ fV́nctis，CIL．v．1326；fv́ncto， xii． 3176 et passim．
fürtim：from fūr．
fürtīvus：from für．
fürtum：from für．
füstis：： $\bar{u}$ acc．to the Romance．

## G．

geōgraphia：Gr．$\gamma \in \omega \gamma \rho a \phi$ a．
Geōrgius：Gr．Гeẃpros．
geörgicus：Gr．$\gamma \epsilon \omega \rho \gamma \iota \kappa \delta s$ ．
glīscō：§ 49.
glössärium：from Gr．$\gamma \lambda \omega \hat{\omega} \sigma \sigma \alpha$ ．
glössēma：from Gr．$\gamma \lambda \omega \sigma \sigma \hat{\eta} \mu a$ ．
gryillus： $\bar{y}$ acc．to the Romance．
grȳps：like Gen．grȳpis；§ 42．2．

## H．

$h \bar{a} c t e n u s: ~ l i k e ~ h \bar{c} c$.
Hellēspontus：Gr．＇E入入ウ̇のтovoos．
Hèrculānum：Hércvlániae，CIL． xii． 1357 ；＇H ${ }^{\prime}$ кооид́dıєоу，Dio Cas－ sius，lxvi．23；＇Hркда⿱丷天s，CIA．iii． 1197.
hibiscum： $\bar{i}$ acc．to the Romance． hillae：from hira．
hïrsütus：like hìrtus．
Hirtius and hirtus：i $\overline{\text { acc．}}$ to the Ro－ mance．
hīscō：see § 49.
Hispellum：of．Gr．Ei $\sigma \pi \epsilon \lambda \lambda o \nu$, Strabo， v． 227.
Hispo，Hispulla ：like Hispellum．
hörnus：from hōra？
hörsum：for＊ho－vorsum．
hydrōps：like Gen．hydröpis；§ 42．2．
Hymèttus：Gr．＇$\Upsilon \mu \eta \tau \tau$ bs．
Hypermèstra：Gr．＇$\Upsilon \pi є \rho \mu \eta{ }_{\sigma} \tau \rho a$.

## I．

ignis：Ignis，CIL．xi． 826.
illōrsum：for＊illo－vorsum．
illūstris：from lūx．
Īllyria：Eillvrico，CIL．i²．p． 77 ．
impingō－ere，imp $\bar{g} \bar{b}$, impāctus：see § 46．3．b）．
infêstus：infésti，CIL．v． 2627 ；of． maniféstus．
instinctus：see distinguō．
intellegö，intellegere，intellēxī，intellēc－
tus：like legō．
intervăllum：from vãllus．
intrōrsum：for＊intro－vorsum．
involūcrum： $\bar{u}$ in Plautus，Captivi， 267 ；§ 36.2.
Yölcus：Gr．＇ $\mathrm{I} \omega \lambda \kappa \delta \mathrm{s}$ ．
istōrsum：for＊isto－vorsum．

## J．

jèntāculum：see § 40．2．a）．
jèntātiō：see § 40．2．a）．
jüglāns：from Jov－and glāns．
$j u n g o ̄$, －ere，jūnxī，jūnctus；see § 46 ．
3．b）．
$j \bar{u} r g \bar{o}:$ for $j \bar{u} r i g \bar{o}$, from $j u \bar{s}$ ．
Jüstiniānus：from jūstus．
jūstitium: from jūs.
$j \bar{u} s t u s: ~ f r o m ~ j \bar{u} s: ~ a l s o ~ I v ́ s t o, ~ C I L . ~ i i . ~ . ~$ 210; v. 5919.
jüxtā, jūxtim: from jūgis 'joined with.'

## L.

läbor, lābī, lāpsus sum: see § 46 . 3 ; DILÁPSAM, CIL. xi. 3123.
lābrum, 'bowl': for lavābrum; labrum, 'lip,' has $\breve{a}$.
labrūsca: $\bar{u}$ acc. to the Romance.
laevōrsum: for *laevo-vorsum.
lāmna: syncopated for làmina.
lārdum: syncopated for lāridum.
Lārs, Lārtis: LART-, CIL. x. 633.
lārva: like lārua, the early Latin form, e.g. Plautus, Amphitruo, 777; Captivi, 598.
lätrina: for lavätriña; cf. Plautus, Curculio, 580 ; § 36. 2.
lätrō, 'bark': $\bar{a}$ in oblätrātrīcem, Plautus, Miles Gloriosus, 681; § 36. 2.
lavābrum: see § 5I. I.
lavācrum: see § 5 I. . .
legō, -ere, lēḡ̆, lēctus: see § 46. 3.
lèmma: Gr. $\lambda \hat{\eta} \mu \mu a$.
lèmniscus: Gr. $\lambda \eta \mu \nu i \sigma \kappa o s$.
Lèmnos: Gr. $\Lambda \hat{\eta} \mu \nu o s$.
lentiscus: $\bar{\imath}$ acc. to the Romance.
lībra : ì in Plautus, Pseudolus, 816; § 36. 2.
lïbrō: like lībra.
lictor: l.Ictor, CIL. vi. 699 and often ; Líctor, Ephemeris Epigraphica, v. 5 I ; 入eikт $\omega \rho$, Eckinger (Orthographie Lateinischer Wörter in Griechischen Inschriften, p. 43).
limpidus: i acc. to the Romance.
lingō, ere, linx $\overline{\bar{l}}$, linctus: $\bar{i}$ acc. to the Romance.
lībricus: ī in Plautus, Miles Gloriosus, 853 ; § 36. 2.
lūceō, -ère, lūxī: see § 46. 3 .
lūcta: $\bar{u}$ acc. to the Romance.
hūctor: like hūcta.
lūctus: from lūgeō: also Lv́ctiv, CIL. vi. 1527 e. 66 ; Lv́ctv, CIL.. v. 337 ; x. 4041. 2.
lügeō, hügère, hūxī: see § 46. 3 .
hūstrum, 'expiation' : lv́strvm, Monumentum Ancyranum, ii. 3, 5, 8; ii. 3,6 , 10 ; lustrum, 'haunt,' has u.
lüstrō: like lī̀strum.
hūxuria: see lūxus.
lūxus: $\bar{u}$ acc. to the Romance.
lycūrgus: Gr. Auкov̂pros.

## M.

mälle: for *mag(e) (magis) + velle. maniféstus: [MANI] FÉstvm, CIL. i. p. 319; very uncertain.

Mãnlius: from Mãnius; Mánlıo, Mánlia, CIL. v. 615 ; Mánliae, ix. 3942.
manüpretium: $\bar{u}$ in Plaut. Men. 544. Märcellus, Märcella: from Märcus; MArcella, CIL. xii. 3188.
Mãrcius: from Mãrcus; Márcivs, CIL. v. 555 et passim; Máapкıov, CIG. 1137.
Märcus: Maarco, CIL. i. Ioo6; xiv. 2802 ; MÁrCı, Boissieu, Inscriptions de Lyon, p. 143; Máapкоя, CIG. 887 et passim.
Märs, Mārtis: MÁrtis, Monumentum Ancyranum, iv. 21; CIL. x. 809 et passim.
$M \bar{a} r s \bar{\imath}$ : like $M a ̄ r s$.
Mārtiālis : like Mārs.
māssa: Gr. $\mu \hat{a} ̧ a$.
mātrimōnium: from māter.
mātrīx : from mãter.
mātrōna: from māter; MÁTróNA, CIL. v. 5249.
maxilla: according to Priscian, iii. 36. (Keil).
māza: Gr. $\mu \hat{a}$ 乡a. See Cramer, Anecdota Oxoniensia, iii. 293.
mercēnnārius: for *mercēd-nārius.
Mētrodörus: Gr. M $\eta \tau \rho \delta \delta \delta \omega \rho o s$. mètropolis: Gr. $\mu \eta \tau \rho \circ \bar{\pi} o \lambda \iota s$. mille, millia: mIllia, Monumentum Ancyranum, i. 16; milliens, iii. 34 ; $\bar{i}$ acc. to the Romance.
milvus: as in the early Latin mìluos. Mōstellāria: from mōnstrum.
mūcrō: $\bar{u}$ in Atta, Frag. 13 (ed. Ribbeck) ; § 36. 2.
mülleus: $\bar{u}$ acc. to the Romance.
müllus: $\bar{u}$ acc. to the Romance.
mūscerda: from mūs.
mūsculus: from mū̀s.
mūscus: $\bar{u}$ acc. to the Romance.
mūstêla: from mūs.
Mycalèssus: Gr. Muка入ךббós.

## N .

nancīscor: see § 49 .
Nārnia : Umbrian Nahar- $(=\bar{a})$.
nārrō: nárrem, Boissieu, Inscriptions de Lyon, p. 136.
nāscor: § 49 ; Náscerer, Monumentum Ancyranum, ii. 44 ; NÁscentibvs, CIL. xii. 3702.
nāsturcium: from nāsus.
nefästus: from nefäs.
neglegō,-ere, neglèxī, neglēctus; see lego.
nèquìdquam (nēquīcquam) : from Abl . quid.
nitor, nīti, nīxus sum: see § 46. 3 .
nōlle: by contraction from * nŏvelle (for *nĕ-velle; §73.3).
nōndum: from nōn and dum; NóNDVM, CIL. x. 404 I . 6.
nōngentī: for *no(v)engentī. nōnne: from nōn. nōnnūllı̀: from nōn and nūllus. Nörba: Gr. N $\omega$ $\rho \beta \eta$.
nōscō: ō acc. to the Romance.
$n \bar{u} b \bar{o},-$ ere, $n \bar{u} p s \bar{i}, n \bar{u} p t a:$ see § 46. 3 .
nudiūstertius, quārtus, etc.: see § 86 .
nūllus: from ne and ūllus; nv́llvm, CIL. x. 4787 .
nündinae, nūndinum: for *no(v)endinae; noundinae in early Latin; Nv́ndinvs, CIL. xii. 3650.
nüntius: for *nove-ntius? ('newsbringer').
nüntiö: like nūntius.
nüptiae: like nüpta.
nūsquam: like $\bar{u} s q u a m$.
nūtrio: like nūtrīx.
nūtrīx : $\bar{u}$ in Plautus, Curculio, 643 ; nūurrīcātus, Miles Gloriosus, 656; nütrīcant, Miles Gloriosus, 715 ; § 36. 2.
O.
oblīvīscor: see § 49; ObLIvIscemvr, CIL. vi. 6250.
Oenōtria: Gr. Olv $\omega \tau \rho l a$.
olla : for aulula ; ólla, CIL. vi. 10006 et passim.
Onchēstus: Gr. "Orxך ${ }^{0} \tau \tau o s$.
Opūs, -ūntis: Gr.' ${ }^{0}$ поồvos.
$\bar{o} r c a: \bar{o}$ acc. to the Romance.
orchēstra: Gr. ó $\rho \chi \eta \sigma \tau \rho a$.
$\bar{o} r d i o r:$ like $\bar{o} r d \overline{0}$.
ōrdō : órdinıs, Boissieu, Inscriptions de Lyon, p. 136; CIL. ix. 5177; xii. 3312 ; $\bar{o}$ acc. to the Romance.
$\bar{o} r n \bar{o}:$ ÓrNARE, CIL. xii. 4333 et passim.
ōrnāmentum: órnámentis, CIL. xii. 3203 et passim ; cf. $\overline{o r n o}$.
ōscen: from ōs.
ōscillum: from ōsculum.
ōscitō: from ōs.
$\overline{o s c u l o r: ~ f r o m ~ o ̄ s . ~}$
Ōstia: from ōs; Gr. ' $\Omega \sigma \tau i a$.
$\overline{o s t i u m: ~ f r o m ~} \bar{o} s ; ~ \check{\omega} \sigma \tau \iota a$, scholion to
Aristophanes, Plutus, 330 ; ústivm,
CIL. vi. 4710, ústió, Monumen-
tum Ancyranum, v. 14.
ovillus: from ovinus.
$\bar{O} x u s:$ Gr. ${ }^{\top} \Omega \xi$ os, in Strabo.

## P.

pacīscor, pacīscī, pactus sum: see § 49 . palimpsēstus: Gr. $\pi a \lambda i \mu \psi \eta \sigma \tau o s$.
palīster: from palùs.
pangō, pangere, pepigī, pāctus: the
compounds impāctus, compāctus,
point to $\bar{a} ;$ see § $46.4 . c$ ).
paradigmà: Gr. тара́бєє $\gamma \mu u$.
pāscō, pāscere, pāvi, pāstus: see § 49.
pāstillus: like pāscō.
pāstiō: like pāstus.
pāstor: like pāstus; PAASTORES, CIL.
i. 55 I ; PÁSTỨRIS, CIL. x. 827 .
pāxillus: acc. to Priscian, iii. 36.
pēgma: Gr. $\pi \hat{\eta} \gamma \mu a$.
pentāthlum: Gr. $\dot{\dot{\alpha}} \theta \lambda o \nu$.
perēmptālis: from perēmptus (emō).
pergō, pergere, perrēxi, perrēctus: like
regō.
periclitor: like periculum.
perimō,-ere, perēm̄̄, perēmptus: like emö.
Permèssus : Gr. Пє $\rho \mu \eta \sigma \sigma$ s.
perrēptō: from rēptō (rēpō).
persölla, for $\operatorname{persön}(u) l a$, from persōna.
Pessinū̄s, -īntis: Gr. Пє $\sigma \sigma \iota \nu 0 \hat{\nu} \nu \tau o s$.
Phoenīssa: like Phoenīx.
pīctor: like pictus (pingō).
pictüra: like pītus.
pigmentum: PIgment-, CIL. viii. 1344 ; $\bar{i}$ acc. to the Romance.
pingō, pingere, pin $x \bar{\imath}$, pictus: see under fingō, which is precisely parallel.
pistillum, pistor, pistus (from pinsō), pistrinum, pistrilla: pIstvs, CIL. v. 6998. The Romance evidence is conflicting, but is favorable to $\bar{i}$.
Pistōria: like pistor.
plēbīscītum: = plēbīscītum, and better so written.
plêbs: like genitive plēbis; PLéps, CIL. v. 6797 ; xii. 4333.
plēctrum: Gr. $\pi \lambda \hat{\eta} \kappa \tau \rho o \nu$.
Plisthene's: Gr. II $\lambda \epsilon \iota \sigma \theta$ év $\eta$ s.
plōstellum: fromplaustrum.
plīsculum: from plūs.

Pōlla: = Paulla ; Púlla, CIL. xii.
347 I ; cf. Pöllio.
polling $\overline{3}$,-ere, linxī, linctus: like ling $\bar{J}$. pollinnctor: like pollīnctus.
Pōlliō : from Paullus; Póllio, CIL.
vi. 22840 et passimı; $\Pi \omega \lambda \lambda i \omega \nu$ in Plutarch, Dio Cassius, and elsewhere.
pollūceō,-ere, -ı̄̄xī: §46.3.
l'olymēstor: Gr. Полv $\mu \dot{\eta} \sigma \tau \omega \rho$.
porrigō,-ere, porrēxī, porrēctus: like regō.
praelūstris: like lūx.
prāgmaticus: Gr. $\pi \rho \bar{a} \gamma \mu a \tau \iota \kappa o ́ s$.
Prāxitelēs: Gr. Прā $\iota \tau \epsilon \bar{\lambda} \eta s(\pi \rho \hat{a} \xi \iota s)$.
prēndo : for pre-hendō.
primōrdium: from ōrdior.
princeps: from primus and capiō.
principālis: from princeps.
principātus: from princeps.
principium: from princeps.
Frisciānus: from prīscus.
prīscus and Prīscus: Príscvs, CIL.
xi. 1940 ; PRISCVS, CIL. ix. 4354.
c ; Прєîбкоз CIG. 4494 et passim.
pristinus : like priscus.
prōcrāstinō: from crās.
Procrū̀stēs: Gr. Прокрои́or ทs.
profêstus : from festus.
prōmō, -ere, prōmpsī, prōmptus: see § 46.3 .
prörsum, prōrsus: for *pro-vorsum, -sus.
prösperus : from prō*sp̄̀re? (' according to expectation').
prōstibulum: from prō and stabulum.
Püblicius, Pūblicola: from pūblicus.
Poplicola is another word, viz. from
poplus, early form of populus, 'people.'
püblicus: from pūbes; pv́blicór[vm, CIL. vi. 1377 ; $\bar{u}$ in Plautus, Miles Gloriosus, 102, 103; Captivi, 334 et passim; § 36.2 ; $\bar{u}$ also acc. to the Romance.
Püblilius: like Püblius.
Pūblius: like pūblicus.
pulvillus: from pulvinus; pvlvIllvs, CIL. i. Fasti Cap., a. 297.
pungō, -ere, pupuḡ̆, pünctus: $\bar{u}$ acc. to the Romance.
pünctus: see pungō.
pürgō : for *pūrigō (pūrus): $\bar{u}$ also acc. to the Romance.
pūrgāmentum: from pūrgō.
pūrgātiō: from pūrgō.
pūstula: from $\bar{p} \bar{u} s ; \bar{u}$ acc. to the Romance.

## Q.

quärtus: quÁrtvs, CIL. iii. 4959 ; Monumentum Ancyranum, iii. 22 et passim.
quärtānus: like quārtus.
quārtārius: like quārtus.
quièscō: acc. to Gellius, Noctes Atticae, vii. 15, some persons pronounced quiĕscō in his day; but
other -scō formations have practically invariably $\bar{e}$ before sc: quièvī and quiètus also point to quièscō; Qviéscere is found CIL. vi. 25531. quīncūnx: from quīnque and ūncia. quindecim: from quinque and decem : $\bar{i}$ acc. to the Romance.
quingentī, quīngēñ̄, quingentiès: from quīnque.
Qū̄nquātrūs: from quīnque; $\bar{a}$ in Plautus, Miles Gloriosus, 691; § 36.2.
quinque: QVINQve, CIL. vi. 3539 et passim; i acc. to the Romance.
quīnquaggintä: from quinque.
quïnquennium: from quinque.
quinquiès: from quinque.
quintāna: from quintus.
Quintiliānus: from quīntus.
Quint:lis: from quintus.
Quintilius: from quintus; QvinctiLio, CIL. iii. 384.
quīntus, Quintus, Quīnctius: QvInтvм, Monumentum Ancyranum, iii. 1; ilonga occurs repeatedly; K $\delta \boldsymbol{\epsilon} \iota \nu-$ ros, CIG. 2003; $\bar{i}$ acc. to the Romance.
quīppe: for *quīd (Abl.) and -pe. quörsum, quōrsus: for *quö-vorsum, *quō-vorsus.

## R.

rāllus : for $r \bar{a} r(u) l u s$ from rārus.
rāstrum: from $r \bar{a} d \bar{o}$.
reāpse: for rē cāpse (Abl. of $i p s a)$.
rēctē, rēctor: like rèctus.
rētus: see regö.
redigō, -ere, redègī, redāctus: like agō.
redimō, -ere, redēmī, redèmptus: like emō; 'Р $\mathrm{P} \delta \hat{\eta} \nu \pi \tau a$, CIG. 98 II ; REdÉMPTA, CIL. vi. 22251.
redèmptiō, redēmptor: from redimō. rēgnum: see § 38, end.
rēgnō: like rēgnum.
règnātor, rēgnātrīx : from rēgnō.
regō, -ere, rēxī, rēctus: see § 46. 3. b).
relinqū̄,-ere, relīquī, relīctus: see § 46. 3.b).
reminiscor, $-\bar{\imath}$ : see § 49 .
rèpō, rèpere, rèpsi, rēptum: see § 46 . 3.
restingū, -ere, restīnxī, restinctus: see distinguō.
rīxa: $\bar{i}$ acc. to the Romance.
rōscidus: from rōs.
Rōscius: Rúscio, CIL. vi. 2060, 5 ; 'P о́ккоя, Plutarch, Cicero, 3; 5; Pompey, 15.
rōstrum: from rōdō; $\dot{\rho} \omega \hat{\sigma} \tau \rho o \nu$, Hesychius.
Rōstra: from rōstrum.
Rōxāna: Gr. 'P $\omega$ द̆á $\nu \eta$.
rūctō: acc. to the Romance (Gröber, Archiv, v. p. 370), which points also to a form with $\breve{u}$.
rūctus: like rūctō.
rürsum, rūrsus: for *re-vorsum, *re-vorsus.
rūscum: $\bar{u}$ acc. to the Romance.
rūsticus: from rūs; Rv́sticvs, CIL. ix. 4012 ; $\bar{u}$ acc. to the Romance.

## S.

sanciō, sancīre, sānxī, sānctus: see § 46. 3. b).
sārculum: like sāriō.
Sārsina: Sássinas in an inscription. scēptrum: Gr. $\sigma \kappa \hat{\eta} \pi \tau \rho \circ \nu$.
scīscō: see § 49; D[ESC] IsCENTEM, Monumentum Ancyranum, v. 28.
scrībō,-ere, scrīpsī, scrīptus : see § 46. 3 ; SCRIPTVM, CIL. vi. 2011 ; CON-

SCREIPTVM, CIL. i. 206. 87 ; 109 ; CÓNSCRÍptis, CIL. x. 3903; i acc. to the Romance; Umbrian screihtor $=$ scrīptōs (Nom. Plu.).
scrīptiō, scrīptitō, scrīptor, scrīptūra: see scrībō.
sëgmen: like sēgmentum.
segmentum : see § 39 .
sēgnis: SÉGNIS in a Herculanean papyrus.
sēligō, sēligere, sēlēgì, sēlēctus: like legō.
Selīnūs, -ūntis: Gr. $\Sigma_{\epsilon} \lambda_{\iota}$ voûdtos.
sëmèstris: for *ses-mēstris, *sexmēstris; see §89.
sèmūncia : from sēmi- and ūncia. septūnx: from ūncia.
sēscūncia: for sēsqui- and ūncia.
sèscuplex, sēscuplus: for sèsqui- and -plex.
Sesōstris: $\Sigma \epsilon \sigma \omega \sigma \tau \rho ı s$.
sēsqui- : = sèmisque-.
sēstertius : for sèmis tertius.
Sēstius: Gr. $\Sigma \dot{\eta} \sigma \tau \iota o s$, in Cic. ad Att, vii. 17. 2 et passim; $\Sigma \eta \sigma \tau l a, ~ C I A . ~$ iii. 1450.

Sēstos, Sēstī̀: Gr. $\Sigma \eta \sigma \tau$ ós, $\Sigma \eta \sigma \sigma \tau \iota$.
Signia: Seig[NiA, CIL. i. iI.
sĭgnum and signum: SEIGNVm, CIL. xiv. 4270 ; sIgna, Boissieu, Inscriptions de Lyon, p. 606 ; see § 38. sйgnificō, sĭgnō: like sйgnum.
sinciput: for semi + caput, i.e. sinciput for *sènciput, by vowel assimilation ; see § 90.
sinistrōrsus: for *sinistro-vorsus.
sīstrum: Gr. $\sigma \in i ̂ \sigma \tau \rho o \nu$.
sōbrius: $\bar{o}$ in Plautus, Miles Gloriosus, 812 ; § 36. 2.
Sōcratēs: Gr. $\Sigma \omega \kappa \rho a ́ \tau \eta s$.
sōlstitium: from sōl.
Söphrōn: Gr. $\Sigma \omega \dot{\omega} \phi \rho \omega$.
sōspes: Gr. $\Sigma \hat{\omega} \sigma \pi \iota s$, CIA. iii. II61 et passim.
sōspita, sōspitō: like sōspes.
stāgnō: like stāgnum.
stăgnum: see § 38 , end.
stilla : i acc. to the Romance.
stillicidium, stillō: like stilla.
stringō,-ere, strinx $\bar{\imath}$, strictus : strinx $\bar{i}$ acc. to the Romance.
strū̄, -ere, strūxī, strūctus : see § 46.
3. $b$ ); $\bar{u}$ also acc. to the Romance.
strüctor: like strūctus; cf. STRVCTOR, CIL. x. 708 ; $\bar{u}$ acc. to Gellius, xii. 3. 4 .
strūctūra: like strūctus.
sublūstris: like lūx.
substrūctiō: like strūctus.
suèscō: as in suēvī, suètus.
sūgō, -ere, sūxī, sūctus: see § 46. 3 ; $\bar{u}$ acc. to the Romance.
suillus: from suinus.
sūmō, -ere, sūmpsi, sūmptus: see § 46 .
3 ; $\bar{u}$ also acc. to the Romance.
sūmptus: from sūmō.
sūrculus: from sürus.
surgō, -ere, surrēx̄̄, surrēctus: like regō.
sūrsum: for *su-vorsum.
sūtrīna: like sūtor.
Sūtrium : $\bar{u}$ in Plautus, Casina, 324 ; § 36. 2.
syllēpsis: Gr. $\sigma \hat{v} \lambda \lambda \eta \psi ı s$.

## T.

tangō,-ere, tetigī, tāctus: see § 46. 3. b).
tāctiō: like tāctus.
Tartèssus : Gr. Taprך
tāxillus : acc. to Priscian, iii. 36.
Tecmèssa: Gr. Téк $\mu \eta \sigma \sigma a$.
tēctum: from tegō.
tegō,-ere, tēxī, tēctus : see § 46.3. b).

Telmèssus: Gr. T $\boldsymbol{\lambda} \lambda \mu \eta \sigma \sigma b s$.
Tèmnos: Gr. T $\eta \mu \nu$ ós.
Termèssus : Gr. Tє $£ \mu \eta \sigma \sigma \delta s$.
terūncius: from ūncia.
theätrum: Gr. $\theta \in \bar{a} \tau \rho 0 \nu$.
Thrēssa: Gr. Өן $\hat{\eta} \sigma \sigma a$.
Tillius: Tlllivs, CIL. vi. 2043.
tingō, -ere, tinxī, tinctus: see §46. 3. b).
trāctim: like trāctus.
trāctō: like trāctus.
trahō, -ere, trāxī, trāctus: see § 46. 3. $b$ ).

Trapezūs, -ūntis: Gr. Tpanȩoûs, -о仑ิдтоs.
trifōrmis: from förma.
trilībris: like lībra.
trīstis: TRISTIOR, CIG. 6268; ī also acc. to the Romance.
trülla: for truella. The Romance also points to $\breve{u}$.
trūcta: $\bar{u}$ acc. to the Romance.
tubilūstrium: like lūstrum.

## U.

$\bar{u} l l u s: ~ f r o m ~ \bar{u} n u s ; ~ v ̄ L l A, ~ C I L . ~ i i . ~$ 1473 ; v́lli, CIL. vi. 10230.
$\bar{u} \ln a: \mathrm{Gr} . \dot{\omega} \lambda \epsilon \quad \nu \eta$.
ūlva: like ūl̄̄gō.
ūncia: like $\bar{u} n u s$.
ünctiō: like ūnctus (ungō).
ūndecim, ūndecimus: from ūnus and decem.
ündēvĭgintī, etc.: like ūnus.
ungō, -ere, $\bar{u} n x i \overline{\text { in }}$ ūnctus: see $\S 46$. 3. b).
$\bar{u} r \bar{o},-e r e$, ussī, $\bar{u} s t u s ; ~ \bar{u}$ in the Perfect Participle acc. to the Romance; for the $\breve{u}$ in $u s s \bar{\imath}$, see $\S 53 \mathrm{~S}$. v.
ūspiam: like ūsque.
ūsquam: like $\bar{u} s q u e$.
$\bar{u}$ sque: $\bar{u}$ acc, to the Romance.
ūstrina: like ūstus.
$\bar{u} s u ̈ r p \overline{0}: \bar{u} s \bar{u}$ rapiō?
V.
vāllum, vāllus: vállári, CIL. ii. 4509 ; also Vállivs, Vállia, CIL. xix. 4039.
vāllâris: see vàllum.
vālıō: : see vàllum.
vāsculum: like vās.
vāstus: the Teutonic languages point to a long root vowel.
Vēctis, ‘Isle of Wight' : Gr. Oủnkris. vęgrandis: from vè- and grandis.
Vēlābrum: $\bar{a}$ in Plautus, Curculio, 483; § 36. 2.
Venafrum: the suffix is originally the same as -ābrum; see §51. I.
vèndō: from vènum and dō.
vèrnus: from vêr.
vēstibulum: vē + stabulum? Cf. prōstibulum.
vēstīium: vē + steigh-?
Vèstiñ̄: Gr. Oủ $\eta \sigma \tau i ̂ v o l$.
vēxillum: véxillo, CIL. xii. 3167; Byzantine Gr. $\beta \eta \xi \xi \iota \lambda \lambda a$; CIG. 4483, ov̉ $\eta \iota \lambda \lambda \lambda a \tau \iota(\hat{\omega}) \sigma \iota \nu$; also acc. to Priscian, iii. 36.
vīctus: from vīvō. The Romance also shows $i$.
villa: vllla, CIL. vi. 9834 ; the Romance points to $\bar{i}$.
vinaèmia: from vinum and aèmō.
Vīpsänius: VIpsanI, CIL. vi. 12782 ; vIpsania, CIL. vi. 8877 ; Beє廿uàlos, CIG. 5709.
Vīpstānus: vIpstanvs, CIL. vi. 2039 and frequently ; Oи́єєчтavov̂ CIG. $5837, b$; CIA. iii. 621 .
víscus: vIsceris, CIL. vi. 1975.
vīvō, -ere, vīxī, vīctum: see § 46. 3 ; veixit, CIL. xiv. 2485; vIXIt, CIL. ii. 3449 ; vIctv́ro, CIL. vi. 12,562; $\beta \in \mathfrak{\epsilon} \dot{\xi} \iota \tau$ in an inscription cited by Eckinger (Orthographie Lat. Wörter in Griech. Inschriften, p. 43).
Vopiscus: Gr. Өv́orєî̃kos; vopIsco, CIL. x. 4872 .

## X.



## Z.

$z \bar{o} s t \bar{e} r: G r . ~ \zeta \omega \sigma \tau \eta \dot{\rho}$.

## 53. Words whose Hidden Quantities are in Dispute.

agmen: $\bar{a}$ Marx; see $\S 39$.
agnātus, agnōtus, etc.: $\bar{a}$ Marx; see § 38.
agnus: $\bar{a}$ acc. to many; see $\S 38$.
allicio: : some scholars mark the $e$ of the Perfect long in allexi, illex $\bar{i}$, pellexī and likewise in -spexī (aspexī, cōnspexī, etc.), flexī, pexī, vexi. This marking rests upon a statement of Priscian in ix. 28. But Priscian in this passage simply says
that Perfects in $-x \bar{\imath}$ have a long vowel before the $x$ only when the vowel is $e$; he does not state that every $e$ is long before $-x \bar{i}$. Moreover, little weight is to be attached to this testimony ; for in the paragraph immediately preceding (ix. 27) Priscian lends the weight of his authority to such forms as $\operatorname{trăx} x \bar{z}$, mănsī, düxī, which certainly had a long vowel in the best period.

Osthoff (Geschichte des Perfects, p. 227) and Brugmann (Grundriss der Vergleichenden Grammatik, ii. p. 1182) support $\bar{e}$ in Perfects of this type by arguments drawn from comparative grammar ; but the evidence does not warrant a positive conclusion in their favor. allium: $\bar{a}$ Marx; see § 88. I. amygdalum : $\bar{y}$ Marx, without citation of evidence, Gröber (Archiv, i. 240) and Körting (Wörterbuch) give $y$. anxius : $\bar{a}$ Marx, Brugmann, Sommer, and others ; see $\S 46.5$. end. Appulus, Appulia: $\bar{A}$ Marx. Āpulus, Apulia are the better spelling. aprugnus: $\bar{u}$ acc. to many; see $\S 38$. arca: this word occurs with the apex (Árcae) in Boissieu, Inscriptions de Lyon, p. 279, but it is doubtful whether this single instance justifies our recognizing the $a$ as long. The root arc-, 'hold, confine,' had originally a short vowel, as is shown by coerceō (for *co-arceō); *ārceō would have retained the $\bar{a}$ in composition; see § 72. Nevertheless it is undeniable that a tendency existed in certain localities to lengthen the short vowel before $r+$ a consonant. In some words this resulted in permanent lengthening of short vowels in the classical speech, e,g: in förma, quārtus (cf. quattuor), $\overline{o r c a}$, and probably in $\bar{o} r d \overline{0}$, $\bar{o} r d i o r, \bar{o} r n \bar{o}$. In case of other words we simply meet isolated local manifestations of the tendency, e.g. in Árváli, CIL. vi. 913 ; libértis, CIL. x. 3523 ; sérvilio, Henzen, 6490; vIrgo, CIL. vi. 2150 ; vIrtvtis, CIL. vi. 449;

Cúrvinvs, vi. 204i ; órfito, vi. 353; Córdiae, vi. 22,915; Nárbúne, xii. 3203; Nárbunénsis, xit. 3163 ; ни́rt[os, vi. 9493; Соно́rt[is, vi. 2993; Fört[is Fórtvnae, vi. 9493 ; FÓrtvinata, vi. 7527 . Yet these sporadic inscriptional markings hardly justify our assuming àrvum, àrvālis, lïbèrtus, sērvus, vīrgū, etc., for the classical speech; and the same applies to arca. See Seelmann, Aussprache des Latein, p. 91.

Arrūns: $\bar{A}$ Marx; see § 88. 1.
arvum, arvälis: see arca.
ascend $\overline{0}$, ascrī̀ō, etc.: $\bar{a}$ Marx; see § 48.
ascia: $\bar{a}$ Marx ; see § 89.
Asclèpiadēs: $\bar{A}$ Marx.
Asculum : $\bar{A}$ Marx.
aspiciō,-ere, -exī, ectus : ēxī Marx and Lewis; see above under alliciō. assus: $\bar{a}$ Marx and Lewis, as if for *arrsus, which is improbable. See Osthoff, Geschichte des Perfects, p. 545.
astus, astūtus : $\bar{a}$ Marx, as if for *axtus, etc.; see § 89 .
axis: $\bar{u}$ Marx, without warrant ; Charisius (Keil, i. 11. 22) and Diomedes (Keil, i. 428) both testify to a short $a$.
balbuttiō: $\bar{u}$ Marx ; see § 88. 1.
barritus: $\bar{a}$ Marx ; see § 88. 1.
benignus: i Marx and others; see § 38.
benignitās: $\bar{\imath}$ Marx and others; see § 38.
bès, bessis: $\bar{e}$ in oblique cases Marx ; but in view of Quintilian's statement (i. 7. 20) that ss was not written after a long vowel in the
post-Ciceronian period, it is much more probable that the word followed the analogy of as, assis. Osthoff, Geschichte des Perfects, p. 545. braccae: $\bar{a}$ Marx; see § 88. I.
caballus : $\bar{a}$ Marx, as if a diminutive from an assumed *cabānus, for which there is no warrant.
Camillus: i acc. to Appendix Probi (Keil, iv. p. 197) ; $i$ acc. to Martianus Capella (p. 66. 4, ed. Eyssenhardt).
capessō: $\bar{e}$ acc. to Osthoff (Geschichte des Perfects, p. 221), who regards capessō, facessō, lacessō, as originally aorists of the same type as habessō, licēssit, etc. Brugmann (Grundriss, ii. p. 1203), taking a different view of the formation, regards the $e$ as short.
carduus: possibly $\bar{a}$, if from the same root as cār-ex, 'sedge' (lit. 'rough plant' ?).
carrus, carrūca: $\bar{a}$ Marx ; see § 88. I. Cassandra: Cāss- Marx; see §88. і. cing $\bar{o}$, -ere, cinx $\bar{i}$, cinctus: Lewis (E.L.D.) regards the $i$ as short in $\operatorname{cin} x \bar{\imath}$; likewise in -stinx $x \bar{i},-$ stinctus; tinxī, tinctus, and in pinxxi, finxi. The Romance languages seem to point to $\bar{\imath}$ in the Perfect and Perfect Participle of all these words, e.g. Italian cinsi, cinto; stinsi, stinto; finsi, finto, etc. Inscriptions, moreover, give ExTInctos, cInctvs. See d'Ovidio in Gröber's Grundriss, i. p. 501 f. ; Körting, Wörterbuch, and Fröhde in Bezzenberger's Beiträge, xvi. p. 193. classis: $\bar{a}$ Marx, on the basis of an assumed etymological connection with clärus.
cognātus, cognōmen, cognōscō, and other words beginning with $\operatorname{cog} n-:$ the $o$ here is regarded as long by many; but the evidence is not sufficient to warrant this view; see § 38 .
combūrō: $\bar{o}$ Marx, who explains the verb as for *co-amb-ūrō; cf. cōgitō for * co-agito.
confestim: $\bar{e}$ Marx, after the analogy of maniféstus, which latter is somewhat uncertain.
conjungo, conjūnx: $\bar{o}$ Marx, on the basis of cónivgi, CIL. v. ro66; vi. 9914, which are too improbable to merit acceptance.
cōnspiciō,-ere, -exī,-ectus : èx̄̄ Marx and Lewis; see above under alliciō.
cunctor: $\bar{u}$ Marx, whose treatment of this word is unintelligible.
damma: $\bar{a}$ Marx; see § 88. $\mathbf{1}$.
dēspiciō,-ere,-exī, -ectus :- -exxī Marx and Lewis (E.L.D.) ; see under alliciō.
dignus: i Marx and others; see § 38. discidium, discrībō, distō, distingū, distringō; dīs- Marx and Lewis (E.L.D.); see § 48 .
disco : $\bar{\imath}$ Marx, on the theory of compensatory lengthening (discō for * di-dc-scō); see §89.
distinguō,-ere,-inx $\bar{\imath},-\bar{i} n c t u s: ~ s e e ~ c i n g o ̄ . ~$ For dīstinguō, see above under discidium.
duumvir: $\bar{u}$ Marx and Lewis (E.L.D.) ; see § 42. I.

Dyrrhachium: $\bar{y}$ Marx, who cites the modern name Durazzo.
$\bar{e} n o r m i s: \bar{o}$ Marx and Lewis (E.L.D.); see norma.
Erinnys: i Marx ; cf. § 88. 1. exstinguō,-ere, -inxī,-inctus : see distingū.
fastigium : $\vec{a}$ Marx, on the theory of compensatory lengthening; see § 89.
fastus, 'disdain': $\bar{a}$ Marx, on the theory of compensatory lengthening ; § 89.
festinus, festinō: $\bar{e}$ Lewis and Marx, on the theory of compensatory lengthening, as though for fendt-; see § 89 .
festūca, fistūca: $\bar{e}$ and $\bar{\imath}$ Marx, on the theory of compensatory lengthening (see § 89), as though for ferst-.
fingō, -ere, finxī, fīctus: see cingō.
flectō,-ere, flexī: flèxī Lewis and Marx ; see under allicio.
forsit, forsitan: Marx writes försit and försitan on the basis of the Romance. But Körting (Wörterbuch) interprets the evidence of the Romance as pointing to $\check{o}$.
fortasse, fortassis: $\bar{a}$ Marx, who cites nothing valid in support.
fragmen: $\bar{a}$ Marx and many others; see § 39 .
frendō,-ere, frendū̀, frēsus, or fressus: -èssus Marx ; § 98. 2.
futtilis: $\bar{u}$ Marx ; see § 88. I.
garrio, garrulus: $\bar{a}$ Marx, who connects with Gr. $\gamma \bar{\alpha} \hat{\rho} \dot{\omega} \omega$; see § 88. I.
Garumna: $\bar{u}$ Marx on the basis of
Gr. 「apoúvas; but the Romance (Fr. Garonne) points to $\breve{u}$.
gignō: i acc. to Marx and many others; see $\S 38$.
gluttiō, gluttus: $\bar{u}$ Marx ; see § 88. 1. grallae: $\bar{a}$ Marx; see $\S 88$. 1 .
hallūcinor: $\bar{a}$ Marx ; see § 88. I.
helluō: $\bar{e}$ Marx; see § 88. I.
hircus: the quantity of the $i$ is doubtful, as the Romance words upon which judgment is based may be
'semi-literary'; see § 36. 5 fin. Cf. Gröber (Archiv, iii. 139); Körting (Wörterbuch). Marx compares hìrtus, with which hircus may be related.
hispidus: ¿ Marx and Lewis. Marx cites the Romance, but the word is probably 'literary' in the Romance ; see § 36.5 fin. Körting (Wörterbuch) regards the $i$ as short.
ictus: īctus Lewis; but the Romance points to $i$.
ìlignus: $\bar{\imath}$ acc. to Marx and others; see § 38.
imm $\bar{o}: ~ \bar{i} m m \bar{o}$ Marx, in view of $\bar{i} m u s$ and Immo, CIL. iii. 774. The Romance points to $\grave{\imath}$.
inspiciō, -ere, -exī, -ectus: -ex $x \bar{i}$ Marx and Lewis; see alliciö.
jubeō, -ère, jussī, jussus: jūssus Lewis. The only authority for $\bar{u}$ in jussus is iv́ssvs, CIL. vi. 77. But the apex here is entitled to no weight. The same inscription has at least one other error in the use of the apex, viz. Anniv́s. In favor of $j u \bar{u} s \bar{i}$ we find 1 v́ss[ric, CIL. xii. 1930; Iv́ssit, iv. 2553 I ; and IovSIT, CIL. i. 547 a, et passim in inscriptions of the ante-classical period. The simplest solution of the difficulties is to recognize an ante-classical $j \bar{u} s \bar{i}$, which is well attested by Quintilian in i. 7. 21, and a classical $j u \check{u s s i}$. The shortening occurs in accordance with the principle explained in §88. 1. In view of Quintilian's additional statement that $j u s s i$ was the orthography of his day, and that ss was not written after a long vowel (i. 7. 20) this
is almost a necessary conclusion. The apex in CIL. xii. 1930 is then a blunder, a result of the confusion of $j \bar{u} s i \bar{i}$ and $j u \check{u} s \bar{\imath}$. See Osthoff, Geschichte des Perfects, p. 532 ff.; Brugmann, Grundriss, ii. 1182; Fröhde, Bezzenberger's Beiträge, xvi. p. 184.

Juppiter: $\bar{u}$ Marx ; see § 88. I.
lascivus: $\bar{a}$ Marx, on the basis of an
assumed etymology, which connects the word with the root lās (lā$r-)$ of làrua.
lībertus: è Lewis; see arca.
lībertās: ē Lewis; see arca.
lignum: i acc. to Marx and others; see § 38 .
littera: ¿ Marx ; see § 88. i.
malignus: $\bar{i}$ acc. to Marx and others; see § 38 .
Matrona: $\bar{a}$ Marx, without citation of evidence.
Messalla : $\bar{a}$ Marx ; see § 88. r.
mingō, -ere, minxī, mictum: minnxī acc. to Marx and Lewis ; see § 46, end.
misceō, miscēre, miscuī, mixtus: ī in mēxtus acc. to Marx and Lewis. The Romance points to $\check{\imath}$ (Gröber, Archiv, iv. 117 ; Körting, Wörterbuch).
mittō, mittere, mīsī, missus: the Romance points to $i$; a few suspicious instances of $i$ longa occur, e.g. diMIssis, CIL. iii. p. 862 (shown by Osthoff, Geschichte des Perfects, p. 526, to be probably a blunder); MISSIONE, x. 7890; REMISSA, xi. 1585.

Narbō, Narbōnēnsis: $\bar{a}$ Marx; see under arca.
nesciō, nescius: è Lewis; but com-
pare nequeō. The Romance points to $e$.
norma: $\bar{o}$ Lewis and Marx, who connects with Gr. $\gamma \nu \dot{\omega} \rho \not \mu \mathrm{\mu}$.
nūncup̄: $\bar{u}$ Marx and Lewis, who connect with nōmen.
nūsquam: $u$ Lewis ; see $\bar{u}$ squam.
ostrum: $\bar{o}$ Marx, who connects with austrum.
Paelignus: ī acc. to Marx and others ; see § 38. Gr. texts accent Пat入ìvo.
pannus: $\bar{a}$ Marx ; cf. §88. І.
pectō, -ere, pexī, pexus: pēxī Marx, and Lewis; see under allicio.
pelliciō: see alliciō.
perspiciō: see aspiciō.
pestis : è Marx, in accordance with an untenable theory of compensatory lengthening ; see § 89.
pignus : $\bar{\imath}$ acc. to Marx and others ; see § 38.
pilleus : $\begin{gathered}\text { i Marx ; see § 88. ı. }\end{gathered}$
pingō: see cingō.
plangō,-ere, planxī, planctus : plānxī, plänctus acc. to many ; see § 46 , end.
planctus : $\bar{a}$ acc. to many ; see § 46 , end.
plector, 'be punished': $\bar{e}$ Marx, who compares $\pi \lambda \dot{\eta} \sigma \sigma \omega$.
posca: $\bar{o}$ Marx, who compares $p \bar{o}-c u-$ lum ; but the root had also a reduced form por- (§ 69) ; cf. Gr. тотбу.
posco : $\bar{o}$ Marx, on the theory of compensatory lengthening (pōscō for *porscō) ; see § 89 .
postulo : $\bar{o}$ Marx, as in the case of poscō.
privignus: $\bar{\imath}$ acc. to Marx and others; see § 38 .
pröpugnāculum: $\bar{u}$ acc. to Marx and others ; see § 38 .
pugna pugnax pugnō pugnus: $\bar{u}$ acc. to Marx and others ; see § 38.
pulmō: $\bar{u}$ Lewis. The Romance points to $\breve{u}$.
quoüsque: Lewis $u$; see $\bar{u} s q u e$.
respiciō, -ere, -exī -ectus: -ēxī Marx and Lewis ; see alliciō.
Sallustius : $\bar{a}$ Marx.
sagmen: $\bar{a}$ Marx and others; see § 39.
salignus: $\bar{i}$ Marx and others; see § 38.
Sarmātae, Sarmātia : $\bar{a}$ Marx, who compares the form Sauromãtae.
sescentï: sès- Marx and Lewis, on the theory of compensatory lengthening ; see § 89. Marx compares Sestius (for Sextius), but $\bar{e}$ in that word is exceptional. See Fröhde, Bezzenberger's Beiträge, xvi. 204.
sordès : ō acc. to Körting (Wörterbuch), on the basis of the Romance, but the only word he cites, is Italian sorde, which is very likely 'literary'; see $\S 36,5$, end.
Sphinx: i Marx.
spinter: ¿ Marx.
stannum: $\bar{a}$ Marx, on the basis of the ' by-form,' stägnum.
stella: stella acc. to the Romance; probably the form with two $l$ 's had $\check{e}$.
strenna: ì Marx ; see § 88. I.
supparum : $\bar{u}$ Marx ; cf. § 88. I.
suspiciō, -ere, -exī, -ectus; suspīrō: $\bar{u}$ Marx ; see § 48. On suspexī, see alliciō.
taxō: a Marx.
testa : $\bar{e}$ Marx, on the theory of compensatory lengthening (testa for
*tersta) ; see § 89. The Romance points to $e$.
testis, testor, testämentum, testimönium, etc. : $\bar{e}$ Marx, on the theory of compensatory lengthening (têstis for *terstis) ; see § 89.
testūd $\bar{o}: \bar{e}$ Marx, as in testa.
tignum: $i$ acc. to Marx and others ; see § 38 .
tingū̄, eere, tinxī, tinctus: see cingō.
torreō, -ere, torrū, tostus: tōstus Marx, on the theory of compensatory lengthening (tōstus for *torstus) ; see § 89. The Romance points to $o$. See d'Ovidio in Gröber's Grundriss, i. p. 520 ; Körting (Wörterbuch), Gröber (Archiv, vi. 129).
tressis: è Marx ; see bēs, bessis.
Tusci: $\bar{u}$ Marx, on the theory of compensatory lengthening (Tūscī for *Turscī); see § 89. The Romance points to $u$.
Tusculum: $\bar{u}$ Marx: see Tusci.
ultrā, ulterior, ultimus, etc. $: \bar{u}$ Lewis, on the basis of an alleged apex in vltra, Boissieu, Inscriptions de Lyon, p. 136. But the apex does not occur there. See Lindsay, Latin Language, p. 595. The Romance points to $u$.
urceus: $\bar{u}$ Marx, who cites $\overline{o r c a}$; but the Romance points to $u$.
ūrna: $\bar{u}$ Marx and Lewis. Marx compares ürinātor; but urna is to be referred to the root arc-, weak form urc- (§ 100. 2), whence $u r(c) n a$. The Italian urna, if a genuine Latin inheritance, would point to $\bar{u}$; but it is probably purely literary ; § 36.5 , fin.
$\bar{u} r \bar{o},-e r e, u s s \bar{\imath}, \bar{u} s t u s: \bar{u} s s \bar{u}$ Lewis ; but Priscian (Keil, i. 466.6) gives $\check{u} s s i ̄$. See under jubeō.
urtīca: $\bar{u}$ Marx and Lewis. Marx compares $\bar{u} r o ̄$.
vehō,-ere, vexī, vectus : vèxī, Lewis ; see under alliciō.
vescus : $\bar{e}$ Marx, on the basis of the questionable etymology vē $+\bar{e} s c a$.
victor, victus, victōria, etc. $: \bar{\imath}$ Lewis, on the basis of repeated inscriptional markings, such as vIctor, CIL. vi. 10056; 10115; 1058; vICTORINVS, vi. IO58; vICTORIAM,
vi. 2086; invíctai, vi. 353. But with a single exception no one of these inscriptions can be shown to antedate the third century A.D. ; and I quite agree with Christiansen (de Apicibus et I longis, p. 49) in the view that in the classical period the $i$ was short ; later, apparently, it was lengthened.
vinciō, -īre, vinxī, vinctus: vinxī, vinctus, acc. to Marx and others.
viscum: $\bar{\imath}$ Lewis; but the Romance points to $i$.

## CHAPTER IV.

## ACCENT.

See Brugmann, Grundriss, i². pp. 971 ff.; Stolz, Lateinische Grammatik, ${ }^{3}$ pp. 98 ff.; Lateinische Lautlehre, pp. 95 ff. ; Seelmann, Aussprache des Latein, pp. 15 ff.; Lindsay, Latin Language, pp. 148 ff.; Sommer, Handbuch der Lateinischen Laut- und Formenlehre, pp. 94 ff.
54. Accent in general is the prominence of one special syllable of a word as compared with the other syllables of the same word. This prominence may manifest itself in three different ways. Thus:

1. A syllable may be made prominent by 'stressing' it, i.e. by uttering it with a more energetic expulsory act on the part of the lungs (stress accent). The English and German accent are of this nature.
2. A syllable may be made prominent by uttering it at a higher pitch than the other syllables of the same word (musical accent). The Greek and Sanskrit accent were of this kind.
3. A syllable may be quantitatively prominent, i.e. its time may be greater than that of the other syllables of the same word. No language was ever accented essentially on the quantitative principle alone ; but traces of the operation of this principle are noticeable at one stage of Latin accentuation.

Neither stress accent nor musical accent prevails alone in any language. As a rule the one constitutes the essential accentual principle of a language, while the other is subordinate. Thus in English we notice chiefly the stress accent ; but the rise and fall of pitch also exists as a feature of the spoken language.
55. i. The character of the Latin accent seems to have varied at different periods of the language. Originally it seems to have been a stress accent. In the prehistoric period this stress accent rested upon the initial syllable of the word. In this respect Latin represents a deviation from the accentuation of the Indo-European parent-speech. In the parent-speech the accent was free, i.e. it might rest upon any syllable of a polysyllabic word. Evidences of this prehistoric Latin accent (i.e. the stress accent on the initial syllable) are seen in the weakening of unaccented vowels and in the loss of unaccented syllables. Thus:
a) Vowel-weakening : exerceō for *'ćx-arceō; cōnficiō for *cónfaciō; exīstumō for *éxaistumō; inimūcus for *in-amūcus; contuhernālis for *cóntabernālis; cecīd̄̄ for *cécaid̄̄ (caedō); conclūdō for * cón-claudō; Mānlius for Mánilius.
b) Syllable-loss : repput̄ for * ré-peput̄̀; surpū̀ for *sur-rapū̀; ūn-decim for $* \bar{u} n o$-decem.
2. In course of time another factor seems to have become operative in Latin accentuation, viz. quantity. Apparently a long penult came to assume such prominence as to receive a secondary stress. Thus pépercì became pépércī; inimùcus became inimúcus; éxīstumāmus became éxistumámus. Where the penult was short, the preceding syllable seems to have received the secondary accent, as éxīstumō for éxīstumō ; cónfíciunt for cónficiunt. Ultimately this secondary accent prevailed over the primary initial accent, and thus established the traditional accentuation of the historical period, the so-called 'Three Syllable Law,' by which the accent is restricted to the last three syllables of a word, resting upon the penult if that is long, otherwise upon the antepenult. Yet the first syllable of Latin words seems to have always retained a certain degree of prominence ; for it is regularly retained in Romance, while unaccented syllables in the interior of a word frequently vanish.
3. It has just been stated that in the prehistoric period the

Latin accent was a stress accent. The nature of the accent in the classical period is a matter of controversy. The ablest investigators often differ diametrically in their interpretation of the evidence bearing on this point, most of our leading German philologists still holding that the Latin accent of the Ciceronian age was stressed, while French scholars, on the other hand, are inclined to maintain that it was musical. This latter view has been made extremely probable by the discussion of Vendryes, Recherches sur l'histoire et les effets de l'intensité initiale en Latin. Paris, 1902. See also Johnson, in Transactions American Philological Association, 1904, pp. 65-76.

Still, even those who advocate the theory of a musical accent for the classical speech, admit that by the fourth and fifth centuries of the Christian era the stress accent had become established.
4. Even were we to admit that the accent of the classical age was a stress accent, it would be clear that the Latin of that time was not as strongly stressed as English and German, for example. One reason for this is found in the accentuation of the Romance languages. These, in the main, retain the Latin accent in its original position, but they generally agree in showing a much slighter degree of stress on the accented syllable than exists in English or German. More weighty is the evidence of Latin poetry. Here the quantitative principle is the fundamental basis of the verse. A decided stress accent would have conflicted with this to the extent of obscuring the metrical character of the verse. Moreover, we often find Latin words containing an unbroken succession of long syllables, e.g. ēdīcēbātur. A strong stress accent is inconsistent with such conditions, as may be seen from the strongly stressed modern languages. Cf. Eng. inévitable with Latin inē̃ũtábile.
5. Attention has been called in the Grammar, $\S 6,4$, to cases where, by the loss of a final vowel, the accent has come to stand
upon the last syllable of certain words. Other instances of the same sort are disturbā̄ar for disturbáavit; mānīt for mūnívit. The principle is stated by Priscian (xv. 17-18). Arpīnā̀as, Samnī̀, nostr $\bar{a} \bar{s}$, Camp $\bar{a} n s$, etc., are also cited by the grammarians as having an accent upon the last syllable, as though for Arpina $\overline{\bar{a}} t i s$, Samnátis, nostrātis, Campáanus, etc. See, for example, Priscian iv. 22. Such forms as benefácit, satisfácit, are properly written bene facit, etc.
6. Various Latin grammarians who support the theory of the existence of a musical accent in Latin (e.g. Nigidius Figulus, in Gellius, Noctes Atticae, xiii. 26. 1-3 ; Audacis Excerpta, Keil, vii. 357. 14 ff. ; Priscian, de Accentu, 2. 5) recognize an acute (') and a circumflex ( ${ }^{\wedge}$ ), and lay down specific rules for their employment. According to them, the acute stood upon all short vowels, as núx, béne, véterem, and upon a long vowel in the antepenult, as régibus. It also stood upon a long vowel of the penult in case the ultima was long, as réges. If the ultima was short, a long penult took the circumflex, as rêge. The circumflex also stood upon long vowels of monosyllabic words, as flos. But it is more than probable that these rules are merely an echo of the principles of Greek accentuation, just as the rules given for syllable-division by certain Latin grammarians were probably merely a learned fiction in imitation of the Greek rules. See § 35 .

## CHAPTER V.

## ORTHOGRAPHY.

See Brambach, Die Neugestaltung der Lateinischen Orthographie, Leipzig, 1868, and the same author's Hülfsbüchlein für Lateinische Rechtschreibung, 3d ed., Leipzig, 1884 ; Georges, Lexikon der Lateinischen Wortformen, Leipzig, 1890.
56. The orthography of Latin words naturally varied at different periods, and even within one and the same period there was not infrequently considerable discrepancy between different writers. During the classical era relatively slight attention was paid to the study of the language, and as a result we notice the absence of any recognized standard of spelling such as prevails in modern languages. This lack of a recognized norm compels us to resort to other sources of information in order to determine the best spelling for a given era. Our manuscripts of the Latin writers unfortunately have been so altered in the course of transmission from the past, that they seldom furnish trustworthy evidence. A few of the oldest give valuable indications of the contemporary spelling; but more often the Mss. have been adapted to the standards of a later age, and are full of the errors and inconsistencies of the Decline. On the whole, carefully cut official inscriptions furnish the safest reliance. The testimony given by these is supplemented for the post-Augustan era by the statements of grammarians, who, beginning with the first century a.D., devoted much systematic attention to orthographic questions. Many points belonging here have already been anticipated in connection with the discussion of Pronunciation. The following special classes of words call for further consideration :
57. 1. Words of the type mentioned in Gr. § 9. 1; 4, viz. quom, volt, volnus, voltus, volgus; Nouns and Adjectives in -quos, -quom ; -vos, -vom ; -uos, -uom; and verbs in -quont, -quontur ; -vont, -vontur ; -uont, -uontur. This was the original spelling and continued to be the regular orthography down to about the beginning of the Augustan Age. After that it was still retained, particularly in special words as an archaic reminiscence. But as a rule, beginning about the 8th century of the city (Brugmann, Grundriss, I². § 662 ; Stolz, Lat. Gr. § 46 ; Lindsay, Latin Language, p. 299 ; Bersu, Die Gutturalen, p. 53 ff.), the following changes took place :
a) $\mathrm{vol}+\mathrm{a}$ mute or a nasal became vul, e.g. vultus, vulnus, But proper names show a preference for the early form, e.g. Volcānus, Volscī, etc.
b) -vos, -vom, -vont, -vontur became -vus, -vum, -vunt, -vuntur, e.g. saevus, saevum, solvunt, solvuntur.
c) -uos, -uom, -uont, -uontur became -uus, -uum, -uunt, -uuntur, e.g. perpetuus, perpetuum, acuunt, acuuntur.
d) -quos, -quom, -quont, -quontur developed somewhat at variance with the foregoing classes. They first became -cus, -cum, -cunt, -cuntur, yielding, e.g. ecus (for equos) ; cum (for quom) ; relincunt (for relinquont) ; secuntur (for sequontur).
2. This spelling established itself during the Augustan Age, and continued to be the standard orthography in words of this class until shortly after the close of the first century A.D., ${ }^{1}$ when -cus, -cum, -cunt, -cuntur became -quus, -quum, -quunt, -quuntur. This change was the result of analogy. Thus in a word like ecus, for example, the preponderance of forms containing qu (equī, equio,

[^2]equīs, etc.) in time naturally produced the change from ecus to equus; and from ecum to equum. Similarly, in the verb such forms as relincunt, secuntur ultimately became relinquunt, sequuntur owing to the influence of the forms containing $q u$ (relinquis, relinquit, relinquimus; sequitur, sequimur, etc.).
3. It is interesting to note that the conjunction cum remained unaffected by this tendency. Not forming part of a paradigm containing $q u$-forms, it remained intact. Its association and frequent collocation with tum also tended to preserve its form unchanged. The form quum, though occasionally found still in texts, does not appear in Latin inscriptions or Mss. prior to the 6th century A.D. (Bersu, Die Gutturalen, p. 44 N.).
4. What has been said of forms in original -quont, -quontur, applies similarly to forms in original -(n)guont, -( n ) guontur. Thus an exstinguont became first exstingunt, then later (after analogy of the other forms of the same tense) exstinguunt; so exstinguontur developed through the medium of exstinguntur to exstinguuntur.
58. Assimilation of the Final Consonant of Prepositions in Compounds. ${ }^{1}$ -
a) In compounds of ad, the preposition appears, -

1) Before c, regularly as ac-, e.g. accipiō.
2) Before $\mathbf{f}$, regularly as ad-, e.g. adferō, adfū̄ .
3) Before g , regularly as ad-, e.g. adgredior; but as ag- in aggero.
4) Before 1 , regularly as ad-, e.g. adloquor; but as alin alligō, usually in allātus, and often in allectus.
5) Before n, regularly as ad-, e.g. adnïtor.
6) Before p, regularly as ap-, e.g. appellō ; but sometimes as ad-, e.g. adpetō, adportō.
${ }^{1}$ On this topic, see particularly the illuminating paper by Buck in the Classical Review, Vol. XIII., pp. 156 ff. Buck's results have materially modified the position taken in the Appendix to my Latin Grammar.
7) Before r, regularly as ad-, e.g. adrā $\bar{o}$, adrēpō; but sometimes as ar-, e.g. arripiō, arrigō.
8) Before s, regularly as ad-, e.g. adserō, adsistō; but as as- in assiduus, and often in assido.
9) Before $\mathbf{t}$, regularly as at-, e.g. attine $\bar{o}$; but sometimes as ad-, e.g. adtingō.
io) Before q, regularly as ad-, e.g. adqū̄rō.
iI) Before gn, sp, sc, st, we find sometimes a-, sometimes ad-, e.g. agnōscō, adgnōscō; asp̄̄rō, adspīrō. Here the spelling adgn-, adsp-, etc., is purely etymological, and does not indicate the actual utterance ; the $d$ disappeared in these consonant groups in accordance with the principle explained in § 105.1 .
10) In all other cases ad was retained both in spelling and pronunciation.
b) In compounds of com-, the preposition appears -
11) Before b, p, m, as com-, e.g. combibō, comportō, commoror.
12) Before $\mathbf{c}, \mathrm{q}, \mathrm{g} ; \mathrm{d}, \mathrm{t}, \mathrm{n}$; $\mathbf{f}, \mathbf{s}$; $\mathbf{j}, \mathbf{v}$, as con-, e.g. conciliō, conquīrō, congerō; condō, conterō, connāscor; cōnferō, cōnserō; conjungō, convincō.
13) Before 1 , as con- or col-, c.g. contātus or collātus.
14) Before r , regularly as cor-, e.g. corrumpō, corripiō.
15) Before gn, con- dropped its n (see § зо5. 1), e.g. cognōscō.
16) For the origin of cō- in cōnūbium, cōnīve $\overline{0}$, etc., see § 89. 1 ; 3.
c) The Preposition ex ( $=$ ecs) before f , lost the c (§ 105. i) and then assimilated $\mathbf{s}$ to $\mathbf{f}$, e.g. efferō, for $e(c) s f e r \bar{o}$ (cf. differō for ${ }^{*}$ disferō). Another form sometimes arises by the loss of the s, e.g. ecferō, ecfätus, etc. This orthography is found mainly in the archaic period.
d) The Preposition in appears, -
17) Before 1 , regularly as in-, e.g. intātus.
18) Before r , regularly as in-, e.g. inrump $\bar{o}$.
19) Before $\mathbf{m}, \mathbf{p}$, and $\mathbf{b}$ as im-, e.g. imbibō ; importo ; immortālis.
20) In all other cases in- was both written and pronounced.
e) The Preposition ob
21) Is regularly assimilated to oc-, of-, og-, op-, before $\mathbf{c}, \mathbf{f}, \mathbf{g}$, and $\mathbf{p}$ respectively, e.g. occurrō, offend $\bar{o}$, oggerō, oppōnō.
22) Elsewhere the $b$ is regularly retained in writing and in pronunciation, except that before $s$ and $t$, b had the sound of p. See § 27. Our Mss. of Plautus, Terence, and Lucretius often have op- in this situation ; but Quintilian (i. 7. 7) assures us that for his time good usage demanded ob.
f) The Preposition per sometimes appears as pel before 1, e.g.pelliciō. Elsewhere $\mathbf{r}$ is retained ; pējerō probably does not contain the preposition per.
g) The Preposition sub
r) Is regularly changed to suc-, suf-, sug-, supbefore $\mathbf{c}, \mathrm{f}, \mathrm{g}$, and $\mathbf{p}$ respectively, e.g. succurrō, suffectus, suggestus, supplex.
23) Before m , appears regularly as sum-, e.g. summove $\overline{0}$.
h) The Preposition trāns
24) Is regularly retained before vowels and $\mathbf{b}, \mathbf{c}, \mathrm{f}, \mathrm{g}, \mathrm{p}$, $\mathbf{r}, \mathbf{t}, \mathbf{v}$, e.g. trānsē, trānsferō, trānsportō, trānsversus.
25) Becomes trān-, often before s, and always before sc-, e.g. $\operatorname{tra} \bar{n}-\mathrm{ser} \overline{0}, \operatorname{tra} n$-scrībō.
26) Becomes trā-, before j, d, 1, m, n (§ 105. 2), e.g. $\operatorname{tr} \bar{a} i c i \bar{o}, \operatorname{tra} \bar{a} d \bar{u} c \bar{o}, \operatorname{tra} \bar{n} n \bar{o}$. Yet before these sounds trāns- is often restored by re-composition (§ 87.3).
59. Seelmann (Aussprache des Latein, p. 6i f.) thinks that such spellings as adf-, adr-, ads-, inl-, inr-, in the prepositional compounds above considered, indicated the actual pronunciation. This pronunciation, however, he considers to have been a faulty one, emanating from half educated persons striving for special correctness. Terentius Scaurus, Priscian, and Appendix Probi all expressly declare the etymological spelling to be incorrect in the type of words under discussion. In accordance with this, in the Appendix to my Latin Grammar, the etymological spelling was rejected and the assimilated spelling was recommended as representing the actual speech of the Romans of the best period. The investigations of Buck no longer authorize those conclusions, - at least not as a thoroughgoing principle. In many compounds, the assimilated form is practically unknown in the best period of the language. In others it is regular. In yet others it occurs occasionally. But in all cases the orthography is probably to be regarded as indicating the actual pronunciation. ${ }^{1}$
60. Compounds of jacio. As indicated in Gr. § 9.3, these are better written iniciō, abiciō, etc. That a $j$ was pronounced after the preposition, is made probable by the fact that the first syllable of these words is commonly used as long in verse. Possibly the analogy of $\bar{e} i c i \bar{o}, ~ d \bar{e} i c i \bar{o}, ~ r e ̄ i c i o ̄ ~(w h e r e ~ a ~ j ~ w o u l d ~ n a t u r a l l y ~ b e ~ p r o-~$ nounced, even if not written) led to the omission of $j$ in other compounds also. For further discussion of the compounds of jaciō, see Mather, Harvard Studies, Vol. VI, pp. 53 ff.; Exon, Hermathena, Vol. XIII, pp. 129 ff.
[^3]
## 61. List of the Most Important Words of Doubtful or Varied Spelling. ${ }^{1}$

## A.

abiciō: rather than abjiciō; § 60 . $a d$ in composition : § 58 .
adiciō: rather than adjiciō; § 60 .
adolēscèns: see adulēscèns.
Adria : see Hadria.
adulēscēns: Brambach (Neugestal-
tung, p. 52) restricts this spelling
to the noun, 'young man,' and for
the participle of adolēscō writes adolēscēns.
adutescentia, adulèscentulus: like adulèscēns.
Aeduĩ: see Haedui.
aèneus, aènus: better than ahēneus, ahènus.
agnōscō and adgnōscō: § 58.a).
Alexandrea: this is the correct form for the Ciceronian period. Later Alexandria is found.
aliöquì and aliōquīn.
allium: early ālium; § 88. I.
allec: not àlec.
ancora: not anchora; § 31. 3.
antemna: also antenna.
Antiochēa, Antiochāa: like Alexandrēa, Alexandrīa.
änulus : not annulus.
Āpenninus and Appenninus.
Apuleius and Appuleius: cf. §88. 1. Āpulia, Āpulus.
arbor: arbōs is archaic and poetic.
arcessō: in early Latin also accersō. Arēopagīta and Ariopagīta. Arēus pagus and Arīus pagus; of. Alexandrēa.
artus, artāre: not arctus, arctāre. arundō : not harundō.
auctor: not autor. auctōritās : not autōritās. aurichalcum: better than ōrichalcum. autumnus : not auctumnus.

## B.

bacca: early bāca; § 88. I. balbūtiō : not balbuttiō. ballista : preferable to balista. balneum, balneae: balineum occurs in early Latin.
bēlua: also early Latin, bêllua. beneficium: rather than benificium. bencficus: rather than benificus. benevolentia : rather than benivolentia. benevolus: rather than benivolus. bibliothēca: bybliothēca also occurs. bipartitus and bipertitus: § 87. I. Bosphorus: § 3 I .3 fin. bracchium : brāchium also occurs. Britannia, etc.: better than Britt-. Brundisium: not Brundusium.

## C.

caecus: not coecus; § II.
caelebs: not coelebs; § II.

[^4]caelum and derivatives have ae, not oe-; § II.
caementum: not cèmentum; § 10. 2. caenum : see coenum.
caerimōnia and caeremōnia: not cèrimōnia; § 10. 2.
caespes : not cēspes; § 10. 2.
caestus: not cēstus; § 10. 2.
caetra: not cètra; § 10. 2.
Camēna: not Camoena; §ir.
causa: caussa was the pre-Augustan form ; § 98. 2.
cèna: not coena; § II.
Cereālis and Ceriālis; Ceriālia.
cèterı̄: not caeterí; § $\mathbf{1 0} \mathbf{2} \mathbf{2}$.
Cethēgus: Cetēgus is pre-Ciceronian ; § 31. 3 .
cirсиmeō and circueō.
claud $\bar{o}$ : clu $\bar{u} d \bar{o}$ is rare and the result of 'De-composition'; see § 87. 2.
clipeus: better than clupeus, the early spelling ; § 6. 2.
Clytèmèstra: not Clytemnèstra.
coclea and cochlea; § 31. 3.
coenum: this (and not caenum) is probably the correct spelling.
com- in composition: § 58.b).
comissārī and cōmīsārī.
comminus : not cōminus.
comprehendō : better than comprèndō.
con- in compounds: §58.b).
condiciō (con and root dic-) : not conditiō.
cōnectō and derivatives: not connectō, etc.
coniciō: rather than conjiciō; § 60. A form coiciō also occurs.
cōnītor: not connītor.
cōnīvoo: not connīveō.
conjūnx: better than conjux.
cōntiō (for coventiō): not cōnciō; § 25.3 .
cōnūbium: not connūbium; § 89. 1. convīcium: not convītium; § 25.3. cottīdiē and cotīdiē: not quotīdiè.
cothurnus and coturnus: §31. 3 .
culleus, culleum: early cūleus, cūleum; § 88. I .
cum: archaic quom; never quum; see § 57.3 .
cumba: also cymba.
cupressus : not cypressus.
$c \bar{u} r: q u \bar{o} r$ is ante-classical.

## D.

damıma: early dāma; § 88. I.
Dānuvius: not Dānubius. Cf.§16.2. Dārēus: better than the later form Dārīus.
Decelēa: better than the later form Decel̄̃a.
dèfatīgō, dèfatīgātiō: also dèfet-.
dēiciō: rather than dèjiciō; see § 60.
dēlēctus, 'choosing'; also dīlēctus.
dèlēniō: better than dēlīniō; cf. §90.
deprehendō: also the contracted form dēprēndō.
dèrigō : also dìrigō, which is probably the original form. Brambach, however, recognizes two independent verbs: dèrigō (dē + regō), 'to move in a particular direction, and dirigō (dis + regō), 'to move in different directions.'
dētrecto: also dētractó; §87. 1. dexter, dextra, dextrum : also dextera, dexterum; regularly dextera when used as a substantive.
diciō : not ditiō; § 25.3. dīnōscō : earlier dignōscō.
disiciō: rather than disjiciō; §60. Dū̆lius or Duillius.
dumtaxat: not duntaxat; § 87. 1.
dipondius: earlier dupondius; § 6.2.

## E.

eculus: cf. § 57. d).
èiciō: rather than ējiciö; § 60 .
elleborus: better than helleborus.
epistula : rather than epistola.
Erinys : not Erinnys.
erus, era, erīlis: not herus, etc.; § 23.
Esquiliae, Essquilinus : not Exquiliae, etc.
Euander: not Evander.
exedra and exhedra.
existimātiō, exīstimō: exīstumātiō, existumō are the early spelling; § 6. 2.
exsanguis, exscind $\overline{0}$, exscrībō, exsilium, exspectō, and other compounds of ex with words having initial $s$ : better than exanguis, excindō, expectō, etc.

## F.

faenerātor, faenerō: not fēnerātor, etc.; § 1o. 2.
faenum: not fènum, nor foenum; § 11.
faenus: see faenerātor.
fēcundus, etc.: not foecundus, etc., § 11.
fêmina: not foemina; § II.
fètus: not foetus; § II.
finitimus: earlier-umus; §6.2. foetidus: not fêtidus; § II. forēnsia and forēsiä: § 20. 2. futtilis: early fütilis; § 88. $\mathbf{1}$.

## G.

gaesum: not gēsum; § 10. 2. garrulus : not gārulus.
Genêva : acc. to the evidence of the Romance (see Gröber in Wölfflin's Archiv, ii. 437) ; but the best Mss.
of Caesar, and the Celtic point to Genăva.
genetīvus : not genitīvus.
genetrīx : not genitrix.
glaeba: not glēba.
gnātus, gnāta : this is the early form, used also in poetry; later nātus, nāta.
grätis and grätiōs. The latter form is archaic.

## H.

Hadria, etc. : not Adria, etc.; § 23. Haedū̀: rather than Aedū̀. Halicarnāsus : not Halicarnassus. hallūcinor better than hāhūcinor; of. § 88. $\mathbf{1}$; also $\bar{a} l$-, all-; § 23 .
Hammōn: better than Ammōn; §23. harēna: not arēna; § 23 .
haruspex: rather than aruspex; § 23 . haud: sometimes haut; § 28.
haveō and aveō; § 23.
hedera: not edera; § 23 .
helluō, helluātiō: early hēluō, etc.; § 88. 1.
Henna: better than Enna; § 23 .
Hèraclēa: later Hèraclīa.
herciscō and ercisscō: § 23 .
heri: also here (a different formation). Hiber, Hibērēs, etc.: not lber, etc.; § 23.
hiems: possibly also hiemps.
Hîlōtae: not Hēlōtae.
Hister: better than Ister ; § 23.
holitor, holitōrium : see holus.
holus: rather than olus; § 23 .

## I.

imb- in compounds: § $58 . d$ ) 3).
imm- in compounds : §58.d) 3).
$i m m o ̄$ : not $\bar{i} m o ̄$.
imp- in compounds: § 58. $d$ ) 3).
inclitus and inclutus: not inclytus. incohō and inchoo.
ingrātēs and ingrātī̄s; cf. grätīs. iniciō: rather than injició; § 60. inl- in compounds: $\S 58 . d$ ) 1). in primis, or imprimìs: § 58. d) 3). inr- in compounds: $\S 58 . d$ ) 2). intellegentia, intelleg $\bar{y}$ : see § 87. 1. intimus: earlier intumus; § 6. 2.

## J.

jücundus: not jōcundus, since the word is derived from juvō, 'please '; the form jōcundus is the result of false association with jocus, 'jest.'
Jūdaea: not Jūdēa; § 10. 2.
jūniperus: not jünipirus.
Juppiter: the regular classical form.
Jüpiter was the early spelling; §88. I.

## K.

K'aesō and Caesō.
Kalendae: better than Calendae.
kalumnia: in legal expressions for calumnia.
Kartināgō and Carthāgō.

## L.

lacrima: earlier lacruma (archaic dacruma); § 6. 2 ; not lachrima nor lachryma; § 3I. 3.
lagoena: not lagēna; § II.
lamina and lammina, also syncopated lāmna.
lanterna: better than laterna.
Lārentia (in Acca L.) : not Laurentia. lautus: better than lōtus.
lègitimus: earlier lēgitumus; § 6. 2.
libet, libēns, libìdō: earlier lubet, etc.; § 6. 2.
lìs: but stlis in the legal phrase stlitiobus jüudicandīs; § 104. I. b).
littera: better than lītera; § 88. I. litus: rather than littus.
loquèla: not loquella.
M.
maereō, maeslus, etc.: not moerē, etc.; § II.
malevolentia: not malivolentia.
malevolus: not malivolus.
mancipium: earlier mancupium; § 6. 2.
manifēstus: earlier manufēstus; § 6. 2.
manipretium: earlier manupretium; § 6. 2.
maritimus: earlier maritumus; §6.2. Mauretānia: also Mauritānia.
maximus : earlier maxumus; § 6.2. Megalēnsia and Megalēsia; § 20. 2. mercēnnārius: not mercēnārius.
Messalla: early Messāla; § 88. I. mille: plural mīllia (Monumentum Ancyranum) and mìlia (the usual form).
minimus : also minumus; § 6. 2. monumentum and monimentum; § 6. 2.
muccus: earlier mū̆cus; § 88. І.
multa: not mulcta.
multo: : see multa.
mūraena: not mūrēna; § 10. 2.
murra and myrrha.

## N.

nāvus: earlier gnāvus.
$n \bar{e}$, 'verily'; not nae; § Io. 2.
neglegō, neglegentia: § 87. I.
negōtium, negōtiātor: not negōcium, etc.; § 25. 3 .
nēnia: not naenia; § 10. 2.
nēqū̄cquam and nēquīquam.
novícius: not novĩtius; § 25. 3 .
nunquam and numquam. nūntiō, nüntius: not nūnciō, etc.; § 25.3 .

## O.

obiciō: rather than objiciō; § 60 . oboediō: not obēdiō; § II.
obscènus: not obscaenus; nor obscoenus; § 10.2 ; 11 .
obs- in compounds: not ops-; § 58.
e) 2).
obsönium : also opsōnium (oे ('ف้vov). obsōnāre: see obsōnium.
obstipēscō: earlier obstupēscō; § 6. 2. obtemperō, obtineō, obtulī: not opt-; § 58.e) 2).
ōpiliō: better than ūpiliō.
$o p p$ - in compounds; §58.e) 1). optimus: earlier optumus; § 6.2. Orcus: not Orchus; \& 31. 3.

## P.

paelex: not pellex; § io. 2. Paeligni: not Pêlignī; § 1о. 2. paenitet: not poenitet; § II. paenula: not pènula; § io. 2.
Parnāsus; not Parnassus.
parricīda, etc.; earlier pāricī̀a; § 88. $\mathbf{1}$.
Paullus and Paulus.
paulus : preferable to paullus.
pedetentim and pedetemptim.
pedisequus: not pedissequus.
pējerō: not pējurō; perjūrō is probably a different word.
percontor, etc.: not percunctor, etc.
perjūrus and pèjūrus: of. pējerō.
pessimus: earlier pessumus ; § 6.2.
pilleus, etc.: early pilleus, etc.; §88. 1.
plaustrum: not plōstrum.
plēbs: not plēps; § $58 . e$ ) 2).
Polliō: better than Pōliō.
pōmèrium: not pōmoerium.
Pomptinus : not Pontinus.
pontifex : earlier pontufex; § 6. 2.
Porsenna and Porsena; also, acc. to
Brambach, Porsinna and Porsina.
prehendō and prēndō.
prèlum: not praelum; § 10. 2.
proelium: not praelium; § II.
prōiciō: rather than pröiciciō; § 60.
prömunturium: better than prömonturium.
proscaenium: not proscènium; § 10.2.
proximus: earlier proxumus; § 6. 2.
Püblicola: on the early forms Poplicola, Puplicola, see pūblicus.
pūblicus (from pūbēs, 'youth,' 'ablebodied men,' 'citizens') : poplicus (early Latin) is from poplus = populus; puplicus is the result of the contamination of pūblicus and poplicus.
pulcher: early Latin pulcer; § 31.3.

## Q.

quamquam and quanquam.
quattuor: not quatuor.
querèla: better than querella.
quīcumque: better than quīcunque.
quicquam and quidquam.
quicquid and quidquid.
Quīnctus, Quinctius, Quīnctilis, Quinctilius: these are the forms for the Republican period; under the Empire, Quintus, Quintīlis, etc. quom: § 57 .
quör: see cür.
quotièns and quotiès.

## R.

raeda: better than rèda; not rh-;
§ 10. 2.

Raetia, Raetī: not Rhaetia, etc. reccid̄̄̀ (Perf. of recĭdō) : not recidī. reciperō: earlier recuperō; §6. 2. Rēgium: not Rhēgium. reiciō: rather than rējiciō; § 60. religiö: in poetry also relligiō. reliquiae: in poetry also relliquiae. reliquus : early Latin relicuos; § 57. repperī (Perf. of reperiō) : not reperi. reppulī (Perf. of repellō) : not repulī. reprehendō or reprēndō. rès püblica: not rèspüblica. rettulī (Perf. of referō) : not retuli. rotundus: in Lucretius sometimes rutundus; § 90.

## S.

saeculum: not sēculum; § 10. 2. saepès: not sēpès; § Io. 2. saepiō: see saepēs. saeta: not sèta; § 10. 2.
Sallustius: not Sālustius. sāriō: better than sarriō. satura: also later satira; not satyra. scaena: not scena; § 10. 2.
sepulcrum : not sepulchrum; of. § 3I. 3.
sescentī: rather than sexcentī.
sētius: not sēcius.
singillãtim: not singulātim.
sōlācium: not sōlātium; § 25.3.
sollemnis: not sollennis.
stelliō : early stēliō; § 88. I.
stīllicidium: not stilicidium.
stilus: not stylus.
stuppa, etc.: early stüpa, etc.; § 88. I. suādèla: not suādella.
subiciō: rather than subjiciō; § 60.
subtèmen : not subtegmen.
succ- in compounds: § $58 . g$ ) 1).
succus: rather than sūcus; § 88. I. Suēbū: not Suēvà; § 16. 2.
suff-in compounds: § 58.g) I).
sulpur and sulphur: not sulfur; § 31.4
summ- in compounds: §38.g) 2).
supp-in compounds: §58.g) 1).
suscēnseō: rather than succènseō.
suspīciö: not suspītiō, § 20. 3 .
Syria: earlier Suria: § 1. 5.

## T.

taeter: not tēter; § IO. 2. tanquam and tamquam. temperī (Adv.) : not temporì. tentāre and temptāre.
Thalia: Thatea is pre-Augustan. thēsaurus: thēnsaurus is archaic. Thr $\bar{\alpha} x$ and Thraex ( $\Theta \rho \hat{a} \xi)$.
tingō: also tinguō.
totiēns: also totiès.
trājectus: not trānsjectus; § 58.h) 3).
trāns- in composition: § 58. h).
$\operatorname{tr} \bar{a} n s i c i o \bar{o}$ and trāiciō: rather than
trānsjiciō, trājiciō; § 60.
trānsnāre and tränāre: § 58. h).
Trēverī: rather than Trēvirī.
tribūnīcius: not tribūñ̄tius: § 25.3. tripartitus and tripertītus: § 87. I. tropaeum and trophaeum.
tūs: rather than thūs.

## U.

ubicumque: Letter than ubicunque.
Ulixès: not Ulyssēs.
umerus: not humerus; § 23.
ūmidus, ӣmor, etc.: not hūmidus, etc.; § 23.
$u n g u \bar{o}$ and ungō.
unquam and umquam.
urgeō: not urgueō.
utcumque: better than utcunque.
utrimque: not utrinque.

## v.

valêtūdō: not valitū̀dō.
vehemēns: in poetry often vèmèns. Vergiliae, Vergilius, Verginius: not Virg.
versus (versum) : early Latin vors-. vertex: early Latin vortex. vertō: early Latin vortō. vester: early Latin voster. vīcēsimus: commoner than vīgēsimus; sometimes also vīcēnsimus. victima: earlier victuma: § 6. 2. vīlicus : not villicus.
vinculum and vinclum: §91. vinolentus and vinulentus.
Volcānus: § $57 . a$ ).
Volsci: § 57. a).
Volsiniènsis: § 57.a).
Volturnus: § 57.a).
Vortumnus: under the Empire also
Vertumnus: cf. verto.
vulgus: earlier volgus; § $57 . a$ ).
vulnus : earlier volnus; § 57 a). vulpès: earlier volpès; § 57. a).
vultur: earlier voltur; § $57 . a$ ). vultus: earlier voltus; § 57. a).

## CHAPTER VI.

## THE LATIN SOUNDS.

## THE VOWELS. ${ }^{1}$

## Ablaut.

62. i. The Indo-European parent-speech, from which the Greek, Latin, Sanskrit, Avestan, Slavic, Teutonic, Celtic, Armenian, and Albanian languages are descended, had a vowel system of considerable regularity. By variation of the the root vowel, each monosyllabic root ${ }^{2}$ was regularly capable of appearing in three different forms. Thus the Indo-European root gen-, 'bring forth,' had also a form gon-, and another form gn-. The different phases in which a root appears are designated as 'grades'; while the general phenomenon of variation is called Ablaut or Vowel Gradation. 'The different phases of a root taken together form an 'ablaut-series.' While ultimate conclusions have not yet been reached on the subject, yet it is usual to recognize six such ablautseries as belonging to the Indo-European parent-speech. Of the three grades belonging to each series, two are characterized by a fuller vocalism than the third ; these fuller phases of the root are called 'strong' grades ; the third by contrast is called the 'weak' grade. Thus gen- and gon-, cited above, represent the strong

[^5]grades ; gn-, which has been weakened by the loss of the $\mathbf{e}$, is the weak grade. The first of the two strong grades gives its name to the series in which it occurs.
2. The six Indo-European ablaut-series are as follows:

| Series. | Weak Grade. | Strong Grades. |  |
| :---: | :---: | :---: | :---: |
| - - -Series: | $\left\{\begin{array}{c} \boldsymbol{\theta}^{1} \\ \text { e.g. bho- } \end{array}\right.$ | $\left\{\begin{array}{c} \overline{\mathbf{a}} \\ \text { e.g. } b h \bar{a}- \end{array}\right.$ | ō bh - |
| $\overline{\mathrm{e}}$-Series: | $\left\{\begin{array}{c} \ominus \\ \text { e.g. dho- } \end{array}\right.$ | $\left\{\begin{array}{c} \overline{\mathrm{e}} \\ \text { e.g. dhē- } \end{array}\right.$ | dhō- |
| $\overline{\mathbf{o}}$-Series : | $\left\{\begin{array}{c} \ominus \\ \text { e.g. } p^{2}- \end{array}\right.$ | $\left\{\begin{array}{c} \bar{o} \\ \text { e.g. po } \bar{o}- \end{array}\right.$ | $\underset{p \bar{o}-}{\overline{-}}$ |
| ă-Series : | $\left\{\begin{array}{c} \text { Vowel vanishes } \\ \text { e.g. } g_{-} \end{array}\right.$ | $\left\{\begin{array}{l}\text { ă } \\ \breve{a g} \text { - }\end{array}\right.$ | б |
| ¢-Series : | $\left\{\begin{array}{l}\text { e.g. pt } \\ d r k-\end{array}\right.$ | $\left\{\begin{array}{c}\text { pet- } \\ \text { derk- }\end{array}\right.$ | pot- dork- |
| ठ-Series: | $\left\{\begin{array}{c}\text { Vowel vanishes } \\ \text { e.g. }\end{array}\right.$ | $\left\{\begin{array}{c}\text { ¢̆ } \\ \text { ofd }\end{array}\right.$ | ¢ |

3. Of these six ablaut-series, it will be noticed that three are long-vowel series (the $\bar{a}$-, $\bar{e}$-, and $\bar{o}$ - series), and three short-vowel series (the $\breve{a}$-, $\breve{c}$-, and $\breve{o}$-series). But the short-vowel series often have, in addition to the forms given in the foregoing table, socalled 'protracted forms' of the root; e.g. from the root teg-, tog- of the $\breve{e}$ - series comes the 'protracted form' teg- in tegula, ' tile' ; from the root sed-, the 'protracted form' sēd- in sē̄ēs, 'seat.'
4. The origin of this variation in the form of roots is attributed with great probability to accentual conditions prevailing in the parent-speech. Some uncertainty still prevails concerning details in the various series ; but for practical purposes the above scheme is sufficiently accurate (see Brugmann, Grundriss ${ }^{2}$, i. § 534 ff. ; Lindsay, Latin Language, p. 253 ff.; Stolz, Lat. Gr.,

[^6]§ 15 ff. ; Lateinische Lautlehre, p. 157 ; Johnson's Cyclopaedia, Article Ablaut). Of the different Indo-European languages some have preserved the Indo-European Ablaut with great fidelity; this is notably the case with Greek and Teutonic. In other languages the Ablaut has become much obscured ; Latin belongs to the latter class. Most Latin roots appear in only a single grade, the other two grades having disappeared in the course of the development of the language. Yet some examples of the original gradation are preserved. These will be considered according to the different ablaut-series in which they occur.

## $\breve{e}$-Series.

64. The $\breve{e}$-series is by far the best represented of any in Latin ; it embraces three sub-types :
a) The $\breve{e}$ or $\breve{o}$ is followed by some consonant which is not a nasal or a liquid, e.g. root $d c-$, dec-, doc-, seen in discō (for *di-dc-scō) ; dec-et; doc-eō; root sd-, sed-, sod-, seen in sīāo (for *si-sd-ō) ; sed-eō; sod-ālis, 'seat-mate,' 'table companion,' ' crony.' The root es- ('to be') has only the weak grade and one of the strong grades. The weak grade is seen in s-im; s-unt, etc.; the strong grade in es-t; es-se, etc.
b) The $\breve{e}$ or $\breve{o}$ is followed by a liquid or nasal. By the loss of the $e$ in the weak grade the liquid or nasal often becomes vocalic, developing according to the principles explained in §§ 100, $\mathbf{1 0 2 .}$ Thus from the Indo-European root gn-, gen-, gon-, the Latin has gnātus (for $g \bar{n}$-tus ; see § 102. 2), and gen-us; no form with gonhas been preserved; gi-gn- $\bar{o}$, however, shows us another form of the weak grade. From the root $m n$-, men-, mon-, the Latin has $\bar{m} n s$ (for $\left.{ }^{*} m n-t(i) s\right)$, memin̄ й for $m e-m e n-\bar{\imath}$, and mon-e $\bar{\circ}$. Compare also ex-cel-lo, col-lis (root cel-, col-); terra, ex-torris (root ters-, tors-). Occasionally the liquid precedes ; e.g. from the root prc-, prec-, proc-, we get poscō (for *prc-scō, *porc-scō ; §100. 2 ; 105. 1), prec-or, proc-us, 'suitor.'
c) The $e$ or $o$ of the strong grades was originally followed by $i$ or $u$; in the weak grade the $e$, as usual, disappeared, leaving $i$ or $u$. Thus originally:

| $i$ | $e i$ | $o i$ |
| :--- | :--- | :--- |
| $u$ | $e u$ | $o u$ |

But, of these diphthongs, ei became $\bar{z}$, while the others became $\bar{u}$, except that $o i(o e)$ has been retained in a few words. Examples: root fid-, feid-, foid-, seen in fïd-ēs; fīdo (for feid-ō) ; foed-us (earlier foid-us) ; root duc-, deuc-, douc-, seen in dŭc-em, dūcō (for earlier *deuc- $\bar{o}$ ).

By disappearance of the $\breve{e}, \breve{o}$ of the strong grades, $\breve{\imath}$ sometimes develops from $j$ in the weak grade, e.g. mag-is, ma(g)-jes-tās, $m a(g) j u s$ (for $-j o s$ ).

For protracted forms of the root in the $\breve{c}$-series, see § 62. 3 .
Further examples of Ablaut in the $\breve{e}$-series are given in Stolz, Lat. Grammatik, ${ }^{3}$ pp. 34 ff. ; Lat. Lautlehre, pp. 157 ff. ; Lindsay, Lat. Language, p. 255.

## $\bar{e}$-SERIES.

65. No root shows all three grades in Latin; 2, the obscure vowel, develops regularly as $\breve{a}$, but often appears secondarily as $\breve{\imath}$ in accordance with § 7r. 2. The root $d h 2$-, $d h \bar{e}-$-, $d h \bar{o}-$-, 'place,' 'put,' shows the weak grade in con-dĭtus (for *con-dă-tus; § 7 I .2 ), etc., and one of the strong grades in sacer-dō-s; fānum (for *făsnum) shows the weak grade ; fés-tus, the corresponding strong grade. Cf. also ră-tus, rē-ri; să-tus, se-men.

## $\breve{a}$-Series.

66. One form of the strong grade is seen in $\breve{a} g \cdot \bar{o}$, the 'protracted form' (§62.3) in ambāges. The $a$ may combine with $i$ to produce the diphthong $a i$. An instance of this is seen in maes-tus, weak grade mis- in mis-er.

$$
\bar{a} \text {-Series. }
$$

67. The obscure vowel a develops as $\breve{a}$. The weak grade is seen in fa-teor; the corresponding strong grade in f $\bar{a}-r \bar{\imath}, f \bar{a} m a$. Cf. also stă-tus; stā-men, Stātor; rād-ere and rōd-ere exhibit the two strong grades.

## ŏ-Series.

68. Examples of this scantily represented ablaut-series are fö-dere, ŏd-ium. Of these roots, protracted forms (§62.3) appear in $f \bar{o} d-\bar{\imath}, \bar{o} d \bar{l}$.

## $\bar{o}$-Series.

69. The obscure vowel a appears as $\breve{a}$. The weak grade is seen in dămus, dătus; the corresponding strong grade in dōnum, dōs. Cf. also că-tus, cōs (for * cōts).
70. Vowel gradation appears not only in roots, but also in suffixes and in case-endings. 'Thus in nouns of the second declension the suffix varies between $e$ and $o$, the two strong grades of the $\breve{e}$-series. The suffix $e$ is seen in the vocative hort-e, and originally existed in the locative horfi, which is for *hort-e-i; see § $\mathbf{1 2 6}$. The other cases originally had the suffix $o$, e.g. hortus, hortum, for a primitive hort-o-s, hort-o-m. Cf. also nouns of the type of genus, generis, originally ${ }^{*}$ gen-os, *gen-es-is, where again the suffixes -es, -os show us the two strong grades of the $\breve{e}$-series.

In case-endings we have an interesting illustration of vowel variation in the genitive ending, which appears as $-s,-\breve{e} s$, and $-\check{o} s$; e.g. familiā-s (§ II 3) ; ped-is (for *ped-ĕs); senatu-ŏs (early Latin).

## Vowel Changes.

## ă.

71. Indo-European $\breve{a}^{1}$ in syllables which were accented at the time of the early Latin accentuation (see § 55) remains unchanged in Latin ; in syllables which were unaccented at that period, $\breve{a}$ develops as follows :

[^7]I. Before two consonants (not a mute and a liquid) and before $r$ (not final) $\breve{a}$ regularly becomes $\breve{e}$, e.g. acceptus for *accaptus; particeps for *párticaps; cōnfectus for *cónfactus; impertiō for *impartiō; pepercī for *péparcī; reddere for * 1 eddare.
2. Before a single consonant in the interior of a word $\breve{a}$ becomes $\breve{\imath}$, e.g. adig $\bar{o}$ for ${ }^{*}$ adag $\bar{o}$; tetig $\bar{\imath}$ for ${ }^{*}$ tetag $\bar{\imath}$; cecid $\bar{\imath}$ for *cecadī; concinō for *concanō; īnsitus for *insatus; redditus for ${ }^{*}$ reddatus.
3. Before $l+$ a consonant (but not before $l l$ ), $\breve{a}$ becomes $\breve{u}$, e.g. exsultō for *éxsaltō; inculcō for *incalcō; īnsulsus for *insalsus.
4. Before labials, $\breve{a}$ becomes the sound which was represented by $u$ in the earlier period, and later by $i$ (see § 6. 2), e.g. oссиро̄ for *оссар̄̄; contubernālis for *cóntabernālis; mancupium (later mancipium) for *máncapium. But when $i$ follows the labial the preceding $\breve{a}$ appears always as $\breve{\imath}$, e.g. accipio for *áccapio.
5. Before $n g$, $\breve{a}$ becomes $\breve{\imath}$ (through the medium of $\breve{e}$ ), e.g. atting $\bar{o}$ for ${ }^{*}$ áttangō; cōnfringō for *'cōnfrangō; compingō for * cómpangō.
6. After $\breve{\imath}$ in open syllables $\breve{a}$ becomes $\breve{e}$, e.g. varieg $\bar{o}$ for *variagō: hietō for *hiato (cf. hiāscō).
7. Short $a$ before $l$ in open syllables becomes
a) $\breve{u}$, if the $l$ is guttural, ${ }^{1}$ e.g. exsuto for *exsalō.
b) $\breve{\imath}$, if the $l$ is palatal, ${ }^{1}$ e.g. exsilium for ${ }^{*}$ exsalium.

## $\overline{\mathbf{a}}$.

72. $\bar{a}$ regularly remains unchanged in Latin in all situations, e.g. māter; contāctus for *cóntāctus.
[^8]
## ě.

73. 74. $\breve{e}$ is regularly retained in Latin:
a) Before $r$, e.g. ferō, cōnferō, sceleris.
b) When final, e.g. horte, age, agite.
c) Usually before two consonants, e.g. scelestus, obsessus, auspex.
1. $\breve{e}$ becomes $\breve{\imath}$ :
a) Before a single consonant in syllables which were unaccented by the early accentuation (§55), e.g. colligō for *collegō; militis for *mīlĕtĕs; obsideō for *óbsedeō; prōtinus for *prōtemus. But in unaccented syllables before $r$, the $\breve{e}$ is retained, according to § 73. 1. a, e.g. generis.
b) Sometimes before $n$ or $m+$ a consonant, e.g. simplex for *sem-plex (from sem-, 'one'), vègintū for *vĭgentī; tinguō for *tenguō; quīnque for *quenque (earlier *penque). Before $g n$ original $\breve{e}$ also becomes $\breve{\imath}$, e.g lig-num for *leg-num; dignus for *degnus (from *decnus; § 94. 3).
2. $\breve{e}$ becomes $\check{o}$ before $v$, e.g. novos for an original *nevos (Gr. $\nu$ ย́fos).
3. svĕ- becomes first svo- and then so- (§ 1о3.5), e.g. IndoEuropean *svesor to *szosor, whence *sosor, soror (for the change of $s$ to $r$, see $\S 98.1$ ); *svecrus to *svocrus, whence socrus, ' mother-in-law.'
4. e becomes $o$ before guttural $l$ (i.e. $l$ followed by $a, o, u$ or a consonant, e.g. olìva for *elaiva (Gr. é̀aífa); volvō for *velvō (cf. Gr. $f \in \lambda$ v́ $\omega$ ).

## è.

74. $\bar{e}$ is regularly retained in Latin in all situations, e.g. rēctus, corrēctus, corrēx̄, diè.

## ì, $\mathbf{i}$.

75. 76. In unaccented syllables not final $\breve{\imath}$ becomes $\breve{e}$ before a secondary $r$ (§ 98. 1), e.g. cineris for * ciniris, genitive of cinis. So also in an accented syllable in serō for ${ }^{* s i-s \bar{o}}$, ssi-rō.
1. Before a consonant, $\breve{r}$ develops to $\underset{\circ}{r}$ (see § 100 ), then to er, e.g. *crïnō (Gr. крive) becomes first *crn $\bar{o}$, and then cerno ; so *tris (Gr. $\tau \rho i s)$ became *trs, later ter(s).
2. Final $\breve{\imath}$ becomes $\breve{e}$, e.g. mare for *mari; ante for *anti (Gr. à $v \tau i$ í) ; sedile for ${ }^{*}$ sedīli; but sometimes final $\breve{\imath}$ disappears. e.g. animal (for *animālı̀) ; calcar (for *calcārì).
3. Long $\bar{\imath}$ regularly remained unchanged in Latin.

## 厄.

76. ı. $\breve{\text { b }}$ became $\breve{u}$ in accented syllables:
a) Before $n$-adulterinum ( $\S 20.1$ ), e.g. uncus for *oncos (Gr. oै ${ }^{\prime} к о$ ) ; unguis for *onguis (cf. Gr. oैvv ).
b) Before $l+\mathrm{a}$ consonant, e.g. multa for molta; sulcus for *solcos (Gr. ò $\lambda \kappa$ ós); pulcer for earlier polcer; culpa for colpa. But this change does not take place before $l l$; hence collis, mollis.
77. $\breve{o}$ also regularly becomes $\breve{u}$ before $m$, e.g. umbō for *ombo (cf. Gr. ỏ $\mu \phi$ ало́s) ; numerus for *nomeros (cf. Gr. vó $\mu$ оs). A few exceptions (domus, etc.) remain unexplained.
78. About 150 b.c. earlier vor-, vos-, vot- became ver-, ves-, vet-, e.g. versus, vertŏ, vertex, vester, vetō, for earlier vorsus, etc.
79. In unaccented open syllables Indo-European ŏ seems to have become :
a) $\grave{i}$, e.g. novitās for *nevo-tās; armiger for armŏ-ger; $\bar{i}$-licō for *in stloco, 'on the spot'; indigena for *indogena.
b) After $\breve{\imath}$ this $\breve{o}$ became $\breve{e}$, e.g. pietas for *piŏ-tās; societās for *sociŏ-tās.
c) Before guttural $l$ (see § 71. 7, footnote), $\check{o}$ became $u$, e.g. sēdulō for ${ }^{*}$ sè dolō.
d) Before labials this $\breve{o}$ became $u$ (later $\breve{\imath}$, see § 6. 2), e.g. Crassupes for *Crassopès; aurufex for *aurơfex.
80. In closed syllables, originally unaccented ŏ becomes $u$, e.g. onustus for *ónostos; euntis for *éontis (cf. Gr. ióvios). So also before a consonant in final syllables, e.g.filius for earlier filios; dōnum for *donom; opus for *opos. Final syllables in -quos, -quom; -vos, -vom; -uos, -uom, etc., retained the $\breve{o}$ to a considerably later period; see § 57. I. $\breve{o}$ was also regularly retained before $r$, e.g. temporis.
81. Final $\breve{o}$ became $\breve{e}$, e.g. sequere for ${ }^{*}$ sequeso. For the rhotacism, see § 98. r.

## $\overline{0}$.

77. $\bar{o}$ regularly remains unchanged in Latin in all situations, e.g. dōnum, victōrēs, licētō.

## ŭ.

78. $\breve{u}$ before labials became $\breve{\imath}$ about the close of the Republic (see § 6. 2), e.g. lacrima for earlier lacruma; lacibus for earlier lacubus. This change regularly took place in unaccented syllables, but by analogy it affected some accented syllables also, e.g. libet for lubet; libēns for lubēns.

## $\overline{\mathbf{u}}$.

79. $\bar{u}$ is regularly retained in all situations, e.g. fu$m u s, ~ c o n j \bar{u} n c-$ tum, etc.

## ai.

80. 81. In syllables which, under the early accentuation (see § 55), were accented, original ai was retained, becoming, about iоо в.с., ae, which, in turn, late in imperial times, developed into a monophthongal sound ; see § 10. 2. But ai arose
secondarily in Latin in a few words, e.g. maior, ${ }^{1}$ aī, Maius, etc. pronounced maijor, aijō, etc.
1. In syllables which, under the early accentuation (§ 55 ), were unaccented, original ai became regularly $\bar{\imath}$, e.g. inquī$r \bar{o}$ for *inquairō; exīstumō for *éxaistum̄ ; virtūti, mīlitī, etc., for *virtūtai, etc.; mēnsīs, port̄̀s, etc., for mēnsais, etc.

## oi.

## In Accented Syllables.

81. i. oi appears in the oldest monuments of the Latin language, e.g. oinom. But it early began to take the form oe, e.g. COERAVERE. Somewhere between 200 and 100 b.c. it began to develop to $\bar{u}$, e.g. $\bar{u} t i l i s$ for *oitilis; $\bar{u} n u s$ for oinos; lūdus for *loidos. This change was complete by 100 b.c., though a tendency existed for a long time after that to use the original $o i$ in formulas, e.g. COIRAVERVNT, LOIDOS.
82. Yet $o e$ (even after the change of oe to $\bar{u}$ ) appears even in a few words :
a) As a result of contraction, e.g. coetus for coïtus; coepī for * coèpì.
b) In the following special words: poena, Poenus, coenum, foedus, 'treaty,' foedus, ' ugly,' foetor. Yet by the side of poena we have pūniō; by the side of Poenus, Pūnicus; along with coenum, ${ }^{2}$ cūniō. Sommer suggests that the law is this: When the labials $p, f$, or the labio-velar $q u$ began a word, the following oe was retained, except when $\breve{\imath}$ followed.
c) Moenia survived as an archaism. The form served to differentiate moenia and mūnia, which were originally the same word.

[^9]d) $o i$ in early Latin appears before $j$ in $q u o i(j) o s$; see § 198.3.
3. After initial $v$, oi became $\bar{\imath}$, e.g. vīcus for *voicos (Gr. foîкоя) ; vīnum for *voinom (Gr. foìvos).

## In Unaccented Syllables.

4. Here $o i$, through the intervening stage of $e i$, became $\bar{i}$, e.g. hortī through hortei, from *hortoi (cf. Gr. $\chi^{\circ} \rho \tau 0 \iota$ ) ; hortis, through horteis, from *hortois (Gr. $\chi^{\text {óptots). Vestiges of the early form }}$ are preserved in poploe $(=$ poputi) and oloes $(=o l l i s$, illiss), mentioned by Festus.

## ei.

82. I. Indo-European $e i$ is preserved in the earliest monuments of the Latin language, e.g. Deivos, Deicerent. About 200 B.C. it began to pass into $\bar{i}$. This circumstance led to the writing of $e i$ for original $\bar{\imath}$ in some words, e.g. FAXSEIS, for faxis; peilum for pilum. In inscriptions the spelling el (both for original $e i$ and for $\bar{i}$ ) was commonly current even down to the time of Caesar.
83. After $l$, ei became $\bar{e}$, e.g. lēvis for ${ }^{*}$ leivis (Gr. $\left.\lambda \epsilon \bar{\imath} f o s\right)$; lèv $\bar{\imath}$ for *ieiv̄̀ (from linō).
84. ei arose secondarily in some words, e.g. eius, peior, Pompeius, the correct spelling, instead of the traditional pèjor, Pompèjus. These were pronounced eijus, peijor, etc.

## ui.

83. This diphthong undergoes no changes ; see § 14 .

## au.

84. I. au is regularly retained in syllables which, under the early accentuation ( $\S 55$ ), took the accent, e.g. aúrōra, claudō. In the speech of common life this $a u$ had a tendency to become an open $\bar{o}$ (later close), and in some words this colloquial pronunciation even established itself permanently in the literary lan-
guage. Examples are: Clōdius for Claudius; plō̃ō, in exptōdō, implōdō, etc.
85. In syllables which, under the early accentuation (§ 55 ), remained unaccented, au regularly became $\bar{u}$, e.g. inctū$d \bar{o}$ for *inclaudō ; dèfrū̄ōo for *défraudō.

## eu and ou.

85. 86. Primitive Latin $e u$ and $o u$ are nowhere preserved in the existing monuments of the Latin language. $e u$ first became ou (seen in early Latin doucō for *deucō), and subsequently developed to $\bar{u}$, e.g. d $\bar{u} c \bar{c}, \bar{u} c e \bar{o}$. Original ou became $\bar{u}$ directly.
1. In a few instances we have $e u$ arising secondarily, e.g. neu, cell, seu.

## Long Diphthongs.

86. The name 'long diphthong' is given to diphthongs whose first element consisted of a long vowel. $\bar{A} i, \bar{o} i, \bar{e} i, \bar{e} u, \bar{a} u, \bar{o} u$, existed in the parent-speech. These, so far as they were inherited by the Latin, more commonly shortened the first element, after which they developed according to the principles already laid down for original ai, ei, oi, au, eu, ou, etc. Examples are hortīs for *hortois (§ 81. 4), from original *hortōis; dative singular, portae, from *portāi (cf. Gr. $\chi^{\omega} \rho \underset{\imath}{\text { i }}$ ) ; aurōra, for *āurōra; noctū for ${ }^{*}$ nocteu, from *nocteu. So also probably diūs in nudiūstertius, diūs here being for *dieus, from original *diēus. In the dative singular of $\breve{o}$-stems, the Indo-European termination was $-\bar{o} i$ (Gr. $-\omega)$. In Latin this generally became $-\bar{o}$, by loss of the final element of the diphthong, but in our earliest Latin inscription (CIL. xiv. 4123) we have perhaps a dative in -ŏi, viz. nvmasior, from -ōi.

In the parent-speech, these long diphthongs frequently lost the second element. Thus $\bar{e} i, \bar{e} u$ gave $\bar{e}$. Traces of this are seen in Latin fétō, for *fêitō; rem (earlier *rèm) from *rēim; diem (earlier * dièm) from *dièum.

## Re-composition and De-composition.

87. I. The principles laid down in the foregoing sections for the change of vowels and diphthongs in the (originally) unaccented syllables of compounds often seem to be violated. Thus appetō, expetō, intellegō, neglegō occur where the law demands *appito, *expitō, negligō, intelligō. These apparent irregularities are in reality not due to any violation of the law, but are the result of ' Re -composition,' i.e. the identity of the simple verb was so keenly felt that the language restored it in the compound, thus replacing the regular *appitō, intelligō, etc., with appetō, intellegō, etc. Other instances of the same kind are exaequo , conclausus, exquaerō, revocō, collocō, interrogō, where phonetic laws would demand *exīqū̀, conclūsus, exqū̀̄o, *revicō, *collicō, *interrigō (§ 76.4).

Many compound words are also naturally much later than the operation of the laws above referred to.
2. Sometimes the form taken by a verb in composition occurs instead of the original form, e.g. ctūdō for claudō, after inclūd̄̄, etc.; plicō for plecō after implicō, etc. This process may be called ' De-composition.'
3. Re-composition and De-composition manifest themselves not only in connection with vocalic changes, but also in connection with many of the consonantal changes enumerated in the following sections. Cf. e.g. trānsdūcō as an illustration of Recomposition. The phonetic form is trādūco, which also occurs. Cf. also sescentī (the phonetic form; § 105. 1), but sexcentī (Re-composition).

## Shortening of Long Vowels.

88. 89. A group of some twenty words exhibits shortening of an accented long vowel, with compensatory doubling of the following consonant, viz. Jüppiter (for earlier Jüpiter), cuppa, littera, muccus, succus, hallūcinārӣ, parricīda, bacca, gluttus, glutt̄̄re,
bucca, damma, muttīre, stuppa, futtilis, Messalla, braccae, puppa, allium, stelliō, strenna, helluō, culleus, pilleus. Many of these words often appear in Mss., texts, and inscriptions, written with a single consonant; that represents the earlier spelling. The orthography of the Augustan Age has two consonants.
1. The vowel was regularly shortened in final syllables in $m$ and $t$; also in the original $-\bar{o} r,-\bar{a} r$, and $-\bar{e} r$ of Passive forms ; and in the Nominative endings -ter, -tōr, -sōr, - $\bar{o} r,-\bar{a} l,-\bar{a} r$.
2. Words of original iambic form, e.g. mĭhī, tĭb̄̀, sĭbī, mŏd $\bar{o}$, cito $\overline{\text {, }}$ cĕd $\overline{0}$, often suffered permanent shortening of the ultima, giving mĭhı̆, tibŭ, modŏ, cedŏ, etc. The name of 'Breves Breviantes' ('shorts shortening') has been given to this process.
3. In the interior of words a long vowel is often shortened before a vowel, e.g. plē, tace $\bar{o}$, from *plēo, *tacēo; deorsum from * dēorsum; fidè̄ from fidè̀ ; rḕ from rḕ; deesse, deeram (cf. तе̄sum, dēfū̄).

## Compensatory Lengthening.

89. 90. In accented syllables, an $s$ before a voiced consonant is often dropped with lengthening of a preceding short vowel, e.g. sìdo for ${ }^{*} s i-s d-\bar{o} ; ~ q u e r e ̀ l a ~ f o r ~ * q u e r e s l a ; ~ e g e ̄ n u s ~ f o r ~ * e g e s n o s . ~$ Often the consonantal group contains other consonants before the $s$, which first disappear (in accordance with § 105. r), e.g. $\bar{a} l a$ for *acsla; rèmus for *etsmos; scāla for *scantsla; femō for *tensmō ; cōnūb̄o for co-snūbō (§ 104. 1. b. 2). This lengthening of the short vowel in compensation, as it were, for an omitted consonant, is designated 'compensatory lengthening.'
1. A short vowel followed by $-n s$ at the end of a word is lengthened with disappearance of the $n$, e.g. equōs for *equons.
2. Compensatory lengthening is also claimed by many scholars for those cases in which a long vowel has developed before nct, $n c s$ (i.e. $n x$ ), e.g. jünctus, jūnxī (cf.jüng $\bar{o}$ ) ; and where $n$ disappears before $c$, e.g. cōnīvēō for *con-conīvē̄.

## Assimilation of Vowels.

90. Vowels are occasionally assimilated to each other in successive syllables, e.g. nihil for *nehil; nisi for *nesi; sobolēs fur subolès; rutundus (chiefly in poetry) for rotundus; tugurium for * tegurium (tegō) ; purpura for $\pi о \rho \phi \dot{\rho} \rho a$; and in reduplicated perfects, e.g. momordì for memordì ; totond $\bar{\imath}$ for tetond $\bar{\imath}$; pupugì for pepugì ; etc. Assimilation is mainly restricted to short vowels, but possibly we should recognize the assimilation of a long vowel in filius, lit. 'suckling,' for *fée-lius, root dhēi- (see § 86) ; in suspiciō for *suspēciō (protracted form of root spec-) ; subtīlis for *subtèlis (tèla).

## Parasitic Vowels.

91. In the immediate environment of a liquid or nasal, a parasitic vowel sometimes develops. Thus, especially in the suffixes -tlo-, -blo-, -clo-, which become -tulo-, -bulo-, -culo-, e.g. in vitulus, stabulum, saeculum; yet the original forms continued in use in the colloquial language and in poetry, e.g. saeclum, vinclum. Further examples are famulus (for *famlos) ; populus for poplus (early Latin) ; and several words borrowed from the Greek, e.g. Aesculāpius ('Абклךтьós) ; mina ( $\mu \nu \hat{\alpha}$ ) ; drachuma ( $\delta \rho a \chi \mu \eta$ ).

## Syncope.

92. In early Latin a short vowel following an accented syllable was often dropped. Illustrations of this are: auceps for *aviceps; auspex for *avispex; $\bar{a} r d o r$ for *āridor; reddō for re-d(i)d̄ ; aetās for aevitās; prūdēns for *prōv(i)dēns; valdē for validē; officina for *op(i)ficina; anceps for amb(i)-ceps. Syncope in final syllables is seen in ager for ${ }^{*} \operatorname{agr}(o) s,{ }^{*} \operatorname{agr}_{\circ} s,{ }^{*} \operatorname{agr}$, etc., and $\bar{a} c e r$ for $\bar{a} c r i s,{ }^{*} \bar{a} c r s,{ }^{*} \bar{a} c r$, etc.; see § 100.

## Apocope.

93. 94. Final $\breve{e}$ and $\breve{\imath}$ often disappear, e.g. nee (for neque), ac (for atque), et (for *eti; Gr. ${ }^{\prime \prime} \tau \iota$ ), aut (for *auti); quot, tot (for
${ }^{*}$ quoti, *toti; cf. toti-dem) ; ob for *obi; and in neuter $i$-stems e.g. animal for *animālı̆ ; calcar for ${ }^{*}$ calcārı̆. But dissyllabic $\grave{\imath}$-stems change $-\breve{\imath}$ to $-\breve{e}$, e.g. mare for *mari.
1. Final $\breve{o}$ disappears in $a b$, for an original *apo (Gr. àmó) ; and sub for *supo (cf. Gr. vimó). On the change of $p$ to $b$, see § 96. 1 .

## THE CONSONANTS. ${ }^{1}$

The Mutes.

## The Palatal and Guttural Mutes, $\boldsymbol{c}, \boldsymbol{q}, \boldsymbol{g}$.

94. 95. There are three series of $k$ and $g$-sounds in Indo-European, designated respectively as 'Palatals,' 'Velars,' and 'LabioVelars.' The Palatals were formed by approximating the tongue to the roof of the mouth. They developed in most languages as $k, g$ (in Latin regularly as $k(c), g$, rarely as $q$; in Sanskrit and Slavic as sibilants, $s$, sh, etc.). The Velars were formed further back in the throat, and develop in all languages as plain gutturals, $k, g$. The Labio-Velars develop with labialization, i.e. they have a parasitic $w$-sound after the $k$ or $g$. Latin represents these sounds respectively by $q u$ and $g u$.
1. Examples of the different Gutturals are :

Palatals : centum, decem, dīcere, socer; ager, agō, gen $\bar{u}$, genus, argentum. $q u$ for $c$ appears in queror, quē, but never $g u$ for $g$.

Velars : cruor, cavēre, canere ; augeō, grūs, gel̄, tego
Labio-Velars: quis, qū̄, etc.; sequor; -que; -linquō; stinguō, unguen. The labial element is sometimes entirely lost so that $q u$ appears as $c$, e.g. stercus (cf. sterquilinium), socius (for *soquius; cf. sequor); arcus (cf. arquitenēns) ; -lictus (cf. -linquō). When

[^10]initial, gu (i.e. gv) loses the $g$ and becomes $v$, e.g. (g)venire, (g)vīvos, (g) vorāre.
3. -cn - and -cm - occasionally develop as $g n$ and $g m, e . g$. salignus from salix (root salic-) ; dignus for *dec-nus; segmentum for *sec-mentum (sec-ō).

## The Dental Mutes, $\boldsymbol{t}$, $\boldsymbol{d}$.

95. 96. $t$ regularly appears as $t$, but in the Indo-European suffix -tlo-, $t$ became c, e.g. piāclum (whence piāculum) for *piātlom; saeclum (saeculum) for *saetlom; vinclum, etc. Sometimes this -clo- subsequently (by dissimilation; see § iro) developed to -cro-, when a preceding syllable had l, e.g. lavācrum for *lavāclom, *lavätlom; in quadrāgintā, quadringentī, $d$ has not developed from $t$; quadr- probably represents a different word; see § 183.13 .
1. $d$ is regularly retained, but becomes $l$ in a few words, e.g. lacruma for dacruma (preserved in Ennius); lingua for early dingua (helped perhaps by association in the folk-consciousness with lingere, 'lick') ; solium for ${ }^{*}$ sod-ium (Ablaut of sed-; see § 64. a) ; lē̃ir for *dēvir (dialectal(?) for *laivir; Gr. $\delta \bar{a}(f) \eta$ ท́p).

## The Labial Mutes, $p$ and $b$.

96. I. $p$ regularly remains unchanged; but in the prepositions $a \dot{b}, o b, s u b, b$ has developed from an earlier $p$. The original forms of these words were *apo (Gr. $\dot{\alpha} \pi o ́)$, *op- $i$ (in Ablaut relation to Gr. $\dot{\epsilon} \pi i$; cf. § 64. a) ; *supo (cf. Gr. $\mathfrak{v \pi o}$ ). By loss of the final vowel these became *ap, ${ }^{*}$ op, ${ }^{*}$ sup (cf. sup-er, suprā) ; apand $o p$ - are probably to be recognized in aperiò and operiō; but before voiced consonants the $\phi$ of $a p, o p$, and sup regularly became $b$ by partial assimilation, e.g. ab dūce, ob dē̄̄̄cta, sub dēcessūu, whence the forms with $b$ ultimately became predominant. In $b i b \bar{o}$ the initial $b$ may be for an original $p$ by assimilation; cf. Skr. pibāmi. By assimilation also, an original *penque became quīnque; and *pequō became first *quequō, then coquō.
97. $b$, as the descendant of Indo-European $b$, is by no means a frequent sound in Latin, particularly initial $b$. Examples are baculum, balbus, brevis; lubricus, labrum. On the late development of intervocalic $b$ to a spirant, see § 16. 2.

## The Indo-European Aspirates in Latin.

97. In the Indo-European parent-speech the aspirates were almost exclusively voiced, i.e. $b h, d h, g h$ (both palatal, velar, and labio-velar) ; $p h$, th, ch were extremely rare. These voiced aspirates developed in Latin as follows:
98. Indo-European $b \boldsymbol{h}$ became:
a) $f$ at the beginning of words, e.g. fägus (for *bhāgos; Gr. $\phi \eta \gamma$ ós) ; $f \bar{a}-\bar{\imath} \bar{\imath}$ (root $b h \bar{a}-$; Gr. $\phi \eta \mu i ́)$; $f u-\bar{i}$ (root $b h u$-; Gr. фv́ $\omega$ ) ; fer- $\bar{o}$ (root bher-; Gr. ф'́ि $\omega$ ).
b) $b$ in the interior of words, e.g. $a m b \bar{o}$ (for *ambhō; Gr. ä $\mu \phi \omega)$; orbus (root orbh-; Gr. ópфavós) ; mor-bus (suffix -bho-).
99. Indo-European $d \boldsymbol{h}$ became:
a) $f$ at the beginning of words, e.g. fūmus (for * dhūmos; Gr. $\theta v \mu$ ós) ; fémina (root dhḕi-; $^{\text {- }}$ Gr. $\theta \hat{\eta}-\lambda v \varsigma$ ) ; forum (root dhor-).
b) Usually $d$ in the interior of words, e.g. medius (for ${ }^{*}$ medhios; cf. Gr. $\mu$ ध́ $\sigma \sigma o s$ for ${ }^{*} \mu \epsilon \theta_{\text {los }}$ ) ; aedēs, 'fireplace,' 'hearth ' (root aidh- ; Gr. ail $\theta \omega$, 'burn ') ; viduus (root vidh-) ; but
c) $b$ in the interior of words, if an environing syllable contains $r$, e.g. ūber (root oudh-; Gr. ovtap) ; rubro(root rudhro-; Gr. ${ }^{\text {épv }} \boldsymbol{\theta}$ oós) ; and in the suffixes -bro(for -dhro-; Gr. - $\rho_{\rho o-}$ ), e.g. crī-brum. Similarly before $l$ in the Indo-European suffix -dhlo- (Gr. - $\theta$ 入o-), dh becomes b, e.g. stabulum (with -bulum for -blum; see § 91).
100. Indo-European $g h$. Here we must distinguish palatal, velar, and labio-velar $g h$.
A. Palatalgh. This became:
a) $h$, when initial or between vowels in the interior of words, e.g. hiems (root ghim-; Gr. $\chi \epsilon \epsilon \mu \omega \nu$ ) ; holus (root ghol-); vehō (root vegh-) ; ànser (root ghāns-) has lost the initial $h$; see § 23 .
b) $g$ before and after consonants e.g. fing $\bar{o}$ (root dheigh-, with the infix $n$ ) ; grāmen (root $g h r \bar{a}-$ ).
c) $f$ before $u$, e.g. fu-nd̄ (root gheu-).
B. Velar gh.
a) Velar $g h$ becomes regularly $h$, but $g$ before $r$, e.g. hostis (for *ghostis) ; pre-hendo (root ghend-) ; gradior (for ${ }^{*}$ ghrad-).
C. Labio-velar $g h$ becomes, -
1) $f$, when initial, e.g. formus (for *ghormos).
2) $g u$ after $n$, e.g. ninguit (root (s)nigh-, with infix $n$ ).
3) $v$ between vowels, e.g. nivis, nivī, etc. (root snigh-).

$$
\text { The Spirants, } s, f, h \text {. }
$$

98. I. $s$ is the most important of the spirants, as regards phonetic changes. An original $s$ regularly became $r$ between vowels ('Rhotacism'), e.g. ger- $\bar{o}$ for ${ }^{*}$ ges- $\bar{o}$ (cf. ges-sì, ges-tus) ; dirimō for ${ }^{*}$ dis-emō (cf. distinguō) ; temporis for ${ }^{*}$ tempos-is (cf. tempus) ; portārum for *portāsom. This change took place within the historical period of the language. It had been consummated before the close of the fourth century в.c. But the grammarians retained the tradition of the earlier forms, and often cite such words as arbosem, pignosa, etc. This change of $s$ to $r$ sometimes seems to occur before v, e.g. lārva (root las-). But
this is only apparent ; $v$ in such cases is secondary, having developed from $u$, so that the rhotacism is regular: la $r-u-a$ (for *lās-u-a) ; cf. Lar-ès (for Lasēs); fur-u-os (for *fus-u-os; cf. fus-cus) ; Mener-u-a (for *Menes-u-a) ; lā-ru-a and Mine-ru-a are both found in Plautus.
99. Wherever $s$ appears between vowels in the classical language it is usually a result of the reduction of ss after a long vowel or a diphthong, e.g. mìsī for $m \bar{\imath} s s \bar{\imath}\left(i . e .{ }^{*} m i \bar{\imath} t-\bar{\imath}\right)$; suāsī for suāssì (i.e. *suādsī) ; haesī (for haes-sī); causa for caussa.

The forms with double ss were current in Cicero's day (cf. Quintilian, i. 7.20), and occur occasionally in inscriptions much later; after short vowels ss was, of course, always retained, e.g. fïssus, scĭssus, etc.
3. In a few cases intervocalic $s$ appears to have resisted rhotacism, e.g. basium, miser, caesaries. Possibly the $s$ was retained in miser and caesaries as $\mathrm{a}^{*}$ result of dissimilation ( $\S 110$ ), i.e. in order to avoid *mirer, *caerariès.
4. By analogy, the $r$ resulting from rhotacism sometimes crept into the Nominative from the oblique cases, e.g. honor (originally honōs) after honōris, honō̄̄̀ (originally *honōsis, etc.).
5. Compounds, of course, often show intervocalic $s$ after the analogy of the simple words of which they are compounded, e.g. nisi, quasi, positus (after situs), dēsiliō, dēsinō, etc.
6. For the omission of the spirant $h$, see § 23 .

## The Liquids, $l, r$.

## The Liquids as Consonants.

99. r. As consonants, the Latin liquids exhibit few peculiarities. Their most important feature is a tendency toward dissimilation, as a result of which $l$ changes to $r$, or $r$ to $l$, to avoid the repetition of $l$ or $r$ in successive syllables. Examples are seen in the suffixes, - $\bar{a} r i-$ - cro- for -āli-, -clo- (from -tlo-; see § 95.1 ),
e.g. exemplāris (to avoid *exemplālis); lucrum (to avoid *luclum). So caeruleus is for *caeluleus (caelum), 'sky-blue.' Sometimes $r$ disappears as a result of the tendency to avoid two $r$ 's in successive syllables, e.g. praestigiae for praestrigiae (praestringō) ; sempiternus for *sempe(r)-ternus.

## The Liquids as Sonants.

100. In the Indo-European parent-speech, whenever roots which, in their strong grades, contained el, ol, er, or, became reduced to the weak grade (see § 64. b), the $l$ or $r$ (by the disappearance of the $e$ or $o$ ) became sonant, i.e. endowed with vocalic character, usually indicated by $!, r$. English has these sounds in botl (written bottle) ; centr (written centre), etc. These Indo-European sonant liquids developed in Latin as follows :
101. ! developed regularly as ol, which often became $u l(\S 76.1$, $b$ ), e.g. tollō, i.e. ${ }^{*}$ tol-nō (for ${ }^{*} t l-n \bar{o}$, root tel-) ; pulsus (for an Indo-Eur. ${ }^{*} p l$-tós; root pel-) ; -cultus in oc-cultus (for an IndoEur. *cl-tós; root cel-). Before vowels, ! developed as al, e.g. palea for *pl-ea.

Sometimes the sonant $l$ was long in quantity and then developed as lā or al, e.g. lāna (i.e. *vlāna) for ${ }^{*} v \bar{l}_{-} n a ́$, from root vel-; cf. vel-lus; lātus (i.e. *tlàtus; § 104. 1 a), from root tel-; falx (for ${ }^{*} f l l_{0}$; root flec-, in flec-tō), 'the curving tool.'
2. $r$ developed regularly as or, e.g. porta (for * $p_{0}$-tá, root per-; cf. Gr. $\pi \epsilon i \rho \omega$, for ${ }^{*} \pi \epsilon \rho-\iota \omega$ ) ; cord-is (for ${ }^{*} \operatorname{cr} d-$ ) ; corn $\bar{u}$ (for crn-). In some words this or seems to have developed to ur, e.g. curvus (*'croós, root cerv-; cf. cerv-īx) ; curtus (for * cr-tós, root cer-, 'cut' ; cf. Gr. кєiр $\omega$, for * * $\kappa \rho \underline{\text { t }} \omega$ ).

Before vowels $r$ developed as ar, e.g. carō, 'flesh' (for * ${ }^{*}$ - $-\bar{o}$, from root cer-, 'cut').

Like the sonant $l$, the sonant $r$ was sometimes long in quantity. It then developed as $r \bar{a}$ or ar, e.g. strātus (for *str-tós; root ster-in sternō); crātis (for *' $\bar{\circ}$ - tis); armus (for $\bar{\circ} m o ́ s)$.
3. In certain instances a sonant $r$ arose in Latin itself. This sonant $r$ developed differently from the Indo-European $r$ above described, regularly becoming er. Thus in the Nominative Singular of ro-stems, ager, for example, was originally *agros; by Syncope (see § 92) *agros became *agrs, whence by assimilation *agr $(r)$, and by development of $r$ to er, ager. Similarly, stems in -ris developed an er in the Nominative Singular. Thus $\bar{a} c r i s$ gave first ${ }^{*} \bar{a} c r s$, then ${ }^{*} \bar{a} c r_{0}$, whence $\bar{a} c e r$. Other instances of the same change are tībertās for *lìbr-tās (root lībro-), acerbus for *ácr-bus; incertus for *incrotus (from *incritos,-§75.2,-root cri-) ; sècernō for * séçrnō (from *sēcrinō,-§75.2, - root cri-) ; agellus, i.e. *ager-lus for *agr-lus, from agro-.

Similarly sonant $l$ sometimes arose secondarily in Latin and developed as el, e.g. catel-lus, for *catl-lus, by syncope for *catlolus (§ 92 ).

## The Nasals, $m, n$.

## The Nasals as Consonants.

101. As consonants the Latin nasals exhibit few peculiarities.
102. Before $j, m$ became $n$, e.g. veniō for *gemjō (with labio-velar g; § 94. 2) ; quoniam for *quomjam.
103. On the tendency of $m$ to disappear before labials, and $n$ before dentals, see § 20. 2-4.

## The Nasals as Sonants.

102. In the Indo-European parent-speech, whenever roots which, in their strong grade, contained em, om; en, on, became reduced to the weak grade (see § $64 . b$ ), the $m$ or $n$ (by the disappearance of the $e$ or $o$ ) became sonant, i.e. endowed with vocalic character, usually indicated by $m, n$. English has these sounds in butn (written button), rhythm, etc.
r. These Indo-European sonant nasals developed in Latin regularly as em and en, e.g. septem (for ${ }^{*} \operatorname{septm}$ ) ; decem (for
*decm) ; ped-em, mīlitem, etc., for *pedm, mīlitm, etc.; mementō for ${ }^{*} m e-m n-t \bar{o} d$; tentus for ${ }^{*}$ tn-tós (root ten-) ; and in the suffix -men for $-m n$, e.g. nōmen.
103. Like the liquid sonants (see § roo. r, 2) the nasal sonant $n$ is sometimes long, and then regularly develops as $n \bar{a}$, e.g. antae for * ${ }_{0}$ tae; gnā-tus (for *gñ -tós; root gen-) ; gn $\bar{a}$-rus (for *gñ-rós). An instance of $\bar{m}$ is perhaps seen in (d)māteriès (for ${ }^{*} d \bar{m} t e r i e ̀ s, ~$ from root dem-, 'build'; cf. dom-us).

The Semi-vowels $j, v$.
103. I. Primitive intervocalic $j$ regularly disappeared, e.g. très for ${ }^{*}$ tre-es, from trejes; moneō, etc., for *monejō.
2. When following a consonant, primitive $j$ became $i$, e.g. veniō for *venjō ; capiō for *capjō; medius for *medjos.
3. Intervocalic $v$ also often disappears, accompanied by contraction of the vowels which it separated, e.g. cōntiō for $\operatorname{co}(v)$ entiō; lātrina for *la (v) àtrīna; nōlō for ${ }^{*} n o(v) o l \bar{o} ; ~ j u ̈ c u n d u s ~ f o r ~$ $j u(v) i c u n d u s$; junior for *juvenior. Yet this law does not affect all instances of intervocalic $v$.
4. $a v$ and $o v$ in unaccented syllables regularly became $u$, e.g. abluō for *áblavō; dènuō for dée novō; impluo for *implovō; induo for *indovos; suus and tuus for earlier sovos and tovos, owing to their frequent enclitic (unaccented) use.
5. Before $o, v$ regularly disappeared, e.g. sūdōr for ${ }^{*}$ soidōs from *svoidōs; coenom for *quoinom; secundus for *sequondus; socrus for *svocrus (from *svecrus; § 73.4) ; somnus for *sopnus from *svop-nos (earlier *svep-nos) ; soror for *sosor (§98. I), from *svos-or (earlier *svesor).

## CONSONANT CHANGES. ${ }^{1}$

## Initial Combinations.

104. 105. Initial consonant combinations often drop the first consonant. Thus:
a) Mute lost :
1) $p$ in tilia for ${ }^{*} p t i l i a$ (Gr. $\pi \tau \epsilon \lambda \epsilon ́ a$ ); sternū for *psternuō.
2) $t$ in lātus for *tlatus (root tel-); $d$ in $J \bar{u}$-piter for *Djeu-pater (cf. Gr. Zeús for $\left.{ }^{*} \Delta_{\Lambda} \in v s\right)$.
3) $g$ in lac for *glact (cf. үá入актоs), also in nātus for gnātus; nōtus for gnōtus; yet the $g$ appears in the archaic language and in compounds, e.g. ignōtus (for *ingnōtus) ; cognātus (for *con-gnātuis). By analogy cognōmen takes a $g$ (for *comn̄̄men).
b) $s$ lost :
4) before mutes: torus for *storus (root ster-, stor-; cf. ster-n $\bar{o}$, stor-ea, 'mat') ; tegō for *stegō (cf. $\sigma \tau \epsilon ́ \gamma \omega)$; further, in līs, locus, lātus, 'broad,' for stT̄̄s, stlocus, stlātus. Early Latin still has stlocus (e.g. CIL. v. 7381) and stlatus, while stī̀s is regularly used in the phrase Xvirī stītibus jūdicandīs. $C f$. also Quintilian, i. 4. 6.
5) Before liquids and nasals: in tubricus for *stübricus; ninguit, nix (for *sninguit, *snix) ; mirus for *smirus; nūbō for *snūbō.
c) $v$ lost in lāna for *vlāna; rād̄̀x for *vrād̄̄x.
2. $d v$ - becomes $b$ in bellum (and derivatives); in bomus and bis (earlier dvis; cf. Gr. dís for ${ }^{*} \delta_{f} \iota s$ ) ; bimus for *dvi-him-us, 'of two winters.' The early forms dvellum, dionōrum are preserved in inscriptions, and as

[^11]archaisms in the poets. By the side of forms with $b$ - from the foregoing roots, we find also forms with $d$-, e.g. dìmus, dès $(=b \bar{e} s)$, diennium. These are archaic or dialectal, but dirus, a classical word, is apparently for *dvei-ros.

## Consonant Changes in the Interior of Words.

105. Simplification of Compound Consonant Groups.- I. In the case of groups of three or more consonants, one or more were regularly dropped in the formative period of the language to facilitate pronunciation. Examples are: suscipiō for *subscipiō; asportō for *abs-portō; ostendō for *obs-tendō; misceō for *mig-sceō (cf. Gr. $\mu i \gamma-v v \mu \iota)$; discō for ${ }^{*} d i-d c$-scō ; illūstris for *illūcstris; suèscō for *suèdscō; ecferrī for *ecs(ex)ferrī; pāstus for *pāsctus; mulsī for *muly-sī; ultus for *ulctus; quīntus for *quinctus; àrsì for *ārdsī; tortus for*torctus; ursus for *urcsus; sparsī for *spargsī; bimèstris for *bimèns-tris ; poscere for *porcscere; Tuscus for *Turscus (cf. Umbrian Turskum) ; alnus for *alsnus; fulmentum for fulc-mentum; urna for *urc-na (cf. urc-eus), quernus for *querc-nus.

Here also belong such compound forms as ignōscō for *ingnōscō; cognōscō for *congnōscō; agnōscō for adgnōscō.
2. Often such simplification is merely preliminary to further changes, - regularly so when the groups $s l, s m$, $s n$ arise. Compensatory lengthening (\$89) then takes place, e.g. pillum, ' mortar,' for *pinslum, *pislum; āla for *acsla, *asla. The preposition $\bar{e}$ as a 'by-form' of ex arose in this way, e.g. éligō, ènormis for *ecsligō, *esligō; *ecsnormis, *esnormis; after $\bar{e}$ became established in compounds, it came to be used separately. So also $\operatorname{tra} \bar{a}$ - arose, e.g. trādūcō for $\operatorname{tra} n s d \bar{u} c \overline{0}$, ${ }^{*} \operatorname{tr} \bar{a} s d \bar{u} c \bar{o}$. Tra $\bar{a} s d \bar{u} c o$ is the result of 'Re-composition' (§ 87.3).
3. Where two of three consonants in a group are a mute and a liquid, owing to facility of pronunciation, simplification does not
take place, e.g. astrum, antrum. Other groups easy of pronunciation are sometimes preserved, e.g. sculpsì, serpsì, planxī, though these may be due to analogy. Compounds like trānscrībo, trānsportō, being much later than the formative period of the language, are not to be regarded as exceptions.

## Assimilation.

106. 107. Assimilation is designated as 'regressive' when the first of two consonants is assimilated to the second, 'progressive ' when the second is assimilated to the first.
1. By regressive assimilation the following changes take place :
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bc to cc, e.g. occurrō.
bg to gg, e.g. suggeroे.
bf to ff, e.g. sufferoे.
bp to pp, e.g. supportō.
dc to cc, e.g. accurrō.
dg to gg, e.g. aggerō.
dl to ll, e.g. sella (*sed-la); lapillus (*lapid-lus).
dn to nn, e.g. mercènnarius for *mercèd-narius.
ds to ss, e.g.jussus for *jud-sus (root judh-).
dp to pp, e.g. apporto.
tc to cc, e.g. siccus for*sit-cus (cf. sit-is).
ts to ss, e.g. quassi}\mathrm{ for *quatsi.
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$p m$ to $m m, ~ e . g . ~ s u m m u s ~ f o r ~ * s u p m u s . ~$
pf to ff, e.g. officina for *opficina, i.e. *opificina; see § 92 . $n m$ to $m m$, e.g. gemma for *gen-ma, i.e. 'sprout' (root gen-). $n l$ to $l l$, e.g. $\bar{u} l l u s$ for ${ }^{*} \bar{u} n l u s$, i.e. ${ }^{*} \bar{u} n u l u s ;$ see § 92. $n s$ sometimes to $s s$, which was later simplified to $s$, e.g. in adjectives in -ōsus. The earlier form was formōnsus, etc., whence formōssus (cf. § 98. 2), formōsus.
$r l$ to $l l$, e.g. stella for *ster-la; agellus for *ager-lus (see § 1о0. 3) ;
paullus (classical paulus) for *paur-lus (cf. Gr. $\pi \alpha \hat{v} p o s)$ ).
3. By progressive assimilation the following changes occur :
$l d$ to $l l$, e.g. percellō for *perceldō. Assimilation affects only a primitive ld; in valde (=validé; § 92 ), for example, the ld remains unchanged.
In to ll, e.g. pellis for *pelnis; $\ln$ resulting from Syncope (§ 92 ), as in ülna for *ïlena; volnus for *vol-inus, is not affected by this change.
Is to ll, e.g. velle for *velse; facillumus for *facilsumus.
rs to rr, e.g. ferre for *fer-se; torēere for *tors-ère. Secondary $r s$, for $r t t$, as in versus for *vertos (see § io8. i) generally remained unchanged, but in the colloquial language such an $r s$ sometimes became ss or $s$, e.g. prōssus, prōsus for prōrsus (i.e. prōversus).
4. Partial Assimilation. - Sometimes assimilation is only partial. Thus :
a) A labial nasal may become dental, or a dental nasal may become labial, owing to the influence of the following mute, e.g. centum for *cemtum; ventum for *vemtum (root guem-) ; con-tendō for *com-tend $\bar{o}$, etc., whence arose con- as a separate form of the preposition com-.
b) A voiced mute may become voiceless before a following voiceless sound, e.g. $\bar{a} c$-tum (for ${ }^{*} \bar{a} \bar{\sigma}_{g}$-tum) ; scrīp-sī for *scribsì.
c) The labial mutes $p$ and $b$ are changed to the corresponding nasals before $n$, e.g. sommus for ${ }^{*}$ sop-nus (earlier *svep-nos; § 104. 2. b) ; Samnium for Sab-nium (cf. Sabīn̄̄) ; antemnae for *ant-ap-nae; lit. 'opposite fastenings,' - hence ' yards.'

## Metathesis.

107. Metathesis or transposition is perhaps to be recognized in fundō for *fud-n̄̄; unda for *ud-na; pand $\bar{o}$ for *pat-n̄ ; and tend $\bar{o}$ for $*$ te- $t n-\bar{o}$ (reduplicated present).

## Other Consonant Changes.

108. r. An original $d t$ or $t t$ became ss, e.g. sessus for *sed-tus; passus for *pat-tus. After a long vowel or diphthong such an ss became $s$ in the Augustan era, though retained in Cicero's time (§ 98. 2), e.g. $\bar{u} s u s$, earlier $\bar{u} s s u s$, for ${ }^{*} \bar{u} t t u s$; dīvīsus, earlier dīvīssus, for *dìvīdtus. In such forms as lāp-sus, pulsus, nexus (=nec-sus), fïxus, s has not developed phonetically, but has simply been borrowed from words like sessus, fisus, etc. When followed by $r$ an original $d t$ or $t t$ became st (instead of ss), e.g. claustrum for *claud-trum; pedestris for *pedettris. In syncopated forms and compounds, $d t$ simply became $t$, e.g. cette for *cedate (cf. cedo), attendo; i.e. these forms belong to a period in which the change of $d t, t t$ to $s s$ was no longer operative.
109. Between $m$ and $l$, a parasitic $p$ developed, e.g. exemplum for *exemlom; templum for *tem-lom. Such a $p$ developed also between $m$ and $s$ in $s \bar{u} m p s \bar{i}$, contem $p s \bar{\imath}$, and between $m$ and $t$ in emptus and contemptus. This phenomenon apparently was confined to accented syllables, though hiemps is attested occasionally in good Mss.
110. An original $-s r$ - became $b r$. The steps in this change were first from $s r$ to $b r(\beta=$ Eng. th $)$, then to $f r$, whence $b r$. Examples are: sobrinus for *sosr-inus (*sosr-, from *sosor, earlier form of soror; see § 104.2 b) ; tenebrae for *tenesrae; membrum for *memsrom; fünebris for *fünesris (cf. fünes-tus); muliebris for *muliesris (cf. mulier-is for *mulies-is; §98. 1) ; fibra for *is-ra; cf. filum for *is-lom.
111. For the disappearance of $s$ before $l, m, n, r, b, d, g$, combined with lengthening of a preceding short vowel, see $\S 89$.

## Consonant Changes at the End of Words.

109. i. Single consonants are usually retained. Final $s$ does not become $r$ phonetically, but is changed after the analogy of the $r$ arising by rhotacism in the oblique cases ; see § 98. 4. Final $n$ in the Nominative Singular of $n$-stems disappeared prior to the existence of Latin as a separate language, e.g. in homo for *hom- $\bar{o}(n)$; *carō( $n)$, etc. After a long vowel or a diphthong, final $d$ is found in early inscriptions, but disappeared toward the close of the archaic period. Examples are: Ablatives Singular of the first and second declension, e.g. praed $\bar{a}$ for praed $\bar{a} d ;$ Gnaivō for Gnaivōd; also certain Adverbs and Prepositions, e.g. extrā, suprā, etc.; prō- for prōd-, which latter appears in prōdesse. So also $s \bar{e}$ - for $s \bar{e} d-$, which latter appears in séditio.
110. Geminated consonants are not written at the end of a word ; thus as for *ass (cf. as-sis) ; so fel for ${ }^{*}$ fell, i.e. ${ }^{*} f e l s(\S 106.3$ ) ; far for *farr, i.e. *fars (§ 106. 3) ; yet it is probable that geminated consonants were spoken in these words, e.g.hocc (for *hodc), not hōc; so farr, fell, ass, ess, 'thou art '; this last is the regular form in Plautus.
111. Groups of two consonants at the end of a word are simplified, -
a) By dropping the second, e.g. mel for *melt; lac for *lact; os for *ost; cor for *cord. In fert, volt, est, the final consonant is retained after the analogy of agit, etc. A regular exception to the general principle is seen in final $p s$ and $x, e . g . o p s, u r b s(b s=p s$; see § 27) ; rēx, lēx.
b) By dropping the first, e.g. mìles for *mīlets; pès for *pèds; and in final syllables in -ns, as agrōs for *agrons; turris for *turrins.
112. Final $-n t s,-n d s,-r t s,-r d s$, $-l t s$ lost the $t$, e.g. $m \bar{o} n(t) s$, frōn $(d) s$, concor $(d) s, \operatorname{ar}(t) s, \operatorname{pul}(t) s$. Final $-n x,-l x,-r x$ are permitted, e.g. lanx, falx, merx.

Disappearance of Syllables by Dissimilation.
110. By a natural tendency, when two syllables began with the same consonant, the first syllable was often dropped, e.g. dèbilitāre for *dēbilitātāre; calamitōsus for *calamitātōsus; dentiō for *dentītiō; portōrium for *portitōrium ; venēficus for *venēnificus; voluntārius for *voluntātarius; sèmodius for ${ }^{*}$ semi-modius.

## CHAPTER VII.

## INFLECTIONS

## DECLENSION OF NOUNS AND ADJECTIVES. ${ }^{1}$

## A-Stems.

111. In the Indo-European parent-speech there was Ablaut (§ 62) in the suffix of $\bar{a}$-stems. The weak grade of $\bar{a}, ~ v i z . a ̆ a$ (§ 66), occurred in the Vocative Singular. Elsewhere the suffix remained $\bar{a}$.
112. Nominative Singular. - I. The original Nominative Singular had $-\bar{a}$, e.g. *portā . But $-\bar{a}$ was shortened to $-\breve{a}$ before the beginning of the historical period. Possibly this shortening was owing to the influence of the Accusative Singular, where *- $-\bar{a} m$ regularly became shortened to $-\breve{a} m$ ( $\$ 88.2$ ). The relation of the Nominative to the Accusative in $o$-stems, $u$-stems, and $i$-stems might easily have led to such shortening. $C f$. the following proportional representations :


Possibly the law of Breves Breviantes (§88. 3), by which *füg $\bar{a}$, * férā, * rŏtā, etc., regularly became fŭgă, fĕră, rōtă, etc., led to the extension of $-\breve{a}$ for $-\bar{a}$ to all Nominatives. Either one or both of these influences may have operated to produce the shortening of final $\bar{a}$.

[^12]2. The Latin has developed a number of Masculine $\bar{a}$-stems, e.g. agricola, ' farmer' (probably originally 'farming ') ; cf. optio, $m$., 'centurion's assistant,' from optiō, $f$., 'choice, selection.' Other languages exhibit this same phenomenon, e.g. Greek. Thus veaviás, 'a youth,' probably goes back to a lost *veaviā, 'youth' (abstract), the $-s$ being appended to indicate the Masculine signification; so further many Greek Masculines in $-\bar{\alpha} s,-\eta s$. The mediaeval Latin word bursa, $f$., meant 'company of students,' but subsequently became individualized to mean 'a student' (.German Bursche) ; so camerāta, $f$. ., 'roomful of comrades,' later 'comrade' (German Kamerad). Cf. also English justice (the quality) and justice ('magistrate'); Spanish justicia, by change of gender, also covers these two senses.
113. Genitive Singular. - The ending of the Genitive Singular in Indo-European was $-s$, $-e s$, $-o s$, the different forms representing Ablaut ( $\S 64 . a$ ), as the result, probably, of varying accentual conditions of the parent-speech. In the case of $\bar{a}$-stems, the caseending was $-s$, which united with the $\bar{a}$ - of the stem and gave $-\bar{a} s$. This termination appears in but a few Latin words. It is preserved in familiās, in the combinations pater familiās, māter familiās, etc., but elsewhere is archaic, e.g. viās (Enn. Ann. 42 I Vahl.), fortūnās (Naevius).
114. The Genitive Singular in $-a e$ goes bick to an earlier $-\bar{a} \bar{\imath}$ (dissyllabic), which is found in the poets as late as the Augustan Age. This termination $-\bar{a} \bar{\imath}$ apparently arose by appending the Genitive termination $-\bar{i}$ of the $o$-stems directly to the stem, e.g. port $\bar{a}-\bar{\imath}$. Whether $\bar{a} \bar{\imath}$ became $a i$, ae by regular phonetic processes, or under the influence of the Dative and Locative ending ae, is uncertain.
115. Dative Singular. - The Indo-European case-ending of the Dative Singular was $-a i$. But this had already in the Indo-Euro-
pean parent-speech contracted with the final $-\bar{a}$ of the stem, producing *- $\bar{a} i$, whence successively $-\breve{a} i,-a e(\$ \S 86 ; 80.1$ ).
116. Accusative Singular. - The case-ending was $-m$ in IndoEuropean. This in combination with $-\bar{a}$ of the stem must have given a primitive Latin ${ }^{*}-\bar{a} m, ~ e . g . ~ * p o r t a ̄ m ; ~ b u t ~ t h e ~ v o w e l ~ i n ~ a l l ~$ final syllables in $m$ had probably become shortened before the beginning of the historical period (§ 88. 2).
117. Vocative Singular. - There was no case-ending in the Vocative Singular of $\bar{a}$-stems in the Indo-European parent-speech. The Vocative simply had the weak form $\breve{a}$ of the suffix $\bar{a}$ (§ III). Whether the Vocative in actual use represents this original formation or is merely the Nominative employed in Vocative function cannot be determined.
118. Ablative Singular. - The Indo-European case-ending of the Ablative Singular seems to have been $d$ with some preceding vowel, i.e. $-\breve{a} d,-\breve{e} d$, or $-\check{o} d$. In the noun-declension, this case-ending belonged in Indo-European exclusively to the $\breve{o}$-stems (see § I 30 ). In Latin it was transferred to $\bar{a}$-stems also, combining with the final $-\bar{a}$ of the stem to produce $-\bar{a} d$, which is preserved in early inscriptions, e.g. PRAIDAD, CIL. i. 63, 64 ; SENTENTIAD, CIL. i. i96. 8, 17. These inscriptions belong to the period of Plautus ; but it is generally thought that such Ablatives were probably archaistic at that time. Before an initial consonant, final $d$ when following a long vowel regularly disappeared. Theoretically, therefore, for a while two forms must have existed, - an ante-consonantal form, praid $\bar{a}$, etc., and an ante-vocalic form, praidād, etc. But the ante-consonantal form early became predominant, - probably before 200 в.с.
119. Locative Singular. - The case-ending of the Locative Singular in Indo-European was $-\stackrel{\imath}{ }$. In $-\bar{a}$-stems this combined
with $-\bar{a}$ of the stem to produce $-\bar{a} i$, a long diphthong (§ 86), which then became shortened to $-a \mathfrak{i}$, later $-a e$, just as in the case of the Dative (§ 115).
120. Nominative and Vocative Plural. - The original caseending of the Nominative Plural in Indo-European was -ĕs for all nouns. In the case of $\bar{a}$-stems, this -ĕs must early have contracted with final $-\bar{a}$ of the stem to *- $\bar{a} s$. This *- $\bar{a} s$ is the regular termination of the Nominative Plural of $\bar{a}$-stems in the other Italic dialects, - Oscan, Umbrian, etc.; but has entirely disappeared in Latin. ${ }^{1}$ Instead of $-\bar{a} s$, we have the termination $-\breve{a} i$, which goes back to an original *portāi. This formation is analogical, after the Nominative Plural of $\check{o}$-stems in -oi (§ I3I). The Vocative Plural of $\bar{a}$-stems is simply the Nominative employed in a Vocative function.
121. Genitive Plural. - The case-ending of the Genitive Plural in Indo-European was $-\bar{o} m$. With the $-\bar{a}$ of the stem this case-ending must have early contracted to ${ }^{*}-\bar{a} m$, a termination which has entirely disappeared from all the Italic dialects. Instead of ${ }^{*}-\bar{a} m$ the Latin has $\cdot \bar{a} r u m$, a termination borrowed from the Genitive Plural of the Pronominal Declension. This - $\overline{\text { a }}$ rum is developed by Rhotacism (§ 98. 1) from an earlier *-āsom; compare Homeric Greek forms in $-\alpha \omega v$, e.g. $\theta \epsilon a ̂ ́ \omega \nu$ for $\theta \epsilon \frac{\alpha}{a}(\sigma) \omega \nu$. The forms ending in -um, which sometimes occur in the poets, e.g. caelicolum, Dardanidum, are new formations, possibly in imitation of the $o$-stems (§ 132), possibly after the analogy of such Genitives as Aeneadum (from Aeneadēs).
122. Dative and Ablative Plural. - The Indo-European parentspeech had no special form for the Ablative in the Plural. The Ablative Plural, in all languages in which that case occurs, is identical in form with the Dative. The genuine Dative and Ab-

[^13]lative Plural of $\bar{a}$-stems in $-\bar{a} b u s$ (on $-b u s$, see § 144) appears only in a few words where distinction of sex is important, e.g. equābus, filiābus, lībertābus, etc. Elsewhere we have the termination -ìs, which is historically an instrumental formation borrowed from the $o$-stems. The termination of the Instrumental Plural of the o-stems was -ois (see § 133). By analogy the $\bar{a}$-stems created the termination -ais, which regularly became -iss (see § 8o. 2).

Nouns in $-i a$ sometimes contract the $\breve{\imath}$ with the $-\bar{\imath} s$ of the termination to -īs, e.g. Virgil, Aen. v. 269, taenīs for taenī̀s. Words in ia, e.g. Mair (the adjective) have -īs, e.g. Kalendīs Maīs (for Maī̄) ; see § 80. I.
123. The Accusative Plural. - The case-ending of the Accusative Plural in Indo-European was - $n s$. The $n$ disappeared according to § 109. 3, i.e. portās for *portāns.

## O-Stems.

## A. Masculines and Feminines.

124. In the Indo-European parent-speech there was Ablaut ( $\$ 70$ ) in the suffix of $o$-stems. Both forms of the strong grade occur, $\stackrel{c}{ }$ and $\check{o}$. The former appears in the Vocative and Locative Singular, and partially in the Ablative; the latter in the remaining cases.
125. Nominative Singular. - This is formed by appending -s to the stem, e.g. horto-s, later hortus (§76. 1). On ager, see § 100. 3 .
126. Locative and Genitive Singular. - In the Locative Singular the suffix took the form $e$ (§ 124), which, with the Locative case-ending $\breve{\imath}$, gave by contraction -ei, whence regularly $-i$. The Locative function is still apparent in humì bellì, domì herì, also in town names, e.g. Corinth $\bar{\imath}$ : and in quārt $\bar{i}$, quīnt $\bar{i}$, etc., in such expressions as quàrtī diè, quīnt̄̄ dīe (§ 173).

It was formerly thought that the Latin Genitive Singular of obstems was a Locative that had taken on a Genitive function. But this position is no longer tenable. For in the Senatus Consultum de Bacchanalibus of 186 B.C., where Indo-European ei is still regularly written EI, the Genitive ending appears as I, showing that we have a different formation from the Locative. Besides this, the Genitive Singular of $i \bar{o}$-stems (e.g. imperium) is different from the Locative. For while throughout the Republican period the Genitive of $i o$-stems ends in $-\bar{i}$, the Locative of such stems ends in $-i \bar{\imath}$, e.g. Brundisì̀. The Genitive, therefore, is probably distinct in origin from the Locative, but what the origin of the Genitive $-\bar{\imath}$ is, is not clear. Words in eeius formed the Genitive in -eì, e.g. Pompeì from Pompeius (§ 82. 3).
127. Dative Singular. - The Indo-European case-ending -ai early combined by contraction with final $o$ of the stem, producing -ooi. Perhaps we have this (shortened to -ŏi; § 86) in Numasioi in our earliest Latin inscription, CIL. xiv. 4123. In the historical period $-\bar{o} i$ has become $\bar{o}$ (§ 86).
128. The Accusative Singular. - The regular ending $-m$ is appended to the stem in $o$, e.g. horto-m, classical hortum (§ 76. 5).
129. Vocative Singular. - The stem with the $e$-suffix serves as a Vocative, e.g. hort-e; there is no case-ending. Not only proper nouns in -ius but all nouns in -ius regularly had $-\bar{i}$ (by contraction for - $\breve{e}$ ) in the Vocative Singular. But barring filiz, Vocatives from other than proper names are rare. Forms in -ie are practically unknown, except as cited by the grammarians.
130. Ablative Singular. - $O$-stems were the only class of nouns in Indo-European that originally had a special Ablative case-ending ; other nouns, so far as they exhibit a special ending
for this case, have borrowed it from $\breve{o}$-stems. The form of this case-ending is $d$ with a preceding vowel, $\breve{a}$, $\breve{e}$, or $\breve{o}$, i.e. $-\breve{a} d$, $-\stackrel{e}{ } d$, or -ŏd. As the case-ending appears only in contraction, the vowel cannot be determined. The stem appears in two forms, one in $o$ - and one in $e$ - (§ 124 ), e.g. recto- and recté-. With the former of these the case-ending combined to produce * réctōd, and with the latter * rected. Forms with $d$ appear in early Latin, e.g. POPLICOD, FACILUMED ( $=$ facillime $\bar{e}$ ). Later (probably shortly before 200 в.с. in the ordinary speech) the $d$ disappeared; see § in8. The forms in - $\bar{e}$ became appropriated as Adverbs, - rēctée, facillime, etc.
131. Nominative and Vocative Plural. - The Nominative Plural of $o$-stems in Indo-European was originally formed by appending the case-ending - $\breve{s}$ s to the stem, giving Indo-European - $\bar{o} s$. This termination appears in the other Italic dialects, - Oscan, Umbrian, etc.; but in Latin the $o$-stems have borrowed the termination of the Pronominal Declension, viz. -oi. A tradition of this appears in pilumnoe, poploe, cited by Festus (p. 205, ed. Müller). But final oi regularly became $\bar{i}$, the classical termination, e.g. hort $\bar{\imath}$; $d_{\bar{\imath}}$ is common as the Nominative-Vocative Plural of deus.
132. Genitive Plural. - The original termination was $-\bar{o} m$, the result of contraction of final $o$ of the stem and the case-ending -ōm (§ 121 ). This termination, shortened to -ŏm (§ 42. 1), appears in early Latin, e.g. Rōmānom, and in the form -um (§76.5) is also regular in certain words in the classical period, e.g. talentum, modium, deum, etc. (Gr.§ 25.6.a). The usual ending -ōrum is of secondary origin, and is formed after the analogy of the Genitive Plural of $\bar{a}$-stems (§ 12 I ).
133. Dative and Ablative Plural. - The so-called Dative and Ablative Plural is in reality an Instrumental. The Indo-European
form of the termination was -ōis. This in Latin became first -ŏis (§ 86), and then $-e i s,-i s(\S 8 \mathrm{I} .4)$, the classical termination. $C f$. § 122. In -iŏ-stems -ī̄s often contracts to -īs, e.g. cōnūb̄̄s for cōnūbiūs; so fīlīs, auspicīs; dīs is common as the Dative-Ablative Plural of deus.
134. Accusative Plural. - The Indo-European case-ending was -ns. Latin *horto-ns would represent the primitive formation; this became hortōs; § rog. 3.b.

## B. Neuters.

135. In the singular these present no special peculiarity. The Nominative, Accusative, and Vocative have $-m$ as caseending, which is Indo-European.
136. The Nominative, Accusative, and Vocative Plural have $-\breve{a}$. This ending is in all probability identical with that of the Nominative Singular of $-\bar{a}$-stems; i.e. certain Feminine collective nouns came to be felt as Plurals and were so used syntactically. Thus an original *jug $\bar{a}$ (Latin $j u g \breve{a}$ ) meaning 'collection of yokes' (cf. German das Gejöche) came to be felt as a Plural and was construed accordingly. The use of the Singular in Greek with a Neuter Plural subject, apparently dates from the time when the Neuter Plural was still a Feminine Singular. In Latin this $-\bar{a}$ of the Nominative, Accusative, and Vocative Plural of $\check{o}$-stems was transferred also to consonant, $\breve{\imath}$-, and $\breve{u}$-stems (e.g. ${ }^{*} \overline{\bar{o}} \mathrm{~min} \bar{a}$, *mari $\bar{a},{ }^{*}$ cornu $\bar{a}$ ), and when (by the 'Breves Breviantes' law; §88.3) the $-\bar{a}$ of $j u g \bar{a}$, etc., was shortened to $-\breve{a}$, this shortening was extended also to other stems, giving nōmina, maria, cornua, etc.

## Consonant Stems.

## A. Masculines and Feminines.

The original case-endings are seen to best advantage in the Mute stems.
137. Nominative and Vocative Singular. - The case-ending is $s$, which combines with the final consonant in the ways enumerated in Gr. §§ 32, 33, e.g. princep-s; miles; dux. The Nominative serves also as Vocative.
138. Genitive Singular. - Of the three forms of the IndoEuropean case-ending, viz. -s, -cs, -os, the second, -es, is the one which regularly appears appended to consonant stems. This becomes -is according to § 73. 2. a), e.g. ped-ĭs, mīlit-ĭs. Traces of the ending os are seen in early Latin nomin-vs (-us for -os acc. to $\S 76.5$ ), CASTOR-vS, HONOR-vs, etc., - perhaps also in opus in the phrase opus cst, 'it is necessary.' Cf.§341.2.
139. Dative Singular. - The Indo-European case-ending was probably -ai which regularly became $-\bar{\imath}$, e.g. ped-i for *ped-ai; mīlitı for *mūlitai.
140. Accusative Singular. - The Indo-European case-ending was $-m$, which, after a consonant, necessarily became sonant (§ 1о2. 1) and developed as -em, e.g. pedem for *pedm; principem for *principm.
141. Ablative Singular. - In the Indo-European parent-speech, as already stated, there was no separate form for the Ablative Singular except in $\check{o}$-stems. Ordinarily the Genitive served also as Ablative. In Latin consonant stems the ending $-e$ is the Indo-European Locative ending $-i$ (§ 75. 3). But after the analogy of $\check{\imath}$-stems, the Ablative of consonant stems sometimes ends in $\bar{i} d,-\bar{i}$, e.g. airid ( $=$ aere), conventioni ; $\S 153$. In the

Ablative Singular of adjectives with consonant stems, the termination $-\bar{\imath}$ has become practically universal (e.g. prūdentī, audāci, félīcī, etc.). So also in town-names, to denote place where, e.g. Tîburī, Carthāginī, Lacedaemonī, etc. To denote place whence, the $-\breve{e}$ forms are used, e.g. Carthāgine.
142. Nominative and Vocative Plural. - The Indo-European case-ending of the Nominative Plural was -es, seen in Greek -єs (e.g. фv́дак-єs), but is not preserved in Latin. Plautine canĕs, pedës, turbiněs, etc., come under § 88. 3. The ending -ès which appears regularly in all nouns of the so-called Third Declension has been borrowed from the $\breve{\imath}$-stems; see § 154 . Owing to the fact that the Nominative and Accusative Plural were regularly alike in consonant stems (e.g. mílitēs, mülitēs) ; and owing to the further fact that many consonant stems took -is in the Accusative Plural, after the - - -stems (§ 159. r), it happened that by proportional analogy this $-\bar{\imath} s$ was transferred to the Nominative Plural. The phenomenon is confined almost exclusively to early Latin, where we find such forms as Iovdicis, ( = jūdicīs), hominīs, etc.
143. Genitive Plural. - The regular ending -um is for earlier -om, from -ōm; see § $\mathbf{1} 2 \mathbf{I}$.
144. Dative and Ablative Plural. - The Indo-European ending was -bhos, which became -bos (§ 97. r. b). This appears once or twice in early Latin, but soon became -bus (§ 76. 5). The $i$ of -ibus, the regular termination of all consonant stems, is borrowed from the $i$-stems ; $\S 156$.
145. Accusative Plural. - The Indo-European ending -ns became -ns (§ 102. I) after a consonant. This regularly became *-ens, whence -és; § ro9. 3. b.

## B. Neuters.

146. The Nominative and Accusative Singular are formed without case-ending. For the $-\breve{a}$ of the Nominative and Accusative Plural, see § i 36 .

## Stem-Formation of Consonant Stems.

147. Several formative suffixes originally showed Ablaut (§§ 62, 70). Thus:
148. $S$-Stems. - Stems formed with the suffix os (-us); e.g. gen-us, had in certain cases the suffix -es- ; thus originally Nom. *gen-os, Gen. *gen-es-es, Dat. *gen-es-ai, later gen-us, gen-er-is, gen-er-i$(§ 98.1)$. In some words the os- suffix of the Nominative invaded the oblique cases, e.g. temp-us, Gen. temp-or-is (for *temp-os-es). Yet the -es- suffix appears in the adveros temp-er-i, temp-er-e. Cf. also temp-es-tās, temp-es-tīvus, where the original -es- has been protected by the following t. Pignus, which is ordinarily declined pignus, pignoris, had the -es- suffix in early Latin, e.g. pignerī (Plautus).
149. Nasal Stems. - The suffixes of many nasal stems originally had Ablaut (§§ 62, 70). Thus:
a) The suffix -ōn- (lengthened from -on-, strong grade; § 62) had another strong form, een-, and a weak one, $-n$-. Most words have lost the $-n$-grade, and show only -on- or -en-, e.g. umb- $\bar{o}$ for $u m b-\bar{o}(n)$ (§ ro9. 1), Gen. umb-ōn-is, etc.; $\bar{o} r d-\bar{o}(n)$, $\bar{o} r d-i n-i s$ (for *ōrd-en-is, § 73. 2) ; turb-ō(n), turb-in-is. Car- $\bar{o}(n)$, Gen. car- $n$ - $i s$, shows a trace of the weak grade of the suffix.
$b)$ The suffix $-i \bar{o}(n)$ - had another form of the strong grade, viz. -ien-, and a weak grade -in-. The weak grade appears in the other Italic languages, Oscan, Umbrian, etc., but not in Latin, where as a rule we have only -iōn, e.g. $\bar{a} c t i \bar{o}(n), \bar{a} c t i-\bar{o} n$ - $i s$, though $A n i \bar{o}(n)$ shows -ien - ('protracted form'; §62.3) in Aniènis, etc.
c) The suffix $-m \bar{o}(n)$ had also the grades -men- and -mn-. Sometimes the -men- grade appears in the oblique cases, e.g. $h o-m \bar{o}(n)$, ho-min-is, etc.; sometimes the $-m \bar{o}(n)$ of the Nominative appears throughout, e.g. sermō, sermōnis.
d) Neuters in -men show two forms of the suffix. In the Nominative -men stands for $-m n$ ( ( 1o2. i), e.g. nō-men for *n $\overline{\bar{o}}-m n$. In the oblique cases $m i n$ - is for $m e n$ - e.g. $n \bar{o}-m i n-i s$ for *nō-men-es (§ 73. 2).
150. $\boldsymbol{R}$-Stems. - Some of these originally had Ablaut in the suffix. Thus:
a) Nouns of relationship in -ter, e.g. pater, māter, frāter. These originally had three forms of the suffix, viz. -ter-, ter, and -tr- (weak form ; § 62). The Greek has clung quite closely to the original declension $\pi \alpha-\tau \eta^{\prime} \rho, \pi a-\tau \rho-o \delta_{\rho}, \pi a-\tau \epsilon \rho-a$. In Latin the -tr-form of the suffix has gained the supremacy in the oblique cases ; in the Nominative, -ter represents earlier *-ter (§ 88. 2).
b) Nouns of agency in -tor originally had three forms of the suffix, viz. tơr-, tōr-; -tr-. In Latin these have all practically been reduced to one, -tōr (Nominative toör being for earlier *-tōr; § 88. 2). The weak grade -tr-, however, appears in the corresponding feminine nouns of agency, e.g. vic-tr-ixx, gene-tr-ixx, etc.

## Ĭ-Stems.

A. Masculine and Feminine $\check{i}$-Stems.
148. These originally had Ablaut ( $\$ \$ 62,70$ ) in the suffix. The strong forms of the suffix were $-i i-,-o i-$; the weak form $-i-$.,

Many original $i$-stems have passed over in Latin into the $-i \bar{o}(n)$ class (§ 147.2.b). Examples are statio (earlier *statis; cf. Gr. $\sigma \tau \dot{\alpha} \sigma \iota s$ for $\left.{ }^{*} \sigma \tau a-\tau \iota s\right)$; -ventiō (earlier *ventis; of. Gr. $\beta$ áaıs for $\left.{ }^{*} \beta a \tau \iota s\right)$; -tentiō (earlier -tentis; cf. Gr. đáoıs for *ratıs).
149. Nominative Singular. - This is regularly formed by appending -s, e.g. iggni-s, turri-s. Several nouns have lost the $i$
before $s$ by Syncope (§ 92), e.g. pars for *part-(i)s (cf. partim); gèns for *gent-(i)s; mèns for *ment-(i)s. . Gr. § 38. 3.
150. Genitive Singular. - The Indo-European termination seems to have been -eis, i.e. ei (strong form of suffix) $+-s$, weak grade of Genitive case-ending (§ 138). But this termination -eis, while preserved in Oscan and Umbrian, has disappeared in Latin. The termination -is is borrowed from consonant stems.
151. Dative Singular. - The Indo-European case-ending -ai was appended to the stem with the suffix $-e i$, thus giving, for example, *turrei-ai, whence by contraction *turrei, turri.
152. Accusative Singular. - The regular ending $-m$ is appended to the stem, e.g. turri-m. The termination -em (borrowed from the consonant stems) has, however, largely displaced primitive -im. See Gr. § 37.
153. Ablative Singular. - There was no special form for the Ablative Singular of $\breve{\imath}$-stems in Indo-European. The Latin, however, formed an Ablative in $-d$, e.g. turrid, after the analogy of $o$-stems (hortos: hortom: hortōd: : turris: turrim : turrid). These $-d$-forms, however, are attested by only scanty examples; the $d$ early disappeared (§ го9. г), leaving the termination $-\bar{\imath}$. But in most nouns the ending $-e$, borrowed from consonant stems, has replaced this $-\bar{\imath}$. Adjectives, however, always have $-\bar{\imath}$.
154. Nominative Plural. - The suffix of the Nominative Plural took the form -ei- (§ 148 ). Thus the primitive formation would be represented by *turr-ei-ĕs. The $i$ between vowels first became $j$, and then regularly disappeared. The resulting *turrĕés then became turrés by contraction. Cf. in Greek $\pi$ ó $\boldsymbol{\lambda} \iota \iota(\epsilon \iota=\bar{e})$ for

155. Genitive Plural. - The ending -um is appended to the stem, ending in the $\breve{\imath}$-suffix, e.g. turri-um.
156. Dative and Ablative Plural. - The Indo-European ending -bhos is appended to the stem, ending in the $\breve{\imath}$-suffix, e.g. tur-ri-bus. On -bus for -*bhos, see $\S \S 97$. 1. $b ; 76.5$.
157. Accusative Plural. - The termination was -ns; hence originally turrins, whence turris (§ 109. 3. b). The termination $-\bar{e} s$, which is often used instead of $-\bar{i} s$, is borrowed from the consonant stems.

## B. Neuter $\breve{\imath}$-Stems.

158. r. These changed the final $-\breve{\imath}$ to $-\breve{e}$ by a regular law (§75). Stems of more than two syllables then usually dropped the $-\breve{e}$ thus developed, while dissyllabic stems retained it, e.g. calcar (e), animal(e) ; but mare, rēte.
159. The case-endings of Neuter $\breve{\imath}$-stems are in general the same as for Masculines and Feminines. In the Ablative Singular the termination $-\bar{\imath}$ is regular. On the $-\breve{a}($ i.e. $-i-a)$ of the Nominative and Accusative Plural, see § 136.

Consonant Stems that have partially adapted themselves to the Inflection of $\overline{\text { In }}$-Stems.
159. As stated in the Grammar, § 40 , the adaptation is practically confined to the Plural, viz. the Genitive and Accusative, where $-i u m$ and $-\bar{i} s$ take the place of the normal $-u m$ and $-\bar{e} s$. Several distinct groups of words belong here :
r. One of the most important classes consists of nouns in -és, e.g. aed $\bar{e} s, n \bar{u} b \bar{e} s$, etc. What has led to the adaptation of these words to the inflection of $\check{\imath}$-stems in the Genitive and Accusative Plural is not certain ; but the fact that stems of this class practically never show $-i m$ in the Accusative Singular or $-\bar{\imath}$ in the Ablative Singular, whereas regular $\breve{\imath}$-stems in -is frequently show
these endings, makes it impossible to regard nouns in - $\bar{e} s$, Gen. $-i s$, as actual $\check{\imath}$-stems.
2. Nouns in -tās, Gen. -tātis, may possibly represent $\breve{\imath}$-stems, i.e. civitatat-i-; yet the absence of $-i m$ and $-\bar{i}$ - forms in the Accusative and Ablative Singular is against this. $C f$. r above.

## U-Stems.

A. Masculine and Feminine $u$-Stems.
160. Like the $\breve{\imath}$-stems, the $\breve{u}$-stems had a suffix which appeared in three forms, viz. -eu-, -ou-, and -u-. The first two were strong; the last weak. See §§ 64. c ; 70.
161. Nominative Singular. - The Nominative Singular appends $-s$, e.g. frūctu-s.
162. Genitive Singular.-The Genitive Singular had the strong form of the suffix, either -eu- or -ou-. To this was added the Genitive case-ending in its weakest form, viz.-s (§ 138 ), thus giving *frūct-eu-s, or *frūct-ou-s, whence regularly frūctūs (§ 85). Early Latin also shows two other formations, viz. in -uis and -uos, e.g. senātu-is and senātu-os. These represent the other forms of the Genitive case-ending, -is being for earlier -es (§ 138 ).

The termination $-\bar{u} s$ cannot be explained as the result of contraction from either -uis or -uos. Neither ui nor uo contracts to $\bar{u}$.

In Plautus and Terence $u$-stems largely follow the analogy of $o$-stems and form the Genitive Singular in $-\bar{\imath}, e . g$. sena $\bar{a} t \bar{\imath}$.
163. Dative Singular. - The Indo-European case-ending -ai appended to the stem with suffix -eu-gave *frūcteu-ai, whence regularly fru $\bar{u} c t u \bar{u}$. The Dative in $-\bar{u}$ is not formed from that in $-u \bar{\imath}$ by contraction; for $-u \bar{\imath}$ does not contract to $\bar{u}$. The forms in $\bar{u}$ are probably Locatives, frūct $\bar{u}$ being for earlier ${ }^{*} f r \bar{u} c t e u$, a peculiar terminationless formation, found also in Sanskrit.
164. Accusative Singular. - The regular ending $-m$ is appended, e.g. frūctu-m.
165. Ablative Singular. - The earliest Latin formation had $-d$, e.g. frūctūd. This, however, was not inherited from the IndoEuropean, but was a new formation, specifically Latin. See § 153. The $-d$ was soon dropped, giving frūctū.
166. Nominative Plural. - The original formation would have been in *-eu-ěs, i.e. the strong form of the suffix (§ 160 ) + the Nominative case-ending -ॅ厄s; *-eu-ĕs would regularly have become *- $u$-is, which would have remained uncontracted. The regular Nominative Plural in - $\bar{u} s$ must, therefore, be referred to another origin ; it is probably an Accusative that has taken on a Nominative function. Cf. early Latin Nominatives in $-\bar{i} s$ from $\breve{\imath}$-stems, which are likewise Accusatives in Nominative function (§ 142 ).
167. Genitive Plural. - Frūctu-um, etc., are for earlier frūctu-om. On -om, see § $\mathbf{1 2 1}$. A Genitive in $-u m$ also occurs, e.g. currum, in place of curruum. Inasmuch as this formation appears in Plautus (long before the change of -uom to -uum; § 57. 1. c), currum cannot be explained as from curruum, but is an analogical formation after Genitives in $-u m$ from $\check{o}$-stems (§ $\mathbf{1} \mathbf{3}^{2}$ ) and consonant stems.
168. Dative and Ablative Plural. - The regular Indo-European case-ending *-bhos became Latin -bus (§ 97. r. b), and was regularly appended to the stem in $u$-, e.g. früctu-bus. Later, either owing to the influence of consonant and $\breve{\imath}$-stems, or to the tendency of $\breve{u}$ to become $\breve{\imath}$ before labials (§6.2), -ubus often became -ibus.
169. Accusative Plural. - The primitive formation would be represented by *früctu-ns (case-ending -ns), whence regularly frūctūs; § 109. 3.b.

## B. Neuter $\breve{u}$-Stems.

170. These are not numerous and present few peculiarities. The long $u$ of $\operatorname{gen} \bar{u}$ and $\operatorname{cor} n \bar{u}$ has been explained as being possibly an original dual formation, - 'two knees,' etc.

## $\bar{\zeta}$ and $\bar{U}$-Stems

171. i. The only $\bar{i}$-stem in Latin is $v \bar{\imath} s$. The terminations of the Singular follow those of $\breve{\imath}$-stems ; $\bar{i}$ has probably been shortened in the Genitive, though the actual quantity cannot be proved. The Accusative vim for ${ }^{*} v \bar{\imath} m$ is regular ; § 88. 2. In the Plural, v̄̄̄es, virium, etc., result from the conception of the

172. $\bar{U}$-stems are represented by $s \bar{u} s$ and $g r \bar{u} s$, both of which take the endings of consonant stems, shortening $\bar{u}$ regularly to $\breve{u}$ before vowels. Sūbus is not a contraction of suibus, but represents the original formation; sŭbus and suibus are the result of analogy.

## /̄e-Stems.

172. /्̄ध-stems are represented by nouns in-iès, e.g. rabiés, aciès, facies, speciēs, etc. The suffix -ie- originally had Ablaut (§ 70 ) in Indo-European, appearing in the forms $-\bar{i}$ - and $-i \bar{e}-$; but Latin has lost all traces of the $\bar{i}$-suffix and has $-i \bar{e}$ throughout. Two original $s$-stems (spès and fides) have also adapted themselves to the same declension as the -īe-stems, along with res and dies, which were originally diphthong stems; see § 180.

172a. Nominative Singular. - The case-ending is $-s$ as elsewhere.
173. Genitive Singular. - The primitive Genitive of the $-i \bar{e}$ stems ended in $-s$, e.g. rabiès, Lucretius, iv. 1083. But the regular termination is $-\bar{e} \bar{l}$. The $\bar{i}$ of this is probably borrowed
from $\breve{b}$-stems, precisely as in case of the ending $-\bar{a} \bar{a}$ of $\bar{a}$-stems; subsequently $\bar{e}$ was regularly shortened before $-\bar{i}$, when a consonant
 Latin, forms like fidel, $\bar{\ell} \bar{\imath}$ are found. A Genitive in $-\bar{\imath}$ also arises by the contraction of $\breve{e} \bar{i}$ to $-e i$, whence $-\bar{i}$, e.g. perniciì, dì̀ (Virgil, Aen. i. 636). The ending $-\bar{e}$, e.g. aciē, die (in such expressions as quīnti diē, postridiē, prīdiē, etc.), is not Genitive, but a DativeLocative formation; see § 174 . The original formation was *dièi. But under certain conditions this diphthong - $\bar{e} i$ became $-\bar{e}$ (cf. § 86) ; hence diè for *dièi.
174. Dative Singular. - In the Indo-European parent-speech the Dative and Locative seem to have become merged in a single formation in $-\bar{e} i$ (long diphthong) ; whence $-\bar{e}$ (§ $\mathbf{1} 73$ ). But for the most part this original Dative in $-\bar{e}$ has been supplanted by the Dative in $-\bar{e}$, a new formation modelled on the Datives of consonant stems.

174 ${ }^{\text {a }}$. Accusative Singular. - This is formed regularly by appending the case-ending $-m$, before which $\bar{e}$ is regularly shortened (§88. 2), e.g. aciem for earlier *acièm.
175. Ablative Singular. - No traces of forms with $-d$ are found, though it is likely that acié, etc., are for an earlier *acied, etc. This formation would be secondary, after the analogy of the Ablative Singular of ŏ-stems.
176. Nominative Plural. - The Nominative case-ending -ĕs (see § 142) combines by contraction with the stem, e.g. acies for *aciè-ĕs.
177. Genitive Plural. - The termination -èrum is after the analogy of - $\bar{a}$ rum of the $\bar{a}$-stems and - $\bar{o}$ rum of the $\breve{o}$-stems.
178. Dative and Ablative Plural. - The ending -bus, for IndoEuropean -bhos (§ 97. r.b), is appended directly to the stem.
179. Accusative Plural. - The primitive Latin formation would be represented by *acièns, whence acies (§ 109.3.b).

## Stems ending in a Diphthong.

180. 181. Rēs, originally a diphthongal stem, viz. * rēis, had become res in the Indo-European period.
1. The Nominative Singular of nā̃is was originally *nāus. This form disappeared; nāvis is a new formation after the Genitive nāvis, Dative nā̃ $\bar{a}$.
2. Bōs is probably not a genuine Latin word, but is borrowed from one of the Italic dialects (Oscan?) ; $\bar{o}$ represents earlier $\bar{o} u$. The oblique cases are formed from the stem bou-, $u$ becoming $v$ between vowels. The Dative Plural būbus is regular (for *boubus) ; bōbus is modelled on the Nominative bōs.
3. The stem of $J \bar{u}$ (piter) was, in Indo-European, *DjevInitial $d j$ regularly became $j(\S$ 104. r. $a)$; hence * Djev- became * Jev-, and further Jov- (§73.3). From this stem are formed the oblique cases Jov-is, Jov-ì, Jov-em. The Vocative consisted of the simple stem, namely ${ }^{*} J e v$, which became ${ }^{*} J e u$, $J \bar{u}$ - (§ 85). It is this last which, combined with -piter (i.e. pater, § 73. 2), gives Jüpiter (Juppiter, § 88. 1), really a Vocative, but used as a Nominative as well.

The original Nominative was *Djèus, with a 'by-form ' *Dijeus, 'god of the sky,' 'god of day.' From the latter came the common noun diūs, 'day,' preserved in nudiūstertius, 'now the third day,' 'three days ago' (§ 86). But after the analogy of the Accusative diem, there arose also the Nominative Diés seen in the archaic Diespiter, which is the real Nominative corresponding to Jüpiter. This same diēs, as a common noun, 'day,' passed over into the inflection of the $i \bar{e}$-stems.

Formation of the Comparative and Superlative. ${ }^{1}$
181. The Comparative. - 1. The regular Comparative Suffix in Latin was -jos- ('protracted form' -jos-; § 62. 3), with -jes- as another form of the strong grade, and -is- as weak grade (§ 62 ). But -jos-, -jōs- alone ${ }^{2}$ survived in Latin. In the Nominative Masculine and Feminine the original formation was $-j \bar{o} s$. Following a consonant, $j$ regularly became $i$ (§ 103. 2), and in the oblique cases $s$ became $r$ (§ 98. 1), e.g. meliöris for ${ }^{*}$ meliōsis; the $r$ was subsequently transferred by analogy to the Nominative. The Neuter took the suffix -iŏs- and kept $s$, changing $o$ to $u$ (§76.5), e.g. melius. Minus is not for ${ }^{*} \min$-ios (which would be impossible in Latin), but was probably originally a Noun, * minvos, whence *minos (§ 103.5), minus, Gen. *mineris. This became an Adjective and developed a Masculine minor, after the analogy of other Comparatives.
2. The Indo-European parent-speech had another suffix, which in some languages developed Comparative force, viz. -tero-, -terā-, e.g. Greek как $\dot{-}-\tau \epsilon \rho о s$. But in Latin this suffix retained its primitive force of 'having a relation to,' 'connected with,' e.g. ex-terus, lit. 'having a relation to the outside, outer'; *interus, posterus, citer, etc. These were felt as Positives and took the regular suffix -ior to denote Comparative relation.
3. Plus is for *plō-is, from the root plē-, plō-, 'fill,' 'full' (§62). This *plōis became *plois (§86), whence plūs (§ 81. r). In the archaic hymn known as the Song of the Arval Brothers we find the form pleores from $p l \bar{e}-$, the other phase of the root.
182. The Superlative. - We have three Superlative suffixes in Latin :

[^14]1. -mo-, -imo- seen in sum-mus for *sub-mus (§ 1о6. 2) ; prīmus; brūma 'winter,' lit. 'shortest day,' for *breu-ma (brev-is) ; pessimus; also in extrē-mus, postrē-mus; suprē-mus; plūr-imus, prox-imus (for *proqu(i)simus) ; max-imus (for *mag(i)s-imus).
2. -tumus, -timus (§ 6.2), seen in ci-timus, ex-timus, in-timus, pos-tumus, ul-timus, op-timus, for op(i)timus, from ops (§ 92); earlier citumus, etc. This suffix originally had much the same meaning as tero-, ter $\bar{a}$ - (see § 181), and still retains its primitive force in several words, e.g. leggi-timus; fini-timus, etc.
3. The suffix -issimus is of uncertain origin. It can hardly be for -istimus, a mingling of -isto- (seen in the Greek Superlative ending -ıбтos) and -mus; for -istimus could not become -issimus. No plausible explanation of the suffix has as yet been offered.
 Syncope (§ 92) $\bar{a} c r$ simos, *ācersimos (§ 1оо. 3), àcerrimus (§ ı06. 4). Similarly facillimus is for *fácil-is-imos, *facilsimos, facillimus (§ го6. 3) ; -is-, in the forms assumed as original, represents the weak form of the Comparative suffix (§ 181). Cf. Brugmann, Grundriss, ii. p. 158.
4. On the quantity of $i$ in -issimus, see $\S 43$.

## Numerals. ${ }^{1}$

## Cardinals.

183. 184. Unus is for earlier oinos; § 81. 1. (cf. Gr. oilv ${ }^{\circ}$, the 'onespot ' on dice). German ein and English one are the same word ; Greek $\epsilon i s$ for ${ }^{*} \sigma \epsilon \mu$-s is not related to $\bar{u} n u s$, but to semel, singuti.
1. Duo is for earlier * duō according to § 88. 3; cf. Gr. $\delta \mathbf{v} \omega$. The formation was Dual.

[^15]3. Trēs. The stem shows Ablaut (§ $64 . c$ ), strong grade trei-, weak grade tri-. The former stem originally appeared in the Nominative, *trej-ĕs, whence *tre-ĕs, trēs. The other cases have tri-, viz. tri-um, tri-bus, tri-a, trīs (for *tri-ns; § 109. 3).
4. Quattuor. The Indo-European form from which quattuor is descended was probably *quetvōrĕs; but the Latin form early lost its inflection, after the analogy of the other indeclinable numerals ; -ōr regularly became $\breve{o r}$; § 88. 3. The change of the primitive $e$ to $a$, and the doubling of the $t$ cannot be referred to any recognized law. The change of $v$ to $u$ is perfectly natural ; cf. § 16. ェ. $f$.
5. Quīnque. The Indo-European form was *penque; cf. Skrt. panca, Gr. $\pi$ 白v $\tau \epsilon$. Initial $q u$ - in Latin is the result of assimilation of the first syllable to the second ; cf. $b i-b \bar{o}$ for Indo-European ${ }^{*} p i-b \bar{o}$ (Skrt. pibāmi). The change of $e$ to $i$ is in accordance with § 73. 2. b. The long $i$ is probably borrowed from quïntus, for quīnctus.
6. Sex. This comes from Indo-European ${ }^{* s e x}$, a by-form of

7. Septem. The Indo-European form was *septm, which regularly developed in Latin as *septem (§ 102. 1).
8. Octō is descended from an Indo-European *octō. The form was a Dual ('two sets of fingers'; root ac-, oc-, 'sharp,' 'pointed'?).
9. Novem. The Indo-European form was *nevn, which in Latin would regularly have appeared as *noven (§ го2. $\mathbf{~ ; ~ c f . ~}$ Eng. ni-ne; German neu-n); -em for -en is probably due to association with the following dec-em.
10. Decem is for Indo-European *dekm; § 102. 1.
ir. 'Eleven' to 'Nineteen.' These are regularly formed by composition, - ūndecim, tredecim, etc. On -im for -em, see § 73. 2. For trëdecim we should expect *tēdecim according to $\S 89$ (cf. sēdecim for $* \sec (s)$ decim; § 105). The $\breve{e}$ remains
unexplained. 'Eighteen' and 'Nineteen' were usually expressed by duodèrच̄gintī, ūndēv̄̄gintī.
12. Vigintī. The Indo-European form was *vī-kmtì, in which $v \bar{l}$, 'two,' is for ${ }^{*} d v \bar{\imath}$, an original Neuter Dual, from the root $* d u$-; *kmitī, whence in Latin *-gentī, -gintī (§ 102. 1) was also Dual, in the sense of 'tens.' The change of $k$ to $g$ is peculiar, though not unexampled ; cf. dig-itus for *dic-itus (from root dic- 'point ').
13. 'Thirty' to 'Ninety.' These all end in -gintā, which in Indo-European was *-kontā (cf. Gr. т $\quad$ เáкоута, тєббара́коvта, etc.), a. Neuter Plural meaning 'tens'; *-kontā shows the strong grade of the root whose weak grade *knt- lies at the basis of vigintī (see above) ; -gintā for *gontā is due to the influence of vīginti. The $-\bar{a}$ is a vestige of the original ending mentioned in § 136 . On $g$ for $c$, see above. Trī- in trigint $\bar{a}$ is probably a Nominative Plural Neuter. The - $\bar{a}$ in quadr $\bar{a}-$, quinqu $\bar{a}-$-, sex $\bar{a}-$ is secondary. Its precise origin is uncertain. As regards quadrā-, it is best to disconnect it entirely from quattuor. It is probably an independent word.
14. Centum is for an Indo-European *cntóm, whence the Latin form by regular phonetic process; § 1о2. 1. Eng. hund- in hundred is the same word. Gr. $\dot{\epsilon}$-като́v has prefixed $\mathfrak{\epsilon}-$, for $-\boldsymbol{\epsilon}$, 'one.'
15. The Hundreds present few difficulties. Trĕ-centī is for *trï-centī by assimilation ( $\$ 90$ ). Quadringenti, octingentī (for quattuor-, octō-) have borrowed the -ing- from quingentī (for *quinq-genti; § 105. 1) and septingenti (for *septem-gentī), where -ing- developed regularly. Sescentī is for sex-centī, according to § 105. i. Sexcentī, which also occurs, is the result of 'Re-composition' $; 887.3$. On $g$ for $c$ in -gentī see above, 12.
16. Mille. - The most probable etymology of this word is that which connects it with Greek $\chi^{i} \lambda \iota a$, Doric $\chi \dot{\eta} \lambda \iota a$ (for ${ }^{*} \chi \frac{\epsilon}{\epsilon} \sigma \lambda \iota a$ ), 'thousand.' The Indo-European form of this was *gheslia, which in Latin would regularly develop as *hélia ( $\S \S 89 ; 97.3$. A.), and, by assimilation (§90), *hillia. The initial $m$ would repre-
sent $s m$-, weak form of the root sem-, 'one,' seen in sem-per sem-el, sim-plex, sin-guti. Cf. also Greek $\mu$-ía for ${ }^{*}(\sigma) \mu i a$. Hence originally in Latin *sm( $h$ )̄̀lia, ' one thousand.' On $m$ for initial sm-, see § 104. 1. b).

## Ordinals.

184. . 1. Primus for ${ }^{*} p r i \bar{s}-m o s$ (cf. prīs-cus, prīs-tinus) is a Superlative formation; §89.
185. Secundus (for *sequondos; § 103.5) is from sequor; hence originally : 'the following.'
186. Tertius may be for *tri-tios, whence by Syncope (§ 92 ) *trtios, then tertius (100.3).
187. Quärtus, Quīntus, Sextus are formed from the respective cardinals by adding -tus. The route followed in the development of quārtus is too devious to be here described.
188. Septimus, Decimus are probably for an original *septm-mos, *decm-mos. Before $m, m$ developed into the sound variously represented by $u, \breve{\imath}$; § 6. 2 .
189. Octāvus is for an earlier *octōous.
190. Nōnus is for *noven-os; cf. § 183. 9.
191. Vicēsimus and the other tens are formed with the suffix -timo-, i.e. vīcēsimus, earlier vīcēnsimus, for *vicent-timos; § 1о8. І.
192. Centēsimus and the Hundreds. - Inasmuch as the element -ésimus was common to all the tens, it came to be felt as an independent ordinal suffix, and was appended to the stems of the hundreds, centum, ducentī, etc. The suffix -timo- would have given *centum-timus, or else *césimus for *cent-timus.
193. Millēsimus follows the analogy of the hundreds.

## Distributives.

185. 186. Singuli shows the weak form of the root sem-, 'one,' seen in sem-el, 'once,' sim-plex, sem-per, etc. The origin of the suffix -guti is not clear.
1. The other Distributives are formed with the suffix -no-, e.g. $b \bar{\imath} n \bar{\imath}$ for ${ }^{*} b i s-n \bar{\imath}$; trin $\bar{\imath}$ for *tris-n $\bar{\imath}$. Beginning with septen $\bar{\imath}$, the Distributives are formed by the suffix - $\bar{e} n \bar{\imath}$, which is borrowed from $\operatorname{sen} \bar{\imath}$ (for ${ }^{*} \operatorname{secs}-n \bar{\imath}$; $\S \S 105.1$; 89). The cardinal form to which this suffix is added, usually loses its final syllable, sometimes the last two syllables, e.g. sept(em) $\bar{e} n \bar{\imath}, \operatorname{nov}(e m) \bar{e} n \bar{\imath}$; d $\bar{e} n \bar{\imath}, v \bar{c} \bar{c} \bar{e} n \bar{\imath}$.

## Multiplicatives.

186. i. Semel, 'once,' is from the root sem- ; § 185. i.
187. Bis is for dvis, preserved in the Glosses of Festus; § 104. 2. c). $\quad C f$. Greek $\delta i$ s. For Latin dis, see § 104. 2.
188. Ter is for *tris (cf. Gr. $\tau p i s$ ) in unaccented position. The sequence of development would be *tris, *trs, *trr, ter; §§ 106. 3 ; 100. 3 .
189. Quater is possibly for *quatrus, *quatrs, quater ( $r$ ) ; § 1о0. 3.
190. The other Multiplicatives are formed by the suffix -iens, -iés (see § 20. 2), which is variously explained. Some see in it the Participle of $e \bar{e}$, so that sex-iens would mean literally 'going six.' Others identify it with the Sanskrit suffix -yant, 'great.'

## PRONOUNS. ${ }^{1}$

## Personal Pronouns.

187. First Person. - I. The Nominative Singular, ego, for earlier $\operatorname{eg} \bar{o}$ (§ 88. 3), represents an Indo-European * $\operatorname{eg} \bar{o}$.
188. The Genitive Singular, meī, is simply the Genitive Singular Neuter of the Possessive meus, used substantively. By the side of $m e \bar{\imath}$ we have also in early Latin the Genitive $m \bar{\imath} s$. This probably goes back to an Indo-European Genitive-Dative-Loca-

[^16]tive form ${ }^{*} m e i$ or ${ }^{*} m o i$, whence ${ }^{*} m \bar{\imath}$. To this was added the Genitive termination -s.
3. The Dative Singular, mihi, is probably descended from an Indo-European * megh-oi or * megh-ei, Locative. This would regularly appear in Latin as *mehī (§§ 97. 3. A ; 81. 2). The change of $\breve{e}$ to $\breve{\imath}$ took place first when ${ }^{*}$ meh $\bar{\imath}$ was in unaccented position; § 73. 2. On the shortening of the final $\bar{i}$, see § 88. 3. $M \bar{i}$ may be a contraction of mihi or may be identical with Greek $\mu \mathrm{o}^{\prime}$ (also Locative).
4. The Accusative and Ablative Singular, me , was $m \bar{e} d$ in early Latin. Originally $m \bar{e} d$ was Ablative only, with the case-ending discussed in § 130 . Before an initial consonant méd would become $m \bar{e}$, remaining $m \bar{e} d$ before vowels. The original Accusative Singular was $m \bar{e}$, but the existence of $m \bar{e}$ and $m \bar{e} d$ side by side in the Ablative naturally led to the rise of $m \bar{e} d$ by the side of the already existing $m \bar{e}$ in the Accusative.
5. Nominative and Accusative Plural, nōs, is apparently an inherited Indo-European formation. The form was originally Accusative and was thence transferred to the Nominative also.
6. Genitive Plural. - Nostri, nostrum are the Genitive Singular and Genitive Plural of the Possessive Pronoun used with substantive force. In early Latin we find also nostrōrum and (as Feminine) even nostrārum.
7. Dative and Ablative Plural. - Nōb̄̄s has apparently borrowed its termination $-b \bar{\imath} s$ from $v \bar{o} b \bar{\imath} s$; see below.
188. Second Person. - The Indo-European stem was tve-, with weak grade tü-. A collateral form te- also appears.

1. Nominative Singular. - tū corresponds to German $d \bar{u}$, Greek $\tau \bar{v}$ - in Homeric $\tau \hat{v} \nu \eta$.
2. Genitive Singular. - Tū̀ like meì (§ 187.2 ) is the Genitive of the Possessive Pronoun used substantively. Early Latin has also a Genitive $t \bar{t} s$ to be explained like $m \bar{s} s$ (see § 187.2).
3. Dative Singular. - Tibi is for an earlier *tebhei, *tebī, tibū; on $\breve{\imath}$ for $\breve{e}$, see under mihi, § 187.3 . On the shortening of the final $-\bar{i}$, see $\S 88.3$. The origin of the termination -bhe $i$ is uncertain.
4. Accusative and Ablative Singular. - In both Accusative and Ablative we have $t \bar{e}$, with $t \bar{e} d$ as an alternative form in early Latin. On the origin and relation of the two formations, see § 187.4 .
5. Nominative and Accusative Plural. - Vōs represents an Indo-European formation. Like $\overline{n o s}(\S 187.5)$, it was originally Accusative only.
6. Genitive Plural. - Vestrum, vestrì are of the same formation as nostrum, nostrī; see § 187. 6. Vostrum, vostrì, for vestrum, vestrī, result from association with nostrum, nostrī.
7. Dative and Ablative Plural. - Vōbīs is formed with the suffix $-b h \bar{\imath} s$, the relation of $-b \bar{\imath} s$ in $v \bar{o}-b \bar{\imath} \bar{s}$ to $-b \bar{\imath}$ in $t i-b \bar{\imath}$ being perhaps determined by that of illīs to illi ; istīs to īsti, etc.

## The Reflexive Pronoun.

189. The stem of the Reflexive is *sev-, with the collateral forms * se-, sv-.
190. Genitive. - Sū̃, like $m e \bar{\imath}$ and $t w \bar{u}$, is the Genitive Singular of the Possessive used substantively.
191. Dative. - Sibi, earlier sibì, is for *sebhei, *sebì. See under mihi, § 187.3. On the shortening of the final $\bar{\imath}$ see § 88. 3.
192. Accusative and Ablative. - In both Accusative and Ablative we have $s \bar{e}$, with $s \bar{e} d$ as an alternative form in early Latin. On the origin and relation of the two formations, see on $m \bar{e}, \S 187.4$.

## The Possessive Pronouns.

190. These are formed by appending -os $(-u s)$ to the stems or other form of the Personal Pronouns.
I. Me-us is formed by adding the suffix -os to *mei, the IndoEuropean Genitive form mentioned in § 187.2. This ${ }^{*}$ mei-os
regularly became meus. The Vocative Singular $m \bar{\imath}$ is either the old Genitive $m \bar{\imath}$, or is for ${ }^{*} m e i-e$, which by loss of its $-\breve{e}$ might become ${ }^{*} m e i, m \bar{\imath}$.
191. Tu-us is from the stem tev-, whence originally * tev-os, later tovos ( $\S 73.3$ ), preserved in early Latin. In enclitic position ov became $u$, whence tuos, tuus; see § 103. 4. With Latin *tev-os, cf. Homeric Greek $\tau \epsilon(f)$ ós.
192. Su-us is from the stem sev-, whence originally *sevos, later sovos (73.3), preserved in early Latin. In enclitic position, e.g. pátrem sovom, ov became $\breve{u}$, whence suos, suus; see § io3. 4 . With primitive Latin *sev-os cf. Homeric Greek éfós for ${ }^{*} \sigma \epsilon$ fós. The weak form of the root $s e v$ was $s v$-. It is this which appears in Greek ós for $\sigma$ fós, and traces are present also in Latin, e.g. in such forms as sìs (Dat.-Abl. Plu.), for *svīs (root svo-), found in early Latin.
193. Noster and vester are formed by adding the suffix -tero- to nŏs- and vŏs-, with Syncope of the $e$; cf. Gr. $\mathfrak{\eta} \mu \dot{\epsilon}-\tau \epsilon \rho o s$. The suffix is the same as that already considered 181. 2, and had the meaning 'connected with,' 'having a relation to.' The early form voster became vester according to $\S 76.3$.

## The Demonstrative Pronouns.

## Hic.

191. 192. The stem of hic was ho-, h $\bar{\alpha}$-. To the regular caseforms of this stem was often added the suffix -ce, frequently reduced to $-c$; $-c e$ itself represents a pronominal stem meaning ' here.'
1. Nominative Singular.
a) Masculine. Hic is now explained as for *ho-ce. In unaccented (i.e. enclitic) use, this would regularly become *hice, whence hic $(\S 76.4)$. The element ho- is thought originally to have been a Nominative form of the same type as Indo-European *so (Skrt. sa, Gr. ó (for * $\sigma o$ ), Gothic sa), i.e. a Nominative consisting
of the stem alone without case-ending. The $i$ of hic was thus short by origin, and the word always has $\breve{\imath}$ in Plautus. Where we find an apparent $\bar{\imath}$ in later times, we should probably read hicce; i.e. the syllable is long, but the vowel is short. An instance of hicc occurs in CIL. ix. 60, HICC EST. This $c c$ comes from hocc. See below, $c$ ).
b) Feminine. Haec for ${ }^{*} h \bar{a}-i-c(e)$, adds $i$ (a formative element recognized elsewhere in the inflection of this pronoun) to an original *hā (cf. ${ }^{*}$ port $\bar{a}$ ).
c) Neuter. Hoc is for *hocce, earlier *hod-c (e), in which $-d$ is a case-ending peculiar to the Pronominal Declension. The $\breve{o}$ of hoc was short. Whenever the word makes a long syllable in verse before an initial vowel it is probable that the Romans pronounced hocc, e.g. hocc erat in Mss. of Virgil, Aen. ii. 664. Before consonants they pronounced hŏc, e.g. hŏc templum.
2. Genitive Singular. - The earliest form of the Genitive Singular was *hoij-os, whence hoi( $j$ )us, preserved in early Latin, The exact nature of this formation is still far from clear. The classical form hüjus seems most likely to have developed from hoi-( $j$ )us in accordance with § 81. r.
3. Dative Singular. - The original form of the Dative Singular was probably *hoijei, a Locative formation that took on Dative function. From this, by disappearance of the intervocalic $j$ (§ Io3. 1) and contraction, arose the earliest Latin form, viz. hoice, CIL. i. 197. 26. The exact way in which huic arose is uncertain.
4. Accusative Singular. - Hunc, hanc are simply for earlier *ho-m-ce, *ha-m-ce, with obvious phonetic changes.
5. Ablative Singular. - $H \bar{o} c, h \bar{a} c$ for earlier * $h \bar{o} d-c(e),{ }^{*} h \bar{a} d-c(e) \cdot$ represent the same Ablative formation as regularly seen in $\bar{a}$ - and $o$-stems ; §§ ir8, Izo.
6. Plural Forms. - These all follow the regular termination of $\bar{a}$ - and $o$-stems, except the Nominative and Accusative Plural Neu-
ter, haec, where $-a i$, $-a e$ (instead of $-a$ ) exhibit the same $\breve{\imath}$ as noted above in connection with the Nominative Singular Feminine.

## Is.

192. I. The root of this pronoun is $e i$-, weak form $\breve{i}$ - (§ 62 ). By appending the suffixes $-o-$ and $-\bar{a}$ we get the stems $e j o-$, ej $\bar{a}-$ or (by disappearance of the intervocalic $j$ ) eo-, $e \bar{a}$-.
193. Nominative Singular.
a) Masculine. Is shows the root in the weak form with the case-ending -s.
b) Feminine. $E a$ is for ${ }^{*}{ }_{e} j-\bar{a}$; see above, $\mathbf{I}$.
c) Neuter. Id shows the weak form of the root with the Pronominal case-ending $-d$.
194. Genitive Singular. - The original formation is thought to have been ${ }^{*}$ eijos, whence eius, the correct classical form; cf. § 82.3 .
195. Dative Singular. - $E \bar{\imath}$ for ${ }^{*} e-e i$, earlier ${ }^{*} j$ j-ei was in formation a Locative from the stem $\check{\text { ëjo- (see } 1 \text { ). In the Pronouns the }}$ Locative served also as Dative.
196. Accusative Singular. - Eum, eam represent an earlier *ëjom, *ĕjam, (see x).
197. Ablative Singular. - $E \bar{o}$ and $e \bar{a}$, earlier $e \bar{o} d$, $e \bar{a} d$, were formed from the stems * $\check{e j o-, ~}{ }^{\text {ej }} \bar{a}$-. The case-ending is the same as that of $\bar{a}$ - and $\check{b}$-stems.
198. Plural Cases. - These are all formed regularly from the stems * $\check{e j o}$-, $\breve{e} j \bar{a}$-. In the Nominative Plural, $e \bar{\imath}$ (for ${ }^{*} \ell j-o i$ ) represents the original formation ; $i \bar{\imath}$ is for $e \bar{\imath}$ by assimilation (§90); $\bar{i}$ is from $i \bar{\imath}$ by contraction. $C f$. also the corresponding DativeAblative forms, eiss, iìs, ìs.
199. Idem is simply is with the suffix -dem. For the Compensatory Lengthening, see §89. I.

## Iste, Ille, Ipse.

193. These three pronouns presumably contain in their second syllable the Indo-European pronoun ${ }^{*}$ so, 'he' ; ${ }^{*}$ sā , 'she '; *tod, 'that.' But by association and analogy the second element has become much modified.
194. Iste. The first syllable of iste is of uncertain origin. It was apparently an unchangeable element. By the addition of *so, *s $\bar{a}$, ${ }^{*}$ tod, would arise *isso, *iss $\bar{a}$, ${ }^{* i s t o d . ~ T h e ~ r e g u l a r ~ A c c u-~}$ sative of *so was *tom, *tām, *tod (cf. Greek $\quad o ́ v, ~ \tau a ́ v, ~ \tau o ́ o(\delta)), ~$ whence *istom, *istàm, *istod. The preponderance of forms with $t$ eventually caused ${ }^{*}$ issa to become ista and *isso to become *isto, later iste (§ 76.6), influenced by ille, ipse.
195. Ille. If olle was the original of ille, as is usually held, the change from $o$ to $i$ can be accounted for only on the ground of adaptation to such forms as iste, ipse, is. Olle, itself, may be for *ol-so, *ol-se, whence olle (§§ 76. 6; 106. 3). The Feminine would similarly have been *ol-s $\bar{a}$, olla. The Neuter would have been *ol-tod, and the Accusative *oltom, *oltām, *oltod. Then the forms with $l l$ might naturally have gained the supremacy over those with lt.
196. Ipse. $I$ - here seems the root of is (cf. early Latin eappse, cumpse, eopsse, etc.), while the origin of the suffix -pse is obscure. The Neuter, ipsum (instead of *ipsud), shows transition to the Noun Declension.
197. Declension of Iste, Ille, Ipse. - With the exception of the forms istud, illud already mentioned, and the Genitive and Dative Singular, these all show the usual terminations of the Noun Declension. The Genitives istīus, illīus, ipsĩus are formed by appending the Genitive ending -os $(-u s)$ to istì illi,$i p s \bar{\imath}$, Locatives
from the stems isto-, illo-, ipso-. These Locative formations served originally as both Dative and Genitive in the Pronouns. Later the Genitive was differentiated from the Dative.

## The Relative, Interrogative, and Indefinite Pronouns.

198. I. These are all formed from the same root, which appears as quй-, quŏ-, quā-.
199. Nominative Singular. - Quis shows the stem qui- with the case-ending $-s$. $Q u \bar{u}$ is for $q u o+i$, a formative element which appears elsewhere in the Pronominal Declension (see under hic, § 191. 2. b) ; 7) ; oi in accented syllables regularly becomes $\bar{u}$, but $\bar{i}$ for $o i$ in $q u \bar{u}$ may perhaps be explained by the enclitic character of the word. Quae is the regular Feminine of the Relative. The formation is the same as seen in hae-c (§ 191. 2.b). Qua, which appears in the Indefinite Pronoun, follows the Noun Declension. Quo-d and qui-d append the regular pronominal termination to their respective stems.
200. Genitive Singular. - Cūjus, for earlier quoi(j)us, *quoijos, seems best explained like hījus; § 191. 3.
201. Dative Singular. - Cui seems to have developed in the first century of the Christian era from the earlier quoi; see § 14. Quoi was probably a Locative formation.
202. Accusative Singular. - Quem for *qui-m has followed the analogy of $\breve{\imath}$-stems having -em for $-i m$, e.g. turrem, ovem, etc.; § 152.
203. Ablative Singular. - Besides the regular qū$, q u \bar{a}, q u \bar{o}$, which present no peculiarities, we find $q u \bar{\imath}$ used for all genders and (in eàrly Latin) for both numbers. This may have been a genuine Ablative form ( $q u \bar{\imath}$ for * $q u \bar{u} d$ ), or an Instrumental.
204. Plural Forms.- Quae is analogous to hae-c; § 191. 7. The Dative and Ablative quīs is from the stem quo- (§ 133 ); it has no formal connection with qui-bus, which is from the stem quı-.

## Pronominal Adjectives.

199. Several Adjectives of pronominal meaning have adopted also the Pronominal Declension in the Genitive and Dative Singular, viz. alius, alter; uter, neuter; $\bar{u} l l u s, ~ n \bar{u} l l u s ; ~ s o ̄ l u s, ~ t o ̄ t u s, ~ \bar{u} n u s . ~$ Alius takes also the pronominal $-d$ in the Neuter Singular.

## CONJUGATION. ${ }^{1}$

## Introductory.

200. As compared with Greek and Sanskrit, the Latin in its verb-system exhibits extensive deviations from the original conjugational system of the Indo-European parent-speech. The following are the most important points of difference :
r. The Latin has lost the augment, i.e. an initial $e$-, prefixed to the secondary tenses of the Indicative as a symbol of past time.
201. The strong (i.e. unsigmatic) Aorist has disappeared almost entirely.
202. The original Perfect Indicative has become merged with the sigmatic Aorist. The result is a tense whose inflections are derived from both sources, and whose meanings are Aoristic as well as Perfect.
203. The original Middle Voice has disappeared, being superseded by a new inflection peculiar to Latin and Keltic.
204. The Subjunctive and Optative do not appear as separate moods, but have become fused into one, designated Subjunctive.
205. In the Imperfect and Future Indicative of the $\bar{\alpha}$ - and $\bar{e}-$ conjugations we meet new formations in -bam and $-b \bar{o}$, which, like the $r$-Passive, are peculiar to Latin and Keltic.

[^17]7. In the Personal Endings the distinction between primary and secondary endings has become effaced.
8. Several new tense-formations have developed which are peculiar to Latin, e.g. the Perfect Indicative in $-v \bar{\imath}$ and $-u \bar{u}$, the Pluperfect Subjunctive in -issem, etc.

## Formation of the Present Stem.

201. Thematic and Unthematic Formation. - The Latin inherited two distinct types of Present formation. The one, characterized by the presence of the variable or thematic vowel ( $\breve{e}, \breve{o}$ ) before the Personal Endings, is called Thematic. This type is illustrated by dīcu-nt (for * dīco-nt); dīci-tis (for *dīce-tis). The other type of Present formation has no thematic vowel, and hence is called Unthematic. Unthematic presents originally had Ablaut (§ 62). The strong form of the root appeared in the Singular, the reduced form in the Plural. This change was connected with primitive accentual conditions. Presumably the accent originally rested on the root syllable in the Singular, on the endings in the Plural.

In Greek, the Unthematic Conjugation is represented by the $-\mu i$ verbs ( $\tau i-\theta \eta-\mu \iota, \tau i-\theta \epsilon-\mu \epsilon v$ ), while $-\omega$ verbs are thematic, e.g. $\lambda \epsilon ́ \gamma-0-\mu \epsilon \nu, \lambda \epsilon \epsilon \gamma-\epsilon-\tau \epsilon$.

## Classification of Present Formations.

## A. Unthematic Presents.

202. Unthematic Presents are but scantily represented in Latin; for the most part they have passed over into the thematic inflection. The following verbs are the chief representatives of the class :
203. $\mathrm{D} \overline{0},{ }^{1} d \bar{a}-s, d a ̆ t$ (for earlier $d \bar{a} t$ ) ; Plural $d \breve{a}-m u s, d \breve{a}-t i s, d a ̆ n i$.

[^18]2. Eō. - The two forms of the root were ei- (strong), and $-i$ (weak). The primitive inflection for Latin, therefore, would have been theoretically somewhat as follows:

| $*_{e j-\bar{o}^{1}}$ | $*_{i-m o s}$ |
| :--- | :--- |
| $*_{e i-s}$ | $*_{i}$-tis |
| ${ }^{e i-t}$ | $*_{i-n t}$ |

In the First Singular ${ }^{*} e j \bar{o}$ regularly became $e \bar{o}$ (§ 1о3. i) ; *eis became ìs (§ 82) ; and *eit, ìt, later ìt. The Plural seems to have abandoned early the weak form of the root in favor of the strong; imus, ìtis, eunt, therefore, represent *ei-mos, ei-tis, ej-ont.
3. Sum.- The strong form of the root is es-, the weak $s$-. The original conjugation for Latin, therefore, would have been theoretically somewhat as follows :

| *es-m $^{2}$ | $*_{s-m o s}$ |
| :--- | :--- |
| ${ }^{*}$ es-s | $*_{s-t i s}$ |
| $e s-t$ | $*_{s-n t}$ |

The historical forms show considerable deviation from this. Traces of *ess are seen in the regular use of es as long in early Latin verse. The presumption is that ess represents Plautus's pronunciation. The First Singular sum, along with su-mus (for *so-mos), and sunt (earlier sont) may represent a special thematic formation. The Second Plural es-tis is formed from the strong root, like the Second Singular. Enclitic forms 's and 'st sometimes occur for the Second and Third Singular. These are often

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\({ }^{1}\) The Indo-European inflection was presumably:
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\(*_{e i-m i}(\) Gr. \(\epsilon \uparrow \mu \iota) \quad *_{i-m o s}(c f\). Gr. \(\stackrel{\imath}{\iota}-\mu \epsilon \nu)\)
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$*_{e i-m i}($ Gr. $\epsilon \uparrow \mu \iota) \quad *_{i-m o s}(c f$. Gr. $\stackrel{\imath}{\iota}-\mu \epsilon \nu)$
$*_{e i-s i} \quad *_{i-t e}(c f . \mathrm{Gr} . \stackrel{\imath}{\mathrm{L}}-\tau \epsilon)$
$*_{e i-s i} \quad *_{i-t e}(c f . \mathrm{Gr} . \stackrel{\imath}{\mathrm{L}}-\tau \epsilon)$
*ei-ti (Gr. $\epsilon i \sigma \iota$ for $\left.{ }^{\epsilon} \epsilon \tau \tau\right)$ *i-enti

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*ei-ti (Gr. \(\epsilon i \sigma \iota\) for \(\left.{ }^{\epsilon} \epsilon \tau \tau\right)\) *i-enti
```

2 The Indo-European inflection was presumably :

| *esmi | *smos $^{\text {sm }}$ |
| :--- | :--- |
| *essi | *ste |
| *esti | *senti |

joined in writing with a previous word, e.g. bonust $=$ bonum 'st; morast $=$ mora'st. The usage is poetic and colloquial.
4. Edō. - Unthematic forms occur only in the Second and Third Singular, and in the Second Plural. The root shows Ablaut, appearing in some forms as $\breve{e} d-$, in others as $\bar{e} d$-, altered to $\bar{e} s$ - by euphonic change, e.g. ēst for *édt; èstis for *édtis (§ 108. 1).
5. Ferō. - Fers, fert, fertis show apparent unthematic forms, but in view of the fact that this verb follows the thematic conjugation in Sanskrit and Greek, it is probable that the above Latin forms arose by Syncope (§ 92).
6. Volō. - The only forms which are certainly unthematic are vult, vultis (earlier volt, voltis). The root in the Singular was normally *vel- (cf. vel-im, etc.), but *velō and *vel-t became volō, volt, according to § 73. 5. The Second Singular vìs is not for *vel-s, but comes from the root vei-, also meaning 'wish' ; cf. invitus. Volumus, volunt have followed the thematic inflection with $o$ for $e$ according to §73. 5. Vultis (earlier voltis) is most naturally explained as for *vl-tis, whence voltis (§ гоо. 1). is for ${ }^{*}$ nevolō, ${ }^{*}$ novolō ( $\$ 83.3$ ) and mātō for ${ }^{*} \operatorname{mag}(e)$ votō.

## B. Thematic Presents.

203. Of these there are the following classes :
I. Root Class. - The Present stem consists of the root in its strong form + the thematic vowel $\mathrm{e} / \mathrm{o}$. More exactly the root appeared in that phase of the strong grade which gave its name to the different Ablaut Series (§62). Thus roots of the $\breve{e}$-Series had $\breve{e}, e i(\bar{\imath}), e u(\bar{u})$; those of the $\bar{a}$-Series had $\bar{a}$, etc. The $\breve{e}$-Series is most fully represented. Examples are :
$\breve{e}$-Series: leg-e-/o, root leg-; teg-e- $/ o_{0}$, root teg-; veh-e-/o., root veh-; deic-e-/o., root deic- (later dīc-; §82) ; feid-e-/o., root feid(later $f \bar{i} d-$-) ; deuc-e-/o-, root deuc- (later dūc-).
ă-Series: ag-e-/o., root $a_{o}^{-}$; caed-e- $/ o$., (§ 68).
$\bar{a}$-Series: vād-e-/o-, root vād-.
$\bar{e}$-Series: cèd-e-/o., root cēd-
$\bar{o}$-Series : rōd-e-/o., root rōd-.
II. Reduplicating Class. - The Present Stem is formed by prefixing to the root + the thematic vowel $\mathrm{e} / \mathrm{o}$, a reduplicating syllable, which consists of the initial consonant of the root $+\mathfrak{i}$. The root appears in its weak form (§ 62). Examples: gi-gn-e-/o-, root gen- (cf. Gr. $\left.\gamma^{i}-\gamma \nu-o-\mu a l\right)$; sī-d-e-/o. for ${ }^{*} s i$-sd $d^{e-} / o$. (§ 89), root sed-; also apparently originally *di-dō (cf. redd $\bar{o}$ for ${ }^{*}$ re-d(i)-dō by Syncope ; § 89). Sistō, root stā, and se-rō for *sĭ-sō (§ 98. 1), root *sée, do not strictly belong here. They were originally unthematic formations (cf. Gr. $(\sigma) i-\sigma \tau \eta-\mu l,(\sigma) i-(\sigma) \eta-\mu l)$, but have passed in Latin into the thematic conjugation ; bibō is not properly a reduplicated formation. The root was pib- (cf. Skr. pibāmi; Gr. $\dot{\epsilon} \pi i \beta \delta a$ for $\left.{ }^{*} \dot{\epsilon} \pi \iota-\pi i \beta-\delta a\right)$. The Latin word results from assimilation of $p$ to $b$.
III. T-Class. - This class, like the preceding, is but sparingly represented in Latin. The root appears in its strong form, to which is appended te-/o. Examples are: nec-te-/ o., plec-te-/ o., pec-te-/ o., Alec-te-/ o.
IV. N-Class. - The Present Stem is formed with a nasal infix before the final consonant of the root ; to this is appended the thematic vowel e-/ o. The root appears in the weak form. Examples: find ${ }^{\text {e- } / o ., ~ r o o t ~ f i d-; ~ r u m p-e-~} / o$., root rup-; jung ${ }^{e^{-}} / \mathrm{o}$., root jug. Originally the infix was confined to the Present system, but in some words, as $j u n g \bar{o}$, it appears throughout the entire verb, e.g. $j u n g \bar{o}, j \bar{u} n x \bar{u}, j \bar{u} n c t u s$. In other verbs the nasal appears in the Perfect Indicative, though not in the Perfect Participle, e.g. fingō, finxī, fïctus; string $\bar{o}$, strīnxī, strictus.
V. NO-Class. -- To the root in its weak form is added the suffix $n^{e-} / o$. Originally verbs of this class were unthematic.

The primitive suffix was $n \bar{u}$ - in the Singular, and $n \breve{u}$ - in Plural. The Personal endings were appended directly to these suffixes, so that a verb like stern $\bar{o}$, for example, was once inflected :

| *ster-nū- | *ster-nŭ-mos |
| :--- | :--- |
| *ster-nū-s | *ster-nŭ-tis |
| *ster $-n \bar{u}-t$ | *ster $-n u ̆$ - $n t$ |

But *ster-nu-mos regularly developed to sternimus. Thus two forms of the Plural (sternimus, sternunt) were identical with the thematic inflection and hence led to sternō, sternis, sternit in the Singular, after the analogy of dīcimus, dīcitis, dīcunt to dīcō, dīcis, dicit. Other examples are sper-n $\bar{o}$, tem-n $\bar{o}, l i-n \bar{o}, ~ s i-n \bar{o}$, tollō, for * tl-nō (§ 100. 1).
VI. SCO-Class. - The Present stem is formed by appending
 *porc-scō, suèscō for *suèd-scō.

Many secondary formations also occur, as gemī-scō, tremēe-scō; especially derivatives from contract verbs, as fī̀réscō, from florē̄; lābāasco from làbō; and even from nouns and adjectives, as lapidèscō, rōrēscō, dūrēscō.

The inceptive or inchoative meaning of numerous $s c \bar{o}-$ verbs is not an inheritance from the Indo-European parent speech, but is a special development of the Latin itself. Many verbs of this formation, e.g. nāscor, discō, poscō, hīscō, etc., show no trace of the inceptive force.
VII. JO-Class. - The Present Stem is formed by appending the suffix $j^{e-} /{ }_{o-}$ to a root or stem. Several different formations belong under this head, the chief of which are the following :
a) $j$ e-/ $/$--Presents from roots ending in a consonant. Here $j$ becomes $i$, e.g. jac-iō for *jac-jō; capiō for *cap-jī, and all the so-called verbs in $-i \bar{o}$ of the Third Conjugation. Some verbs originally of this formation have passed over into the inflection of contract verbs in -io, -ire (see $b$ below), e.g. veniō, venīre.
b) $j^{j-} / 0$-Presents from roots and stems ending in a vowel. The $j$, here becoming intervocalic, disappears and the concurrent vowels (except in the First Singular of $\bar{e}-$ and $\bar{i}$-verbs) regularly contract. Examples :

1) Monosyllabic roots : implé-mus for *implé-jo-mos, root plé-; intrāmus for *intrājomos, root tr $\bar{a}-$.
2) Dissyllabic verb-stems : domāmus for * do-mājo-mos, stem domā-.
3) Noun and Adjective stems in $-\bar{a}, \breve{e}, \breve{\imath}: ~ c \bar{u} r \bar{a} m u s$, stem $c \bar{u} r \bar{a}-$; rub̄emus, stem rubĕ-; finīmus, stem finŭ-.

These $\bar{a}$-contracts form the so-called First Conjugation, the $\bar{e}-$ and $\breve{e}$-contracts the Second Conjugation, and the $\breve{l}$-contracts the Fourth Conjugation.
c) Causatives in ejc-/ o., e.g. mon-e $\bar{o}$, doc-ē , torr-e $\bar{o}$. These all take the $o$-phase of the strong form of the root ( $\$ 64$ ). They regularly suffer contraction and form a part of the Second Conjugation.
d) Verbs in -ojō probably once existed in Latin, but have disappeared. Thus arō, arāre was probably originally *arōo (for * àrojō) ; cf. Gr. ג áów. The adjective aegrōtus is likewise possibly to be referred to an orignal *aegrō.

## Tense Formation in the Indicative.

## The Imperfect.

204. The termination -bam in the Imperfect Indicative is plausibly explained as representing an Indo-European Aorist, *bhvām, from the root bhu-. This seems to have been appended to some oblique case of a noun derived from the stem of the verb. The primitive formation would be represented by ${ }^{*} m o n e \bar{e} b h v a \bar{a} m$, * legébhvàm, etc. This theory of the origin of the Latin Imperfect finds confirmation in Slavonic, where the Imperfect consists of a case-form of a verbal noun + the past tense of the verb 'to be.'

Early Latin has both -ibam and -iébam in verbs of the Fourth Conjugation. The ending -iēbam, however, is later in origin than $-i b a m$, and was borrowed from $i \bar{o}$-verbs of the Third Conjugation, e.g. capiēbam.

It has been suggested that the element preceding the -bam in the Imperfect was an old Infinitive. $C f$. such compounds as $\bar{a} r \bar{e}-f a c i o$, 'to make dry.'

Eram for earlier *es-am (§98. 1) exhibits the same praeterite formation as that assumed for ${ }^{*} b h v-\bar{a} m$ in amābam, etc.

## The Future.

205. 206. The Future in $-b \bar{o}$. - The Future in $-b \bar{o}$ is analogous to the Imperfect in $-b a m,-b \bar{o}$ is probably the Present of the root $b h u$-, so that $a m a \bar{a} b \bar{o}$ (for *am $\bar{a}-b h \imath \bar{o}$; § 204) literally means 'I become loving.' Cf. the analogous German ich werde lieben. On $a m \bar{a}-$, mone$\overline{-}$ - in this formation, see § 204. The Future in $-b \bar{o}$ is found also in verbs of the Fourth Conjugation in early Latin, e.g. scibō, audībō.
1. The Future in -am. - This formation, regular in the Third and Fourth Conjugations, is in reality a Subjunctive, or rather two Subjunctives, that have come to be ranked as Indicatives. The ist Singular in -am (for ${ }^{*}-\bar{a} m$ ) is an $\bar{a}$-Subjunctive ; the remaining forms are $\bar{e}$-Subjunctives. See §§ 221; 222.
2. The future in $-s \bar{o}$. - This formation appears in such archaic forms as $\sqrt{\bar{i}} x \bar{o}, f a x \bar{o}$, which are in reality Aorist Subjunctives that have come to be ranked as Indicatives. The Future of sum, erō, is similarly a Present Subjunctive, for ${ }^{*} e s-\bar{o}$ (§ 98. 1) ; cf. Homeric Greek ${ }_{\boldsymbol{\epsilon}}^{\boldsymbol{\epsilon}}(\boldsymbol{\sigma}) \omega$, Attic $\boldsymbol{\omega}^{\boldsymbol{\omega}}$ (by contraction).

## The Perfect.

## The Reduplication.

206. 207. In Verbs beginning with a Consonant. - The Reduplication in such verbs regularly consisted of the initial consonant $+e$.

Where the root began with $s c, s p$, or $s t$, the $s c$, $s p$, or $s t$ appeared in the reduplicating syllable, but the $s$ was lost in the root syllable, $e . g$. sci-ci-d $\bar{\imath}$ (early Latin) spopondì, ste-tî. The reduplicating vowel, $e$, was assimilated to the root vowel when the latter was the same in the Perfect as in the Present, e.g. mo-mord-i, sci-cid-i, pu-pug-ī, di-dic-i , spo-pond- $\bar{i}$; but the original forms with $e$ are often found in early Latin, e.g. memordī, pepugì, spepondì, FHEFHAKED CIL. xiv. 4123.

The Reduplication has disappeared very largely in Latin, yet traces of its earlier presence are sometimes distinguishable, e.g. in rettuli for * ré-(te)tulı̄ (§ 92) ; reppul̄̀ for * ré-peputī; repperī for ré-(pe)perì; reccidì for ${ }^{*}$ ré-(ce) cidì̀. In the same way fidì, scidì represent an earlier *fefidī, *scecid̄̄ (cf. early Latin scicid $\bar{\imath}$ ).
2. In Verbs beginning with a Vowel. - The Reduplication here consisted in prefixing $e$. Only a few verbs have preserved it, e.g.
 $\bar{e} p \bar{\imath}$, root $a p-; \bar{e} m \bar{\imath}$ for $*_{e-}-\breve{m} \bar{l}$. Some scholars refuse to recognize a Reduplication in Latin verbs beginning with a vowel, and explain the long vowel in the foregoing Perfects in other ways.

Stem Formation of the Perfect.

## A. The Primitive Perfect.

207. In the Indo-European parent-speech the accent rested on the root syllable in the Singular of the Perfect, but on the Personal Ending in the Plural. It was probably owing to these primitive accentual conditions that the strong form of the root appeared in the Singular, the reduced form in the Plural. The special phase of the strong form appearing in the Singular was that containing $\breve{o}$ or $\bar{o}$ (see the various Ablaut Series, § 62 ff .). Several of the Indo-European languages, as Sanskrit, Greek, and the Teutonic, have preserved with more or less fulness the original

Ablaut of the root in the Perfect ; ${ }^{1}$ but in Latin there has been a uniform 'levelling' ; either the strong form has invaded the Plural (the usual sequel), or the weak form has invaded the Singular. Examples of the former process may be seen in totondimus, spopondimus; of the latter in ce-č̆d-ì, tu-tŭd- $\bar{\imath}$. In most Latin verbs, however, other formations have largely displaced both of those just mentioned. This has come about, partly as the result of phonetic changes, partly from the workings of analogy. The whole subject is too intricate for detailed consideration here. See Lindsay, Latin Language, p. 494 f.

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\text { B. The Perfect in }-s \bar{i} \text {. }
$$

208. The Perfect in -sì, which appears chiefly in roots ending in labial, dental, and guttural mutes, is by origin an Aorist which has passed over to the Perfect inflection. Cf. Latin $d \bar{\imath} x-\bar{\imath}$ with Greek, ${ }^{\epsilon}-\delta \epsilon \iota \xi-a$. Some verbs have preserved both the true Perfect and this Aorist Perfect, e.g. pepercī and parsì ; pupugī and (in compounds) -punxī; pepigī and (in compounds) -panxī.

## C. The Perfect in $-v \bar{v}$.

209. The Perfect in $-v \bar{\imath}$ is a new formation which has developed in the separate history of Latin itself. The origin of this suffix is not clear ; according to one theory, $-\tau \bar{\imath}$ is borrowed from such Perfects as $f \bar{a} v \bar{\imath}$, la $\bar{v} \bar{i}, f \bar{v} v \bar{\imath}, m \bar{o} v \bar{\imath}, ~ v \bar{o} v \bar{v}, j \bar{u} v \bar{v}$, solv $\bar{c}$, volvi , where $v$ really belongs to the stem.

|  | oì $\delta$ - | $\chi \delta-\mu \epsilon \nu$ |
| :---: | :---: | :---: |
|  | oโ $\sigma-\theta a$ | $\ell \sigma-\tau \epsilon$ |
|  | ot\%- $\epsilon$ | $\boldsymbol{\tau} \boldsymbol{\sigma}-\alpha \sigma \iota$, |
| or Gothic |  |  |
|  | vait | vit-um |
|  | vaist | vit-ub |
|  | vait | vit-un |

## D. The Perfect in $-u \bar{i}$.

210. The Perfect in $-u \bar{u}$ is a development of that in $-v \bar{\imath} ;-v \bar{\imath}$ is thought to have been added to extended forms of the roots e.g. *gen-e-v (root gen-), *dom-a-v (root dom-), whence genui, domuí; § гоз.4. From forms like these the category might easily extend itself. Its diffusion was probably assisted by the existence of such Perfects as fuī, plū - for early f $\bar{u} v \bar{\imath}$ (Ennius), plu $\bar{u} \bar{\imath}$ rū̀, indū̄, exū̀, imbū̀, etc.

## The Inflection of the Perfect.

211. In its inflection the Latin Perfect presents a mingling of Perfect and Aorist forms. The exact determination of the details of this fusion furnishes one of the most difficult problems of historical Latin grammar ; the following explanations can claim only a certain degree of probability.
212. The type of Perfect inflection existing in Latin prior to the fusion of Perfect and Aorist may be partially reconstructed as follows :

| Singular | Plural |
| :--- | :---: |
| 1. vídì 1 | víd-i-mus |
| 2. ? | ? |
| 3, *vìde | *vĩd-ent (for *vid-nt) |

Of these forms $v \bar{l} d \bar{i}$ in the First Singular represents an IndoEuropean middle, *void-ai. The Second Singular and Second Plural cannot be conjectured with any degree of satisfaction.
213. With this true Perfect were fused certain sigmatic Aorists, $v i z$. an $s$-Aorist and an -is-Aorist. These were originally unthematic, i.e. the endings were appended to the stem without the

[^19]help of connecting vowels (§ 201). The inflection of one of these -is-Aorists may be hypothetically reconstructed as follows:

Singular

## Plural

1. *vīd-er-em (for *vid-is-mı; 75. 1; 98. 1; 102. 1)*vīd-is-mos
2. *vīd-is (for *vīd-is-s)
3. *vid-is-t *vid-er-ent (for*vīd-is-ñt)
4. Just what furnished the starting-point for the formal fusion of the two tenses is not clear ; vidistis in the Second Plural is the Aorist form ; so is vide erunt in the Third Plural, with *-ent changed to -unt after the analogy of other tenses, e.g. regunt, amāb-unt; $\bar{e}$ (for $\breve{e}$ ) in -érunt is of uncertain origin. Probably it was borrowed from the Perfect Third Plural in -ēre, which is certainly a different formation, though not at present well understood. The scansion -ĕrunt, frequent in poetry, preserves the earlier quantity. In the Singular, vi$d \bar{\imath}$ has already been explained as originally a Middle which has assumed the function of the Active. First Singular, vīd $\bar{\imath}$, and the First Plural, vìdi-mus, are Perfect forms (§212). The Second Singular vīdistī is difficult of explanation. Possibly the primitive form of the Second Singular Perfect may have been *vīsti. If so, vídistī may be a contamination of *vīstī (Perfect) and *vídis (Aorist), helped on by the influence of the Second Plural vidistis. The assumption of a Perfect * $v \bar{\imath} s t \bar{\imath}$, however, involves difficulties. The Personal Ending of the Second Singular Perfect was -tha in Indo-European. $C f$. Greek oí $\theta a$ for ${ }^{*}$ foi $\delta-\theta a$. In Latin -thă after $s$ should become -tă. Influence of the Second Singular Middle ending ${ }^{*}$-sai ( $=$ Latin $-s \bar{i}$ ) has been suggested ; also of the First Singular ending $-\bar{i}$. The Third Singular *vìde early assumed the regular Personal Ending, $t$, of the other tenses. This gave *vīdet, vīdit. Some have thought that in the true Perfect in Latin the primitive Third Singular was * vī $\bar{\imath}$ (a Middle form, like the First Singular). Some evidence in favor of this view is found in the regularly long quantity of $-\bar{t} t$ in early Latin poetry.

## The Pluperfect.

215. The Pluperfect Indicative in -eram seems to have developed by proportional analogy : vĩderam : vīderō : :eram : erō.

## The Future Perfect.

216. The Future Perfect Indicative is an Aorist Subjunctive. Thus víderō is for a primitive *veid-is- $\bar{o}(\S 75.1 ; 98.1)$, in which $-i s$ - is the same Aorist suffix as already mentioned in §§ 213,215 .

The inflection follows that of Presents in $-\bar{o},-i s$, -it, except in the 3 d Plural, which has -int instead of -unt, probably owing to the influence of the Perfect Subjunctive (§ 219), which it regularly resembles in the other persons and numbers. In strictness the terminations of the Perfect Subjunctive had -is, -ìmus, -itis. Hence, by confusion of the two formations, the $-\bar{i}$ - sometimes appears in the Future Perfect, e.g. Horace, Odes, iv. 7. 20, dederis.

## The Optative.

217. There were two Optative formations in Indo-European, a thematic and an unthematic. Greek $\lambda \dot{v}-o-t-\mu$ represents the former, $\sigma \tau \alpha-i \eta-\nu$ the latter. In Latin probably only the unthematic type is to be recognized. Owing to the thorough fusion of Optative and Subjunctive (§353), all Optative forms are traditionally known as Subjunctives.
218. Present Optative. - Only a few forms occur. The special suffix of the unthematic Optative was $-i \bar{e}-$ in the Singular, $-\bar{i}-$ in the Plural.

Thus the primitive inflection of the Present Optative of the root es-, 'to be,' was :

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Siem, siès, siet are common in early Latin. The classical inflection of the Singular, sim, sis, sit, is formed after the analogy of the Plural. Similarly in early Latin also we find siemus, siètis, sient after the analogy of siem, etc. The weak form of the root, as above, regularly appeared in the Plural. Other illustrations of this Optative are velim (for *vel-iè-m, after vel-i-mus), nōlim, mālim, edim (edō,' 'eat '), du-im, possim.
219. Aorist Optative. - The so-called Perfect Subjunctive in -erim is by origin an Aorist Optative. The tense is formed by means of the Aorist suffix -is- already mentioned in §§ 213, 215 , to which is further appended the Optative suffix $i \bar{e}-, \bar{i}$ - (§ 218 ). Thus the original inflection of viderim was:

| *veid-is-ie-m | *veid-is-i-mus |
| :---: | :---: |
| *veid-is-iē-s | *veid-is-ıे-tis |
| *veid-is-iē-t | *veid-is-ī-nt |

By change of $e i$ to $\bar{\imath}$ (§ 82 ), by rhotacism (§ 98.1 ), and by the regular development of $\breve{\imath}$ to $\breve{e}$ before $r(\S 75.1)$, this gave *vinderièm, etc., Plural vīderimus. But the $i \bar{e}$ of the Singular was early changed to $\bar{\imath}$ after the analogy of the Plural, giving *vīderim, vìderīs, *víderìt. The long vowel was regularly shortened in the rst and 3 d Singular and in the 3 d Plural, but was retained in the rst and 2d Plural, and is common in the 2d Singular. Hence the correct inflection is : viderimus, videritis, and probably also videris. The forms in -imus, -itis, -iss, where they occur, are to be explained as the result of confusion with the Future Perfect (§ 216). A trace of the long vowel in the 3 d Singular is found in Plautus, Mercator, 924, addūxerīt.

Another Aorist formation was by means of the suffix $-s$ - in place of $-i s$. This is seen in ${ }^{2} \bar{\imath} x i m$, faxim, ausim for earlier * dì $c-s-\imath \bar{e}-m$, etc.

## The Subjunctive.

220. Two formations, both descended from Indo-European, are to be recognized. One of these is characterized by the suffix $\bar{a}$ and belongs to the Present tense ; the other is characterized by the suffix $\bar{e}$, and appears not only in the Present, but in the other tenses as well. Both these suffixes take the place of the thematic vowel of the corresponding Indicative formations.
221. A-Subjunctives. - Examples are moneam (for *mone$j \bar{a} m$ ) reg-a-m, audiam, earlier *regām, *audiām; § 88. 2. In the 3 d Singular, and 3 d Plural also, the $\bar{a}$ has become regularly shortened, but traces of the original quantity are preserved in early Latin, e.g. Plautus, Pơnulus, 489, faciāt.

## 222. E-Subjunctives.

I. Amem (for *ama $\bar{a}-j \bar{e}-m$ ) evidently has preferred this type, to avoid the identity of Indicative and Subjunctive, which would have resulted from the $\bar{a}$-formation here; *ama-j $\bar{a}-m$, etc., would have given *amām, * amās, * amāt. For the shortening of $\bar{e}$ in *amem, see § 88. 2. For the $\breve{e}$ in amet, ament, cf. § 22 I . Traces of the original quantity are preserved in Plautus, Curculiō, 208, amēt.
2. The so-called Future Indicative of the Third and Fourth Conjugations is (outside the First Singular, which is an $\bar{a}$-Subjunctive) a Present Subjunctive of the $\bar{e}$-formation which has come to rank as an Indicative, e.g. fer- $\overline{-}-s$, audi- $\bar{e}-s$, etc.
3. The Imperfect Subjunctive also belongs here. There are two formations, both $-s$ - Aorists in origin :
a) Without connecting vowel. Examples are : es-s-em, ferrem, for *fer-s-èm (§ 1о6. 3), vellem for *vel-s-ēm (§ 1о6. 3) ; amā-r-em for *amā-s-em (§ 98. 1) ; monē-r-em for *monē-s-em, audī-r-em for ${ }^{*}$ aud $\overline{-}-s-\bar{e} m$.
b) With connecting vowel, e.g. reg-e-rem for reg-e-s-èm (§ 98. r).
4. The Pluperfect Subjunctive may be the result of proportional analogy : vīdissem : vīdisse : : essem : esse.

The Imperative.<br>A. Active.

223. Present, Second Singular. - The most probable view is that which regards this form as consisting of the simple stem. The Imperative, then, will be analogous to the Vocative, to which it bears in general meaning a strong resemblance. Examples are: $\bar{\imath}$, es, leg-e, c $\bar{u} r \bar{a}$ (for * cūr $\bar{a}-j e$ ), mone (for *mone-je), aud $\bar{\imath}$ (for *audī-je). Verbs in $i \bar{o}$ of the Third Conjugation follow the root class (§203. 1) e.g. cape. Dīc, dūc, fac, fer are probably for dīce, dūce, face, fere by dropping off the final short $e$.
224. Present, Second Plural. - This is formed by adding -te (Indo-European ending of the secondary tenses) to the stem, e.g. $\bar{i}-t e, f e r-t e, ~ e s-t e, ~ l e g i t e ~(f o r ~ * l e g e-t e ; ~ § ~ 73 . ~ 2), ~ a m a ̄ t e, ~ m o n e ̀ t e, ~$ audīte.
225. Future, Second and Third Singular. - The termination is $-t \bar{o}$, earlier $-t \bar{o} d$, appended to the Present Stem, e.g. ìtō, fertō, estō, legitō, etc. Originally this formation had Plural as well as Singular force. Strictly, too, it was a Present, not a Future; the Future force is a special development of the Latin. The ending -tōd is preserved in early Latin, e.g. licētōd, datōd, violàtōd.
226. Future, Second and Third Plural. - The termination of the Second Plural -tote is simply a pluralization of the Singular $-t \bar{o}$. The Third Plural termination -ntō is a new formation (cf. § 225) after the analogy of the relation existing between the Third Singular and Third Plural of the Present Indicative, i.e.
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suntō : estō :: sunt : est
reguntō : regitō :: regunt : regit
amant\overline{\jmath : amātō : : amant : *amãt}
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## B. Passive.

227. The Present. - The Second Singular ending -re represents an original -so, so that Latin seque-re (for * seque-so; § 76. 6) corresponds exactly to Greek $\underset{\epsilon}{\pi} \pi \epsilon(\sigma) o$, ${ }^{\ddot{E}} \pi \pi o v$. The Second Plural in -mini is probably an old Infinitive which has taken on the function of the Imperative. $C f$. the Homeric use of the Infinitive as an Imperative. According to this view Latin legi-min̄ $=$ Greek $\lambda \epsilon \gamma^{\epsilon} \mu \epsilon \nu \alpha$, , both forms being originally the Dative of a verbal noun with the suffix -men. Cf. ger-men, Dat. ger-min $\bar{i}$.
228. The Future forms are the result of appending the Passive $-r(\S 235)$ to the corresponding Active forms.

## The Personal Endings. ${ }^{1}$

## A. Active.

229. Ist Singular. - In the Indo-European parent-speech - $\bar{o}$ was the termination of the primary tenses of the Thematic Conjugation, while -mi was the termination of the Unthematic Conjugation. Secondary tenses had $-m$ only. Latin shows no traces of -mi (on sum, see § 202.3) ; - $\bar{o}$ appears in the Present, Future, and Future Perfect Indicative. Elsewhere in the Indicative and everywhere in the Subjunctive (including some original Optatives) $-m$ appears, e.g. amābam, amāveram, sim, essem, etc.
230. 2d Singular. - The Indo-European endings were -si (primary) and $-s$ (secondary). Latin $-s$ may represent the secondary ending, or original *-si may have lost its final short vowel, so that legis, for example, may be either for *leg-e-s or * leg-e-si.

[^20]231. $3^{\text {d }}$ Singular. - The Indo-European endings were $-t i$ (primary) and $-t$ (secondary). Apparently in the earliest Latin, $-t$ had become $-d$. Cf. early inscriptional forms, e.g. FHEFHAKED, FECED, FECID, SIED ; $-t i$, on the other hand, became $-t$ and very early supplanted the $-d$ of the secondary tenses. The closely related Oscan dialect exhibits this distinction of $-d$ and $-t$ assumed for early Latin.
232. rst Plural. - The only ending appearing in Latin is -mus, earlier *-mŏs, which seems to stand in Ablaut relation (§ 62) to Greek - $\mu \in \mathbf{\epsilon}$ (dialectal).
233. 2d Plural. - The Latin ending -tis probably stands for -te (the Indo-European ending of the secondary tenses) $+s$ borrowed either from the 2 d Singular or the ist Plural.
234. $3^{d}$ Plural. - The Indo-European endings were -nti (primary) and $-n t$ (secondary). In the Italic languages -nti became $-n t$, while -nt became -ns. Oscan and Umbrian preserve this distinction, but in Latin *-ns has disappeared, being everywhere supplanted by $-n t$ (for $-n t i$ ).

## B. Passive.

235. The distinguishing characteristic of the Latin Passive is the presence of final $r$. This formation, in its wide application, is found only in the Italic and Keltic groups of the IndoEuropean family. Its origin is not yet sufficiently clear to warrant an attempted explanation here. Some have connected it with the Sanskrit ending -re of the Perfect Middle. One thing is perfectly certain : Latin $r$ does not arise from the reflexive $s \bar{e}$ as was formerly held. In general the Latin Passive is an outgrowth of an earlier Middle. With the exception of the rst Singular and rst Plural, Middle forms are seen to have been at the basis of the developed inflection.
236. Ist Singular. - Where the Active form ends in $-\bar{o}$, the Passive is -or, e.g. regor (earlier -ōr; § 88. 2), amābor. Where the Active ends in $-m$, the Passive has $r$ instead of $-m$, e.g. ainer, amābar. The originally long vowel before $-r$ sometimes appears in Plautus, e.g. Asinaria, 62, fateōr; Amphitruo, 559, loquār.
237. 2d Singular. - This is in origin a Middle, formed with the Indo-European ending ${ }^{*}$-so, the termination of secondary tenses in the Middle. Thus sequere is for *seque-so (§ 98.1 ).
 $-r e$ by further appending $-s$, the ending of the 2 d Singular Active. Thus sequeris for ${ }^{*}$ sequeré-s (§ 73.2). This was possibly the result of an effort to distinguish the Indicative 2d Singular from the Imperative.
238. 3d Singular. - The origin of the 3d Singular in -tur is too obscure to be considered here.
239. Ist Plural. - In place of $-s$ of the Active ending -mus we have the Passive $-r$, e.g. regimu-r.
240. 2d Plural. - We probably have here a periphrastic formation ; legiminī, etc., presumably stand for legiminī estis, in which legimini is a Middle Participle of the same type as Greek $\lambda \epsilon \gamma^{\circ}-$ $\mu \in v o t$. This formation must have originated in the Present Indicative; legèbāmin̄̀, legēminì, legāmin̄̀, legerémin̄ are all secondary, formed after the analogy of legimini
241. $3^{\text {d }}$ Plural. - The origin of the 3 d Plural in -ntur is too obscure to be considered here.

## The Infinitive.

242. In Latin, as in other Indo-European languages, the Infinitives are oblique cases of verbal nouns which have become stereo-
typed by usage. The Dative and Locative cases have contributed most largely to this category.

## A. Active.

243. Present. - This was apparently in origin the Locative of a noun with an -es-, -os- suffix. Thus reg-er-e for a primitive *reg-es-i (§ 141), as though from a Nom. ${ }^{\text {reg-os. Unthematic }}$ verbs appended -se (for -si), e.g. es-se, fer-re, for ${ }^{*} f e r-s e ; ~ v e l-l e ~$ for *vel-se.
244. Perfect. - The Locative -se (for $s i$ ) is appended to the -is- Aorist stem (§§ 213,215 ), e.g. vid-is-se.
245. Future. - In such forms as dicturum esse, it is probable that originally dictūrum was not a Participle, but an Infinitive. The form has been plausibly explained as being contracted from dict $\bar{u}^{*}$ erom, where dict $\bar{u}$ is Supine, and *erom (for *es-om; § 98. 1) the old Infinitive of the root es- (-esse). This Infinitive is preserved in Oscan and Umbrian, though lost in Latin. The original force of dictū *erom would be 'to be for saying,' i.e. 'to be about to say' (on dictūu see § 252.2). The foregoing explanation accords exzellently with the use of dicturum and similar forms without esse and (in early Latin) with a Plural subject, e.g. crēdō inimē$\overline{c o s} m e \bar{o} s h \bar{o} c ~ d i c t u ̄ r u m, ~ ' I ~ b e l i e v e ~ m y ~ e n e m i e s ~ a r e ~ f o r ~ s a y i n g ~ t h i s, ' ~$ i.e. 'will say this' (C. Gracchus, cited by Gellius, i. 7). After the analogy of periphrastic forms, dictūrum esse subsequently came into vogue (though the form with esse never came to be predominant) and thus gave rise to the Future Active Participle in - $\bar{u} r u s,-a$, $-u m$.

> B. Passive.
246. Present. - Such forms as $\operatorname{reg}-\bar{i}$, $d \bar{c} c-\bar{i}$ are Dative forms; § 139 . Other verbs append the Dative ending to ees-stems, e.g. cūrā̀̄, monērī, audīri, for ${ }^{*} c \bar{u} r \bar{a}-e s-\bar{\imath}$, etc.; so ferrī for ${ }^{*}$ fer-s-i.
$C f$. § 243. No Passive signification originally attached itself to these Dative Infinitives ; at the outset they could not have differed essentially from the Locative Infinitives of the Active. The differentiation into Active and Passive meanings was purely arbitrary.

The Passive Infinitive in -ier (archaic and poetical) is of uncertain origin. Some think that er represents the apocopated Active ending eere. This seems to have been fairly frequent in colloquial Latin, e.g. biber for bibere; tanger for tangere. Agier, therefore, and similar forms might represent Passive Infinitives with an added Active termination.
247. Perfect and Future. - Periphrastic forms are used here, e.g. dictus esse, dictum $\bar{i} r \bar{r}$. The latter consists of the Supine combined with the Passive of $e \bar{o}$ in its impersonal use.

## The Participles.

248. Present Active. - The suffix here is -nt-, e.g. -sēns for *-s-ñt-s (§ 102. 1) in ab-sēns, prae-sēns; regèns for *rege-nt-s. The oblique cases of iens are formed from the stem ${ }^{*} e j-o-$, e.g. euntis for ${ }^{*}$ ej-o-ntis.
249. Future Active. - See § 245 .
250. Perfect Passive. - The suffix was -tus, earlier -tos, appended originally to the weak form of the root, e.g. divc-tus, düctus, tentus for *in-tos (§ 102. i). Where the root ended in $d$ or $t$, ss or $s$ arose phonetically (§ 108. 1), e.g. sessus for *sed-tos; $\bar{u} s u s$ for $* \bar{u} t$-tos. By an extension this spurious ending, -sus became appended also to some guttural and liquid stems, e.g. läp-sus, fīxus, pulsus.
251. The Gerundive. - The origin of the termination-endus, -undus is not yet determined.

## Gerund and Supine.

252. 253. The Gerund. - The Gerund is probably a development of the Gerundive. Such expressions as virtūs colenda est might easily give rise to a colendum est (impersonal), while similarly patriae dēfendendae caus $\bar{a}$ might generate a dēfendendī caus $\bar{a}$.
1. The Supine. - The Supine in $-u m$ is an Accusative of a Verbal noun formed with the suffix $-t u$-; the Supine in $-\bar{u}$ is a Locative formation from the same stem (cf. § 163).

## CHAPTER VIII.

## ADVERBS AND PREPOSITIONS.

ADVERBS. ${ }^{1}$
253. Adverbs are, in the main, case-forms which have become stereotyped as the result of highly specialized usage. 'The cases most frequently thus employed are the Accusative, Ablative, Locative, and Instrumental.
254. Accusatives. - These result from various syntactical usages. Thus:

1. Accusative of Result Produced (Gr.§ $176.2 ; 3$ ), e.g. multum, plērumque, plūrimum, aliquid, facile, fortius, and other comparatives, etc.
2. Appositives, e.g. vicem, partim, etc.; § 310.
3. Limit of motion, e.g. forās.
4. Ablatives. - Here belong :
5. Adverbs in $-\bar{e}$ (for $\cdot \bar{e} d$; § 130) from $\check{o}$-stems, e.g. pulchrē, s $\bar{a} \bar{e} \bar{e}$; certissime $\bar{e}$. Benĕ and matē result from the operation of the 'Breves Breviantes' law (§ 88.3).
6. Adverbs in $-\bar{o}$ (-for $-\bar{o} d$; § I 30 ) from $\breve{o}$-stems, e.g. certō, continu $\bar{o}$. Cf. early Latin meritōd. Citŏ and modŏ result from the operation of the 'Breves Breviantes' law (§88.3).
7. Adverbs in $-\bar{a}$ (for $-\bar{a} d$; § 118) from $\bar{a}$-stems, e.g. extrā, suprā, infrā, contrā, suprā, ultrā, citrā, jūxxtā. Cf. early Latin exstrād, suprād. Many words, clearly Ablative in form, appar-

[^21]ently became Adverbs through the medium of Instrumental constructions, e.g. $\bar{u} n \bar{a}$, rēctā, quà, e $\bar{a}$, eādem (sc. vi $\bar{a})$, etc. Cf. § 34 I .5 .
256. Locatives. - Here belong :
r. True Locatives, e.g. herī, vesperī, humī, bellī, mìlitiae, domī, postrīdiē (§§ 126 ; 173), merīdiē; diē crāstinī; noctū; temere (originally, 'in the dark,' and so 'blindly,' 'rashly') ; also the Pronominal Adverbs $h \bar{i}-c$, illi$\overline{-}-c$, istī-c (§ 197).
2. Ablative in Locative function, e.g. foris.
257. Instrumentals.-Here belong : sponte, forte, repente, numerō, 'promptly' (originally a musical term, - 'with the music,' 'with the beat'), saepe (originally, 'with frequency').
258. Even a few Nominatives have become Adverbs, e.g. adversus; rūrsus for reversus; prōrsus for prōversus.
259. Many adverbs were originally phrases, e.g. dènuō for aē novō (§ 103.4) ; ìlicō for in ${ }^{*}$ stlocō (§ 89) ; admodum. Some have thought that Adverbs in -iter also belong here, e.g. breviter for breve iter, etc. Cf. German kurzweg.

## PREPOSITIONS. ${ }^{1}$

260. Prepositions are in the main Adverbs which have come to have special uses in connection with certain cases. Historically they belong to a relatively late period in the development of language. Originally the cases alone sufficed for denoting relations, but as greater precision became necessary, the requisite definiteness of meaning came to be expressed by various Adverbs, which ultimately crystallized as Prepositions ; yet an independent adverbial usage often remained.
[^22]In the earlier period of their employment, Prepositions enjoyed considerably more latitude of usage than later, being freely combined with almost any oblique case ; ultimately, however, most of them became restricted to combination with particular cases. This is truer of Latin, for example, than of Greek, where the older freedom is quite apparent. The Oscan and Umbrian also show greater latitude than Latin.

## 261. $\overline{\mathrm{A}}, \mathrm{ab}, \mathrm{abs}, \mathrm{au}-$

1. $\bar{A}, a b, a b s$ go back to an Indo-European * $a p o$, Greek $\dot{\alpha} \pi \sigma^{\prime}$. By loss of the final $o$, this became in Latin $a p$-, seen probably in $a p$ eriō. But in composition and in phrases before voiced consonants $p$ became $b, e . g$. abd $\bar{o}$ for *ap- $d \bar{o} ;$ ab genere for *apgenere, and ultimately the form with $b$ supplanted that with $p$. Abs is formed from $a b$ by appending $-s$, probably the Genitive ending in its weak form (§ 138 ), an element frequently employed in amplifying prepositional and adverbial formations. Cf. ex ( $=e c-s$ ) from ic-; sub-s (in suscipıō for ${ }^{*}$ sub-s cipiō; § 105. 1) from sub; obsfrom $o b$; also Greek $\dot{\epsilon} \xi$ by the side of $\dot{\epsilon}_{\kappa} ; \dot{\epsilon} \nu \rho$, whence Attic $\epsilon \boldsymbol{\epsilon} \boldsymbol{s}$, by the side of $\dot{\epsilon} v$; $\dot{a} \mu \phi ' s$ by the side of $\dot{a} \mu \phi \dot{i}$. $\bar{A}$ seems to have developed from abs in compounds, e.g. āvellō from *asvelī̄ (for *abs-vellō; § 105.2), and then to have detached itself as a 'byform' of $a b, a b s$.
2. Au-, Sanskrit ava, goes back to an Indo-European ave. It appears in Latin only in aufugiō, and auferō for *ave-fugiō, *ave-ferō by Syncope (§ 92). Cf. auspex for *av(i)spex; augurium, etc.
3. A form of *apo with aphæresis of the initial vowel is po-, seen in pōno for *po-s-(i)n̄ (§§ $9^{2}$; 89) ; cf. po-situs. Poalso possibly appears in po-liō (root li-; cf. $l i-n \bar{o})$, 'rub off, polish.'
4. A form af, found in early inscriptions and occasionally later, is of uncertain origin. It is probably merely a dialectal variation of $a b$.
5. Ad is cognate with English at. In early Latin inscriptions we find a form $a r$-, used before $f$ and $v$ in composition, e.g. arfuerunt, arversus; also ar-biter, arcessō in classical Latin. Aris probably of dialectal origin.
6. Ambi-, Greek $\dot{a} \mu \phi \dot{\prime}$, is probably an old Locative.
7. Ante for *anti, Greek ảví, is probably an old Locative.
8. Apud seems to be Indo-European *apo (§ 261. 2) with an appended $d$.
9. Circum, circā, circiter are all connected with the noun circus, 'ring, circle, circus' ; circum is the Accusative Singular, used first as Adverb, later as Preposition ; $\operatorname{circ} \bar{a}$ is probably a late formation after the analogy of extrā, suprā (§ 255.3). Circiter probably contains the Comparative suffix -ter (§ 181). Cf. inter, propter, subter.
10. Cis, citrā are from the root $c \breve{\imath}$-, 'this.' On the final -s of cis, see § 261. 2. Citrā has the comparative suffix (§ 181). On the formation, see § $255 \cdot 3$.
11. Clam evidently contains the root of $\bar{c} \bar{l} \bar{o}$, 'conceal.' The formation is uncertain.
12. Com- (cum). - See $\S 58 . b$ ). The relation of co- to comis not clear.
13. Contrā. - See § 255.3.
14. Dē is obscure in its formation and its relationship.
15. Ergā, ergō are obscure in etymology and formation.

16. Ex, ec-, ef-, $\bar{e}$. See § 105. 2. On the final $s$ of $e x$ ( $=e c-s$ ), see § 261. 2.
17. Extrā is formed from ex by means of the Comparative suffix tero- (§ 181). On the case-formation, see § 225.3 .
18. In is the unaccented form of Indo-European *en, Greek ${ }^{\epsilon} \nu$. The original form of the Preposition is seen in early Latin en-do. Cf. Greek ${ }_{\epsilon}^{\epsilon} \nu \delta o-\theta l,{ }_{\epsilon} v-\delta o v$. Another form of endo is indu-(indi-) seen in indi-genus, ind olès, and in several early Latin words, e.g. indu-gredì.
19. Īnfrā. Cf. ìnferus, and see § $255 \cdot 3$.
20. Inter, intrā are formed from in by means of the Comparative suffix-tero-; $\S \S 181 ; 255 \cdot 3$.
21. Intus contains the same suffix as seen in divinitus, funditus, etc.
22. Jūxtā is from the stem jūxt $\bar{a}$-, a Superlative of $j \bar{u} g i s$, 'connected,' 'continuous.' For the case-form, see § $255 \cdot 3$.
23. Ob is from an Indo-European * $o p-i$, a Locative formation kindred with Greek $\dot{\epsilon} \pi-i$, , to which it stands in Ablaut relation (§ 62). The form $o b$ has developed from ${ }^{*} o p$, exactly as $a b$ from *ap (§ 261. 2) ; yet op- probably appears in op-erio, and is preserved in Oscan.
24. Per is for an Indo-European *peri (Locative). Cf. Greek $\pi \epsilon \rho i ́$.
25. Post, early Latin poste, apparently goes back to a Locative *posti.
26. Prae, praeter. - Prae is very likely a Dative from prā-, an extension of $p r$ - (weak form of per-). Cf. $\operatorname{pro}(d)$ from prŏ-. Praeter bears the same relation to prae as inter to in; subter to sub.
27. Prō, pro-, por-. - Prŏ and prō were Indo-European 'byforms.' In Latin, prŏ- appears only in composition, chiefly before $f$ (e.g. profugiō, profiteor, proficīscor), but also elsewhere e.g. protegō, pronepōs). The $d$ of prōd-, seen in prōdesse, prōdīre, etc., is not original, but is probably borrowed from retro $(d)$ or red-. Por-, e.g. in por-tendō, porrigō, polliceor (for *por-liceor) may represent $p_{0}$-, weak form of the root per- (§ 100. 2), with which all the above words are ultimately connected.
28. Prope, propter. - Prope is for pro + pe. Cf. quip-pe. Propter bears the same relation to prope as inter to in, etc.
29. Re-, red-. - Re- is the earlier form; the $d$ of $r e d$ - is of uncertain origin.
30. Secundum is an Accusative from secundus, lit. 'following' (sequor).
31. Se-, early Latin $\operatorname{se} d$-, preserved in séditiō, may have been an Ablative formation; s $\bar{o}$-, seen in $s \bar{o}$-cors, sō-brius, may represent the Ablaut of se-.
32. Sub, subter. - The Indo-European form is ${ }^{*} u p o . ~ C f$. Greek $\dot{v} \pi o ́$ (with irregular rough breathing). The initial $s$ is explained as containing a reduced form of ex, viz. 'ks, so that *( $k$ ) sup would represent the primitive formation. For the change of $p$ to $b$, see §261. 2. On subter, cf. inter.
33. Super, suprā. - Super goes back to an Indo-European *uper. Cf. Greek $v \pi \epsilon \rho$ (with irregular rough breathing). For the initial $s$, see § 289. Suprā sustains the same relation to super as intrā to inter.
34. Tenus is probably the Accusative of an obsolete tenus, -eris, lit. 'a stretch,' root ten-.
35. Trāns is probably the Present Participle of *trāre seen in intrāre, penetrāre; i.e. originally trāns flūmen mīlitès dūxit meant he led his troops, crossing the river. On trā-, see § 105.2.
36. Uls, ultrā from root ol-, 'that' (cf. olle; § 195), are the pendants to cis, citrā.
37. Versus, versum, etc. - See $\S 258$.

## CHAPTER IX．

## SYNTAX．${ }^{1}$

## THE CASES．

## Names of the Cases．

295．The English word case comes from the Latin cāsus，which was a translation of the Greek word $\pi \tau \hat{\omega} \sigma \iota \varsigma . \quad \pi \tau \hat{\omega} \sigma \iota \varsigma$（from $\pi i \pi \tau \omega$ ， fall），as a grammatical term，primarily denoted a＇change＇or＇de－ viation，＇and was accordingly first employed to denote the oblique cases，as being＇deviations＇（ $\pi \tau \boldsymbol{\omega} \sigma \epsilon \epsilon s$ ）from the Nominative．The Nominative itself，therefore，was not at the outset a $\pi \tau \hat{\omega} \sigma t s$ ，though it early came to bear this name．

296．The Greek names of the cases were ：
óvoцa⿱宀兀ıкグ（sc．$\pi \tau \hat{\omega} \sigma \iota \varsigma)$ ，Nominative．
$\gamma \epsilon \nu \kappa \bar{\eta}$ ，Genitive．
ботьки́，Dative．
aitんaт兀ки́，Accusative．
$\kappa \lambda \eta \tau \iota \kappa \eta$ ，Vocative．

[^23]The Nominative was so called because it was the case employed for naming a substantive when it was simply cited as a word.

The significance of the term $\gamma \epsilon \nu \kappa \kappa \eta$ is in dispute. Some have thought it meant 'the case of source or origin.' But the usual meaning of $\gamma \in \nu<\kappa o ́ s$ is against this view. It probably meant 'the case of the genus,' or 'the generic case.' This view accords with the regular use of the Genitive to restrict the meaning of another word by denoting the class or $\gamma^{\prime}$ vos to which it applies, e.g. love of parents, 'fishers of men,' tons of earth.

The Dative was called $\delta$ отьк $\eta$, 'the case of giving,' though this is simply one prominent function of the case.

In calling the Accusative airıa兀ıк $\eta$, the Greeks intended to designate this case as the 'case of effect,' i.e. of the thing caused (airía). Here again the name designated but imperfectly the functions of the case. For the Accusative indicates also the person or thing affected, to say nothing of other uses.

K $\lambda \eta \tau \iota \kappa \eta$ means 'calling case' or 'case of address.'
297. The Romans in devising grammatical terms for their own language simply translated these Greek names. 'Ovoнабтєкй became Nōminātīvus (sc. cāsus). In translating $\gamma \in \nu \kappa \kappa \eta$ by Genetīvus the Roman grammarians falsely interpreted the case as that of source, or origin, misled doubtless by the frequent use of the Greek Genitive in that function. Doтькй became Dativus. Aí九aтıкй was falsely rendered Accūsātī̀us, as though aiтıaтıкท́ were derived from aitıóopaı, accuse. К $\downarrow \tau \iota \kappa \grave{j}$ became Vocātīvus. The Greek had no Ablative, and for this case the Romans were therefore obliged to coin a new term ; they named it Ablätivus, 'the case of taking away.' This designation was fairly accurate for certain uses of the case, viz. those of the true Ablative ; but it ignored the Instrumental and Locative uses of the case (§331). It is uncertain just when and by whom these Latin names were introduced. They had become established as current terms by Quintilian's time (90 A.D.).

## Review of Case-Theories.

298. Since the beginning of the last century, there has been much discussion concerning the original force of the cases both individually and collectively.
299. The Localistic Theory. - The chief representative of this was Hartung, who set forth his views in 183I in a work entitled Ueher die Casus, ihre Bildung und Bedeutung. Hartung started with the assumption (largely a correct one, according to the views of most investigators) that in language the development is from the concrete to the abstract, - that words at the outset indicated definite sense concepts, which later came to be used in transferred meanings. Applying this principle to the cases, he assumed that in Greek and Latin there had been (in addition to the Nominative and Vocative) three cases, one to designate each of the three definite local relations, from, in, and to. Applying this principle first to Greek, he explained the Genitive as the from-case, the Dative as the in-case, the Accusative as the to-case. For Latin, substantially the same explanation was given, except that the Dative of the Greek has in Latin, according to Hartung, been differentiated into two cases, Dative and Ablative, of which the latter has entirely absorbed the $i n$-function, while the Dative has developed new meanings.

Hartung's theory has been styled 'through-going' Localism. It asserted that the original Indo-European case-system (apart from Nominative and Vocative) had originally been limited to three cases, which expressed the three natural space relations: to, from, in. Wherever in the individual languages more cases appeared (as in Latin or Sanskrit), these were held to be differentiations ('Zersplitterungen') of the original three. Whatever may be true of the meaning of individual cases, comparative grammar conclusively proves that Localism in the form in which Hartung held it
is absolutely untenable. A case-system of at least six clearly distinguished oblique cases must have existed in the Indo-European parent-speech.
300. The Logical Theory. - Michelsen, in his Casuslehre der lateinischen Sprache vom causal-localen Standpuncte aus, published in 1843, endeavored to apply logical categories to the explanation of the cases. According to him two principles are fundamental : i) Causality (including cause and effect) ; 2) Finality. Hence in every sentence, he holds, we must have a cause, an effect, and a purpose. The Nominative he regarded as the case expressing the cause, the Accusative the case of the effect, the Dative as the case of finality or purpose. The Genitive and Ablative were also given special treatment, though these cases were regarded as not essential to logical completeness. But Michelsen's theory is false in principle. Language is not founded on logic, and any attempt to explain forms of speech as primarily identical with logical categories will probably always be fruitless.
301. The Grammatical Theory. - In 1845 appeared Rumpel's Casuslehre in besonderer Beziehung auf die griechische Sprache. This book was a protest against the Localism of Hartung on the one hand and the logical theory of Michelsen on the other. Rumpel asserted the purely grammatical character of the cases. The Nominative he defined as the case of the Subject, the Accusative as the case used to complete the meaning of the verb, the Genitive as the adnominal case or case used to complete the meaning of a noun, while the Dative was used to modify the meaning of the sentence as a whole. Where the Genitive limited a verb, it was explained as denoting an internal relation as opposed to an external relation, such as that denoted by the Accusative. As Rumpel concerned himself only with Greek, he propounded no theory of the Ablative.
302. Subsequent Views. - Rumpel's theory shows much better method than either Hartung's or Michelsen's. Yet the grammatical theory of the cases is not universally true. Discussion since Rumpel's day has shown that while some of the cases are undoubtedly grammatical in their origin, others were just as certainly local. To the Grammatical cases belong with certainty the Nominative and the Genitive, the former as the case of the subject, the latter as the adnominal case. To the local cases belong with certainty the Ablative, as the from-case, the Locative, as the in-case, and the Instrumental, as the case denoting association with. Diversity of opinion still exists as to the Dative and to some slight extent as regards the Accusative. If we regard the Dative as originally the case of direction, it is a local case ; if we take it as originally used to modify the sentence as a whole, it is a grammatical case. The Accusative is usually regarded as simply completing the meaning of the verb, and is therefore classified as a grammatical case ; but there is some warrant for considering it as originally denoting the goal of motion, in which case it would be local. See § 3 ri.

## The Accusative. ${ }^{1}$

303. The distinction between the Accusative of the Person or Thing Affected ( $G r . \S$ 175) on the one hand and the Accusative of the Result Produced ( $G r . \S_{176}$ ) on the other, is one of fundamental importance. Other designations are often employed to distinguish the two types. Thus the Accusative of the Person or Thing Affected is called External Object, the Accusative of Result Produced the Internal Object. But these designations are likely to prove too philosophical for elementary pupils. German scholars employ also the designations 'Akkusativ des Affekts' and 'Akkusativ des Effekts,' terms which might be advantageously imitated in English, if our language only had the noun Affect. When the
[^24]Greek philosophers gave the name airıãıкท to the Accusative, they had in mind only the second of the two uses of the Accusative now under consideration, viz. the Accusative of the Result Produced or, as they designated it, of the Thing Caused ('Internal Object,' 'Effect '). The Romans, in transferring the Greek name of the case to Latin, should have rendered it by some such word as Causātious (a designation actually employed by Priscian) or Effectīvus. Either of these would, like the Greek original, have been a defective name (cf. § 296), but it would have been accurate as far as it went.
304. The Accusative with Passives used as Middles. - The treatment of the Accusative after Passive Verbs in $G r$. § 175. 2. a) is based on the elaborate discussions of Schröder, Der Accusativ nach Passiven Verben in der Lateinischen Dichtersprache, Grossglogau, 1870; Engelhardt, Passive Verba mit dem Accusativ, Bromberg, 1879 ; and the treatment of Kühner in his Ausfïhrliche Lateinische Grammatik, ii. §71.b). The explanation of the Accusative as Synecdochical (cf. Gr. §180), which is sometimes given for this construction, is not adequate. It might explain such phrases as cinctus tempora hederā, but is irrational for galeam induitur, nōdō sinūs collēcta, laevō suspēnsī loculōs lacertō, and many others. On the other hand, the interpretation of the Passive in such instances as a Middle, and the Accusative as the Direct Object, furnishes a satisfactory explanation of all phrases of this type.

Sometimes by an extension of usage the Middle is employed to indicate that the subject lets some action be consummated upon himself, or has it done. Cf. English he had his hair cut. An illustration of this is Virgil, Aen. ii. 273, per pedēs trājectus löra, 'having had thongs drawn through his feet.' For a few instances in which a Synecdochical Accusative occurs with Passive verbs, see § 307 .
305. Accusative of Result Produced. - The different constructions grouped together under $G r . \S_{176.1-5 \text {, are often referred }}$ to the Cognate Accusative as the original fromowhich theyrike all developed. The Cognate Accusative, however,-is/sorlrestvicted in its scope that it seems better to regard it as a subdivision of a larger category rather than as the basis of such a categorye - $C f$. Brugmann, Griechische Grammatik ${ }^{3}$, § 439. 2, who classifies
 and $\nu \kappa \kappa \hat{\nu} \nu \iota \kappa \eta \nu$, win a victory, as parallel subdivisions of the general category of the Accusative with Verbs of producing.
306. Accusative of Person Affected and of Result Produced Dependent upon the Same Verb ( $G r$. § i78). - The true character of this construction is best seen in phrases where the Accusative of Result is a Neuter Pronoun or Adjective, e.g. te haec rōgō, id me doces, the essential point being that the Latin was able not only to say id docess (Acc. of Result) and $m \bar{e} d o c \bar{e} s$ (Acc. of Person Affected), but to combine the two constructions in a single phrase. It is a misconception to regard the Accusative of Result in such sentences as any less the Direct Object than the Accusative of the Person Affected. Each of the two Accusatives is a Direct Object equally with the other. There is no essential difference between the construction of haec in haec me rogās and the construction of haec in haec rogās. In many instances the Accusative of Result with verbs of asking, teaching, etc., is clearly of secondary origin, e.g. te sententiam rogō, after tē hōc rogà; té cēlā̃ı sermōnem after tè id cēlāvì.
307. The Synecdochical or Greek Accusative (Gr. § 180).There can be little doubt that this construction is a Grecism. $C f$. Quintilian, ix. 3. 17. Some have claimed it as a genuine Latin idiom, but its almost total restriction to the poets of the imperial age and to the prose writers who imitate them is against any such
theory. The names 'Accusative of Specification' and 'Accusative of Respect' are sometimes used to designate this construction.

With Passive verbs it is better in most cases not to recognize a Synecdochical Accusative. Apparent cases of the construction can usually be classed under $G r . \S$ 1 $75.2 . d$ ), but in some twenty instances in the Augustan poets and in about twice that number in Lucan, Silius, Statius, and Valerius Flaccus, we must recognize the Synecdochical Accusative with Passive verbs.
308. Accusative in Exclamations. - This construction is apparently the result of ellipsis. Just what verb is to be supplied in thought in particular instances, is not always clear, nor is it material that it should be determined.
309. The Accusative as Subject of the Infinitive. - The Accusative as Subject of the Infinitive is an outgrowth of the use of the Accusative as Direct Object. The history of the construction may be illustrated as follows: In an expression like jussi eum abire, eum was originally the object of $j u s s i \bar{z}$, while the Infinitive was a noun in the Locative (§ 243), the force of the entire phrase being: Iordered him to a going (§ 35 I ). But in course of time the eum abīre came to be felt as a whole and as sustaining an object relation to the verb, a conception which led to such expressions as jussit puerōs necā $\bar{r}$, where puerōs could never have been the object of jussit. When once the construction of the Accusative with the Infinite became established, its extension was rapid. Expressions like jussit puerōs necārī easily led to dīxī puerōs necātōs esse, whence puerì necātī esse dīcēbantur and other types of Infinitive usage.
310. Id genus, muliebre secus, etc. - I. Id genus is clearly appositional in origin, as indicated by the fact that it regularly occurs only in combination with a Nominative or Accusative, i.e. not virōrum id genus, but usually vir̄̄ id genus, virōs id genus, etc.
2. Muliebre secus, virile secus, while doubtless of the same origin as id genus, have nevertheless advanced a stage beyond it in actual use. We find not only tīberi muliebre secus, 'children of the female sex,' lit. 'children, the female sex' (of children), but also līberōrum (İ̄berīs) muliebre secus.
3. Meam vicem, tuam vicem, etc. - The appositional or predicate origin of this phrase seems to be indicated by such early Latin usages as Plautus, Mostellaria, 355 , quī hodiè sèsē excruciàn̄̀ meam vicem possit paft, 'who can let himself be tortured, as my substitute ;' Captivi, 697 , ut eum remittat nostrum ambōrum vicem, 'to release him in return for us two,' lit. 'as an exchange for us two.'
4. Magnam partem, maximam partem. - The appositional origin of these phrases is less certain, yet expressions like Livy, v. 14 and ix. 37.9, maximam partem ad arma trepidantes caedes oppressit, seem to point in that direction.
311. Original Force of the Accusative Case. - Rumpel in his Casuslehre, published in 1845 (cf. § 301), contended that the Accusative served simply as the complement of the verb, and that all the varieties of meaning, such as limit of motion, duration of time, direct object, etc., are but varieties of this primary function. Rumpel accordingly regarded the Accusative as a grammatical case, and this view has been maintained by most subsequent scholars. It is advocated to-day by all the leading authorities, e.g. Delbrück, Brugmann, Hübschmann, Holzweissig, Gädicke, and others. This theory, it must be admitted, is both simple and rational. Yet there have always been some scholars who have recognized the goal-notion as representing the original force of the Accusative. While it is impossible to prove the truth of this latter theory, yet the arguments in its favor deserve consideration. They are the following :

1. The antecedent probability of the existence of a case denoting to a place, person, or thing, is very great. It is admitted that
the parent-speech had an in-case (the Locative) and a from-case (the Ablative), so that a to-case might naturally be expected as the complement of these.
2. 'There are advantages in starting with a concrete, tangible meaning for the Accusative. Language undeniably develops from the concrete to the abstract.
3. The goal-notion is shown by the testimony of those IndoEuropean languages whose literature reaches furthest back, to have been an extremely primitive force of this case. Thus Sanskrit and Homeric Greek exhibit the goal-meaning of the Accusative, while the vestiges of it in Latin indicate that in prehistoric times it had been more frequent. Thus the use of town names and of domum, domōs, rūs, to denote the goal of motion, and the occurrence of such expressions as exsequī̄̄s ire, infitiàs ire, pessum dare, venum dare, point to a freer use of the same kind in early times. The Supine in $-u \mathrm{~m}$ also shows this primitive force. It is noteworthy that in post-Homeric Greek this goal-use of the Accusative had become obsolete. Post-Homeric Greek stands upon the same ground as Latin in this respect. In both of these languages the practical disappearance of the goal-notion in historical times would seem to indicate that as other uses developed the original function gradually passed away.
4. The other uses of the Accusative may all be satisfactorily derived from the goal-use as the original one. As the first and most obvious developments must be considered the Accusative of Extent of Space and of Duration of Time. Thus vīgintī mìlia prōcessit would originally have meant 'he advanced to the limit of twenty miles,' whence arose secondarily the notion of extent. Similarly vīgintī annōs vīxit would have meant originally 'he lived to the limit of twenty years,' whence secondarily 'he lived throughout twenty years.' In the case of the Direct Object, the Accusative may also have orginally designated the limit of the action of the verb. Thus aedès strūxit would originally have meant 'he per-
formed an act of building, the goal of which was a house.' Similarly vide $\bar{o}$ hominem, 'I perform an act of seeing, the goal of which is a man.' $C f$. the similar idiom prevalent in certain Romance languages, e.g. Spanish yo veo al hombre, lit. 'I see, to the man' $=$ 'I see the man.' The so-called Accusative of Specification, which, so far as it appears in Latin, is apparently a Grecism ( $\$ 307$ ), would be the least obvious development of the goalnotion. Yet expressions like umerōs similis dē̄, lit. 'like a god as to the shoulders,' may be explained as originally meaning 'looking to the shoulders,' 'as regards the shoulders;' i.e. the shoulders are conceived as the thought limit to which the statement is referred.

## The Dative.

312. The Dative probably originally designated motion towards, motion in the direction of. It was accordingly a localistic case. Some, however, as Delbrück, regard it as a grammatical case, and think that originally it was a mere sentence modifier, very much like the so-called Dative of Reference. But it is much more difficult to develop the notion of direction from the force of the Dative as a sentence modifier than vice versa. It therefore seems simpler to assume this concreter meaning as the original one. In that case the poetical construction of the Dative to denote direction of motion ( $G r$. § 193 ) would represent the original meaning of the case.
313. Dative of Indirect Object.-The Dative of Indirect Object is a very obvious development of the notion of direction, just assumed as the original meaning of the Dative case. Thus tibi hōc dīcō, 'I tell you this,' would originally have meant 'I tell this in your direction'; so tibi ignōscō, 'I pardon you'; rū̄na nōbīs impendet, 'ruin threatens us.'
314. Indirect Object with Verbs signifying 'Favor,' 'Help,' etc.It is a common conception that the Latin is peculiar in construing many verbs of these meanings with the Dative ; but this impression is erroneous, and largely due to the loss of inflections in English, whereby the original distinction between the AngloSaxon Dative and Accusative has become obliterated, so that the English ' Objective' is commonly felt as an Accusative.

As a matter of fact many verbs of the category under consideration were intransitive in Anglo-Saxon and in Teutonic generally, and accordingly governed the Dative case. Modern German gives clear illustration of this. Cf.e.g.ich glaube Thnen, ich verzeihe Ihnen, ich traue Ihnen, ich helfe Ihnen. Latin, therefore, does not differ from English and the other Teutonic languages in taking the Dative with these verbs ; on the other hand there is a striking agreement, when we come to examine the matter from the historical point of view.
315. The Indirect Object with Compound Verbs. - It is a misconception to suppose that the mere fact of composition with certain prepositions was the occasion of the employment of the Dative case. Prepositions when prefixed to neuter verbs often essentially modify the previous character of the verb. Sometimes they make the verb transitive (i.e. the verb becomes transitive) and it then governs the Accusative (e.g. inīre magistrātum. Cf. Gr. 175. 2. a). More frequently a neuter verb, when compounded with a preposition, becomes only so far modified in meaning as to admit an indirect object, not a direct one, e.g. perīcutīs incurrit. Sometimes also composition changes the character of a transitive verb, making the compound incapable of governing a direct object, though admitting a Dative, e.g. obsequor. But in all these the use of the Dative should be referred not to the fact of composition, but to the meaning of the verb. Least of all should the Dative be regarded as depending upon
the preposition, - an error often propagated in the minds of elementary pupils.
316. The Dative of Reference is an outgrowth of the original notion of direction belonging to the Dative. It is a somewhat less obvious development than the Dative of Indirect Object, representing as it does a somewhat weaker relation. Thus in a sentence like nōb̄̄s hostes in cōnspectum vēnerant, the Dative represents the direction of the thought as a whole rather than of the action indicated by the verb. The name 'Dative of Interest' sometimes applied to this construction is somewhat narrower in scope than 'Dative of Reference,' and hence is less satisfactory. The subdivision of the construction into 'Dative of Advantage' and 'Dative of Disadvantage ' is also quite useless. These designations tend to obscure the real character of the construction, calling attention, as they do, to what is merely accidental. A division of the Accusative of Direct Object into 'Accusative of Advantage' and 'Accusative of Disadvantage' would be equally justified.
317. The Ethical Dative. - This is simply a special phase of the Dative of Reference, and is entitled to recognition as a separate category only because it represents the Dative in its most attenuated force, - often, in fact, quite untranslatable. It is confined to the Personal Pronouns.
318. Dative of Agency ; Dative of Possession. - These are both developments of the Dative of Reference. Thus haec mihi agenda sunt originally meant 'this is to be done and it is with reference to me that this is true,' i.e. 'I must do this.' Similarly nōbīs sunt agrì originally meant 'there are lands, and it is of us that this is true,' i.e. 'we have lands.'
319. Dative of Purpose. - This, like the Dative of Indirect Object, is a perfectly obvious development of the original notion
of direction belonging to the Dative. Thus receptū canere, 'to sound the signal for a retreat,' was originally 'to sound the signal in the direction of a retreat'; rè̀ pūblicae clād $\bar{\imath}$ sunt similarly meant 'they are in the direction of damage to the state.'

## The Genitive.

320. The Genitive is best regarded as primarily an adnominal case, i.e. as originally used with nouns to define their meaning more closely. It is therefore a grammatical, as opposed to a local, case. The use of the Genitive with verbs must be regarded as secondary, and as developed from its use with nouns by some association or analogy.
321. Genitive with Nouns. - The special kind of closer determination expressed by the Genitive, depends upon the context. There was no one type from which the others developed, but all of the varieties enumerated in $G r$. § 195 (excepting the Genitive of Quality) are equally primitive. Most of these call for no special comment, but the Objective Genitive is noteworthy as exhibiting at times a wider extension of application than at first belonged to it. Theoretically the Objective Genitive is used only with verbal nouns whose corresponding verb governs the Accusative. Thus amor patris corresponds to amāre patrem, metus deōrum to metuere deōs, etc. But by an extension of usage we frequently find the Genitive used with nouns derived from verbs which govern other cases, and even from verbs which admit no case construction whatever. Typical examples are: cōnsuétūdō hominum, 'intercourse with men'; excessus vītae, 'departure from life'; ira praedae amissae, 'anger on account of the loss of the booty'; argentī $\bar{o} r \bar{a} t i \bar{o}, ~ ' t a l k ~ a b o u t ~ t h e ~ m o n e y . ' ~ T h e s e ~$ relations, however, are usually more accurately expressed by means of prepositions.
322. Genitive of Quality. - This seems to have been of secondary origin and to have developed from the Subjective Genitive. Thus homō magnae virtūtis was probably originally 'Virtue's man.' In conformity with this origin, the Genitive of Quality more commonly denotes a permanent quality, as opposed to the Ablative of Quality, which was primarily employed to designate qualities which were more or less transitory. For a completer statement of the difference between the Genitive of Quality and the Ablative of Quality, see § 345 .
323. Genitive with Adjectives. - This construction must be regarded as equally primitive with that of the Genitive with nouns. Cupidus laudis, for example, is just as original a construction as cupiditās laudis.

As regards the construction with similis, many fine-spun theories have been propounded to account for the difference between similis with the Genitive and similis with the Dative. The difference, however, is probably merely one of chronology and not of meaning. In the earliest Latin we find similis construed only with the Genitive. This is probably Plautus's unvarying usage. Later the use of the Dative begins to creep in, doubtless after the analogy of $p \bar{a} r$ and similar words construed with the Dative, and as time goes on the Dative gains the supremacy more and more, until in Silver Latin the Genitive is comparatively rare. See Jones, Thomas M., Case-Constructions of Similis and its Compounds, Baltimore, 1903.
324. Genitive with Verbs. - If the Genitive was primarily an adnominal case, its use with verbs must be of secondary origin, and is due either to some analogy whereby the verb adopts the construction of a noun of kindred meaning, or else to the ellipsis of a governing word.
325. Genitive with Meminī, Reminīscor, Oblīviscor. - With verbs of remembering the use of the Genitive apparently comes from associating the verb with memor. Thus memini $\bar{\imath}$ was felt as memor sum. Obliviscor followed the analogy of its opposite memini. Cf. English differ with after the analogy of agree with. See Babcock, C. L., A Study in Case-Rivalry, being an Investigation regarding the Use of the Genitive and Accusative with Verbs of Remembering and Forgetting. (Cornell Studies in Classical Philology, Vol. XIV.) New York. Macmillan, i9оı.
326. Genitive with Admoneō, etc. - Here the verb of reminding was probably felt as equivalent to aliquem memorem reddere, and was construed with the Genitive on this principle.
327. With Verbs of Judicial Action the Genitive is plausibly explained as resulting from an ellipsis of the governing word, crimine, jūdiciō, nōmine. Thus Verrem avā̄ritiae coarguit is to be regarded as standing for Verrem avāritiae crimine coarguit; 'he convicts Verres on the charge of avarice.' Occasionally crimine was expressed, e.g. Tacitus, Annals, vi. 14. 2 cecidère conjūrātiōnis crimine; iii. 44.8 maiestātis crimine reum.
328. Genitive with Pudet, Paenitet, etc. - The Genitive here is held to depend upon the noun notion implied in the verb. Thus pudet suggests pudor; paenitet, paenitentia; miseret, misericordia, etc.
329. Interest and Rēfert. - The Genitive here is probably the Subjective Genitive used predicatively, i.e. patris interest rem familiārem cūrāre is quite analogous to patris est rem familiārem cūrare. For the Ablative Singular Feminine of the Possessive with réfert and interest, see § 349. 3 .
330. Genitive with Other Verbs. - With verbs of plenty and want, e.g. compleo, impleo, indigeo, the Genitive, where used, is employed after the analogy of its use with adjectives of plenty and want; thus compleō after plènus; indigeō after egènus, etc. But with most verbs of this category the Ablative is the regular construction. Potior when construed with the Genitive follows the analogy of potens, 'master of.'

## The Ablative.

331. The Ablative is a so-called syncretistic case, i.e. a case resulting from the fusion of more than one original case. The Ablative represents three original Indo-European cases, viz. the true Ablative or from-case, the Instrumental or with-case, and the Locative or $i n$-case. Evidences of the fusion referred to are found both in the forms and in the functions of the so-called Ablative.
a) Forms: Only a portion of the forms designated as Ablative are historically such. Thus in $\bar{a}$-stems the Ablative Singular is a true Ablative (e.g. portā, for portād; § 118). In the Plural of $\bar{a}$ stems the so-called Ablative is probably an Instrumental. The same is true of $\breve{o}$-stems as of $\bar{a}$-stems. In Consonant stems the Ablative Singular in $-e$ (e.g. mïlite) is probably a Locative (§. 141), while the Plural forms ending in -ibus are true Ablatives. In the $-\breve{-}-,-\breve{u}-$, and $-\bar{e}$ - stems both the Ablative Singular and the Ablative Plural are true Ablatives.
b) Functions: The triple function of the so-called Ablative also points clearly to a triple origin of the case. Thus we find from-uses, with-uses, and $i n$-uses (the last much rarer than the others) side by side. Notions so radically distinct could hardly have developed from a single original case.

By the Romans, of course, the Ablative was felt as a single case. They were totally ignorant of its syncretistic origin, although they recognized its great diversity of function.
332. Causes of Syncretism in the Latin Ablative. - Despite their radical differences of meaning, the Locative, Ablative, and Instrumental cases naturally possessed certain points of contact. Thus aquà lavāre might have meant originally either 'to wash with water' or 'to wash in water,' i.e. might be expressed either by the Instrumental or the Locative. Similiarly eqū̀ vehī might mean 'to be borne on a horse' or 'by a horse' ; onus umerō sustinet, 'he bears the load on his shoulder' or ' with his shoulder'; carris veniunt, ' they come with carts' or ' on carts,' etc. These examples all show points of contact between the Locative and Instrumental. The Ablative and Instrumental also have certain points of contact. Thus $\bar{i} r \bar{a} \bar{a} r d \bar{e} r e ~ m i g h t ~ m e a n ~ e i t h e r ~ ' t o ~ b u r n ~$ with anger' or 'from anger'; lacte vivunt might mean either 'they live from milk' or 'by milk,' etc. Points of contact between Locative and Ablative are naturally much less frequent, yet such English expressions as 'to receive at the hands of 'and ' from the hands of ;' 'the wind is in the west' and 'the wind is from the west,' show that even here contact was possible.

Ablative, Instrumental, and Locative, therefore, to a certain extent occupied common ground in the field of thought, and this circumstance ultimately led in Latin to a complete fusion of the three and to the establishment of a single syncretistic case, - the Ablative.

## Genuine Ablative Uses.

333. The true Ablative designated dissociation or the point of departure. When the dissociation is external, we call the construction Ablative of Separation ; when the dissociation is internal, we call it Ablative of Source, a construction which in prose is confined to narrow limits. The Ablative of Agency is also a development of the true Ablative, the agent being conceived as the source from which the action emanates ; e.g. in $\bar{a}$ Caesare accūsātus est the action was primarily conceived as emanating from Caesar as its source.
334. Ablative of Comparison. - This construction also reveals the original conception of point of departure. Thus melle dulcior primarily meant 'sweeter, reckoning from honey as the standard,' and so in similar expressions. An examination of Cicero's orations shows that in this writer the Ablative of Comparison is mainly restricted to negative sentences, to interrogative sentences implying a negative, and to a few stock phrases such as tūce clärius, làtius opīniōne, etc.

When plūs, minus, longius, and amplius are used as the equivalents of plüs quam, minus quam, etc., the plūs, minus, etc., were probably originally appositional. Thus amplius vĭgintī urbēs incenduntur originally meant 'twenty cities, (aye) more were fired.' This explanation, of course, involves the assumption that originally a different order of the words existed in sentences of this type, e.g. vīgintī urbēs, amplius, incenduntur, and this assumption is borne out by the repeated occurrence of this order, e.g. Tac. Ann. xii. 43 quīndecim dièrum alimenta, non amplius, 'food for fifteen days, not more'; Livy xxix. 32. 5 cum quīnquāgintā, haud amplius, equitibus, 'with fifty horsemen, no more.' For a detailed discussion of the Ablative of Comparison, see Neville, K. P. R., The Case-Construction after the Comparative in Latin. (Cornell Studies in Classical Philology, Vol. XV.) New York, Macmillan, rgor.

## Instrumental Uses of the Ablative.

335. The Instrumental was primarily the case of association or with-case.
336. Ablative of Accompaniment. - This is logically one of the first and most obvious developments of the sociative idea. The construction is not frequent, however, being confined mainly to military expressions. Gr.222.1.
337. Ablative of Association. - Besides the idea of accompaniment (which strictly applies only to persons in connection with a verb of motion) the Ablative also sometimes denotes association. This construction was never common in Latin, yet it should be recognized in a limited set of expressions ; thus with jungere, conjungere, miscēre, mūtāre, permūtāre, assuētus, e.g. lib̄̄̀do scelere jüncta, 'lust joined with crime'; mella $\approx \bar{\imath} n \bar{o}$ miscēre, 'to mix honey with wine '; bellum agricultūrā permūtant, ' they exchange war for farming'; assuētus labōre, 'accustomed to toil' (lit. ' familiarized with toil'). In all of these expressions and in some others of less frequent occurrence, it seems better to recognize the primitive sociative force of the Instrumental, rather than the Ablative of Means, as is done in Gr. 218. 5; 7. For a fuller discussion of this Ablative of Association, see Bennett in Transactions of the American Philological Association, Vol. XXXVI (1906), pp. 64 ff .
338. Ablative of Attendant Circumstance (Delbrück's 'Instrumentalis der Begleitenden Umstände'; Vergleichende Syntax, § 195). - This construction also is a direct outgrowth of the sociative idea inherent in the Instrumental. Thus dat sonitūu magnō strāgem means 'occasions destruction in connection with a loud crashing'; nèmō mea fünera fiètū faxit,'let no one celebrate my obsequies with weeping' ; exstinguitur ingentī lūctū, 'he dies under circumstances of great sorrow,' etc.
339. The Ablative of Manner is another obvious development of the sociative idea. Thus in magnā gravitāte loquitur, 'he speaks with great impressiveness,' the 'impressiveness' was primarily conceived as an accompanying feature of the speaking. 'Manner' differs from 'Attendant Circumstance' in that it is regularly restricted to abstract words, e.g. celeritāte, virtūte, dignitāte, etc.
340. Ablative of Accordance. - The construction treated under Ablative of Manner in $G r . \S$ 220. 3, viz. sū̀s mōribus, meā sententiā, etc., seems to be closely connected both with Manner on the one hand and Attendant Circumstance on the other. The type is so definite and pronounced that it deserves clear recognition in our Latin teaching. Another excellent example of the construction is seen in Cic. de Sen. 3, pares autem vetere prōverbiō cum paribus facillimè congregantur; 'according to the old proverb, "birds of a feather flock together." '
341. Ablative of Means. - The notion of Means is an outgrowth of the idea of Association. Thus, hostem tèlō percussit is primarily 'he, along with a spear, smote his enemy.' Out of this sociative idea the notion of means or instrument developed secondarily. Yet there are few instances of the Abative of Means in which traces of the sociative notion are not apparent, and in some cases this idea is very prominent, e.g. deōs precibus adōrāre, 'to worship the gods with prayers.'
342. With ūtor, fruor, fungor, potior, vescor, the Ablative of Means is a natural result of the Middle, i.e. reflexive, use of these verbs, 'benefit one's self,' 'enjoy one's self,' etc.
343. With opus est the Ablative is a secondary construction after the anology of $\bar{u} s u s$ est with the Ablative. In $\bar{u} s u s$ est aliqu $\bar{a} \bar{e} \bar{e}$, 'there is need of something,' the Ablative was originally one of Means, lit. 'there is service by means of something.' From the notion of use the notion of need arose secondarily. Cf. German ich brauche etwas, 'I need something,' as an outgrowth of the earlier meaning, 'I use something.' Besides the use of ūsus est with the Ablative, we find $\bar{u} s u s$ used predicatively, e.g. hōc $\bar{u} s u s$ est, 'this is necessary.' Now in the case of opus, the predicate construction was probably the earlier; opus is best taken as the Genitive of $o p s$, 'help, service.' The formation would then be a relic of Genitives of the type of nominus, necessus, etc. (§ 138 ).

At the outset hōc opus est meant 'this is of service,' secondarily 'this is necessary.' Early Latin exhibits many instances of this predicative use of opus in its original meaning, 'of service,' and the same force is noticeable at times in Cicero (e.g. de Or. ii. 296), Livy (e.g. xliii. 19. 4), and later writers. The construction opus est aliqu $\bar{a} \bar{a} \bar{e}$ seems to be historically later than the predicate construction, and to have developed after the analogy of $\bar{u} s u s$ est aliqu $\bar{a} r \bar{e}$. It is in view of this theory of the origin of the construction that it has been classed in the $G r$. as a subdivision of the Ablative of Means.
3. With continērī, cōnsistere, cōnstāre, consist of, be composed of, the Ablative was probably originally one of Means. Such is the view of Ebrard, de Ablativi, Locativi, Instrumentalis usu, p. 645. Kühner and Roby also give this explanation for the Ablative with cōnstāre and cōnsistere; the use with contine è $\bar{\imath}$ they explain as Locative. But all three words originally had the same meaning, 'hold together, be held together,' and it seems unnecessary to adopt different explanations for the separate verbs. Some scholars regard the Ablative with all three verbs as a true Ablative usage. This view is based upon the occurrence of ex with the Ablative with constare. But prepositions are a very uncertain guide in such matters. Often more than one case relation is possible with the same verb; and often a verb in its developed meaning takes a different construction from that which it originally had. See Delbrück, Vergleichende Syntax, I., p. 23.
4. Quid hōc homine faciās; quid mē fīet? Delbrück in his Ablativus, Localis, Instrumentalis, p. 17 (published in 1867), explained the case in expressions of this type as a true Ablative. Ebrard's collections for early Latin, however, showed that the construction was rather Instrumental in origin, and Delbrück now (Vergleichende Syntax, I., p. 248) adopts this view.
5. Ablative of the Way by which. - This construction seems to be one of considerable antiquity, and deserves recognition as
an independent type of the Instrumental. It appears not only in Latin, but in several other Indo-European languages. Illustrations for the Latin are : ut jugis Octogesam perveniret, 'that he might reach Octogesa by way of the mountains' ; portīs èrumpunt; frūmentum quod fū̀mine Ararì subvexerat. Cf. German mit der Bahn reisen, where the traveller is evidently conceived as keeping company with the road.
342. Ablative of Cause. - Cause is sometimes referred to the true Ablative for its origin. In accordance with this theory $\bar{i} r \bar{a}$ ardēre meant originally 'to burn from anger.' The Sanskrit often employs the Ablative in this way. On the other hand an Instrumental origin is equally conceivable. Cf. such English expressions as burn with anger, howl with pain, leap with joy, green with envy; the Sanskrit employs the Instrumental as well as the Ablative to denote this relation. Other Indo-European languages also use the Instrumental to denote Cause. While it is impossible to prove that Cause has developed exclusively from the Instrumental conception, yet it is likely that this case has at least had the greater share in propagating the construction; such is now the opinion of Delbrück (Vergleichende Syntax, I., § 126). Cf. also Kühner, Ausfïhrliche Grammatik, ii. p. 291.
343. Ablative of Degree of Difference. - This seems an outgrowth of the Ablative of Means ; i.e. $\bar{u} n \bar{o}$ diē longiōrem mēnsem faciunt meant primarily 'they make the month longer by means of one day,' and so on.
344. Ablative of Price.-Price was in its origin a development of the Means notion. At the outset, the construction must have been confined to verbs of buying, e.g. puellam viggintī minis $\bar{e} m i t$, 'he bought the girl by means of twenty minae.' With verbs of selling the price was not strictly the means of selling; but
after the analogy of verbs of buying, such verbs early came to take the Ablative construction. A still further extension of the construction is seen in its application to verbs of costing, being worth, etc., and also to the adjectives vīlis, 'cheap' ; cārus, 'dear,' 'too dear,' e.g. HS sex mīlibus cōnstat, 'it costs 6000 sesterces'; asse cārum, 'dear at a farthing.'

The use of tantī, quantī, plūris, minōris with verbs of buying and selling is the result of a transference of the Genitive of Value ( Gr. § 203.3) from verbs of valuing, estimating, etc., to verbs of buying and selling. Such a transition is psychologically easy. Cf. our English I wouldn't give a penny for that (a phrase of buying) in the sense of $I$ don't value that at a penny.
345. The Ablative of Quality is an obvious outgrowth of the sociative force of the Instrumental case. Thus in a sentence like serpèns immān̄ corpore lābitur, the original idea was 'the serpent glides on with its huge body,' as though the body were a distinct accompaniment of the serpent. But in course of time the Ablative in such cases came to be felt as a modifier of the noun. In this way such expressions as acerba tuēns immān $\bar{\imath}$ corpore serpēns became possible. Here the phrase immāni corpore can be conceived only as an Ablative of Quality, limiting serpēns ; it cannot be associated with the verb as in the first example.

In conformity with its origin, the Ablative of Quality primarily denotes more or less transitory qualities. Qualities which are the mere outward accompaniment of an action are naturally not permanent. The observation sometimes made that the Genitive denotes internal qualities, whereas the Ablative primarily denotes external ones, is not sufficiently exact. In the phrase hortātur ut bon $\bar{o}$ anim $\bar{o}$ sint, 'he urges them to be of good courage,' the quality is internal ; yet the Genitive could not here be used ; for while the quality is internal, it is transitory. On the other hand, 'a man of high purpose' is in Latin vir magn $\bar{\imath}$ animì, since a per-
manent and not a passing quality is intended. By an extension of usage the Ablative is sometimes employed, where ambiguity would not result, to indicate permanent characteristics; but the Genitive is not used to denote temporary qualities. Physical and bodily characteristics are regularly designated by the Ablative. For an excellent discussion of the Ablative of Quality, see Edwards, Geo. V., The Ablative of Quality and the Genitive of Quality. New York, 1900.
346. Ablative of Specification. - This seems to be a development of the sociative force of the Instrumental. Thus Helvétii virtūte praecedunt meant originally 'the Helvetii with their valor are superior' ; so pede claudus, 'lame with his foot.' The Means conception may also have assisted in the propagation of the construction.
347. Ablative Absolute. - The Ablative Absolute construction is an outgrowth of the sociative force of the Instrumental. Thus in Plaut. Trin. Prol. 13, rem paternam me adjūtrīce perdidit, the sense is: 'he lost his property (in connection) with me helping him' ; so frequently $m \bar{e} j \bar{u} d i c e, ~ ' w i t h ~ m e ~ a s ~ j u d g e ' ; ~ t \bar{e} ~ p r a e s e n t e ~$ 'with you present.' Cf. further scissā veste, passìs capillīs, 'with clothes torn, and hair dishevelled.' At first the Ablative in such phrases modified the verb of the sentence, but ultimately the original construction was lost sight of, and the phrase as a whole came to be felt as a kind of loose modifier of the rest of the sentence (Ablative Absolute). See Brugmann, Die lateinischen to-Participia, Indogermanische Forschungen, Vol. V., p. 142 ff.

Others have regarded the Ablative Absolute as a Locative development. This theory was suggested by the fact that the Locative is the case absolute in Sanskrit. That fact, however, would be of little significance for Latin unless it can be shown that the Locative was the case absolute in the Indo-European parentspeech. But there is nothing to show that such was the case.

In fact each language seems to have developed its own case absolute. In Sanskrit we have the Locative, in Greek the Genitive and Accusative ; in Gothic there are traces of the Dative; modern German employs the Accusative. As regards Latin, therefore, there is no anterior probability in favor of any particular case. The question is simply one of evidence, and the evidence points to an Instrumental rather than to a Locative origin. Those who advocate a Locative origin would find the beginnings of the construction in the temporal force of the Locative, e.g. Servīo régnante, 'in the time of Servius reigning'; bellō confectō, 'at the time of the war having been finished,' etc. But this explanation seems much less natural than the former.

Another theory, that of Bombe (De Ablativo Absoluto, Greifswald, 1877), refers the Ablative Absolute to the true Ablative for its origin. Bombe explains bellō cōnfectō, etc., as 'after the war having been finished.' But no such use of the true Ablative to denote time after which is known for Latin. Moreover, if Bombe's theory were true, we should expect a predominance of time-words in the early history of the construction; but no such predominance is found to exist.

## Locative Uses of the Ablative.

348. The Locative seems to have designated originally the space in or within which something is done. From this meaning the notions at, on subsequently developed (Delbrück, Vergleichende Syntax, I., p. 183). The Locative uses of the Ablative naturally fall into two classes : Place Relations and Time Relations.
349. Place Relations.-These may be either literal or figurative.
350. In its literal force the Locative may mean :
a) 'in,' as premit altum corde dotōrem.
b) 'on,' as pharetram fert umero.
c) 'by,' 'near,' as litore curvō exstruimus torōs. This last appears to be rare.

The preposition, however, is usually necessary to express these relations, except in poetry and late prose, and in the classes of words specified in Gr. § 228. 1.

Some recognize a Locative use in tenēre sè castrīs, aliquem fecto recipere, pugn $\bar{a}$ vincere; but all of these easily admit interpretation as Instrumental usages, and in the phrase conquer in battle it is significant that the Sanskrit regularly employs the Instrumental case.
2. In figurative uses the Locative function of the Ablative is restricted to very narrow limits. Here belong, however, a few phrases such as animis pendent, lit. 'they are in suspense in their minds' (cf. the Singular animì in animū pendēre) ; stāre prōmissīs, 'to stand by one's promises ; ' stāre conventīs; manère prōmissìs. In his Ablativus, Instrumentalis, Localis (1867), p. 39, Delbrück formerly pronounced in favor of recognizing a Locative usage in connection with glōrior, dēlector. But now in bis Vergleichende Syntax, I., p. 253, this scholar regards the construction as Instrumental in origin. The same explanation is also to be preferred for laetor, gaudē̄, etc. Similarly with fīdō and cōnf $\bar{d} \bar{o}$ an Instrumental origin is the more probable, inasmuch as we find this case used in Slavic with verbs of trusting.
3. Rēfert and Interest. - The Ablative Singular Feminine of the Possessive with refert originally limited the $\overline{r e}$ (Ablative of $r \bar{e} s$, 'thing ') of réfert. If the construction was Locative in origin, me $\bar{a}$ refert may have originally meant 'it bears towards my affair ' (Goal Locative ; § 35 r), i.e. 'it concerns me.' The use of the Ablative Singular Feminine of the Possessive with interest is of secondary origin, being modelled on the construction with réfert, in consequence of similarity of meaning. Some regard me $\bar{a}$ réfert as equivalent to ex mē $\bar{a} \bar{e}$ fert; me $\bar{a} r \bar{e}$ has also been explained as a stereotyped Dative ( $\$ 886 . b ; 174$ ), and even as a Nominative, $i . e$. for me $\bar{a} r \bar{e}(s)$ fert, with retention of the original long $a$ of the Nominative in $m e \bar{a}$; § ir2. I.
350. Time Relations. - The transference of the Locative from space relations to relations of time is easy and natural. In this way arose the notions of time at which and within which. The use of the Ablative to denote duration of time, which occurs with some little frequency in the best prose of all periods, e.g. Caesar, B. G. i. 26. 5, eāque tōtā nocte continenter ièrunt, is probably not a development of the time within which, but is rather to be referred to an Instrumental origin. This use of the Instrumental to denote duration of time would correspond to the use of the Instrumental to denote the way by which (§ 34 I .5 ).
351. Locative of the Goal. - Sanskrit and Greek both exhibit a goal use of the Locative. This is the result of extending to verbs of motion a conception primarily belonging only to verbs of rest $C f$. in English he went among the Indians, after he is among the Indians. Examples in Latin are confined chiefly to the archaic period. Thus, forō pōnit (Ennius) ; locō collocāre (Lucilius); certā parte repōnunt (Lucretius). Genuine Locative formations, humì, domì, etc., also occur in this sense, e.g. domī advenièns.

## Surviving Locative Forms.

352. The chief genuine Locative formations in common use are enumerated in $G r$. § 232. Beside these we should probably recognize the Locative of an $u$-stem in noct $\bar{u}$, and (by association with noct $\bar{u}$ ) in di $\bar{u}$. On dié, as the Locative of diès in such expressions as quartī dié, postrīdiée (for posterī diē), see § 256. 1. Plural formations in $-\bar{s} s$ from $\bar{a}$ - and $\check{o}$-stems are more safely regarded as Instrumentals which have taken on all the functions of the Ablative, Locative included. Plurals in -ibus of the Third Declension are certainly Ablative in form. Formations in $-e$ of the Third Declension, e.g. Sulmōne, are original Locatives ; § 141.

## THE MOODS．${ }^{1}$

Latin Names of the Moods．

353．1．The Greek name for mood was ${ }_{\epsilon} \boldsymbol{\gamma} \kappa \kappa \lambda \iota \sigma \iota s$ ，literally＇in－ clination＇or＇turn，＇i．e．＇turn of thought．＇The Romans transferred this designation to their own language as modus，which is the universal designation for mood among the Latin grammarians． Yet traces of the influence of the Greek designation are still to be seen in the definitions given by the grammarians．Thus Priscian， probably following the tradition，defines modi as diversae inclina－ tiones animi，varios eius affectiones demonstrantes（Keil，Gram－ matici Latini，Vol．II．，p． 42 I．17）．Diomedes（Keil，Gram．Lat． Vol．I．，p．338）gives the heading：De modis sive inclinationibus verborum，indicating that inclinatio was sometimes used as an alternative designation．

2．The Greeks recognized five $\boldsymbol{\epsilon} \gamma \kappa \lambda i ́ \sigma \epsilon \iota s$ ，viz．о́pıбтькй（Indica－ tive），$\pi \rho \circ \sigma \tau \alpha \kappa \tau \iota \kappa \eta$（Imperative），єن̉ктькท́（Optative），íтотактькク่ （Subjunctive），$\dot{a} \pi а \rho \epsilon ́ \mu ф а т о s ~(I n f i n i t i v e) . ~ . ~$

3．＇Oصьт兀兀кท＇was variously rendered by the Latin grammarians as modus finitus，pronuntiativus，or indicativus．Neither of these designations was precise，however，as ${ }_{\epsilon}^{\prime \prime} \gamma \kappa \lambda \iota \sigma \iota s$ ópıбтıк $\begin{gathered}\text { meant }\end{gathered}$ ＇mood of definite statement＇（from ópi弓 $\omega$ ，＇bound，＇＇limit，＇＇define，＇ ＇state definitely＇）．Hence definitivus would have been a better name．
 literally translated by the Romans as modus imperativus．
 the designation was good for only a small portion of the uses of the Greek Optative，viz．its employment in wishes．It did not apply with accuracy to the Potential uses of the mood．The

[^25]Romans, having no special verbal forms recognized as Optative, had no need of the designation modus optativus. Yet they sometimes used it, ad imitationem Graccorum, as Priscian remarks (Keil, Gram. Lat. Vol. II., p. 407). But it should be noted that the Romans never used the name optativus to designate a group of inflected forms. With them it designated merely a syntactical use of the Subjunctive, viz. the Subjunctive in wishes. They thus made the name narrower than the Greek єv̉ктьки, whose syntactical province extended beyond what its title designated.
6. "E $\mathrm{E} \kappa \lambda \iota \sigma \iota s$ íтотактьк$\dot{\eta}$ meant 'mood of subordination' and was the Greek designation for what we ordinarily call the Subjunctive. But the name was a poor one, since it applied only to the uses of the Subjunctive in subordinate clauses, and implied that these represented the original function of the mood. It ignored the independent Volitive uses (Hortatory, Jussive, Deliberative, Prohibitive), also the so-called Anticipatory uses.

The Romans translated $\dot{v} \pi о \tau а к \tau \iota \kappa \dot{\eta}$ usually by subjunctivus, less frequently by conjunctivus (cf. Jeep, Redeteile, p. 224, footnote 3), names quite as misleading, of course, as the Greek original from which they were taken.
7. 'Атарє́ $\mu ф а \tau о s$ was rendered by the Roman grammarians modus infinitivus or infinitus.

## The Subjunctive.

354. 355. Origin of Subjunctive Forms. - The Latin Subjunctive is the result of a fusion of two original moods of the Indo-European parent-speech, the Subjunctive and the Optative. Greek and Sanskrit kept them distinct from each other, but in Latin they early became merged in a single mood endowed with the characteristic meaning of each. The following table indicates the origin of the different formations appearing in the so-called Subjunctive :

Subjunctive Forms.

1. All regular Presents, e.g. amem, moneam, regam, audiam; §§ 221 f.
2. All Imperfects, e.g. essem, amārem, monērem, etc.; § 222. 3.
3. All Pluperfects, e.g. amāvissem, $d \bar{i}-$ xissem, etc.; § 222. 4.

Optative Forms.

1. Presents in -im, e.g. sim, possim, nōlim, mālim, velim, edim, duim; § 218.
2. All Perfects, e.g. vīderim, amāverim, etc.; § 219.
3. Original Force of the Subjunctive. - The Indo-European Subjunctive exhibits two meanings which seem to have been the source of all others :
a) The Subjunctive expresses the will of the speaker, e.g. surgat $=' I$ will him to rise,' i.e. 'let him rise.' This use implies a certain power or authority on the part of the speaker, i.e. he is represented as willing something over which he has control or volition; hence the name 'Volitive' has been given to characterize this use of the mood.
b) Alongside of this Volitive notion, the Indo-European Subjunctive also possessed a second force, - that of pure futurity (precisely like a Future Indicative). The Greek, particularly of the Homeric dialect, frequently exhibits this Future force of the Subjunctive ; but it is uncertain whether we should recognize it in Latin. In Latin the Subjunctive has a Pure Future force only in subordinate clauses, and this may be traced to a different origin. Yet it should be borne in mind that the so-called Future erō was in reality a Present Subjunctive ( $\$ 205.3$ ) ; also audiam, regam, etc.; while the so-called Future Perfect is an Aorist Subjunctive (§ 216 ). All of these formations bear witness to a Pure Future force as having once existed in the Latin Subjunctive.

The connection of meaning between the Future force and the Volitive force of the Indo-European Subjunctive is much closer than might at first appear. Thus the English he's to go clearly stands on the border line between the two meanings, and may be interpreted either as Volitive, $=$ let him go, or as Future, $=$ he will go.

It is probably impossible to explain satisfactorily the relationship to each other of these two uses of the Indo-European Subjunctive. Some have regarded the Volitive notion as the original one and the Future notion as derived from that. ${ }^{1}$ Others have started with the Pure Future notion as fundamental and have deduced the Volitive uses from this. ${ }^{2}$ Others have regarded the two functions as equally primitive and as representing merely two phases (the Subjective and Objective) of the same thought. ${ }^{3}$ No attempt to solve this problem, however, has commanded extensive acceptance, nor is it likely to. Fortunately its solution is not necessary to our purpose. The two meanings of the Indo-European Subjunctive may be safely accepted, even though we are unable to determine their mutual relations.

For the views of those who deny that the Indo-European Subjunctive possessed any definite fundamental force (or 'Grundbegriff '), see below, § 356 .
355. Original Force of the Optative. - Here we note two different, but closely related meanings, as in the case of the Subjunctive. Thus:
a) The Optative is used to express an act as wished for by the speaker, e.g. veniat, 'may he come!' The element of power, authority, and volition which characterizes the corresponding use of the Indo-European Subjunctive is lacking here.
b) Alongside of the notion of wishing, we find both in Greek and in Latin another notion, viz. that of a contingent futurity (Delbrücks Bedingte Zukunft), e.g. aliquis dicat, 'some one may say' ; crēdiderim, 'I should believe' ; quis putet, 'who would think?' This is obviously a weaker type of Future than that belonging to

[^26]the Subjunctive (in Greek), just as in its meaning of wishing the Optative expresses a weaker phase of thought than the Subjunctive.

The problem of the mutual relationship of the different meanings of the Indo-European Optative is even more difficult than for the meanings of the Subjunctive. Delbrück in his Konjunktiv und Optativ started with the wish meaning as fundamental, and derived the Potential uses from that. Subsequently (Altindische Syntax, p. 302) he has expressed the conviction that the wish meanings and Potential meanings are distinct in their origin. ${ }^{1}$ Goodwin (Greek Moods and Tenses, p. 384 ff .) starts with the Potential force as original. But scholars are far from agreed as to accepting any of these theories of relationships. It is safer, at present at least, to content ourselves with recognizing the existence of the various Optative functions, even though we cannot determine their origin and mutual relationships.

For the views of those who deny that the Indo-European Optative possessed any precise fundamental force whatever (a 'Grundbegriff'), see the following section.
356. Some eminent syntactical investigators have contested the propriety of attributing to the Indo-European Subjunctive and Optative any precise narrow fundamental value (a 'Grundbegriff'). Thus Abel Bergaigne (De Conjunctivi et Optativi . . . vi antiquissima. Paris, 1877, pp. $4^{1-50 ;} 57-73$ ) urged that the Subjunctive and Optative alike originally covered the entire range of modal conception outside that of positive categorical assertion embraced by the Indicative, and that the specific Subjunctive and Optative uses found in the various Indo-European languages are the result of selection in this wide field. Closely related to this attitude of Bergaigne is that of Morris (American Journal of

[^27]Philology, Vol. XVIII. p. 392 ff.; also On Principles and Methods in Syntax, especially chapters iii. and iv.). Morris recognizes in Subjunctive and Optative no 'Grundbegriff,' but urges that the actual functions of these moods have developed as a result of context, gesture, intonation, etc.

Yet to most investigators the phenomena of linguistic growth seem to point to the early existence of a fairly definite value for every inflected form. The existence, also, in Old Indian, Iranian, Greek, Latin, Gothic, and Slavic of a number of substantially the same specific Subjunctive and Optative modal uses seems impossible to account for except upon the basis that the value ${ }^{1}$ of these moods in Indo-European was a fairly precise and definite one; cf. Delbrück, Die Grundlagen der Griechischen Syntax, p. 116.
357. The so-called Latin Subjunctive, as an amalgamation of the original Indo-European Subjunctive and Optative, might naturally be expected to exhibit all four of the original significations, viz.:
$\left.\begin{array}{ll}\left.\begin{array}{l}\text { Volitive } \\ \text { Pure Future } \\ \text { Optative } \\ \text { Contingent Future }\end{array}\right\} \text { Indo-European Subjunctive. }\end{array}\right\}$ Indo-European Optative.

As a matter of fact it represents with certainty only three of them, viz. the Volitive, Optative, and Contingent Future ; and from these three primary uses are to be derived all existing Subjunctive constructions in Latin, not only in principal, but also in subordinate, clauses.

The absence of the Pure Future use of the Subjunctive in Latin may be accounted for by the fact that the Subjunctive in that use early came to be felt as Indicative, and as a result various Subjunctive formations actually became Indicatives, erō, audiam,

[^28]vīderō, etc. (§§ $205 \cdot 2,3$; 216). This transition to the Indicative of those Subjunctive forms which possessed the Pure Future force naturally resulted in the restriction of the remaining forms to the Volitive use.

## CLASSIFICATION OF SUBJUNCTIVE USES.

Subjunctive in Principal Clauses.

## A. Original Uses.

## 358. Volitive Subjunctive.

a) Jussive, expressing a command. This use is found most commonly :

1) In the Third Singular and Third Plural of the Present tense, e.g. loquātur, 'let him speak'; loquantur, 'let them speak.'
2) In the Second Singular and Plural Present. The Second Singular often has indefinite force, but not necessarily so. An example is ūtāre vīribus, 'use your strength,' i.e. 'let a man use his strength' (indefinite).

The Perfect tense is sometimes employed in the Jussive. It calls attention rather to the summary performance of the act, while the Present represents the act as in progress. This is in accord with the origin of the two tenses, for the Perfect was by origin an Aorist (§ 219 ). $C f$. under $d$, and § $360, a$.

Jussives accompanied by $u t$, $u \neq i$ Capt. 115, ufi adserventur, 'just let them be watched!' Bacch. 739, ut caveās; Ter. Ad. 280, ut omne reddat; Cato, de Agr. 1. 4, ut bene aedificatum siet. Ut in these and like expressions is an adverb, - probably originally indefinite, corresponding to the indefinite $q u \bar{i}$, 'somehow,' 'only,' 'just.' The three meanings of the adverb $q u \bar{\imath}$ are well substantiated, viz.:

1. Relative, 'in which way,' ' as.'
2. Interrogative, 'how ?'
3. Indefinite, 'somehow'; cf. modo, originally 'in a way,' 'in some way,' 'somehow,' ' only.'

In case of the corresponding adverb $u t$ we have :
r. Relative $u t$, 'in which way,' 'as.'
2. Interrogative $u t$, 'how?'
3. If we recognize the Indefinite $u t$, we get for $u t$ the third of the three meanings which are assumed for $q u \bar{i}$. The value here suggested for ut seems to occur also in uti-nam, and to be supported by the use of $q u \bar{\imath}$ and $u t$ interchangeably with independent Optatives; see § 359 .
b) Of determined resolution. This rare usage is confined to the Present First Singular, e.g. Terence, Hautontimorumenos 273 manè: hōc quod coep̄̄ primum ènārrem, 'wait! I'm bound first to finish telling what I began.'
c) Hortatory. This is confined to the Present First Plural, and is a mingling of $a$ ) and $b$ ), e.g. loquāmur, 'let us speak,' i.e. 'I'm bound to speak, and do you speak.'
d) Prohibitive. This occurs in the 2 d and 3d Persons Singular and Plural of the Present and Perfect Tenses. The earlier theory as to the Prohibitive was that the Second Singular Perfect was employed of a definite Second Person, while the Second Singular Present had a general (or indefinite) force. This view has been shown to be false by the exhaustive examination of the subject by Elmer, American Journal of Philology, 1894, No. 3. In the Grammar and the Appendix I had given my adhesion to Elmer's view that the Perfect Prohibitive expressed special emotion or excitement. Renewed examination of the question, however, has compelled me to abandon that attitude and to accept the conclusions of Delbrück, who holds that the difference between the Present and Perfect tenses was one of the kind of action designated by the verb, the Present indicating an act (or state) going on, the Perfect an act (or state) conceived of without reference
to continuance. This accords with the origin of the two tenses, for the Perfect was an Aorist (§ 219).
e) Deliberative. This occurs in affirmative questions inquiring after the will or command of the person addressed, e.g. quid faciam, in the sense : 'what do you bid me do ?' 'what is your will that I do ?' Cf. Plaut. Trin. 59, sequere :: quō sequar? Aul. 651, redde hūc:: quid reddam? Capt. 839, gaude::quid gaudeam? The usage, accordingly, consists simply in the inquiry after a command. An English analogy may perhaps be recognized in 'what let's do ?' i.e. ' what do you say (direct) that we do ?'

The name 'Deliberative' is by no means an accurate designation of the usage here under consideration. There is nothing deliberative in an inquiry after orders. We shall come later, under the head of 'Derived Uses,' to a usage which is truly deliberative. We shall come also to a number of other uses which traditionally bear the name 'Deliberative,' though no deliberative character inheres in them. See § 363 .
359. Optative Subjunctive. - The Optative Subjunctive expresses a desire or hope for the fulfillment of a wish. Both the Present and Perfect tenses occur, e.g. Plaut. Pseud. 714, bene sit tibi; Verg. Aen. i. 603, di tibi praemia digna ferant. The Perfect is less frequent than the Present. When used, it ordinarily differs but slightly in value from the Present, denoting the summary performance of an act, as opposed to its continuance (see §358, a, d), e.g. Cic. Phil. xii. 14, quod dì ōmen àverterint. But occasionally the Perfect Optative has true Present Perfect force, e.g. Cic. de Rep. iv. 8, cui quidem vērè augurāverim, lit. 'may I have prophesied,' i.e. 'I hope I have prophesied.'

The Optative Subjunctive is not infrequently accompanied by strengthening particles, e.g. Plaut. Trin. 923, quī istum dī perdant; Aul. 785, ut illum di perdant. Cf. the use of ut with the Jussive ( $\S 358, a, 2)$. Utinam is also frequent.
360. Subjunctive of Contingent Futurity. - This corresponds to the second of the two meanings of the Indo-European Optative (§ $355 . b$ ). From this general notion have developed the following special uses :
a) Subjunctive of Pure Possibility, e.g. aliquis dīcat, aliquis dīxerit, 'some one may say.' This is the most obvious development of the notion of contingent futurity, but it is rare, being confined chiefly to phrases of the type cited in the above examples. As regards the use of tenses, the Perfect (originally Aorist ; § 219) lays stress upon the accomplishment of the act, while the Present calls attention to its progress. Cf. $\S 358, a, d$.
b) Where some condition is implied or expressed, e.g. velim, 'I should wish,' i.e. 'if I were to have my way'; dīcās, 'you would say,' i.e. 'if you should have occasion to express an opinion.' This use occurs also particularly in the First Singular of the Perfect (Aorist, § 219), e.g. dīxerim, 'I should say'; crédiderim, 'I should believe.' Where the condition is expressed, we get a Conditional Sentence of the Second Type (Gr. §303), e.g. laeteris, sī veniat, 'you would rejoice, if he should come.'

The name Potential is usually given to the Subjunctives cited under $a$ ) and $b$ ) ; but this name is somewhat inexact ; see $\S 365$.

## B. Derived Uses.

361. The uses here enumerated are secondary developments from those cited above in $\S \S 358 \mathrm{ff}$.

## 362. Extensions of the Jussive and Prohibitive.

a) Corresponding to the Jussive loquātur there developed an Imperfect use, e.g. loquerètur, in the sense, 'he was to speak,' i.e. 'he should have spoken.' This use is manifestly a derived one, since one cannot now will a person to have done in the past what he obviously has failed to do. An expression like loquerètur,
therefore, must have been formed after the analogy of loquātur. The Pluperfect Subjunctive also occurs in this sense, e.g. eum imitātus essès, 'you ought to have imitated him.' The Volitive character of these expressions is shown by the fact that the negative is regularly $n \bar{e}$, e.g. Plaut. Pseud. 437, tū nē tāle facerēs, 'you ought not to have done any such thing' ; Cic. ad Att. ii. 1, 3, ne poposcisses, ' you ought not to have asked.'
b) The Permissive. An example of this is Cic. de Sen. 58, sibi habeant arma, 'they may have their weapons ;' originally this meant 'let them have!' i.e. 'let them have, for aught I care,' and so, 'they may have.' In this way a recognized permissive value came to attach itself to the Subjunctive. Other examples are Tibullus, i. 1, 58, tēcum dummodo sim, sēgnis vocer; Accius, Fr. $\bar{o} d e r i n t$, dum metuant, 'they may hate, provided they fear.' These Permissive Subjunctives, when negative, imply that one does not need to perform the act involved, e.g. Plaut. Capt. 947, at ob eam rem mihi $\grave{i}$ bellam argentī $n \bar{e}$ duīs, 'you don't need to give me,' etc.
c) The Concessive. This is found in the Present, Perfect, and Pluperfect tenses. The Perfect in this use refers to the past. Examples: Cic. Brut. 76, sit Ennius perfectior, 'I grant that Ennius is more finished'; Academica, ii. 75, at dissolvit idem. Mihi quidem nōn vidētur; sed dissolverit, 'but I grant that he refuted'; Verg. Aen. iv. 603, fuisset, 'grant that it had been done'; Cic. de Sen. 34, nè sint vīrès in senectūte, 'I grant that there is not strength in old age '; Or. гог, nem $\bar{o}$ is, inquiés, umquam fuit. Nē fuerit, 'I grant that there was n't.'
d) Subjunctive of Acquiescence. Here belong expressions like the familiar fiat of comedy, 'so be it,' 'very well.'
e) Subjunctive of Supposition. This is infrequent, but is exemplified in sưch expressions as Cic. de Off. iii. 54, vendat aedēs vir bonus; pestilentēs sint et habeantur satūbrēs; . . quaerō . . . num, etc., 'let us suppose the case of a good man selling a house ; let us
suppose the house is unwholesome, but is considered safe, . . . I ask whether,' etc.
363. Extensions of the Deliberative. - These are all outgrowths of the original use mentioned in § 358. $e$. We distinguish :
a) Questions of purely rhetorical character, implying that the thing mentioned is impossible. The Present, Imperfect, and Perfect tenses occur in this use, e.g. quid faciam!' what am I to do ?' in the sense : 'there's nothing I can do.' The Imperfect represents this present use projected into the past, e.g. quid facerem, 'what was I to do?' implying the impossibility of doing anything. The Perfect is rare, but is found in Plaut. Amph. 748, ubi ego audiverim, 'where am I to have heard it?' i.e. 'how can I have heard it?'
b) Questions implying the idea of duty, obligation, or propriety. The tenses used are the Present and Imperfect. A characteristic example is quid faciam in the sense of 'what ought I to do?' 'what should I do?' 'This is a perfectly natural and legitimate outgrowth of the original idea contained in quid faciam (§358.e), 'what do you bid me do?' Whenever this question is addressed to a person whose authority is respected, ' what do you bid me do ?' becomes tantamount to 'what ought I to do?' So in the Imperfect, quid facerem often means ' what was it my duty to do?' This is simply quid faciam projected into the past. The negative of this usage is $n \bar{o} n,{ }^{1}$ e. $g$. nōn haec faciam, nōn haec facerem, ' is n't it (was n't it) my duty to do these things?' So also in Cic. pro Arch. 18, hunc ego nōn dīligam, nōn admīrer? 'ought I not to love, ought I not to admire this man?' So also in expressions introduced by cūr, quārē, and rarely quīn, e.g. Caes. B. G. i. 40, cūr dēspēeārent, 'why should they despair ?'

[^29]c) Real Deliberative questions. Although the name 'Deliberative' is used as a designation of all the related idioms here considered, yet the only real Deliberative Subjunctive is found in expressions like quid agam, quid faciam, where the speaker is actually pondering what decision to take or what course of action to pursue.
d) Repudiating Questions, in which the speaker repudiates with scorn some command or imputation, or expresses his disdain at some proposal of another person. The origin of the Repudiating Questions may be seen in passages like Plaut. Mil. Glo. 496, vīcīne auscultā, quaesō :: ego auscultem tibi. The context shows that the inquiry is uttered with contempt. Hence the idea is, ' I listen to you!' Sometimes we have the Indefinite ut (§ $35^{8}$. a. 2), e.g. Ter. And. 618, tibi ego ut crēdam? In these cases we see that the usage originated in an inquiry after a command, but that the indignant attitude of the speaker developed a repudiating force. As a result a new category was formed, and we find Repudiating Questions, where no vestige of an inquiry after a command is discernible, or even imaginable, e.g. Plaut. Capt. 207, fingitis fugam : : nōs fugiāmus! The idiom is even transferred to the past, e.g. Plaut. Men. 678, pallam quam tibi ded̄̄ mihi redde : : mihi tu dederis pallam, 'you gave me a cloak!' Cic. ad Quint. i. 3. 1, ego te vidère nōluerim. Pluperfect: Cic. pro Sulla, 45, mihi cūjusquam salūs tantī fuisset, ut meam neglegerem ?
364. Extensions of the Optative. - The use of the Imperfect and Pluperfect Subjunctive in expressions like utinam tū valères, utinam adfuisses, is also secondary. For if the primary force of the Optative was to denote a wish, it must have looked forward to the future ; hence its employment with reference to the present and the past must be a derived usage, after the analogy of sint fêlīcēs, etc.

The Imperfect and Pluperfect Subjunctive, in expressions like
those cited above, do not strictly express a wish, but rather a regret at the present non-existence or the previous non-occurrence of something.

In these derived uses utinam is almost invariably used. A very few exceptions occur in poetry.

## 365. Extensions of the Subjunctive of Contingent Futurity. -

 There are three derived uses:a) The Present 2 d Singular in the sense 'you can, one can,' e.g. videās, 'you can see.' In its origin, the Subjunctive of the Contingent Future denoted mere objective possibility, e.g. dīcās $=$ 'there's a possibility, you will say,' 'you may say.' In the derived usage this objective possibility becomes subjective,'you may' becomes 'you can.' Strictly speaking, only the second of these is Potential. For potentiality involves capacity and control, which mere possibility does not.
b) The 2 d Singular Imperfect. This is restricted to narrow limits, being found chiefly in such expressions as vidērès, 'one could see'; cernerés, 'one could observe'; crēderés, 'one could believe.' The usage is an extension of $a$ ) above, and, like that, is Potential in the strict sense of that term.
c) The Imperfect and Pluperfect in the conclusion of contrary-to-fact conditions, e.g. sì adessès, vidēèes; sī adfuissès, vùdissēs. The exact way in which this use has grown up is one of the most difficult problems of Latin syntax. But if, as seems probable, the protasis in such conditional sentences was in origin partly Optative, partly Jussive (e.g. adessès, 'would that you were here,' — vidè $\bar{e} s$, 'then you would see '), —if this may be assumed, then the use of the Imperfect and Pluperfect would be a kind of assimilation, induced by the regular correspondence of tense and mood in other conditional sentences.

## Subjunctive in Dependent Clauses.

366. Parataxis and Hypotaxis. - In the earlier stages of language there were no subordinate clauses. Sentences were joined by co-ordination. For example, an independent use of the Indicative was followed by an independent use of the Subjunctive, or by another Indicative without any conjunction, e.g. ḕs monē, dèsinant, lit. 'I warn them, let them cease.' In course of time in such combinations the one clause came to be felt as subordinate, and to be introduced by various connecting particles ('subordinate conjunctions'). The stage of co-ordination is called Parataxis ; that of subordination, Hypotaxis. In Latin the paratactic form of expression often survives, even when the hypotactic relation has become clearly developed. This is especially noticeable in the early and colloquial language, but is found also in the best prose in certain categories of expression ; see, for example, § 38 r f . For further discussion of Parataxis, see Bennett, in Cornell Studies in Classical Philology, Vol. IX. p. 66 ff. ; Morris, Principles and Methods in Syntax, p. 113 ff.

## Subjunctive of Purpose.

367. 368. The Subjunctive clause of Purpose is introduced by $u t$, $n \bar{e}, q u \bar{o}, q u \bar{u}$, and Relative Adverbs. It was probably Jussive in origin, e.g. tibi dō pecūniam ut pānem emās originally meant 'I give you money ; just purchase bread.' For this force of $u t$, see § 358. a. 2 ; 359.

In course of time the $u t$-clause came to be felt as subordinate to the other, and $u t$ from being an adverb came to be felt as a subordinate conjunction. In this way arose the purpose clause with $u t$.
2. Negative clauses of purpose introduced by $n \bar{e}$ were quite analogous in origin to those introduced by $u t$. Thus tibi obsto ne intrès probably meant originally 'I stand in your way ; don't come in!' Ultimately this Parataxis developed into Hypotaxis.
3. Qū as an Ablative of Degree of Difference is regularly confined to use in connection with comparatives. The Subjunctive with $q u \bar{o}$ arises in the same way as with other relatives. See 4.
4. Qū, quae, etc., in relative clauses of purpose had practically a demonstrative force, e.g. tibi librum dō quem legā̀, 'I give you a book to read,' originally meant 'I give you a book ; read it !'
5. Relative Clauses with dignus, indignus, and idōneus have been classified in Gr. § 282. 3 under Relative Clauses of Purpose. This has been done partly on account of the meaning of such clauses, partly in view of the other constructions found with dig. nus, idōneus, etc. As regards the meaning of the relative clause with dignus, indignus, idōneus, it seems impossible to separate a sentence like dat mihi sūrculōs quōs seram, 'he gives me shoots to plant,' from dat mihi sūrculōs dignōs quōs seram, 'he gives me shoots fit to plant,' originally 'he gives me fit shoots to plant.' So hominēs dignōs è ēegit quōs mitteret may well have meant originally : 'he selected fit men, (in order) to send them,' and then, secondarily, 'he selected men fit to send.' In each case the Subjunctive clause is fairly one of Purpose. This view is further confirmed by the other constructions found with dignus, idōneus. Thus we repeatedly find an Infinitive employed with these words, e.g. Verg. Ecl. 5.53, et puer ipse cantā̃̄ dignus, 'worthy to be praised' ; Pliny, Paneg. 7. 4, dignus éligi, 'worthy to be chosen.' The Gerund with ad also occurs, e.g. Cic. Rep. i. 18. 30, dignus ad imitandum; and sometimes even an ut-clause, e.g. erās dignus ut habērès (cited by Quintilian from an early author). The $u t$-clause cannot be regarded as one of Result in this and similar cases, as is done by Kühner, Ausf. Gr. ii. p. $858 d$ ), since the action is viewed purely as one contemplated, not as one accomplished.

Some regard the relative clause with dignus, etc., as a Clause of Characteristic. It is of course quite true that dignus, with a following relative clause, does express a characteristic in a general
way ; but the relative clause itself is certainly not a Clause of Characteristic in the technical sense of that term. See § 371 .
368. It is obvious that only those purpose clauses are of primitive origin in which the main clause and the subordinate clause refer to different persons. Thus in a sentence of the type pec $\bar{u}$ niam mūtuor ut librōs emam, emam cannot be referred directly to a Volitive origin, since the Volitive Subjunctive is not naturally used to represent a person as exercising his authority and volition over himself. Sentences like the last, therefore, are more probably of later origin and formed upon the analogy of those cited in § 367 .

## Clauses of Characteristic.

369. The Clause of Characteristic is a relative clause developed from the Subjunctive of Contingent Futurity (§ 360 ). It is probable that in its origin it was confined to a limited number of words such as possim, velim, nōlim, mālim, audeam, crēdam, putem, etc., following negative expressions. Thus a nèmō est quī possit, lit. 'there is no one who would be able,' is so nearly equivalent to 'there is no one who is able,' that it early took on this force. Similarly in such expressions as nèmō est quī velit, nōlit, $m \bar{a} l i t$, audeat, crédat, putet. In all these cases the notion of contingency is so slight as easily to disappear, leaving the relative clause essentially one denoting a fact.

## 370. Clauses of Characteristic as Distinguished from Relative

 Clauses of Purpose. - Difficulty is often experienced in distinguishing Clauses of Characteristic from Relative Clauses of Purpose. This difficulty results chiefly from the fact that a Relative Clause of Purpose may denote a characteristic of an antecedent in the general sense of the word characteristic. Thus in Cicero, Brutus, 56 scrībēbat ōrātiònès quàs alī̀ dīcerent, 'he wrotespeeches for other persons to deliver,' the clause quās alī dicerent is a Relative Clause of Purpose ; but at the same time it does in a certain sense indicate a 'characteristic' of its antecedent. One essential difference between the Clause of Characteristic and the Relative Clause of Purpose consists in the fact that the former denotes an action or state contemporary with or anterior to that of the main clause, while the Relative Clause of Purpose denotes an action which is future relatively to that of the main clause. In accordance with this principle expressions like nihil habeō quod agam, 'I have nothing to do' (Hor. Sat. i. 9. 19) ; n̄̀l scī̄ quod gaudeam, 'I don't know anything to rejoice about' (Plaut. Capt. 842) are Relative Clauses of Purpose. Did these sentences mean respectively 'I have nothing that I am doing' and 'I don't know anything that I am rejoicing about' (contemporary action), they would be Clauses of Characteristic.

At times we find sentences which are ambiguous. The syntactical nature of the relative clause will then depend upon the interpretation. A good example is Ter. Phormio 433 habēbis quae tuam senectūtem oblectet, either 'you will have some one who cheers' (Characteristic) or 'some one to cheer' (Purpose).

## 371. Clauses of Characteristic Denoting Cause or Opposition.

 - In sentences like $\bar{o}$ fortūnāte adutéscèns quī tuae virtūtis Homérum praeconem inveneris there is an apparent violation of the principle that the Clause of Characteristic refers to ' an antecedent not otherwise defined' ( $G r . \S 283.1$ ) ; but in such cases as this we may explain the relative as referring to an indefinite antecedent to be supplied. According to this view the original force of the above sentence would have been: ' O ! fortunate man, (one) who has found,' etc. The frequent employment of ut quй, utpote quī, etc., 'as being one who,' supports this view. The use of the Second Singular in the subordinate clause would then be a species of attraction.372. Clauses of Characteristic Introduced by Quin. - The treatment in Gr. § 283.4 follows that of Brugmann in Indogermanische Forschungen, Vol. IV. p. 226 ff. Brugmann sees in the first element of this quīn an indeclinable Relative quī, which he thinks was capable of standing for any case either Singular or Plural. According to this view, quīn might be equivalent to quī nōn, quae nōn, quod nōn, etc.; the quīn mentioned in §§ 383 , 391 must then be regarded as a separate word.

## Clauses of Result.

373. Clauses of Result, introduced by $u t$, ut nōn, quìn, quī, are a development of the Subjunctive of Contingent Future, viz. from its second phase, where there is a condition implied (§ $360 . b$ ). Thus in the sentence hōc flagitium tāle est ut quivìs ōderit, the original meaning was: 'this outrage is of such a nature as anyone you please would hate' (i.e. if he should see it). From this to the meaning 'of such a nature that anybody you please hates it,' is an easy transition. At the outset it is probable that such Subjunctives as possit, velit, nōlit, mālit, audeat figured largely in the establishment of this category, since in these verbs the transition from the idea of contingency to that of actuality is particularly easy ; cf. § 370.
374. Relative Clauses of Result are simply a development of the Clause of Characteristic. At times it is not easy to decide whether the clause is one of Characteristic or of Result, and individual interpretations of the same sentence would doubtless often differ. For example, in the sentence given in $G r$. § 284.2 habētis eum cōnsulem quī pārēre vestrīs dēcrētīs nōn dubitet, the clause $q u \bar{\imath}$. . . dubitet might be felt by some simply as a Clause of Characteristic, - 'a consul of the sort that'; but the clause also admits the interpretation 'a consul such that he does not hesitate '; and in that sense it is a clause of Result.
375. Clauses of Result with Quin. - These are really Relative Clauses of Result, and differ from Clauses of Characteristic introduced by quin just as ordinary Relative Clauses of Result differ from ordinary Clauses of Characteristic. Wherever the main clause contains tam, tālis, etc., the Result notion is sufficiently clear.

## Causal Clauses.

376. Causal Clauses Introduced by Quod, Quia, Quoniam. When these take the Subjunctive, it is probably on the principle of Indirect Discourse.
377. Causal Clauses Introduced by Cum. - The Subjunctive with cum-causal is a development of the temporal cum-clause. The temporal notion easily passes into the causal in all languages. Cf. e.g. in English 'When he saw ruin staring him in the face, he did not care to live,' i.e. ' since he saw,' etc.

## Clauses with Cum-Temporal.

378. The treatment in the Grammar, § 228 f., follows the elaborate and convincing exposition of Hale in his CumConstructions, Cornell Studies in Classical Philology, Vol. I. Hale shows that the cum-clause is simply a form of the Clause of Characteristic. Cum, earlier quom (Gr. § 9. 1), is a form of the Relative stem quo-, and, as such, was quite as capable of introducing a Clause of Characteristic as was any other Relative word. Just as quī takes a Clause of Characteristic, stating a quality of a person or thing, so quom took a Clause of Characteristic, stating a quality of a time, i.e. giving the situation existing at that time. The Indicative cum-clause, on the other hand, like the Indicative $q u \bar{\imath}$-clause, was primarily a defining, or determinative, clause and hence used to denote a point of time or date.

## Clauses Introduced by Antequam and Priusquam.

379. Where these are followed by the Subjunctive, Hale (The Anticipatory Subjunctive in Greek and Latin, Chicago Studies in Classical Philology, Vol. I., p. 68 ff.) recognizes a survival in Latin of the Indo-European Subjunctive in its Pure Future phase, - a phase conspicuously present in Homeric Greek. Others refer the mood to the Subjunctive of Contingent Futurity (the second of the two uses of the Indo-European Optative ; § 360 ).

## Clauses introduced by Dum, Dōnec, and Quoad.

380. These clauses are probably the development of an Optative Parataxis. Thus originally exspectō: dum veniat, 'I am waiting; may he come the while.' Hence, 'I am waiting till he comes, for him to come.'

## Substantive Clauses.

## Substantive Clauses Developed from the Volitive.

381. Many of these are often regarded as Substantive Clauses of Purpose. Such a designation implies either that the clauses in question are Purpose Clauses or once were such; neither of these alternatives represents the truth. With the exception of the clauses mentioned in $G r$. § 295. 3, all the substantive clauses included in § 295 are the developments of an earlier parataxis (see § 367 ), in which the Subjunctive was Volitive (Jussive, Deliberative, etc.) in nature. For a valuable discussion of the origin of clauses of this kind, see Durham, Subjunctive Substantive Clauses in Plautus, Cornell Studies in Classical Philology, Vol. XIII. (Macmillan \& Co.).
382. As a typical illustration of the general type here under discussion let us take the sentence, tibi imperō (ut) hōc mihi $\overline{\text { des }}$. Whether ut is present or absent, is immaterial to our purpose.

In either case the dependent clause is of Jussive origin ; $u t$ is simply the adverbial particle which we have already met in independent sentences (see §§ 358. $a$; 359). The original difference between tibi imperō hōc mihi dès and tibi imperō ut hōc mihi dess, could hardly have been more than that between 'I command you, give me this,' and 'I command you, just give me this.' Probably even this distinction soon passed away, and the two forms of expression came to be felt as practically equivalent in force.
383. Taking now our tibi imperō (ut) hōc mihi dès as the type, let us consider a variety of Extensions to which it gave rise :
a) 'Extensions within the Present.' After the analogy of tibi imperō (ut) hōc mihi dēs, it became natural to form sentences like :

> mihi imperat (ut) hōc sibi dem;
> tibi imperat (ut) hōc sibi dēs;
> illī imperat (ut) hōc sibi det;
> illī imperās (ut) hōc tibi det;
> mihi imperās (ut) hōc tibi dem.

Our original typical sentence, tibi imperō (ut) hōc mihi dēs, was undoubtedly once paratactic: 'I command you; give this to me !' But the developments just enumerated could obviously never have stood in Parataxis; they are analogical 'Extensions within the Present.'
b) 'Future Extensions.' An illustration of these would be, tibi imperā$b \bar{o}$ (ut) hōc mihi dès. A sentence like this could obviously never have stood in Parataxis. It is simply tibi imperō (ut) hōc mihi $d \bar{e} s$ projected into the Future.
c) 'Past Extensions.' An illustration would be, tibi imperā̃̄̄ (ut) hōc mihi dares. Here similarly we have our tibi imperō (ut) hōo mihi des projected into the past.
d) 'Negative Extensions.' These are exemplified by tibi $n \bar{n} n$ imperō (ut) hōe mihi dess. These 'Negative Extensions' may also be combined with Extensions of the kinds already noted, e.g. tibi nōn imperābō (ut) hōc mihi des (Future) ; tibi nōn imperāv̄̄ (ut) hōc mihi darès (Past) ; mihi nōn imperat (ut) $h \bar{o} c$ sibi dem (Within the Present).
e) 'Interrogative Extensions.' These are exemplified by quā̄ē tibi imperō (ut) hōc mihi des? These 'Interrogative Extensions' may at the same time also be Future, Past, Within the Present, or Negative, e.g. quis tibi imperat (ut) hōc mihi dès? quis tibi imperā̃it (ut) hōc mihi darēs? cūr mihi nōn imperāvist̄ (ut) hōc tibi darem?
f) 'Conditional Extensions,' e.g. sì tibi imperō (ut) hōc tibi dem. These may similarly be also Future, Past, Within the Present, or Negative ; or they may contain a combination of these Extensions, e.g. sī mihi nōn imperāvistī (ut) hōc tibi darem, a Conditional Negative Past Extension.
g) 'Extension by Analogy of the Meaning of the Verb.' Thus te $\bar{o} r o \bar{o}(u t)$ abeās undoubtedly represents an original Parataxis: '(Just) go away! I beg you,' 'I beg you to go away.' Now after the analogy of this we get $t \bar{e}$ ex $\bar{o} \bar{o}(u t)$ abe $\bar{a} s$, 'I induce you to go away,' 'I succeed in my request that you go away.' Similarly after tibi suādeō (ut) abeās, 'I advise you to go away,' we get tibi persuādeō (ut) abeās, 'I succeed in my advice that you go away,' 'I persuade you to go away.' Neither té exōrō (ut) abeās nor tibi persuādēo (ut) abeās could have stood in an original Parataxis. Such combinations would have failed to make sense.

A recognition of the foregoing varieties of 'Extensions' is of great importance for an understanding of Substantive Clauses Developed from the Volitive, and in fact for many other varieties of subordinate clauses of Subjunctive origin, e.g. Purpose Clauses, Substantive Clauses Developed from the Optative,

Clauses of Characteristic, Result Clauses, etc. No theory of origin can possibly explain all, or even any proportionally large part of the phenomena ordinarily classified under any one of these syntactical usages. A large part of the instances belonging under any single syntactical category (Purpose, Result, Volitive Substantive Clause, etc.) represent analogical Extensions of one sort or another.

## Classification of Substantive Clauses Developed from the Volitive.

## Developed from the Jussive and Prohibitive.

## 384. With Verbs of Ordering or Commanding.

Without $u t$.
Original Uses: Plautus, Poen. ir55 dīcō mihi fîliam dèspondeās, ' I bid you to betroth your daughter to me.'

Extensions: Plautus, Stichus, 624 dīxī, in carcerem īres, ' I ordered you to go to prison' (a Past Extension).

## With $u t$.

Original Uses: Plautus, Men. 990 dī̀ō ut imperium meum habeātis cūrae, 'I bid you heed my orders.'

Extensions: Plautus, Men. 784 ē $d \bar{\imath} x \bar{\imath}$ tibi ut cavērēs (Past Extension).

$$
\text { With } n \bar{e} \text { and } u t n \bar{e} .
$$

Examples: Plautus, Merc. 465 ad portum nē bītās dīcō tibi, 'I tell you not to go to the harbor' ; Mil. Glo. $185{ }^{\text {a }}$ hōc ḕ dīcitō ut ne digrediātur, 'tell her not to depart.'

## 385. With Verbs of Begging and Requesting.

Without $u t$.
Original Uses: Plautus, Merc. $992^{\text {a }}$ pācem faciātis $\bar{o} r o \bar{o}, ' I ~ b e g ~$ you to make peace.'

Extensions: Plautus, Amph. 257 orant ignōscāmus peccātum suom, 'they entreat us to forgive their fault' (Extension within the Present).

## With ut.

Original Uses : Plautus, Curc. 629 quaesō ut mihi dīcās, 'I beg you to tell me.'

Extensions : Plautus, Cas. 532 orabat ut properārem, 'he entreated me to make haste' (Past Extension) ; Men. 1048 possum exōrāre ut pallam reddat, 'succeed in my request that she return the cloak,' an Extension after Analogy of Meaning of the Verb; § 383. g. Similarly impetrō ut, 'I succeed in my request that.'

With $n \bar{e}$ and $u t n \bar{e}$.
Original Uses: Plautus, Bacch. 1013 quaesō nē mē 'I beg you not to desert me'; Rud. 627 quaesō ut tē nè pigeat ' I beg that you be not loth.'

Extensions: Plautus, Cist. 302 eam exōrēs nē tibi suscēnseat, 'induce her not to be vexed with you'; Bacch. 533 impetrā̃ $\bar{\imath}$ ut $n \bar{e}$ quid $\bar{e} \bar{\imath}$ suscēnseat, ' I succeeded in my request that he cherish no anger toward him.'

Some regard the clause with exōrō and impetrō as one of Result, but it is abnormal to have $n \bar{e}$ or $u t n \bar{e}$ with a Clause of Result. We have no sure instance of any such Result Clause in the entire Latinity. Furthermore, affirmative clauses dependent on exo$\overline{r o}$ and impetrō often lack $u t$, which is never lacking in Result Clauses. It is therefore much simpler and more natural to explain such usages as analogical Extensions.
386. With Verbs of Advising. - The origin of the Subjunctive Substantive Clauses after verbs of advising is indicated by Plautus, Men. 569 male habeās : sic cènseō, 'worry him! That's my advice.'

## Without ut.

Original Uses: Cic. in Cat. ii. 9 ḕs hōc monē, dèsinant furere, ' I give them this warning: let them cease their frenzy!'

Extensions: Plautus, Merc. 1015 meam sorōrem tibi dem suādes, 'You advise me to give you my sister.'

## With ut.

Original Use: Plautus, Trin. 674 moneō hōc ut reputēs,' I advise you to consider this.'

Extensions: Plaut. Persa 842 hortantur tuō ut imperiō pāream, 'they exhort me to obey your bidding.'

$$
\text { With } n \bar{e}, \text { ut } n \bar{e} .
$$

Original Uses: Plautus, Persa 68o nē permittās domum, monēo, $t \bar{e}$, ' I urge you not to hie yourself home.'

Extensions: Plautus, Stich. 608 suādēs nē bìtat, ' you urge him not to go.'

Under this head belong clauses with verbs of inducing, impclling, persuading, e.g. Plautus, Epid. 87 perputī ut cènsēret, 'I induced him to believe'; Bacch. 964 persuāsit, sē ut āmitteret, 'he persuaded her to let him go'; Mil. Glo. 1269 indūxū in animum nē $\bar{d} d e r i m$, 'I've persuaded myself not to hate her.' In all these cases the usage represents an 'Extension after the Analogy of the Meaning of the Verb' $(\S 383 . g$ ). Some regard the Subjunctive Clause after verbs of inducing, persuading, impelling, as a Clause of Result. But the same arguments are to be urged against this view as previously in the discussion of the nature of the clause used with exōro and impetro , viz. the fact that negative clauses with these verbs have $n \bar{e}$, ut $n \bar{e}$ (instead of $u t n \bar{o} n$ ), while in affirmative clauses the $u t$ is often lacking. See § 385 .

## 387. With faciō, particularly with fac, facite, facitō, 'see to it !'

## Without ut.

Original Uses: Plautus, Poen. 1035 linguam compescās, face, 'see that you hold your tongue !' originally 'hold your tongue ! see to it!'

Extensions: Plautus, Men. 890 fac sciam, 'see to it that I know,' 'make me know' (Extension within the Present).

## With ut.

Original Uses: Plautus, Persa 526 ut accipiat, face, 'see to it that he receives it!' Rud. 1218 fac ut exōres, 'see that you persuade him!'

Extensions: Plautus, As. 28 faciam ut sciās, 'I'll see that you know' (Future Extension) ; Aul. 26 fēcī thēnsaurum ut hic reperiret, 'I saw to it that he discovered the treasure' (Past Extension).

$$
\text { With } n \bar{e}, \text { ut } n \bar{e} .
$$

Original Uses : No suitable examples are at hand.
Extensions: Plautus, Most. 1145 fac ne metuam, 'see to it that I have no occasion for fear!' (Extension within the Present).

Especially interesting are the clauses with efficio and related verbs. Here belong: Virgil, Ecl. 3. 5 I efficiam posthāc nē quemquam lacessās, 'I'll bring it about that you do not challenge anybody hereafter'; Cic. ad Fam. i. 2. 4 hōc videmur esse cōnsecūtī ut ne quid cum poputo agī possit, 'we seem to have accomplished this, viz. that no business can be done with the people'; Q. Curtius, iv. 14. 4 Macedonas assecūtōs ne quis tūtô locus esset, 'brought it about that no place was safe' ; Cic. pro Milone, 13. 34 adepti estis ne quem civem metuerētis, 'you have achieved your end, of standing in fear of no one.' All of these clauses are probably to be regarded as Extensions after the Analogy
of the Meaning of the Verb ( $\S 383 . g$ ). The origin of the usage probably goes back to clauses with fac, facite, facito, 'see to it (that).' From fac, the first Extension seems to have been to the other forms of faciō; but in our earliest Latin there are many more instances of fac, facite, facitō, followed by Substantive Clauses than of all the other forms of faciō combined. From faciō the next Extension seems to have been to efficiō, 'succeed in one's effort to see to it (that)' ; and from effició the construction was extended to other verbs of closely equivalent meaning, such as assequor, cōnsequor, adipisscor.

Many regard the dependent clause with these verbs as one of Result, but the employment of negatives ( $n \bar{e}, u t n \bar{e}$ ) and the fact that the affirmative clause often lacks $u t$, point to a Volitive origin. Beginning with Cicero we find ut nōn in negative clauses after facior, efficio, which seems to show that the Clause of Result also is used with these verbs.

Other verbs of seeing to it are cūrō, videō.

## 388. With cavē, cavē ne.

Expressions of the cavē abeās Type.
The most plausible theory as to the origin of these expressions is that cave abeās is formed on the analogy of fac abeās.
Cave nè.

Original Uses: Plautus, Most. 324 cavē nē cadās, 'take care you don't fall!' Originally 'Don't fall! Take care!'

Extensions: Plautus, Pseud. 478 nē quid noceat cāverō.

## 389. With Verbs of Permitting, Granting, Allowing.

Without ut.
Original Uses: Plautus, Trin. 1179 videās licet, originally 'see! you may'; then, 'You may see '; Amph. 806 sine dīcat, 'permit him to speak.'

Extensions: Plautus, Cist. 454 sine dīcam, 'let me speak' (Present Extension) ; Mil. Glo. 54 sīvi viverent, 'I let them live ' (Past Extension).

With ut.
Original Uses: Plautus, As. 43 dōnō ut expers sīs, 'I permit you to be exempt.'

Extensions: Plautus, As. 847 potestātem dedì ut essēs, 'I gave you the opportunity to be.' Here we have a noun taking the place of the verb in a Past Extension.
390. With Verbs of Deciding, Resolving, etc.

## Without ut.

Original Uses: An original use would be : đécernimus cōnsulès videant, ' we decree, let the consuls see to it.'

Extensions: The foregoing was evidently the starting-point for expressions like Sall. Cat. 29. 2 senātus dēcrēvit darent operam consulēs, 'the Senate decreed that the consuls should give heed.'

## With $u t$.

Original Uses : No suitable examples are at hand.
Extensions: Plautus, Pseud. 549 rūs ut īrem cōnstitueram, 'I had resolved to go to the farm' (Past Extension).
391. With opus est, ūsus est, necesse est, oportet.

## Without $u t$.

Original Uses: Lucretius, iii. 593 fateāre, necesse est, 'you must admit' ; originally 'admit! you must' ; Cic. de Fin. ii. 26 $m \bar{e} i p s u m$ ames, oportet, 'you ought to love me myself' ; originally 'love me my myself! that's your duty.'

Extensions: Plautus, Poen. 1244 mihi patrōnus sim necesse est, ' I must be my own defender.'

## With ut.

Original Uses: Plautus, Truc. 500 nunc tibi opust aegram ut té adsimulès, 'now you must pretend that you're ill'; Mil. Glo. ${ }^{11} 3^{2}$ nunc ad me ut veniat ūsust.

Several scholars regard the Substantive Clause after necesse est as one of Result. But if the clause were one of Result, it would be impossible to account for the practically invariable absence of ut in this idiom. Moreover, we find that the clause with opus est takes $n \bar{e}$ as a negative in Pliny, Epp. vii. 6. 3 opus esset ne reus vidērētur.
392. With sequitur, reliquum est, restat, in the sense 'it remains to,' 'the next thing is to.'

## Without ut.

Original Uses: These seem lacking.
Extensions: Cic. ad Fam. xv. 21. 6 reliquum est tuam profectiōnem amōre prōsequar, 'it remains for me to attend your departure with affectionate wishes.'

These expressions also are followed by Substantive Clauses of Result, but they then have another meaning, viz. 'the fact remains that.'
393. Substantive Clauses Introduced by Quōminus and Quin after Verbs of hindering. - As explained in Gr. § 295. 3. a, Substantive Clauses introduced by quōminus are probably developed from Purpose Clauses. However, they have their ultimate origin in the Volitive, since Purpose is a development from the Volitive (§ 368. 1). The original character of Subjunctive Clauses of this kind may be seen in an expression like formīdō virōs impedit quominus velint, originally: 'fear hinders men, in order that they may not be willing,' i.e. prevents them from being willing. Quōminus lit. means 'by which the less, by which not,' and hence 'in order that not.'

The origin of Substantive Clauses introduced by quin with expressions of hindering is not altogether clear. Two views deserve consideration :
(1) Quīn in such clauses may be a relative adverb, compounded of $q u \bar{\imath}$ (old Instrumental), and $n \check{e}$, ' $n$ not'; lit. 'by which not.' In this sense, quīn would be the exact equivalent of quōminus, and the Substantive Clause with quin after expressions of hindering would have the same origin as that with quöminus.
(2) Quin in such clauses may be the interrogative quin, 'why not?' In that case the Substantive Clause is developed from the Deliberative. Cf. Plautus, Amphitruo, 560 quīn loquar, numquam potes dèterrēre; lit. ' why am I not to speak? You cannot prevent it;' i.e. 'You cannot prevent me from speaking;' Trinummus, 64 I retinēr̄̄ nequeō qū̀n dīcam.

Clauses introduced by quīn after negative expressions of hindering are sometimes classified as Result Clauses. It is of course true that in its developed meaning the quin-clause after negative expressions of hindering does at times seem to indicate a (negative) result, e.g. nec impedītī sunt quīn facerent may be conceived as literally meaning ' nor were they prevented so that they didn't do.' But this conception is just as possible in case of quōminus-clauses after negative expressions of hindering, and even more so in case of quöminus-clauses after affirmative expressions of hindering. Thus, tè impediò quōminus haec faciās might theoretically be conceived as meaning 'I hinder you so that you do not do this.' But quō minus is clearly a purpose particle, so that the original purpose character of the quomi-nus-clause seems beyond question. Any consistent treatment of Substantive Clauses must have regard to their origin, not merely to the English rendering. Thus, in a sentence like eìs persuāsit ut exirent, 'he persuaded them to go out,' the $u t$-clause might seem at first sight to indicate a Result, but an examination of such clauses clearly shows that they are developed from the Jussive.

Clauses introduced by $n \bar{e}$ after verbs of hindering are not necessarily developed from the Jussive, as suggested in Gr. § 295. 3. This is the more probable view ; but it is also possible that, like quōminus and quinn-clauses, they have been developed from Purpose Clauses.
394. Substantive Clauses in Sentences of the Type: nūlla causa est cūr, nūlla causa est quīn, etc. ( $G r$. § 295.7). - These have been explained as developed from the Deliberative. This is the view, among others, of Schmalz (Lat. Synt. ${ }^{3} \S 350$ ), and is supported by the history of these clauses. Cf. e.g. Cic. ad Fam. ii. 17. I quīn dècēdam nūlla causa est, originally' why shouldn't I go away! There's no reason'; later 'there's no reason why I shouldn't go away.' Cf. Ter. Andria 600 quid causae est, quin in pistrinum proficiscar, 'what reason is there why I shouldn't set out for the mill!' originally 'what reason is there ? Why shouldn't I set out?'

## Substantive Clauses Developed from the Optative.

395. After Verbs of wishing and desiring (Gr. § 296. 1). - The Optative origin of these Substantive Clauses is sufficiently evident. It should be noted, however, that in colloquial language volo sometimes has the force of commanding (cf. the English authoritative $I$ want, e.g. in $I$ want you to understand). In such cases the Substantive Clause with volō must be referred to a Volitive origin, e.g. volō eam dūccās, 'I want you to marry her.'
396. After Verbs of fearing (Gr. § 296. 2).- Instructive for the history of the construction are such early Latin uses as Ter. Andr. 277 Haud verear sì in tè sit sōlō situm: sed ut vim queàs ferre, 'I should not fear, if it were to depend on you alone ; but may you be able to withstand compulsion' ; 705 diēs hīc mī ut satis sit vereor ad agendum, 'may this day be sufficient (I'm afraid though).'

## Substantive Clauses of Result.

397. Expressions like accidit ut aegrōtāret, 'it so happened that he was ill,' show clearly the origin of the Substantive Clause of Result. But the Result notion early became weakened in these clauses, and the substantive notion became so prominent that Substantive Clauses introduced by ut occur where not only no notion of Result exists, but where it never could have existed, e.g. vērīsimile nōn est ut ille antepōneret, 'it's not likely that he preferred'; accēdit ut doleam, 'another fact is that I am suffering'; praectārum est ut ē̄s amèmus, 'it's a noble thing that we love them'; reliquum est ut virtūs sit frūgālitās, 'the fact remains that economy is a virtue.'

## Substantive Clauses Introduced by Quin after Nōn Dubitō and Kindred Expressions.

398. In the expressions nōn dubito quīn, quis dubitat quīn, nōn est dubium quīn, haud dubium est quīn, the quin-clause is probably developed from the Deliberative Subjunctive. Thus quis dubitat quīn in virtūte dīvitiae sint originally meant 'why shouldn't there be riches in virtue! who doubts it?' It seems difficult to find any ground in the history or signification of these clauses for regarding them as Clauses of Result, a view advocated by some.

## Indirect Questions.

399. The origin of the Subjunctive in Indirect Questions is not yet clear. The construction is manifestly a relatively late one in the development of Latin syntax. Plautus and Terence frequently employ the Indicative in such sentences.

## Conditional Sentences.

400. The treatment in the Grammar follows the traditional classification, which has regard exclusively to what is implied in the Protasis in each instance.
401. Conditional sentences are the development of an earlier Parataxis (§ 367). Thus we may assume that the earliest type of si valet, bene est, was bene est, valet, 'it is well ; he is well.' The conditional force was purely the result of the context, which indicated that valet was something assumed. As language developed, the fact that one clause was related to the other as an assumption or condition was brought out more definitely by the use of $s \bar{\imath}$; yet conditional sentences without $s \bar{\imath}$ occur with more or less frequency in all stages of the Latin language (Gr. § 305. 2). They are simply a relic of the earlier paratactic stage. The origin of the conjunctional use of $s \bar{\imath}$ was as follows: $S \bar{\imath}$ was originally an adverb meaning so. The most primitive type of a conditional sentence with si would be seen in bene est sì, valet, i.e. 'it is well so, (ziz. that) he is well.' In this expression si limits bene est, and valet is really an appositive of the adverbial idea in $s \bar{s}$. The use of $s \bar{z}$ as a conjunction is secondary and the result of its association. With sī cf. English sō in such expressions as so you pay me, I shall be satisfied.
402. Conditional Sentences of the Second Type. - Here the Subjunctive in the Protasis was originally Jussive in character. Thus a sentence like sì videat, crēdat would, in its earliest form, have been videat, crédat, lit. ' let him see (i.e. assuming he should see), he would then believe.' The Apodosis is the Subjunctive of Contingent Futurity, conventionally called 'Potential.'
403. Conditional Sentences of the Third Type. - The origin of this type is obscure. Perhaps the Protasis was originally an Optative, i.e. sì adesset, bene esset, lit. ' O that he were here ! it would be well.'

The employment of oportuit, decuit, débēbam, and of the Indicative of the Periphrastic Conjugations in Apodoses of Conditional Sentences of this type is frequently the result of ellipsis. Thus in
sī Pompeius occīsus esset, fuistisne ad arma itūrr, the thought is 'were you about to proceed to arms (and would you have done so ?) had Pompey been slain ?' So in eum patris locō colere dēbē$b \bar{a} s, s \bar{u} \bar{u} l l a ~ i n ~ t e ́ ~ p i e t a ̄ s ~ e s s e t ~ t h e ~ f u l l ~ s e n s e ~ i s: ~ ' i t ~ w a s ~ y o u r ~ d u t y ~ t o ~$ revere him (and you would now be doing it), had you any sense of devotion.'

## Subordinate Adversative Clauses with Quamvis.

404. Here the Subjunctive was originally a paratactic Jussive. Quamvīs was originally quam vīs, 'as much as you wish.' Thus in the sentence, quod turpe est, id, quamvīs occultētur, tamen honestum fierī nōn potest, the original meaning was: ' what is base, let it be concealed as much as you wish, cannot become honorable.' In this way quamvis ultimately developed into a Conjunction with the force of 'although.'

## Clauses of Proviso with Dum, Modo, Dummodo.

405. These were all originally Jussive. Thus in manent ingenia senibus, modo permaneat studium et industria, the original sense was: 'let only interest and vigor remain ! (then) old men's faculties remain.' Dum was originally an oblique case of a noun meaning 'while.' Hence in ōderint, dum metuant, the original sense was 'let them fear the while! (then) they may hate.' Some regard the clause of Proviso with dum as originally temporal ('while'). But that view fails to account for the use of the Subjunctive, and also ignores the fact that the negative with the dumclause of Proviso is always $n \bar{e}$.

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[^0]:    ${ }^{1}$ Initial and final $p, c$, and $t$, in stressed syllables, in English are also uttered with aspiration, though we do not indicate this in writing. Examples are: top, lock, pot.

[^1]:    ${ }^{1}$ The material here presented is based chiefly upon Marx's Hülfsbüchlein,

[^2]:    ${ }^{1}$ Examples are anticvm, CIL. vi. 615.4 b); cocvs, CIL. vi. 8753 f.; 9264 f.; Propincvs, CIL. vi. 2408. 3; iii. 5274 a. 2. Cf. Gr. Протlขкоs CIG. 6430. Manuscripts also preserve numerous traces of such spellings. For examples occurring in the Palatine codex of Virgil's Aeneid, see Bersu, p. 88 , n.

[^3]:    ${ }^{1}$ In the Appendix to my Latin Grammar it was suggested that even in the case of unassimilated spellings (adf- ads-, adg-, etc.) there was assimilation in pronunciation; i.e. that adf- was pronounced aff-; ads-, ass-, etc.

[^4]:    ${ }^{1}$ This list in the main follows that given in Brambach's Hülfsbüchlein für Lateinische Rechtschreibung, a book unfortunately much antiquated. The whole subject of Latin orthography calls for new treatment. The standard followed in this list is the usage of the early Empire, - roughly speaking, the first century A.D. The correct form is given first. Words belonging to the classes treated in $\S \S 57-60$ are, for the most part, omitted from the list.

[^5]:    ${ }^{1}$ See Brugmann, Grundriss², Vol. I, §§ 78-549; Lindsay, Latin I.anguage, chap. iv; Stolz, Lateinische Grammatik3, §§ 4-45; I ateinische Lautlehre, pp. 112-229; Sommer, Handbuch der Lateinischen Laut- und Formenlehre (pp. 34-336), to which work I am under the greatest obligations for the material here presented.
    ${ }^{2}$ While roots are usually monosyllabic, yet some disyllabic roots are also to be recognized.

[^6]:    ${ }^{1} \boldsymbol{\theta}$ represents an obscure short vowel, which developed variously in the different Indo-European languages, - as $\breve{a}, \breve{e}, \breve{\imath}, \breve{o}$.

[^7]:    ${ }^{1}$ Including the $\breve{a}$ arising from Indo-European $a$ (§ 62. 2, footnote).

[^8]:    ${ }^{1}$ By guttural $l$ is meant $l$ before $a, o, u$, or a consonant; by palatal $l, l$ before $e$ or $i$.

[^9]:    ${ }^{1}$ This is probably the correct spelling for this class of words, not major, $\bar{a} j \bar{j}$, Mäjus, etc.

    2 coenum is for earlier *quoinom (§ 1O3).

[^10]:    ${ }^{1}$ See in general Brugmann, Grundriss ${ }^{2}$, §§ 277-532; Lindsay, Latin Language, chap. iv.; Stolz, Lateinische Grammatik³, §§ 42-69; Lateinische Lautlehre, pp. 232-291; Sommer, Handbuch der Lateinischen Laut- und Formenlehre, pp. 169-336.

[^11]:    ${ }^{1}$ See especially Stolz, Lateinische Grammatik³, §§ 62-69; Lateinische Lautlehre, pp. 295-334.

[^12]:    ${ }^{1}$ See, in general: Brugmann, Grundriss, ii. §§ $184-404$; Lindsay, Iatin Language, chaps. v. and vi.; Stolz, Lateinische Grammatik ${ }^{3}$, §§ 75-88; Sommer, Handbuch der Lateinischen Laut-und Formenlehre, §§ 179-265.

[^13]:    ${ }^{1}$ A few possible vestiges occur in the early language.

[^14]:    ${ }^{1}$ See Lindsay, Latin Language, p. 404; Stolz, Lateinische Grammatik3, §92; Sommer, Handbuch der Lateinischen Laut- und Formenlehre, §§ 302 ff .
    ${ }^{2}$-is appears in plüs (see 3, below) and in the Adverbs mag-is, nim-is.

[^15]:    ${ }^{1}$ See Brugmann, Grundriss, ii. §§ 164-181; Lindsay, Latin Language, pp. 408 ff.; Stolz, Lateinische Grammatik³, § 91; Sommer, Handbuch der Lateinische Laut- und Formenlehre, §§ 306 ff.

[^16]:    ${ }^{1}$ See Brugmann, Grundriss, ii. §§ 407-459; Lindsay, Latin Language, chap. vii ; Stolz, Lateinische Grammatik, ${ }^{3} \S \S 89,90$; Sommer, Handbuch der Lateinischen Laut- und Formenlehre, §§ 266 ff .

[^17]:    ${ }^{1}$ See in general: Brugmann, Grundriss, ii. §§ 460-1086; Lindsay, Latin Language, chap. viii.; Stolz, Lateinische Grammatik ${ }^{3}$, §§ 96-118; Sommer, Handbuch der Lateinischen Laut- und Formenlehre, §§ 317-391.

[^18]:    ${ }^{1}$ For the personal endings in this and the other verbs, see $\S \S 235 \mathrm{ff}$.

[^19]:    ${ }^{1}$ No attempt is here made to take account of the Ablaut.

[^20]:    ${ }^{1}$ The endings of the Perfect Indicative and of the Imperative have already been considered in §§ 211 ff ., 223 ff .

[^21]:    ${ }^{1}$ See especially Lindsay, Latin Language, chap. ix.

[^22]:    ${ }^{1}$ See especially Lindsay, Latin Language, chap. ix.

[^23]:    ${ }^{1}$ See especially Brugmann und Delbrück，Grundriss der Vergleichenden Grammatik，vols．iii－v（Vergleichende Syntax，by Delbrück），Strassburg， 1893－1900．Landgraf，Historische Lateinische Grammatik．Riemann et Goelzer，Grammaire Comparée du Grec et du Latin，vol．ii．Paris， 1899. Dräger，Historische Syntrxx der Lateinischen Sprache， 2 vols．2d edition． Leipzig，1878，1881．Kühner，Ausfiuhrliche Grammatik der Lateinischen Sprache，vol．ii．Hannover，1878．Schmalz，in Müller＇s Handbuch der Klassischen Altertumswissenschaft，vol．ii．3d edition．Munich， 1900. Riemann，La Syntaxe Latine．4th edition．Paris，1900．Roby，Latin Gram－ mar，vol．ii． $5^{\text {th }}$ edition．London， 1888.

[^24]:    ${ }^{1}$ For the original force of the Accusative, see §31I.

[^25]:    ${ }^{1}$ On the names of the Moods，see especially Jeep，Zur Geschichte der Lehre der Redeteile bei den lateinischen Grammatikern，Leipzig，1893；pp．216－236．

[^26]:    ${ }^{1}$ This is the view of Delbrück in his Conjunctiv und Optativ im Sanskrit und Griechischen, p. II ff.
    ${ }^{2}$ Notably Goodwin in Greek Moods and Tenses, p. 37 Iff .
    ${ }^{8}$ The view advocated in the earlier edition of this book.

[^27]:    ${ }^{1}$ But in his Vergleichende Syntax, IV. 2. p. 373, he apparently returned to his earlier view.

[^28]:    ${ }^{1}$ It is not necessary that this assumed value was absolutely primitive in Indo-European speech. It may have been the result of development.

[^29]:    ${ }^{1}$ The negative $n \bar{o} n$ (instead of $n \bar{e}$ ) is to be regarded as a perfectly natural consequence of the derived nature of the usage.

