## APPENDX

то
BENNETTS
LATIN
CRAMMAR

## Bennett's Latin Grammar



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W6. mi Gohnotm
Allyw- Bacon, 1895

## PREFACE.

My purpose in the following pages has been to give such suggestions concerning the sounds, inflections, and syntax of the Latin language, as experience has shown are likely to prove of service to teachers and advanced students. In the former part of the work I have drawn freely upon the standard manuals of Seel mann, Brugmann, Stolz, and Lindsay; in the syntax I wish to acknowledge my indebtedness not only to Delbrück's recently published Vergleichende Syntax, but especially, for the moods, to the syntactical studies of Professor W. G. Hale, of the University of Chicago.

For the kind criticism of friends who have read my manuscript and have followed the book through the press, I desire here to extend my thanks, especially to Professors H. C. Elmer and George P. Bristol of Cornell University, Professors George Hempl, Francis W. Kelsey, and John C. Rolfe, of the University of Michigan, and Professor Alfred Gudeman, of the University of Pennsylvania. The chapter on Relative Clauses is the work of Professor Elmer.
C. E. B.

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## CHAPTER I.

## LIST OF ABBREVIATIONS AND SIGNS.

Archiv $=$ Wölfflin's Archiv für Lateinische Lexikographie und Grammatik. Vols. I.-IX. Leipzig, 1884-1895.
CIA. $=$ Corpus Inscriptionum Atticarum. Berlin, 1873 ff .
CIG. $=$ Corpus Inscriptionum Graecarum. Berlin, 1828 ff .
CIL. = Corpus Inscriptionum Latinarum. Berlin, 1863 ff.
E. L. D. = Lewis, Elementary Latin Dictionary. New York, r89x.

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, Ẅ̈rterbuch = Körting, Lateinisch-Romanisches Wörterbuch. Paderborn, 1891.
Marx = Marx, Hülfsbïchlein fïr die Aussprache der Vokale in positionslangen Silben. Berlin, 1889.

References by $\S$ are to the Appendix 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 (eg. $\breve{a}, \breve{e})$.

## THE ALPHABET.

1. r. 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 ro50 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 some time in the sixth century b.c. the Chalcidian alphabet was introduced into Latium. Special peculiarities of this alphabet are the following:
2. The character $\Xi$ was lacking, $X$ was used as $x$, and $Y(V)$ as ch. Lambda, which in Ionic had the form $\Lambda$, took in Chalcidian the form V , while Gamma (Attic 「) was C. Besides K, another character for the $k$-sound existed, viz. Q, called Koppa. For Rho, R was employed as well as P, the ordinary Attic form of thåt letter.
In conformity with its Chalcidian origin the earliest Latin alphabet consisted of the following twenty-one characters: A B C ( $=g$ ) DEFZHIKVMNOГORSTVX.
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, Kaesō, Karthāgō. 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 $Z$, 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 $\odot(\theta),(1)(\phi)$, and $Y \vee(\chi)$, being aspirates, represented sounds which did not originally exist in the Latin language. These characters were accordingly introduced as numerals, $\odot$ as roo, $(1)$ as rooo, 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 . $V$ (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 ( $\dot{\alpha} \tau \tau \iota \kappa$ ' $\zeta \omega)$.

The Emperor Claudius proposed the introduction of three new characters, $\lrcorner$ to represent $v$ (i.e. our $w)$, $)$ (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.

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.
2. In writing $j$ in the Grammar to represent the Latin $i$-connsonāns, 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 $\bar{a} i \bar{o}$ is $\bar{a} j \bar{o}$; that $\bar{a} i u n t$ is $\bar{a} j u n t$, or that Ga $\bar{a} i u s$ is $G \bar{a}-\breve{\imath}-u s$. 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.

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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. 185 A.D.), author of a work entitled de 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 Grammaticarum Libri xviiii. 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 vRes, 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 acletarva for athletarva, which shows that the $t h$ was practically à $t$; otherwise we could not account for its confusion with $c$. See § 3r.
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 Kıк'́ $\rho \omega v$ (Cicero) furnishes support for the $k$-sound of Latin $c$; while Aıovia and Oiàevzia 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, I888; 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 forty 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 :
Corssen, W. Aussprache, Vokalismus und Betonung der Lateinischen Sprache. 2 vols., 2d ed. Leipzig, 1868; 1870. This work has been largely superseded by more recent publications, but is still valuable for its collections of material.
Brugmann, K. Grundriss der Vergleichenden Grammatik der Indogerma-
nischen Sprachen. Vol. I. Strassburg, 1886. ${ }^{1}$
[^0]
## Pronunciation

Stolz, F. Lateinische Grammatik in Müller's Handbuch der Klassischen Altertumswissenschaft. Vol. II. 2d ed. Nördlingen, 1889.
Stolz, F. Lautlehre der Lateinischen Sprache. Leipzig, 1894.
Lindsay, W. M. The Latin Language. Oxford, Clarendon Press, 1894 An admirable summary of the latest researches.
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, 188ı. 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 lips relatively closed. Cf. such inscriptional spellings as pleibes, leigibvs (Brugmann, Grundriss, i. § 73). Short e was open, i.e. spoken with the lips relatively open. 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 I. 17) ; Pompeius (Keil, v. ro2. 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 $\S 36.5$. It is to be

## The Vowels.

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 $\check{i}$-sound, and pronounce a diphthong, $\bar{e} i$, e.g. in fatal, paper, etc.
6. i. 1. Long $i$ was probably somewhat more open than English $i$ in machine (Brugmann, Grundriss, i. § 41 ; Stolz, Lateinische Grammatik, § 32). The evidence for this is found in the occurrence of $e i$ in inscriptions as a graphical variation of $\bar{i}$, e.g. AVDEIRE, CIL. i. 196; vervos ; faxsers. Short $i$ was also probably an open sound, as suggested by its occasional representation in inscriptions by $\breve{e}$, e.g. TEMPESTATEBVS $(=-i b u s)$.
2. Before the labials $p, b, f, m$, an earlier $\check{u}$ changed to $\breve{\imath}$ in many words at about the close of the Republican period. Examples are :

| recuperō | reciperō |
| :--- | :--- |
| lub̄̈do | libidō |
| póntufex | pontifex |
| lacruma | lacrima |
| māxumus, optumus, etc. | māximus, optimus. |

Quintilian, i. 7. 2r, tells us that Julius Caesar was said to have been the first to introduce the new orthography. Inscriptions, however, show the occasional use of $i$ for $u$ before his time. 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 $\ddot{u}$. 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 $i$. See below under $y$.
7. o. 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. 130-1 34) ; Marius Victorinus (Keil, vi. 33. 3-8) ; Servius (Keil, vi. 421 . ${ }^{1} 7-19$ ) ; 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 $\S 36.5$.

Short $o$ should never be pronounced like English $\check{o}$ in hot, top, rock, not, etc. English $\check{o}$ in these words really has a short $a$-sound. Latin ŏ 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 lova (lŭpus) ; sovra (super) ; ove (ubi), etc.
9. y. In conformity with its origin, Latin $y$ ( $=$ Greek $v$; see § r. 5) had the sound of French $u$, German ï. 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. r. The original form of this diphthong was ai, a spelling which prevailed till about roo 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 at in Greek transliteration of Latin words, e.g. $\pi \rho \alpha i ̂ \tau o \rho, ~ K a i ̂ \sigma \alpha \rho$. Terentius Scaurus (first half of second century A.D.) bears testimony to the diphthongal character of the sound, when he says (Keil, vii. 16.9),
$\grave{a}$ propos of the orthography, that $a e$ is a more accurate designation than $a i$, as the second element is an $e$-sound. This difference between $a i$ and $a e$, though a real and perceptible one, was probably not very great.
11. By the fourth century A.D., however, ae 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), evestor, etc. But this orthography does not become frequent till after 300 A.D. See Seelmann, Aussprache des Latein, p. 224 f.
12. oe. 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 кoî入os 'hollow' ; cèna, 'dinner,' appears variously as caena, and coena, the latter spelling being perhaps a result of association with Greek кotvós 'common,' i.e. 'the common meal'; ne , the asseverative particle, is often written nae, probably another instance of Greek influence. Cf. vaí, 'verily.' Other instances of confusion are cerimōnia for caerimōnia; cemèterrium for coemētērium (Gr. коццทгท́ptov) ; moestus for maestus; foemina for fêmina; caeterì for $\overline{\text { ceterì }}$ (probably owing to the influence of Gr. кaì ërєpot);
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 Пaov入入ívך (Pautina), Фaorтîvos (Faustīnus).
14. eu appears in Latin in only a few words, and in these is of secondary origin. Primitive Latin $e u$ early became $o u$, whence $\bar{u}$. The chief Latin words that have eu are: ceu, neu, seu, neuter, neutiquam, neutique, heu. The combination appears also in numerous proper names borrowed from the Greek, e.g. Euröpa, 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 $h u i$ (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 quī (the Nom.). Some scholars have accordingly inferred that $q u \bar{i}$ 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. cuì. But if the facts were thus, we should expect cui, when resolved into two syllables in verse by metrical license, to be an iambus ( $\checkmark-)$. 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 852 cŭ̃̌cumque ( 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,

## The Sound of $j$.

sometimes have cŭ̄ in verse, but there is apparently no trace of any such resolution in the early centuries of the Empire. The $i$ of $w i$ 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 quī; 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 chi as the descendant of Latin quí, but cui (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 $j$ ( $i$ connsonāns). 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 Ï-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 I, 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 assump-
tion that the sound of $j$ was very close to that of $i$, $i . e$. was the semivowel $y$. $C f$. Quintilian i. 4. го.
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 munc 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八ıos (= Julius).
16. 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), Giove (=Jove). Cf. Seelmann, Aussprache des Latein, p. 239.
17. Intervocalic $j$ had a tendency to develop an $i$-glide before it, which was sometimes expressed in writing. Inscriptions show mairor, Pomperivs. According to Quintilian i. 4. II, Cicero wrote ailo, Maila.
18. r. V. $V$ 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 evidences :
a) A single character $(\mathrm{V})$ sufficed with the Romans to indicate the vowel $u$ ( $u$ vōcālis) and the consonant $u$ ( $u$ conssonāns). 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, tenuia easily becomes tenvia, and must frequently 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 $\bar{v} \bar{s}$ 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 $o v$,

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, tārva. Similarly mī-lu-os appears later as mìlvus. 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, poella, etc. This interchange is conceivable only upon the supposition that the vowel and consonant sounds were closely akin. Cf. also Velius Longus (close of the first century A.D.) in Keil vii. 75. 10, to the effect that $a$-cu-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 vöcālis, 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- $\bar{a}$-vis by the side of suā- (i.e. svāa-) vis. Cf. Seelmann, p. 234.
$f$ ) The phonetic changes incident to word-formation also point in the direction of the $w$-sound of $v$. Thus from faveō (root fav-) we get fau-tor (for ${ }^{*}$ fav-tor); from lavō (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 labio-dental, 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.
$g$ ) The contracted verb-forms, such as am̄̄stī for amāvisti, dēlēstī for dètēvisti, 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. Cf. English Hawarden, pronounced Härden; toward, pronounced tōrd.
The evidence given under $f$ ) and $g$ ) 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.
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 it 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 aspīrātiō, e.g. in
valente, prìmitīvō (Keil vii. 58. 17). This reference to aspīrātiō hints at the development of $v$ from its earlier value as a bilabial semivowel to a bilabial spirant, somewhat similar to our English $v$, except that our $v$ is labio-dental. 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 ( $=$ vīgintī) ; 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 Io0 A.D., we find $\beta$ frequently employed in Greek inscriptions in place of earlier ov for such transliterations, e.g. кov $\beta$ '́vios (conventus) ; $\beta$ '́pva (verna) ; Ka入 $\beta$ єîvos (Calvinus). Similarly our text of Plutarch (about roo A.D.) usually has $\beta$ in Latin words (e.g. Badépıos, Bévovs = Venus) where earlier Greek writers mostly employed ov. Now it is claimed (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. However this may be, little support would be gained from that fact for the pronunciation of Latin $v$. 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 roo 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 ioo 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. vinum) ; aizwaggeli, 'gospel' (Lat. ēvangelium) ; Anglo-Saxon weall, 'wall' (Lat. vāllum) ; -wic 'town' (Lat. vicus). 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 (v), did not suggest a new character for $i$ cōnsonāns ( $j$ ). 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 or sixth century A.D.?) the bilabial spirant became a labio-dental spirant (Eng. $v$ ), and with that value passed into the Romance languages, - French, Italian, etc.

## 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 sonus, as in the second $l$ of ille, Metellus; 2) a pinguis sonus, after a mute or at the end of a word or syllable, as in clārus, sōl, silva; 3) a medius sonus, viz. when initial, 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. $a^{\prime} l t e r, l^{\prime} \bar{a} r u s$. The basis for this view he finds in the Romance development of this $l$ pingue; e.g. clārus becomes Italian chiaro; ftūmen becomes fume; alter becomes French autre.
18. $R$ 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 titera canīna, 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. $C f$. 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. M, 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 (obscūrātur) 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. quōrum 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 250 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. 1. $N$ 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 ango, 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, aggulus. 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 $\S 37$. Some have assumed, in consequence, that a nasal vowel was pronounced in such cases, particularly Johannes Schmidt (Zur Geschichte des Indogermanischen Vokal-
ismus 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; vīcies or vícièns. Velius Longus (Keil, vii. $78-79$ ) tells us that Cicero pronounced forēnsia as forēsia, and Megatènsia as Megatēsia, while in adjectives in -ösus the $n$ was permanently lost. Greek transliterations of Latin words also frequently show $\sigma$ for $\nu \sigma(v s)$,
 indicate nothing more than that $n$ before $s$ was unstable and inclined to disappear. There is nothing to force the conclusion that nasal vowels were uttered in such cases in Latin, though it is, of course, possible that such a pronunciation existed. 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 ( $=$ secund $\bar{o}$ ) ; testameto ( $=$ testament $\bar{o}$ ). 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 ( $=$ inqū̄rant) ; pricipis (=principis). The phenomenon under discussion is, accordingly, a general one, and may be stated thus: The Latin nasals $m$ (labial), $n$ (dental), and $n$-adulterīmum (guttural), exhibit a tendency to disappear before labial, dental, and guttural sounds respectively.
4. gn. It has been held that $g n$ was pronounced as $n g n$, i.e. as $n$-adulterinum $+n$. The most recent representative of this view is Brugmann (Grundriss der Vergleichenden Grammatik, i. §§ 500, 506). Yet the evidence in favor of this theory is slight, consisting chiefly in the occasional occurrence in inscriptions of $n g n$ for $g n$, e.g. congnato, ingnominiae. But such spellings as these could hardly have represented the prevailing usage of the best period.
5. Besides the three nasals already considered ( $m, n$, and $n$ adulterīnum), Seelmann (Aussprache des Latein, p. 270) recognizes another midway in sound between $m$ and $n$, which he designates by $m$. 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 $\sigma \alpha ́ \mu \beta v \xi$, where likewise, he observes, neither $\nu$ 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. I99 ( 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, as Corssen, 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, hirundō, holus, represent the correct spelling; but these same words were frequently pronounced arena, 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 hānser ( $\S 97.3$ ). 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 84 th poem humorously refers to one Arrius, who said hīnsidiàs for insidiās, and Hiōniōs for Iōniōs.

Intervocalic $h$ easily vanished between like vowels, as is shown by such contractions as nèmō for *ne-hemō; prēnd $\bar{o}$ for prehendo$;$ 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. Cf. such
 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 septiès). Probably this orthography was not exact, as the sound was rather that of our English sh; 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) became 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. 1. $C$ 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 : K七кє́ $\rho \omega \nu$, K $\alpha \hat{\imath} \sigma \alpha \rho$.
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. Tucerna) ; karkara (=Lat. carcer) ; Kaisar (= Caesar) ; German Keller (= cellārium) ; Kiste (=cista).
e) The Old Umbrian of the Iguvine Tables uses in its enchoric alphabet $\lambda$ for $c$, and $d$ for $\&$ (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 Reviezw, 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 $d_{i} c \bar{o}$, di$c i s, d \bar{\imath} c i t$, 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. $c h$ ) 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.
2. 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 ( $=$ fēlīciōs $a$ ) ; Marziae ( $=$ Märciae). 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 7 th century A.D.
3. 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; suspicicio as suspitiō; negōtium as negōcium; convīcium as convītium. In the case of some of these words, the false forms have not yet been entirely eliminated from our texts of the classic writers.
4. $K$ and $Q$ are simply superfluous duplicates of $c$, as was recognized by the Romans themselves. Cf. Terentianus Maurus (Keil, vi. 331. 204 f.).
26. P. $P$ was apparently our normal English $p$ and presents no peculiarities.

The Voiced Mutes, $b, d, g$.
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 journée, 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 gem, 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 alternation of sounds in a paradigm like legō,legis, or tegés, Tegzm, would not have failed to elicit comment.
b) In the Greek transliteration of Latin words $g$ is always represented by $\gamma ;$ e.g. Гé $\lambda \lambda \iota o s$ (Gellius).
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 § r. 3) was, accordingly, always guttural ; the same was the case with $q$, while $c$ and $g$ varied in character according to the following vowel.

## The Aspirates ph, ch, th.

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. Thus in early inscriptions (down to about ioo b.c.), we find Corintvs, Delpis, Aciles. In the Captivi of
[^1]Plautus, verse 274 , the evident pun on Thalem . . . talentō, shows that the th was felt as substantially a $t$, and in fact there can be little doubt that $t$ is what Plautus actually wrote.
2. Beginning, however, with about 100 B.c., Greek $\phi, \chi, \theta$ came to be represented with increasing frequency in Latin by $p h, c h$, th, 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.
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 iland. The $s$ was introduced at a comparatively recent date as a result of associating iland 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 $\rho v \theta_{\mu}{ }^{\prime}$ ), 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, Kartāgō, 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 $c h, p h$, th, 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 (Bóorooos) 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 àthletarum, and aclheticvm for āthlēticum, in an inscription of about 360 A.D. (Wilmanns, No. 2639). 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); catolico (catholicus). Similarly $c h$ 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. chorues).
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 Fundānius. 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 $p h$ 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 $f f$, 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 Palantium, whence Phalantium, German Pfalz, but dialectically often pronounced

The Double Consonants, $x, z$.
32. 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 § 1. 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. sona ( $=$ ̧'óv $\eta$ ) ; atticisso $(=\dot{\alpha} \tau \tau \iota \kappa i \zeta \omega)$. 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. Cf. 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 5th 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, Pronunciation 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. Iro. Such doubled consonants do not occur in English. We often write $t t$, $p p, c c, e t c$., but pronounce only a single $t, p$, or $c, e . g . u t(t) e r$, $u p(p) e r$, 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 ( $m \mathrm{~mm}, n n$ ), 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, ̄̄llus.

## 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, $b d$. See for instance Caesellius, cited by Cassiodorus (Keil, vii. 205. 1) ; Terentianus Maurus (Keil, vi. 35 1. 879). Seelmann (Aussprache des Latein, p. 138 ) cites also the testimony of inscriptions. Some of these which mark the division of words into syllables by dots, apparently follow the principle under discussion, e.g. CIL. vi. $77 \mathrm{HE} \cdot \mathrm{DY}$ PNVS; vi. II $682 \mathrm{VI} \cdot \mathrm{xIT}$.
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 $\S 33$. Moreover, we find Quintilian (i. 7. 9) advocating an etymological principle of division, e.g. haru-spex, abs-temius. As regards the testimony of inscriptions, the instances cited by Seelmann are very few. Seelmann himself (p. 143) admits the paucity of the material upon which he bases his conclusion, yet indulges the hope that investigation will bring further instances to light. However, in the very inscription from which he cites HE • DY • PNVS we find CAE - LES • TI, and in another (CIL. ix. 4028), which shows the division into syllables by dots, we find SES • TV - LEI • VS ; SES • TV • LE • IO.

There is also evidence of a phonetic nature bearing upon this question. It is a familiar fact that in verse, when a short vowel is followed by a mute with $l$ or $r$, the poet may at his option use the syllable as long. Obviously this license consisted simply in combining the mute with the preceding vowel, while the liquid was joined with the vowel following. Thus the ordinary prose pro-
nunciation $a-g r \bar{\imath}$ would in poetry become $a g-r \bar{\imath}$, if the poet desired to use the first syllable as long, i.e. the open syllable of a-gri became a closed syllable in $a g-r \bar{\eta}$; and a closed syllable is phonetically long. In the same way compounds whose first element ends in a mute, and whose second begins with $l$ or $r$ (e.g. ab-latuc, $a b-r \bar{a} d \bar{o})$, show that the mute must have been joined with the preceding vowel, making a closed syllable, since such syllables are invariably long in verse. In view of these considerations it seems most probable that in words like doctus, magistri, hospes, the actual division was doc-tus, ma-gis-trī, hos-pes. This division gives us closed (i.e. long) syllables. If we divide do-ctus, ma-gi-strī, ho-spes, we get open syllables containing a short vowel, and it is impossible that such syllables should be metrically long, any more than a final short vowel before initial str or $s p$, e.g. operă struit, bonă spès.

As regards the rule 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. The division per-ē, inter-eă, gives us a closed (i.e. long) syllable, whence it would appear that the actual division in such cases was pe-reō, inte-reā, exactly as in ge-rō, te-rō; i.e. compounds were treated precisely like other words.

If, therefore, phonetic considerations are entitled to weight, we shall be justified in rejecting the testimony of third and fourth century grammarians, and in assuming that they rested their statements not upon phonetic observation of contemporary speech, but upon the traditions of their Greek predecessors ; and in conformity with the phonetic evidence we may lay down the following substitute for § 4. 3 : In case of other 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, ma-tris, $a-g \bar{z}$; 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. ab-lātus, ab-rump $\bar{o}$. In all other combinations of consonants, the first consonant is joined to the preceding vowel, as al-tus, an-gō, hos-pes, dic-tus, minis-trī, māg-nus, mōn-strum. This principle obviously demands that $x$ should be divided in pronunciation, as was undoubtedly the case. Thus äxis must have been pronounced ac-sis, lăxus as lac-sus; so, also, after a long vowel, $v \bar{i} c-s \bar{i}(v \bar{v} x \bar{x})$; $\bar{e} c-s \bar{i}(r \bar{e} x \bar{i})$.
Rule 4 in § 4 of the Grammar may for all scientific purposes be abandoned, since, as already indicated, compounds call for the application of no special principles.

So much for the scientific aspect of the division of words into syllables. It has, nevertheless, been deemed best to make no changes in the traditional rules. For 1) Experience has shown that pupils ordinarily divide their syllables with phonetic correctness without the aid of rules. 2) The rules as given are seldom or perhaps never made a basis for the actual pronunciation of Latin, but serve only as a guide for printers, where a word is broken at the end of a line. As such a guide they furnish convenient working rules, which, though probably wrong, are, nevertheless, of world-wide acceptation and application, and in simplicity are superior to the true ones. It should always be borne in mind, however, that the traditional rules are simply mechanical, and that they probably do not represent the way the Romans spoke.

## 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 :
37. 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 $\S 37$ ); 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.
38. The versification of the carlier 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 long by position. Examples are the following: juvĕntūs, Plautus, Mostellaria 30 ; Curculio 38 ; volüntās, Trinummus 1166 ; Pseu-
dolus 537 ; Stichus 59 ; volüptās, 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. bonĭs mīs, Plautus, Trinummus, 822, forǐs pultābō, 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. $\S 87.3$.
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. 231 I ; Priscvs, CIL. xi. ı940 ; ólla, CIL. vi. rooo6; QuInQve, CIL. vi. 3539 ; MIllia, Monumentum Ancyranum i, 16 ; fecei, CIL. i. 55 r.
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. PAASTORES, CIL. i. 55 r ; PeqvLatvv, CIL. i. 202 ; 0 is never doubled in this manner. This peculiarity belongs to the period $1_{30-70}$ b.c.
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 Divì Augzusti. This latter, among a great number of correct markings, contains also some false ones, e.g. clv́per, 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 $\bar{E}$ squiliace in view of 'H ${ }^{\prime} \kappa v \lambda \hat{\imath} v o s$, Strabo, v. 234, 237; Vërgilius, after Ove $\rho \gamma$ ìncos; Vesŏntiō, after Ov̉єбovtímv. Dio Cassius, lxviii. 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. Béíqavos, CIG. $57 \circ 9$, $=$ Vīpsānius; Greek $\iota$ points to Latin $\check{i}$, e.g. ${ }^{*} I \sigma \tau \rho o s=I ̆$ ster.
Inscriptions are naturally of much greater weight in such matters than are our texts of the Greek writers. $C f . \S 3 . c$ ).
5. The vocalism of the Romance languages. - These languages, particularly the Spanish and Italian, treated $e, i, o, w^{\text {with }}$ great regularity according to the natural length of the vowel. It will be remembered that Latin $\bar{e}$ and $\bar{o}$ were close; Latin $\check{e}$ and $\check{o}$ 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 ie. Latin $\bar{o}$ appears as a close $o$ in Italian and Spanish; Latin $\breve{o}$ as an open $o$ or as $u o(u e)$. Similarly Latin $\bar{i}$ remained $i$, but $\bar{i}$ became a close $e$; Latin $\bar{u}$ remained $u$, but $\breve{u}$ became close $o$. Examples:-

| Latin. mēnsis. | Italian. <br> mese (with close e). |
| :---: | :---: |
| honěstus. | onesto (with open e). |
| respōnsum. | rispose (with close o). |
| dŏctus. | dotto (with open 0). |
| dixiz. | dissi. |
| dïctus. | detto (with close e). |
| $d \bar{u} x \bar{z}$. | -dussi. |
| düctus. | -dotto (with close 0). |

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 many 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, Hiulfsbiuchlein fiir die Aussprache lateinischer Vokale in Positionslangen Silben. 2d ed. Berlin, 1889. A work valuable for its collection of evidence, but frequently untrustworthy in its conclusions.
Serlmann, Die Aussprache des Latein. Heilbronn, 1885. p. 69 ff.
GRÖBER, Vulfärlateinische Substrata Romanischer Wörter, a series of articles in Wölffin's Archiv fiir Lateinische Lexikographie, vols. $\mathrm{i}-\mathrm{vi}$,
Kürting, Lateinisch-Romanisches Wörterbuch. Paderborn, 18gr.
Lindsay, The Latin Language. Oxford, $1894 \cdot$ 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.

Further literature up to 1889 is cited by Marx, $\stackrel{\dot{p}}{ }$. xii.

## GENERAL PRINCIPLES FOR THE DETERMINATION OF HIDDEN QUANTITY.

## Vowels before ns, nf.

37. A vowel is always long before $n s$ and $n f$, e.g. cōnsul, inifetēx. 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 ns the vowel is often marked in inscriptions with an apex, as CIL. xii. 3102 Cénsor; CIL. vi. 1527 d. 64 cónstó; CIL. xi. III 8 ménsva ; the apex occurs less frequently before $n f$ e.g. CIL. xi. IIr8 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. 1738 Infanti; CIL. x. 4294 Inferri.
c) Greek transliterations of Latin words often indicate a long vowel before $n s$, as $\mathrm{K} \rho \eta \dot{\eta} \sigma \eta \nu \mathrm{s}$ ( $=$ Crēscēns) ; Проv́ə̀vs (=Prūdēns).

Vowels before gn, gm.
38. Vowels are long before $g n$ in the suffixes $-g n u s,-g n a,-g n u m$. In support of this we have the direct testimony of Priscian (Keil, ii. 82. 7), who lays down the above principle and gives as illustrations: rēgnum, stāgnum, benīgnus, matīgnus, abiēgnus, prīvĭgnus, Paetignus. Inscriptions also have RÉGNVM (CIL. vi. 7578); sIgnvm (CIL. vi. 10234); dIGni (CIL. x. 5676); privIgno (CIL. vi. 354 I ).

This rule is often formulated to include all vowels before gn (e.g. by Marx, p. r) ; but there is no evidence to support such a principle. In gignō, for example, and in such forms as cognōscō, cognātus, ignārus, ignāvus, ignōrō, ignōscō, there is nothing to show that the vowel was long. Marx holds that the vowel in these
latter forms was long as the result of compensatory lengthening, ignārus being for *in-gnārrus, cognōscō for *con-gnōscō. But no such theory of compensatory lengthening is tenable. Moreover, a Greek inscription (CIG. i. 1060) has коүvítov = cŏgnitū. 'E $\gamma v a ́ t \iota o s$ also in Greek texts shows another genuine Latin word with a short vowel before $g n$. Cf. also Latin ambiegnus (ambi+agnus), which indicates that agnus had $\breve{a}$ before $g n$; for $\bar{a}$ is retained in compounds, while $\breve{a}$ regularly becomes $\breve{c}$. Marx's appeal (p. I) 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.
Conservative procedure demands, therefore, that the vowel before $g n$ should be recognized as long only in words of the type mentioned by Priscian and in such others as are supported by definite evidence. Some scholars have even been inclined to reject Priscian's testimony altogether. The Romance languages might at first sight seem to warrant this attitude. For we find Latin dignus, signum, tignum appearing in Italian as degno, segno, legno with close $e$. This close $e$ regularly points to a short Latin $i$ (see §36.5). But it is possible that the $\bar{\imath}$ of Latin was shortened in the Romance (see $\S 36.5$ ) ; or it may be that the $i$ in the Latin words was long but somewhat more open than the ordinary Latin $\bar{i}$. In this latter case the close $e$ of Italian degno, segno, legno (=open $i$ ) would be an indication of the fidelity with which the Romance languages have preserved the quality of the Latin vowels. This second view is that of W. Meyer (Kuhn's Zeitschrift, xxx. p. 337).
39. Before $g m$ the vowel is long in pigmentum (see CIL. viii. I 344, PIgmen [T), and in segmentum (assured by the Greek $\left.{ }^{\sigma} \eta \gamma \mu \dot{\epsilon} \nu \tau a\right)$; but there is no evidence to warrant the formulation of a broad rule embracing all vowels before $g m$, as is done by Marx (p. 1). Marx appeals to the analogy of $g n$ in support of his contention; but if analogy could prove this, it would
similarly prove that every vowel before $m s$ is long, after the analogy of the long vowel before ns. Marx's second argument, that the syllable before $g m$ is always long in Plautus, is of no more weight than the same argument as urged in behalf of gn . It may therefore be seriously questioned whether there is any justification in including $g m$ in the list of combinations before which a vowel is regularly long.

## Voweis before $n t, n d$.

40. I. All vowels are regularly short before $n t$ and $n d$, e.g. amandus, montis, amant, monent.
41. Exceptions:
a) Before $n t$ the vowel is long in
a) quīntus (from quinqque).
$\beta$ ) the following contracted words : cōntiō (for coventiō), jēntāculum (for * Jèjūntāculum), jèntātiō (for *jējūntātiō), nūntius (for *noventius ?).
$\gamma$ ) Greek proper names in - $\bar{u} s$, Gen. - $\bar{u} n t i s$, e.g. Selin $\bar{u} s$, Selinnüntis (Greek, $\Sigma \in \lambda \in \iota$ vov̂vтos).
ס) Greek proper names in -ōn, Gen. -ōntis, e.g. Xenophōn, Xenophōntis (Greek, ヨevo申ஸ̂vios).
b) Before $n d$ the vowel is long in
a) the following contracts and compounds : prēnd $\bar{o}$ (for prehendō), nōndum (nōn + dum $)$, vènd̄̄ (vēnum d̄̄), nūndinus (novem diès), quīndecim (quīnque), ūndecim (ūnus).
$\beta$ ) some Greek names, e.g. Charōndās, Epamīnōndās ( $-\omega v \delta \alpha s$ ).
42. The evidence for the short vowel before $n t$ lies in the fact that, while in the Nominatives of such words as ctèmèns, crēscèns, clièns, föns, gèns, parēns, pōns, praesēns, 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. K $\lambda \dot{\eta} \mu \eta s$ (i.e. K $\lambda \dot{\eta} \mu \eta \nu$ ), CIA. iii. 1094, but K $\lambda \eta \dot{\mu} \epsilon \nu \tau 0 \varsigma$, CIG. 3757 ; K $\lambda \eta \dot{\eta} \mu \nu \tau \iota$, CIG. Addenda, 1829 c.; CRÉSCÉNS, CIL. xii. 4030 , but Créscenti, CIL. vi. 9059 ; K $\rho \eta{ }^{\prime} \sigma \kappa \eta \nu$, CIG. 6012, c. ;
 CIA. iii. 1147, but $\Pi_{\rho a i ́ \sigma \epsilon \nu \tau \iota, ~ \Pi \rho a i ́ \sigma \epsilon \nu \tau a, ~ C I G . ~ 3175, ~ 3991 ; ~}^{\text {1 }}$ Valéns, Greek Oüád̀ves, Fröhner, Inscriptions de Louvre, 120 , but Oủád $\epsilon v \tau \iota$, CIG. Addenda, 5783 , c.

Even where a vowel is naturally long, it sometimes becomes shortened before $n t$, e.g. in linteum from tinum; cf. Greek $\lambda$ téviov CIG. 8695 .
For the vowel before $n d$ the evidence is not so full. We find the Greek transcriptions Kadévoals, Lydus, de Mens. iv. 53, 57 ; Фovóávos (i.e. Fundānius), Bulletin de Correspondance Hellénique, ix. p. 439 ; also Tov́єvסos, i.e. tuendus, CIG. 5600.

## Pontem, fontem, montem, frontem, frondem.

41. A difference of opinion exists as to the quantity of the vowel before $n t$ in the oblique cases of fōns, mōns, pōns, frōns (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 $\S 40$.
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 0 ; so the Provençal fon. Spanish alone with its fuente points to föntem (Gröber, Archiv, ii. p. 426; Körting, Lat.-Romanisches Wörterbuch, col. 337).
frōns (-ndis). The Romance languages all agree in pointing to frōndem (Gröber, Archiv, ii. p. 426 ; Körting, Wörterbuch, col. 345).
frōns (-ntis). Provençal fron and Italian fronte, with close $o$, point to frōntem. So the other Romance languages, except Spanish, which has fruente, pointing to fröntem. (Gröber, Archiv, ii. p. 426 ; Körting, Wörterbuch, col. 345).
mōns. The Romance languages point unanimously to mōntem (Gröber, Archiv, ii. p. 426 ; Körting, Wörterbuch, col. 499).
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, fivente, 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 töndet with open $o$, becomes Italian tonde with close $o$. Similarly respŏndet becomes risponde; rhömbus 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 $o n+$ 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 $(=$ numpit $)$; onda ( $=$ unda) ; dolce ( $=$ dulcis $)$. In accordance with this principle, whose operation is certain, Latin föntem, 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 $\breve{o}$, 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 föntem, etc., in these words, suggests that Spanish monte, fronde, are loanwords, 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 (viz. 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 Фovтílos ( $=$ Föntecius) in Plutarch and Appian ; also in an inscription, CIG. iii. 5837 , b (59 A.D.) ; Фpoviर̂vos, CIA. iii. ${ }^{11} 54$ (between 150 and 200 A.D.) ; Фpovтêvos, CIA. iii. 1177 (about 220 A.D.) ; Фрóvтшv, CIA. iii. $1113,21,26$ (before 161 A.D.), and in texts ; all of which point to Latin Frŏnto, and Fröntinus, and indirectly to frönt-em. Latin Montānus appears
 Ptol. iii. II, 12, et passim; $\pi o ́ v \tau \epsilon \mu$ ( $=$ Latin pöntem) is the text
 Cassius, and Zosimus ; $\pi$ oviti申¢ $\xi$, in Lydus, de Mens. iii. 2 I ; $\pi$ ovit фıкes, in Plutarch, Numa, 9 ; and $\pi$ ovti申ıка, 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 ob 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, fromdis, 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, Hiulfsbüchlein, p. 2 ; Lane, Harvard Studies, i. p. 89) that the ending $-u m$ 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 0 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. 108I) has dvv́mviratvs, which Schmitz (Rheinisches Museum, x. IIO) 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 duovirī, 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, tressir would have been extremely awkward, and it seems probable that the singular duumvir, triumvir were for that reason historically anterior to duumvirī, 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. 18), as noted by Lane (p. 90), shows that to his ear nummum, Genitive Plural, was nowise different from nummum, Accusative Singular.
1. 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; $\bar{a} c e r, \bar{a} c r i s ; ~ p \bar{a} x$, pācis; tenāx, tenācis; făx, făcis; rēx, rēgis; nŭx, nüvis; corn̄̄x, cornēcis; catix, calīcis; fel, fellis; ŏs, ăssis; plēbs, plēbis. Thus sometimes the Nominative gives the clue to the hidden quantity in the oblique cases (as ăger, ăgri ); sometimes the oblique cases give the clue to the hidden quantity of the Nominative (as cornicis, cornīx).
2. 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 - $\bar{\alpha} s$ (Gen. -antis), e.g. Aiās, Aiantis; gig $\bar{a} s$, gigantis, have the same quantity as in the original (Aüās, Aüăvzos; $\gamma \iota \gamma \bar{\alpha} s, \gamma i ́ \gamma a ̆ v \tau o s)$. So, also, contracted Greek names of cities in oôs, -ov̂vtos, e.g. Sel̄̄nūs, Selinnūntis; and proper names in $-\hat{\omega} v,-\hat{\omega} v \tau o s, ~ e . g . ~ X e n o p h o ̄ n, ~ X e n o p h o ̄ n t i s . ~$ Acheron (not a contract form) has Acherüntis.
3. 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. ürbs, sŏrs, ărx. Exceptions to this principle are plēbs and compounds of ūncia ending in -ūnx, e.g. deūnx, deüncis; qṻncūnx, quīncūncis. Before $-x$ the vowel is sometimes long, sometimes short.

## Comparison of Adjectives.

43. In the terminations -issimus, -errimus, -illimus the hidden vowel is short, e.g. carissimus, 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. 16926 ; FORTISSIMO, vi. 1132 . 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. Cf. the similar use of $i$ longa in words like PompeIIvs, CIL. ix. 3748. At all 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.

## Numerals.

44. As separate words are to be noted
a) quăttuor, but quārtus (see $\S 53$ under arca).
b) quinque and its derivatives, all of which have $\bar{i}$, as quindecim, qū̄ntus, quīngentī, quīnquāgintā.
c) the derivatives of $\bar{u} n u s$, $\bar{u} n d e c i m, \bar{u} n d e \bar{e} \bar{q} g i n t i$, etc.
d) mille, mìllia, and mìllésimus.

## Pronouns.

45. 46. Nōs, vōs; but nŏster, vĕster; nostrū, vestrī, etc.
1. Hunc and hanc have a short vowel, as shown by the fact that they are sometimes used as short in verse, e.g. Plautus, Miles Gloriōsus, 1008.
2. Ille, ipse, iste have $\check{\text { z. }}$
3. The suffix -cunque has $\check{u}$.
4. Compounds retain the quantity of the elements of which they are compounded, as quŭsquis, cūjüsque.

## CONJUGATION.

## Root Forms.

46. 47. Presents formed by means of the infix $n$ have a short vowel, e.g. fündō (root fud-) ; frăngō (root frag-) ; jüngōo (root jug-). Before a labial $n$ becomes $m$, e.g. rump $\bar{o}$ (root rup-);
lambō (root lab-). Care should be taken not to confuse derivative and contract Presents like vend $\bar{o}$, prèndō, with genuine nasal formations.
1. In most Presents the hidden vowel is short, e.g. necto, serpo, verto. But the following exceptions are to be noted:
a) First Conjugation: jū$r g \bar{o}$ (for $j \bar{u} r i g \bar{o}), n \bar{a} r r \bar{o}, \bar{o} r n \bar{o}, ~ p \bar{u} r g \bar{o}$, trāe $c t \overline{0}$.
b) Second Conjugation : $\bar{a} r d e \bar{o}$.
c) Third Conjugation: compesscō and all Inchoatives (see § 49).
d) Fourth Conjugation: nūtriō, $\overline{\text { ordior. }}$
2. The quantity of the vowel in the Present regularly remains unchanged throughout the entire conjugation of the verb, e.g. :

| $\overline{\text { ardeo }}$ | ārdēre | $\overline{a r s i}$ | ārsūrus |
| :---: | :---: | :---: | :---: |
| gerō | gerere | gessi | grestus |
| scriboo | scribere | scrips ${ }^{\text {a }}$ | scriptus |
| vīvō | vivere | vīxi | vīctürus |
| figo | figere | fixi | fixus |

Thus inscriptions give FIXA, SCRIpTVM, CONSCREIPTVM, vIxit, verxit.

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

| $a$ | dicō | dicere | $d \bar{i} x \bar{z}$ | dictus |
| :---: | :---: | :---: | :---: | :---: |
|  | $d \bar{u} c \bar{o}$ | dücere | dūxì | düctus |
|  | cêdō | cēdere | cěssī | cěssūrus |

The short vowel of the Perfect Participles dictus and düctus is assured by the statement of Aulus Gellius (Noctes Atticae, ix. 6) and by the testimony of the Romance languages. (See § 5 z. s.vv.)
b) The short vowel of the Present is lengthened in the Perfect Indicative and Perfect Participle, if hidden, in the following verbs :

| ag $\bar{o}$ | agere | $\bar{e} g \bar{i}$ | $\bar{a} c l u s$ |
| :--- | :--- | :--- | :--- |
| cing $\bar{o}$ | cingere | cinnxi | cinctus |
| dèlinquō | dèlinquere | dètiquì | dèlictus |

## In the Conjugations.

| distingū | distinguere | distinxi | distinctus |
| :---: | :---: | :---: | :---: |
| emō | emere | èmi | èmptus |
| exstinguō | exstinguere | exstinxi | exstenclus |
| fingō | fingere | $f i n x i$ | fictus |
| frangō | frangere | frègi | frāctus |
| fungor | fungì | fünctus sum | 迷 |
| jungō | jungere | $j \bar{u} n x \bar{i}$ | jünctus |
| legō | legere | Legzi | lēclus |
| pangō | pangere | pepigi | pāctus |
| pingō. | pingere | pinxi | pictus |
| pungō | pungere | pupugi | pünctus |
| regō | regere | rexi | rēctus |
| relinquō | relinquere | reliqui | relictus |
| sanciō | sancire | sānxiz (?) | sänctus |
| struö | struere | strūxī | strūctus |
| tangō | tangere | tetigi | tāctus |
| tegō | tegere | texi | tectus |
| tinguō | tinguere | tinxi | tinctus |
| trahō | trakere | trāx | trāctus |
| ungō | ungere | $\bar{u} n x \bar{i}$ | $\bar{u}$ nctus |

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 āctus, Tectus, $\bar{u} n c t u s$, and in xii. 3.4 to that of strūctus.
b) In the testimony of inscriptions, which show the following : Åcris CIL. vi. 1377 ; Redácta vi. 7or ; exáctvs Boissieu, Inscripptions de Lyon, p. 136 ; *eInctvs CIL. x. 4104 ; DÉFV́nctis CIL.v. ${ }^{1} 326$; DILÉctvs vi. 6319 ; Léctvs xi. 1826; EXSTInctos vi. 25617 ; infráctá ix. 60 ; iv́ncta x. 1888; SEIV́NCTVM vi. 1527 e. 38 ; RÉcte xii. 2494 ; téctor vi. 5205 ; coémto Monumentum Ancyranum iii. II ; TRÁ[CTA (not certain) CIL. vi. 1527 e. 14; SÁNCTA v. 268 I ; Oscan SAA ( N ) HTOM ( $=$ 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 * cönfăctus; acceptus for an original *accăptus; èreptus for *érăptus.
d) For cinctus, detictus, distinctus, exstinctus, fictus, pictus, pünctus, relictus, tinctus, the long yowel 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. 2311, 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 cinnxī, distinnxi, exstinnxī, finnxī, pinnxī, strüxi, tīnxī, $\bar{u} n x \bar{i}$.
d) The long $\bar{a}$ in $\operatorname{san} x x \bar{i}$ rests upon no specific evidence, but may perhaps be safely inferred after the analogy of sānctus.

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. scind̄̄, scindere, scidī, scīssus; mĕrgo, mërgere, mērsī, 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.

## Verbal Endings.

47. r. The hidden vowel is short before ss and st in the terminations of inflected forms, e.g. fuĭssem, amāvisse; fuiusti, fŭ̈stis. This is shown not only by the historical origin of these formations, but by such metrical usage as Plautus, Amphitruo, 761, dedisse; Menaechmi, 687, dedisti, where iss and ist are treated as short
syllables by neglect of 'position' (see $\S 36.2$ ). Contracted forms are, of course, an exception to the above principle, as amāsse, commōssem, redīsse, audīsset, amāsti, nōstis.
48. Formations of the type : dīxtī, accĕstis, jüsti, trāxe, surrēxe, extinxem 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 ascend $\bar{o}$ (for ${ }^{*}$ ad-scand $\bar{o}$ ) ; di-stingūo (*dis-stingu $\bar{o}$ ); suspiciō (for ${ }^{*}$ sub-spiciō). But this principle rests upon an untenable theory of compensatory lengthening ; see $\S 89$.

## Inchoatives.

49. Inchoatives in -scō, -scor have a long vowel before -sc, e.g. labāscō, flōrēscō, nitéscō, tremīscō, adīīiscor. 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 -escōond -iscō (-iscor) had $\bar{e}$ and $\bar{i}$.

## Irregular Verbs.

50. r. The root vowel of esse is short under all circumstances, e.g. ěst, ěstis, ĕstō, ĕssem.
51. Ed̄̄, 'eat,' has a long $e$ in the forms ēs, ēst, ēstis, èssem, ēsse, èstur, èssētur. Cf. Donatus on Terence, Andria, i. I. 54 ; Servius on Vergil, Aeneid, v. 785.
52. Marx (p. 9) lays down the principle that in compounds of $\bar{e}$, forms containing $i i$ have the second $i$ long before st, as e.g. in interiisti. This theory rests solely upon the occurrence of INTERIEISTI in CIL. i. 1202. But ei occurs elsewhere in inscriptions, incorrectly written for $\check{\imath}$, e.g. PARENTEIS (= parentïs), CIL. i. 1009; FACEIVNDAE ( = faciundae). It is altogether probable that interiEISTI is another instance of the same sort.

## Word Formation.

51. 52. Substantives in -abrum, -acrum, -atrum, derived from verbs, have $\bar{a}$, e.g. flābrum, lavācrum, arātrum.
1. The derivative endings -ellus $(a$, um $)$, -illus ( $a$, um), regularly have $\breve{e}$ and $\breve{\imath}$, but the following have a long vowel, viz.: catella, 'little chain,' anguìlla, Bovillae, hîllae, ovīllus, stīlla, suìllus, vīlla.
2. The vowel is short in -ernus (-ernius, -erninus), -urnus (-urnius, -urnīnus), e.g. hibĕrnus, tab̄̆rna, Satŭrnus. In vērnus (from $v \bar{e} r$ ) the $r$ is not a part of the suffix.
3. The vowel is short in the endings -estus (-ester, -estris, -esticus, -estās), -ister (-istrum), -ustus, e.g. caelëstis, domĕsticus, tempĕstās, capüstrum, venŭstus. In sēmēstris, jūstus, the long vowel belongs to the stem.
4. The vowel is short in the endings -unculus, -unciō,-erculus, -usculus, e.g. ratiuncula, paterculus, mājusculus, homunciō; plūsculus (from $p \bar{u} s$ ) naturally has $\bar{u}$.
5. In compounds, the connecting vowel $i$ is short, e.g. n $\bar{a} v \bar{v}$ fragus, lectĭsternium.

List of the Most Important Words containing a Long Vowel before Two Consonants. ${ }^{1}$

## 52. <br> A.

abiëgnus: see § 38 .
acatatectus: Gr. dккaтá入ךктоs. $\bar{a} c t \bar{u} t u m: ~ l i k e \bar{c} c t u s$. agō, agere, ēgi, àctus: see § 46.3.b).

> Alcēstis: Gr. "A ${ }^{2} \kappa \eta \sigma \tau \iota s$. Ātectō: Gr. 'A $\lambda \eta \kappa \tau \omega$. aliörsum: for *alio-vorsum. a Kiptes: Gr. $\alpha^{2} \lambda e l \pi \tau \eta s$. Amāzōn: Gr. 'A $\mu d{ }^{\prime} \xi \omega \nu$. ambūstus: see $\bar{u} r o ̄$.
${ }^{1}$ 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 $-\bar{a} s c \bar{o},-\bar{e} s c \overline{0},-i s c o \overline{0}$.
a) Some rare Greek loan-words and proper names.
e) Nouns and adjectives in $-x$, whose Genitive (acc. to $\S 42.2$ ) shows the preceding vowel to be long.
anguilla: $\bar{i}$ acc. to the Romance.
aprügnus: see $\S 38$.
Aquillius: AQvIllivs: CIL. vi, 12264.
arātrum: see § $5 \mathbf{1} . \mathrm{I}$.
$\bar{a} r d e \bar{o}:$ like āridus.
àthla: Gr. ả $\theta \lambda o \nu$.

āträmentum: like āter.
ātrium: from āter; also Átrivm,
CIL. vi. 10025.
àxilla: Priscian, iii. 36.
B.
bārdus, 'stupid': from bārō.
Bēdriacum: B $\quad$ тpıakóv, Plutarch, Otho, 8, ir.
Bellerophōn, -ōntis: Gr. $-\hat{\omega} \nu,-\hat{\omega} \nu \tau o s$.
benignus: see § 38 ; so also the Ro mance.
bêstia, Bēstia: B $\eta \sigma \tau l a s ; ~ P l u t a r c h, ~$ Marius, 9 ; Cicero, 3 ; the Romance would point to $\check{e}$.
bimèstris: from mēnsis.
bovillus: from bovinus.
būbrēstis: Gr. $\beta$ oú $\beta p \eta \sigma \tau$ ss.
būrrus: $\bar{u}$ acc. to the Romance.
būstum: $\bar{u}$ acc. to the Romance ; cf. combūstus and ūstus.

## C.

catatectus: Gr. кavdi $\lambda \eta \kappa \tau o s$.
catêlla: from catêna; catella, 'bitch,' has $\check{e}$.
catillus: from catīnus.
cetra: better orthography is caetra, see § 6 r .
chìrūrgus: Gr. хє $\quad$ povpyós.
cicätrix: $\bar{a}$ in Plautus, Amphitruo 446; see § 36.2 .
ciccus, - um : $\bar{i}$ acc, to the Romance.
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, col. 196) ; d'Ovidio (Gröber's Grundriss, p. i. 501 f.); CInctvs, CIL. x.4104; see § 53 . s. v. clàtra, clātrì: Gr. $\kappa \lambda \hat{\eta} \rho_{\rho} a$.

Cnössus: Gr. K $\nu \omega \sigma \sigma \sigma^{\prime}$.
cögo, cōgere, coègz, coàctus: see asō. combū̄rō, combū̀rere, combussī, combū̄stus : see $\bar{u} r \bar{r}$ and $\bar{u} \bar{s} s t u m$.
cōm $\overline{0}$, cömere, cömpsi, complus: ō acc. to the Romance.
comping $\bar{o}$, compingere, compēgi, compāctus: see § 46.3.b).
conjūnx: Coniv́nx, CIL. vi. 6592 et passim; but conjux has $\check{u}$.
conting $\bar{o}$, -ere, contigi, contāctus : 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. Kрウंбкךvs; also acc. to the Romance.
cribrum: $\bar{i}$ in Plautus, Mostellaria, 55; see § 36. 2.
crispus: Creispinvs, CIL. x. 3514. K $\rho \epsilon / \sigma \pi \epsilon \hat{\imath} v o v$, CIG. Addenda, 4342, d. 4. The Romance would point to $\check{\imath}$; but see $\S 36.5$ fin.
crüsta, crūstum: र́ in CIL. i. II99; the Romance points both to crusstum and also to a collateral form with $\breve{u}$. Gröber (Archiv, vi. 384) ; Körting (Wörterbuch, col. 232). Clêsiphōn, -ōntis: Gr. - $\hat{\nu},-\omega \hat{\omega} \tau \mathrm{os}$.
cuciullus, 'hood': the Romance points to two forms, - one with $\bar{u}$, another with $\breve{u}$; see Gröber (Archiv,
i． 555 ；vi． 384 ）；Körting（Wörter－ distinguō，－ere，distinxī，distinctus ： buch，col．233）；cucullus，＇cuckoo，＇ has $\breve{u}$ ．
cünctus：ćrncti，CIL．ix． 60.
cūstōs：Kouvtஸ́o $\eta \mathrm{s}$ ，Lydus，de Magis－ tratibus，i． 46 ； $\bar{u}$ acc．to the Ro－ mance．
Cyclōps：Gr．Kv́к $\lambda \omega \psi$ ．
D．
dēligō，－ere，dēteḡ̀ dètectus：like legō． dēlinqū, －ere，deliquí，dē̄̄ctus： $\bar{i}$ acc． to the Romance．
dētūbrum： $\bar{u}$ in Plautus，Poenulus， II75；see § 36.2.
dèmō，dèmere，dèmpsi，dèmptus：like emō．
deūnx：from dè and ūncia．
dēxtāns：from $d \bar{e}+$ sextāns．
dicō，dïcere，dīxi ，díctus：see § 46 ． $3 . a)$ ．Certain of the Romance lan－ guages（Fr．dit；Old Ital．ditlo， etc．）point to a collateral dictus， which Osthoff（Morphologische Un－ tersuchungen，iv．74）thinks be－ longed to the colloquial language． But possibly those Romance lan－ guages which point to $\bar{i}$ have sim－ ply adapted the Participle to the vowel of the Present and the Per－ fect．See Gröber（Archiv，vi．385）．

Diespiter：diès and pater．
digladior：for dis＋gladior by com－ pensatory lengthening；see $\S 89$ ． dignus ：see $\S 38$ fin．
digredior：for dis＋gradior by com－ pensatory lengthening；see $\S 89$ ． dilèmma：Gr．$\delta \iota \lambda \hat{\eta} \mu \mu a$ ．
dīligō，－ere，dītēxī，d̄̄lectus：like legō． d̄̄riḡ̄，－ere，d̄̄rēx̄̄，d̄̄rēctus ：like regō． dirimō，－ere，dirēmī，dirēmplus：like emō．
acc．to the Romance；see d＇Ovidio （Gröber＇s Grundriss，i．p．502）； Körting（Wörterbuch，col．304）； cf．exstinguō；see 46．3．b．
dolābra：cf．§51．1．
dūcō，dūcere，$d \bar{u} x \bar{x}$ ，dŭctus：see § 46. 3．a）；PERDV́xit，CIL．xii． 2346 et passim．

E．
$\bar{e} b r i u s:$ è regularly in Plautus，e．g．Tri－ nummus，812；see § 36.2.
eclipsis：Gr．є́клєıчıs．
effring $\bar{o}$, －ere，effrèg $\bar{i}$ ，effräctus：like frangö．
emō，emere，èmi，èmptus：see § 46 ． 3．b）．
$\bar{e} m u n g \bar{o},-$ ere，- ，èmūnctus： $\bar{u}$ acc． to the Romance；see d＇Ovidio （Gröber＇s Grundriss，i．p．515）．
èrigō，－ere，ērēxī，èrēctus：like rego．
ésca： $\bar{e}$ acc．to the Romance．
Esquiliae，Esquitinnus：Gr．＇H $\sigma \kappa v \lambda i ̂ v o s$, in Strabo，v．234， 237.
Etrūscus：：cf．Etrūria；Gr．＇Eт $\rho \circ \hat{v} \sigma$ кos． existimō：from ex and aestimo ；ExI－ Stimavervnt，CIL．v． 5050.
exōrdium：from ōrdior．
exstinguō，－ere，exstinx $\bar{i}$ ，exstīnctus． ExTInctos，CIL．vi．25617；of． distinguō；see 46．3．b．
extraōrdinārizes：from ōrdō．
F．
favillla：favIlla，CIL．v． 3143 ．The Romance also seems to point to $\bar{z}$ ． fêllō：from same root as fémina；Gr． $\theta \hat{\eta} \lambda u s$.
festĩus：from festus．
festus：from the same root as feriae （ $=$＊fes－iae），＇holiday＇；Fêstvs in CIL．i．，Fasti Praenestini for April 25 th．So also in the proper name：

Festus：Féstvs，CIL．xii． 31 79；Fêsti，fürtum from für． v．2627；FÉstae，iii．5353；Gr． $\Phi \hat{\eta} \sigma \tau o s$, CIA．iii． 635 and fre－ quently．The Romance points to $\bar{e}$ ，indicating that $\bar{e}$ of the classical period ultimately became reduced； see § 36． 5 ．
figō，figere，fixī，fixus ：FIXA，Monu mentum Ancyranum，vi．18；$i$ acc to the Romance．
fingo，fingere，finxi，fictus： $\bar{i}$ acc．to the Romance；see § $53 \mathrm{~s} . \mathrm{v}$ ．
firmus：FIrmva，CIL．iv． 175 et passim；the Romance points to $i$ ， showing that $\bar{i}$ of the classical pe－ riod had become reduced；see § 36.5 ．
flābrum ：see § 51．I．
figyō，－ere，flixxi，－fictus：afleicta， CIL．i．II75；the Romance also points to $\bar{i}$ ．
fōsculus：from fōs．
föma：see Donatus on Terence， Phormio，28；фట́ $\mu \boldsymbol{\eta}$ in Greek in scriptions；Romance also shows $\bar{o}$ ．
formula：from forma．
frangō，－ere，frēgi，fräctus ：see § 46. 3．b）．
frigo，－ere，－，frictus： $\bar{i}$ acc．to the Romance．
frūctus： $\bar{u}$ acc．to the Romance．Old
French froit points to a collateral
früctus；see Osthoff，Geschichte des Perfects，p． 523.
fruor，frui，frūctus sum： $\bar{u}$ acc．to the Romance．
frūstrā：FRV́STR\＆，CIL．vi． 20370.
frustum： $\bar{u}$ acc．to the Romance．
fungor，fungī，fünctus sum：DE－
FV́NCTIS，CIL．v．I326；FV́NCTO，
xii． 3176 et passim．
fürtim：from für．
fürtivus：from für．
füstis： $\bar{u}$ acc．to the Romance．

## G．

geōgraphia：Gr．$\gamma \in \omega \gamma \rho a \phi l a$
Geōrgizes：Gr．Гє由́pycos．
geörgicus：Gr．$\gamma \epsilon \omega \rho \gamma \iota \kappa \delta{ }^{\prime}$ s．
g $\overline{2} s c \bar{o}:$ § 49.
glōssārium：from Gr．$\gamma \lambda \omega \hat{\omega} \sigma \alpha$ glōssēma：from Gr．$\gamma \lambda \omega \sigma \sigma \hat{\eta} \mu \alpha$ ． gryllus： $\bar{y}$ acc．to the Romance． gryps：like Gen．grypis；§ 42． 2.
āacten
Hellēspontus：Gr．＇E入入خ́ $\sigma \pi 0 \nu \tau o s$.
Hērculānum：HércvlAniae，CIL
xii．1357；＇Hркои入ávєov，Dio Cas－
sius，lxvi． 23 ；＇H ${ }^{\prime} \kappa \lambda a \nu \delta s$ ，CIA．iii． 1197.
hibiscuem：i acc．to the Romance．
hillae：from hīra．
hircus：like hīrtus．
hïrsütus：like hīrtus．
Hirtus and hirtus ：$i$ acc．to the Ro－ mance．
iscō：see § 49.
Hispellum：of．Gr．Ei $\sigma \pi \epsilon \bar{\lambda} \lambda \frac{\nu}{\circ}$ ，Strabo， v． 227.
Hispo，Hispulla：like Hispellum．
hörnus：from höra？
horsum：for＊ho－vorsum．
hydrōps：like Gen．hydrōpis；§ 42． 2.
Hymēttus：Gr．＇$\Upsilon \mu \eta \tau \tau$ ós．
Hypermēstra：Gr．＇〇 $\pi \epsilon \rho \mu \hat{\eta} \sigma \tau \rho a$ ．

I．
ignis：IGNIs，CIL．xi． 826
ilignus：see § 38 ．
illōrsum：for＊illo－vorsum
Īlyria：Eillvrico，CIL． $\mathrm{i}^{2}$. p． 77.
impingö，－ere，impégi，impāctus：see § 46．3．b）．
inféstus：infésti，CIL．v．2627；of． maniféstus．
inlūstris：from $\bar{u} \bar{u} x$
Iölcus：Gr．＇I $\omega \lambda \times 0$ s．
instinctus：see distinguō．
intellegō，intellegere，intellēxī，intellēe． tus：like legō．
intervällun：from vällus．
intrörsum ：for＊intro－vorsum．
involūcrunn： $\bar{u}$ in Plautus，Captivi， 267；§ 36． 2.
istörsum：for＊isto－vorsum．

## J．

jèntāculum：see § 40．2．a）．
jentātiō：see § 40．2．a）．
jüglāns：from $\mathfrak{f o v}$－and glāns．
jungō，－ere，jūnxī，jünctus；see § 46 ． 3．b）．
$j \bar{u} r r_{g} \overline{0}:$ for $j \bar{u} r i g \bar{g}$, from $j \bar{u} s$ ．
耳ैūstiniänzus：from jüstus．
$j u \overline{s t i t i u m: ~ f r o m ~ j u ̄ s . ~}$
$j u \bar{s}$ tus：from jūs：also rýsto，CIL．ii． 210；v． 5919
$j u \bar{u} t \bar{u}$, ，jüxtim：from $j u \bar{u}$ is $^{\prime}$＇joined with．＇

L．
lābor，lābí，lāpsus sum：see § 46．3； dILÁpsam，CIL．xi． 3123.
läbrum，＇bowl＇：for lavābrum；la－ brum，＇lip，＇has $\breve{a}$ ．
labrüsca： $\bar{u}$ acc．to the Romance．
laevōrsum：for＊laevo－vorsum．
làmna：syncopated for làmina．
lärdum：syncopated for lāridum．
Lārs，Lärtis：Lárt－，CIL．x． 633
lārva：like lārua，the early Latin form，e．g．Plautus，Amphitruo，777； Captivi 598.
làtrina：for lavätrīna；of．Plautus， Curculio，580；§ 36．2．
lātrō：a a in oblātrātricem，Plautus，Mi－ les Gloriosus，681；§ 36． 2.
lavābrum：see § 51．I．
lavācrum：see § 5 I．．． legō，－ere，lēgi，lēctus：see § 46． 3 ． Lemma：Gr．$\lambda \hat{\eta} \mu \mu a$ ．
Lemniscus：Gr．入 пииlбкоs．
Lēmnos：Gr．$\Lambda \hat{\eta} \mu$ pos．
lentiscus： $\bar{i}$ acc．to the Romance．
Ībra： $\bar{i}$ in Plautus，Pseudolus，816； § 36.2.
T̄brö：like TVibra．
Fictor：LICTOR，CIL．vi． 699 and often； Lictor，Ephemeris Epigraphica，v． 5I；$\lambda \in i \kappa \tau \omega \rho$ ，Eckinger（Orthogra－ phie lateinischer Wörter in Grie－ chischen Inschriften，p．43）．
Tgonum：see § 38 ．
lūbricus： $\bar{u}$ in Plautus，Miles Glor． iosus， $853 ; \S 36.2$.
lūceō，－ère，lūxī：see § 46.3 ．
lucta： $\bar{u}$ acc．to the Romance．
Lüctor：like lūcta．
lūctus：from luggeō：also Lv́ctvm，CIL．
vi． 1527 e．66；Líctv，CIL．v． 337 ；
x．4041． 2.
lùgeò，lügère，lūxi：see § 46． 3 ．
lūstrum，＇＇expiation＇：Lท́sTrvm，Monu－ mentum Ancyranum，ii．3，5，8； ii． 3,6 ，io；lustrum，＇haunt，＇has $\breve{u}$ ． lūstrō：like lūstrum．
lūxuria：see $\overline{\text { ūxus }}$ ．
$\bar{u} x u s: \bar{u}$ acc．to the Romance．
Lycürgus：Gr．Avкovpros．

## M．

mägnus：see § 38 ．
malignus：see $\S 38$ ；so also the Ro－ mance．
mälle：for＊mak－（magis）+ velle．
manifestus：［mani］féstvm，CIL．i． p．319；very uncertain．
Mānlius：from Mānius；MAnlio， Mánlia，CIL．v．6i5；Mínliae， ix． 3942.

Mārcellus，Mārcella：from Mārcus；nārrō：NArrem，Boissieu，Inscrip－

Märcius：from Mārcus；Márcivs， CIL．v． 555 et passim；Máapкıov， CIG． 1137.
Märcus：Maarco，CIL．i．1006；xiv． 2802；MArci，Boissieu，Inscriptions de Lyon，p．143；Máapкos，CIG． 887 et passim．
Märs，Märtis：MArtis，Monumentum Ancyranum，iv．21；CIL．x． 809 et passim．
Märtiālis：like Mārs．
mässa ：Gr．$\mu a ̂ ̧ a$.
mātrimōnium：from māter．
mātrīx：from māter．
màtrōna：from māter；MATRÓNA， CIL．v． 5249 ．
mäxilla ：acc．to Priscian，iii． 36.
mäximus：MAX［IMO，CIL．vi． 2080. 17.
māza：Gr．$\mu \hat{a}\} a$ ．
mercènnārius：for＊mercēd－narius．
Mētrodōrus：Gr．M $\eta \tau \rho \delta \delta \bar{\omega} \omega \rho$ ．
mètropolis：Gr．$\mu \eta \tau \rho \dot{o} \pi$ ohis．
mille，millia：mIlliA，Monumentum Ancyranum，i．16；milliens，iii． $34 ; \bar{i}$ acc．to the Romance．
milvus：as in the early Latin miluos． Möstellāria：from mōnstrum．
mūcrō： $\bar{u}$ in Atta，Frag． 13 （ed． Ribbeck）；§ 36．2．
muileus： $\bar{u}$ acc．to the Romance．
müllus： $\bar{u}$ acc．to the Romance．
mūscerda：from mūs．
mūsculus：from mūs．
müscus ： $\bar{u}$ acc．to the Romance．
müstela：from mūs．
Mycalèssus：Gr．Muкa入 $\eta \sigma \sigma$ ds．

## N．

nanciscor：see § 49 ．
Nārnia：Umbrian Nahar－$(=\bar{a})$ ，

$$
\text { tions de Lyon, p. } 136 \text {. }
$$

născor：§ 49；NAscerer，Monumen－ tum Ancyranum，ii． 44 ；NAscenti－ Bvs，CIL．xii． 3702.
nästurcium：from nāsus．
nefastus：from nefās．
neglegō，－ere，neglèxi，neglectus；see lego．
nēquidquam（nēquīcquam）：from abl． quīd．
nîtor，nīī̄，nīxus sum：see § 46． 3 ． nölle：from ne + ＊volle（through the assimilated form＊no－volle？）．
nōndum：from nōn and dumn；NóN－ DVM，CIL．x． 404 I .6.
nōngenti ：for＊no（v）engentī．
nōnne：from nōn．
nönnūllı ：from nōn and nüllus
Nōrba：Gr．N $\omega \rho \beta \eta$ ．
$n \bar{s} s \bar{c}: \bar{o}$ acc．to the Romance．
nüūō，－ere，nüpsī，nūpta：see § 46． 3 ． nüllus：from ne and $\overline{\text { üllus ；}}$ ；NV́llvm， CIL．x． 4787 ．
nündinae，nündinum：for＊no（v）en－ dinae；noundinae in early Latin； NǴndinvs，CIL．xii． 3650.
nūntius：for＊nove－ntius？（＇news－ bringer＇）．
nüntiō：like nūntius．
nüptiae：like nūpta．
nūsquam：like ūsquam．
nütrio：like nūtrix．
nütrix： $\bar{u}$ in Plautus，Curculio，643； nütricätus，Miles Gloriosus，656； nütricant，Miles Gloriosus，715； § 36． 2.
0.
oblivīscor：see § 49；OBLIvISCEMVR， CIL．vi． 6250.
Oenōtria ：Gr．Olvatpla．
ōlla：for aula；ólla，CIL．vi． 10006 et passim．

Onchēstus：Gr．${ }^{0} \mathrm{O}_{\chi \chi \eta \sigma \tau o s . ~}^{\text {．}}$
Op̄̄̄s，－位ntis：Gr．＇Otoûvtos．
$\overline{o r c a: ~} \bar{o}$ acc．to the Romance．
$\bar{o} r d i o r: ~ l i k e \bar{o} r d \bar{o}$ ．
ōrdō：Órdinis，Boissieu，Inscriplions
de Lyon，p． 136 ；CIL．ix． 5177 ；
xii． 3312 ； $\bar{o}$ acc．to the Romance．
$\bar{o} r n \bar{o}$ ：Grnare，CIL．xii． 4333 et passim．
ōrnāmentum：ÓrNAMENTIS，CIL．xii．
3203 et passim；of． $\bar{r} r n \bar{o}$.
ōscen：from ōs．
ōscillum：from ōsculum．
ōscitō：from ōs．
osculor：from ōs．
Ōstia：from ōs；Gr．＇$\Omega \sigma \tau i a$
ostium：from ōs；$\dot{\omega} \sigma \tau \iota a$ ，scholion to
Aristophanes，Plutus， 330 ；Óstivm，
CIL．vi．4710；Óstió，Monumen－ tum Ancyranum，v． 14.
ovillus：from ovinus．
Oxus：Gr．${ }^{3} \Omega$ §os，in Strabo．

## P．

pacīscor，paciscī，pactus sum：see § 49.
Paetignus：see $\S 38$ ；Gr．Пaı入îvol in
Appian，B．C．i． 39.
palimpsēstus：Gr．$\pi a \lambda \ell \mu \psi \eta \sigma \tau o s$.
palūster：from palūs．
pang $\bar{o}$ ，pangere，pepiḡ̀，pāctus：the
compounds impāctus，compāactus，
point to $\bar{a}$ ；see § $46.4 . c$ ）．
parad̄̄gma：Gr．$\pi a \rho a ́ \delta e เ \gamma \mu a$.
pāscō，pāscere，pāvī，pāstus：see § 49. pāstillus：like pāscō．
pāstiō：like pāstus．
pāstor：like pāstus；paAstores，CIL．
i． 55 I ；PASTÓRIS，CIL．x． 827 ． päxillus：acc．to Priscian，iii． 36. pegma：Gr．$\pi \hat{\eta} \gamma \mu \alpha$ ．
pentāthlum：Gr．$\dot{d} \theta$ גov
perèmptālis：from perēmptus（emō）．
perg $\overline{0}$ ，pergere，perrēxi，perrēctus：like regō．
periclitor：like periculum．
perimō，－ere，perēmi，perēmptus：like emō．
Permēssus：Gr．Пєрииәббós．
perrèpto：from rèptō（rēpō）．
Pessinnūs，－ūntis：Gr．Пєббเขoûvтos． Phoenissa：like Phoenīx．
pictor：like pictus（pingō）．
pictura：like pictus．
pigmentum：PIGMENT－，CIL．viii．
1344；i acc．to the Romance．
pignus：see § 38 ．
pingō，pingere，pinxi，pictus：see under fingo，which is precisely parallel．
pistillum，pistor，pistus（from pinsō），
pistrinum，pistrilla：pIstvs，CIL．
v． 6998 ．The Romance evidence is conflicting，but is favorable to $\bar{i}$ ．
plēbiscītum：＝plēbi scilum，and better
so written．
plēbs：like genitive plēbis；pLÉPS，CIL．
v． 6797 ；xii． 4333.
plectrum：Gr．$\pi \lambda \hat{\eta} \kappa \tau \rho o \nu$.

plōstellum：from plaustrum．
plūsculum：from plūs．
poētria，－is：Gr．тоıทтрla，тоıทтрls．
Pōlla：＝Paulla；Pólla，CIL．xii．
3471；cf．the following word．
Pōlliō：from Paullus；Póllio，CIL． vi． 22840 et passim ；$\Pi \omega \lambda \lambda(\omega \nu$ in
Plutarch，Dio Cassius，and else－ where．
pollūceō，－－ёre，－ūxī：§ 46.3 ．
Polymēstor：Gr．По入v $\mu \dot{\jmath} \sigma \tau \omega \rho$ ．
porrigō，－ere，porrèxi，porrēctus：like regō．
praelüstris：like lüx．
prāgmaticus：Gr．$\pi \rho \bar{a} \gamma \mu a \tau \iota \kappa o ́ s$.
Präxiteles：Gr．$\Pi \rho \dot{a} \xi$ เт $\hat{\lambda} \lambda\rangle s(\pi \rho \hat{a} \xi c s)$ ． prēndō：for pre－hendō．
primōrdium：from ōrdior．
princeps ：from primus and capiō． principalis：from princeps． principātus：from princeps． principium：from princeps．
Prisciānus ：from priscus．
priscus and Priscus：Príscvs，CIL．
xi．1940；PrIscvs，CIL．ix． 4354 ．c；
Прєîo коs，CIG． 4494 et passim．
prestinus：like priscus．
privignus：see § 38.
pröcrāstinō：from crās．
Procrūstēs：Gr．Прокрои́бтŋs．
profestus：from festus．
prōmō，－ere，prōmpsi，prōmptus：see § 46.3 ．
propugnāculum：pūgnō．
prösum，prörsus：for＊pro－vorsum， －sus．
prösperus：from prō＊spēre？（＇accord－ ing to expectation＇）．
pröstibulum：from prō and stabulum．
Pūblicius，Pūblicola：from pūblicus． Poplicola is another word，viz．from poplus，early form of populus， ＇people．
pūblicus：from pūbes；pV́BLICór［vM，
CIL．vi．1377； $\bar{u}$ in Plautus，Miles Gloriosus，102， 103 ；Captivi， 334 et passim；$\S 36.2 ; \bar{u}$ also acc．to the Romance．
Pūblilius：like Pūblius．
Püblius：like pūblicus．
pügna：see § 38 ．
pūgnāx：like pūgna．
pügno：like pügna．
pügnus：see § 38 ．
pulvillus：from pulvinus；pVLvIllvS， CIL．i．Fasti Cap．，a． 297.
pungō，－ere，pupugi，pūnctus： $\bar{u}$ acc．to the Romance．
pūrgō：for＊p $\bar{u} r i g o ̄ ~(p u ̄ r u s) ; ~ \bar{u}$ also acc．to the Romance．
pūrgāmentum：from pūrgō．
pūrgätiō：from pūrgō．
pushula：from puss； $\bar{u}$ acc．to the Ro－ mance．

## Q．

quärtus：QUArTvS，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 quiéscō in his day；but other－scō formations have invariably $\bar{e}$ before sc；quiēví and quiētus also point to quiēscō；Qviéscere is found CIL． vi． 2553 I ．
quīncūnx：from quïnque and ūncia． quïndecim：from quīnque and decem； $i$ acc．to the Romance．
quïngentī，quīngēnī，quīngentiēs：from quinnque．
Quīnquātrūs：from quīnque； $\bar{d}$ in Plautus，Miles Gloriosus，691 ； § 36.2.
quinque：QvInQve，CIL．vi． 3539 et passim； $\bar{i}$ acc．to the Romance．
quinquägintä：from quīnque． quīnquennium：from quīnque．
quīnquiēs：from quīnque．
quīntāna：from quīntus．
Quintīlis：from quīntus．
Quīntilius：from quintus；QvIncti－ LIO，CIL．iii． 384.
quīntus，Quīntus，Quinctius：from quīnque；QvIntvm，Monumentum Ancyranum，iii．I；i longa occurs repeatedly；Kó́tขтos，CIG．2003； $i$ acc．to the Romance．
quippe：for quid（Abl．）and－pe．
quörsus：for＊quo－vorsus．

## R.

rastrum: from rād $\bar{o}$.
reāpse: for rē eāpse (Abl.of ipsa). rēctē, rêctor: like rēctus.
rectus: see regō.
redigō, -ere, redēḡ̀, redāctus: like agō.
redimō, -ere, ređémi, redèmptus: like

DÉMPTA, CIL. vi. 2225 I.
redēmptiō, redēmptor: from redimō.
regnum: see § 38 .
rēgnō: like ręgnum.
règnātor, rēgnātrix: from rēgno
regō,-ere, rēxī, rēctus: see § 46. 3.b).
relinquō,-ere, relīquī, relīctus: see
§46. 3. b).
reminiscor, -i: see § 49 .
rēpō, rēpere, rëpsi, rèptum: see § 46.3.
restingū̄,-ere, restinxī, restinctus: see distinguō.
rixa: $\bar{i}$ acc. to the Romance.
rōscidus: from rōs,
Rōscius: Rúscio, CIL. vi. 2060, 5 ;
'Pढ̈бкıos, Plutarch, Cicero, 3; 5 ; Pompey, 15.
rōstrum: from rōd̄ō; $\dot{\rho} \omega \sigma \tau \rho o \nu, \mathrm{He}$ sychius.
Rōstra: from rōstrum.
Rōxāna: Gr. 'P $\omega \xi$ §́du
rūcto: acc. to the Romance (Gröber Archiv, v. p. 370).
rüctus: like rūctō.
rürsus: for *re-vorsus.
rūsticus: from rūs; Rv́sticvs, CIL.
ix. 4012 ; $\bar{u}$ acc. to the Romance.

## S.

salignus, saligneus: see § 38 .
sanciō, sancire, sānxī, sänctus: see
§ $46.3 . b$ ).
Särsina: SAssinas in an inscription. scēptrum: Gr. $\sigma \kappa \hat{\eta} \pi \tau \rho o \nu$.
scīscō: see § 49; D[ESC]ISCENTEM, Monumentum Ancyranum, v. 28. scribō,-ere, scrīpsi, scrīptus: see § 46 . 3; SCRIpTvm, CIL. vi. 201I; CONscreiptym, CIL. i. 206. 87; 109; cónscríptis, CIL. x. 3903; i acc. to the Romance ; Umbrian screihtor $=$ scrīptōs (Nom. Plu.).
sëgmen: like sēgmentum.
segmentum: see § 39 .
sëgnis : ségnis in a Herculanean papyrus.
sēligō, sèligere, sêlēgi, sètectus: like legō.
Selīnūs, -ūntis: Gr. $\Sigma \in \lambda$ cıồvoos. sèmēstris: for *ses-mēstris, *sexmēstris; see $\S 89$.
sèmūncia: from sèmi- and ūncia.
septünx: from üncia.
sēscūncia: for sēsqui- and ūncia. sèscuplex, sēscuplus: for sessqui- and -plex.
Sesōstris: $\Sigma$ te $\omega \sigma \tau \rho / s$.
sessqui-: = sëmisque.
sestertius: for sèmis tertius.
Sestius: Gr. इウ̀ $\sigma \tau$ cos, in Cic. ad Att. vii. 17.2 et passim; $\Sigma_{\eta \sigma \tau l a, ~ C I A . ~}^{\text {a }}$ iii. 1450 .

Signia: Seig[nia, CIL. i. iI
signum: SEIGNVM, CIL. xiv. 4270 ; sIgna, Boissieu, Inscriptions de Lyon, p. 606; cf. § 38 fin.
significō, signo: like signum.
sinistrōrsus: for *sinistro-vorsus. sistrum: Gr. $\sigma \in \hat{\epsilon} \sigma \tau \rho o \nu$.
sōbrius : $\bar{o}$ in Plautus, Miles Gloriosus, 812; § 36. 2.
Sōcrates: Gr. $\Sigma \omega \kappa \rho \alpha \dot{T} \eta s$.
sōlstitium: from sōl.
Söphrōn: Gr. $\Sigma \omega ́ \phi \rho \omega \nu$.
söspes: Gr. $\Sigma \hat{\omega} \sigma \pi \iota s$, CIA. iii. 1161 at passim.
söspita, sōspitō: like sōspes.
stăgnō: like stāgnum.
stägnum: see § 38 .
stilla: i acc. to the Romance. stillicidium, stillō: like st̄̆lla.
struō, -ere, strūxī, strūctus: see $\S 46$. 3. $b$ ); $\bar{u}$ also acc. to the Romance. strūctor: like strūctus; cf. STRVCTOR,
CIL. x. 708 ; $\bar{u}$ acc. to Gellius, xii.
3. 4.
strūctūra: like strūctus.
sublūstris: like $\bar{u} x$.
substrüctiö: like strūctus.
suēscō : as in suēvì, suētus.
sügō, -ere, sūxī, sūctus: see § 46.3 ;
$\bar{u}$ acc. to the Romance.
suillus: from suinus.
sümō, -ere, sümpsī, sümptus: see § 46.
3; $\bar{u}$ also acc. to the Romance.
sūmptus: from sūmō.
sürculus: from sürus.
surgō, -ere, surrēxī, surrēctus
rego.
sursum: for *su-vorsum.
sutrina: like sütor.
Sūtrium: $\bar{u}$ in Plautus, Casina 524; § 36.2.
syleepsis: Gr. $\sigma \dot{\lambda} \lambda \lambda \eta \psi \iota s$.
T.
tangō, -ere, tetiḡ̄, tāctus: see § 46. 3. b). tāctiō: like tāctus.
Tartêsus: Gr. Taptทooós.
tāxillus: acc. to Priscian, iii. 36.
Tecmèssa: Gr. Téккиך
fectum: from tegō.
tegö, -ere, texxì, tectus: see § 46.3.b)
Telmèssus: Gr. Te $\begin{aligned} & \mu \eta \sigma \sigma o ́ s . ~\end{aligned}$
Tèmnos: Gr. T $\eta \mu \nu$ ós.
Termèssus: Gr. Tepu $\bar{\sigma} \sigma$ ós.
terūncius: from $\bar{u} n c i a$.
heātrum: Gr. $\theta \in \bar{a} \tau \rho o \nu$.
tignum: see § 38 .

Tillius: tIllivs, CIL. vi. 2043 tingō--ere, īnxī, tinctus: see § 46.3.b), trāctim: like trāctus.
träcto: like trāctus.
trahō, -ere, träxī, trāctus: see § 46 . 3. b).
 -0̂̂ขтоs.
triformis: from forma.
tristis: TRISTIOR, CIG. 6268; i also acc. to the Romance.
trücta: $\bar{u}$ acc. to the Romance.

## U.

ūllus: from ūnus; vlla, CIL. ii. 1473; v́lli, CIL. vi. 10230.
$\bar{u} \ln a: \mathrm{Gr} . \dot{\omega} \lambda t \nu \eta$.
$\bar{u}$ lva : like $\bar{u} t \bar{l} g \bar{o}$.
$\bar{u} n c i a: ~ l i k e \bar{u} n$ nus.
$\bar{u} n c t i \bar{o}: ~ l i k e ~ u ̄ n c t u s ~(u n g \bar{o})$.
$\bar{u} n d e c i m, \bar{u} n d e c i m u s: ~ f r o m ~ u ̄ n u s ~ a n d ~$ decem.
ündē̃igintu, etc.: like ūnus.
ungō, -ere, ūnxī, ünctus: see § 46 . 3. b).
$\bar{u} r o ̄$, -ere, ussī, ūstus : $\bar{u}$ in the Perfect Participle acc. to the Romance; for the $\breve{u}$ in $u s s i \bar{z}$, see $\S 53 \mathrm{~s}$. v.
$\bar{u} s p i a m:$ like $\bar{u}$ sque.
ūsquam: like ūsque.
$\bar{u}$ sque: $\bar{u}$ acc. to the Romance.
usstrina: like ūstus.
$\bar{u} s u \bar{u} p \bar{o}$ : $\bar{u} s \bar{u}$ rapiō?

## V.

vāllum, vāllus: vÁlláRI, CIL. ii 4509 ; also VÁllivs, VAllia, CIL xiv. 4039.
vāllāris: see vāllum.
vālō: see vällum
väsculumn: like vàs.
västus: the Teutonic languages point to a long root vowel.

Vēctis, 'Isle of Wight': Gr. OúqkTis. Vipstänus: vIpstanvs, CIL. vi. 2039 veggrandis: from vè- and grandis.
Vēlābrum: $\bar{a}$ in Plautus, Curculio, 483 ; § 36.2.
vēnd $\bar{o}:$ : from vènum and $d \bar{o}$.
vērnus: from vēr.
vēstibulum: vē-+ stabulum? Cf.prōstibulum.
vēstigium : vē + steigh-?
vēxillum: vÉxillo, CIL. xii. 3167 ; Byzantine Gr. $\beta \eta \xi \xi / \lambda \lambda a$; CIG. 4483 , ơं $\eta \xi \iota \lambda \lambda a \tau \iota(\hat{\omega}) \sigma \iota \nu$; also acc. to Priscian, iii. 36.
victus: from vivō.
villa: vIlla, CIL. vi. 9834 ; the Romance points to $i$.
vindēmia: from vīnum and dēmō.
Vipsānius: vIpsanI, CIL. vi. 12782 ;
vIpsania, CIL. vi. 8877 ; Beiqápıos, CIG. 5709 .
53. Words whose Hidden Quantities are in Dispute.
agnātus, agnōtus, etc.: à Marx; see § 38 .
agnus : $\bar{a}$ acc. to all the authorities; but see § 38 .
allicio: some scholars mark the $e$ of the Perfect long in allexī, illexi, pellexi; and likewise in -spexi (aspexi, conspexī, etc.), fexx̄, pexī, vexī. This marking rests upon a statement of Priscian in ix. 28. But Priscian in this passage simply says that Perfects in $-x \bar{z}$ have a long vowel before the $x$ only when the vowel is $e$; he does not state that every $e$ is long before $-x \bar{z}$. Moreover, little weight is to be attached to this testimony ; for in the paragraph immediately preceding (ix.
and frequently ; Oúeıutavov̂, CIG. 5837, $b$.; CIA. iii. 62 I.
viscus : vIsceris, CIL. vi. 1975. vivō, ere, vixxi, victum: see § 46. 3 ; veixit, CIL. xiv. 2485; vIxit, CIL. ii. 3449 ; vIcrv́ro, CIL. vi. 12,562; $\beta \in \tilde{\xi} \stackrel{\text { L }}{2}$ in an inscription cited by Eckinger (Orthographie Lat. Wörter in Griech. Inschrif. ten, p. 43).
víctus: like vàvō.
Vopīscus: Gr. Oúoreîokos; vopIsco, CIL. x. 4872 .

X .
Xenophōn,-ōntis: Gr. ヨevo $\hat{\omega}^{2} \nu,-\hat{\omega} p \tau o s$.

## Z.

zöster : Gr. $\zeta \omega \sigma \tau \eta \dot{n}$.
arca: $\bar{a}$ Marx and Lewis (E.L.D.). The word occurs with the apex (Arcae) 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 ex isted 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 forma, quārtus (cf. quattuor); $\bar{r}$ ca, and probably in $\bar{o} r d \bar{o}$, $\overline{o r d i o r, ~} \bar{o} r n \bar{o}$. In case of other words we simply meet isolated local manifestations of the tendency, e.g. in Arvali, CIL. vi. 913; libertis, CIL. x. 35²3; sérvilio, Henzen, 6490; vIrgo, CIL. vi. 2150; vIrtvtis, CIL. vi. 449 ; Córvinvs, vi. 2041; órfito, vi. 353 ; Cordiae, vi. 22,915 ; NArbone, xii. 3203; NÁrbonénsis, xii. 3163 ; hórt[os, vi. 9493 ; COHórt[is, vi. 2993; Fórt[is Fórtvnae, vi. 9493; fórtviata, vi. 7527. Yet these sporadic inscriptional markings hardly justify our assuming àrvuem, àrvālis, V̄̄̄̄rtus, sērvus, virgō, etc., for the classical speech; and the same applies to arca. See Seelmann, Aussprache des Latein, p. $9 \mathbf{I}$.

Arrūns: $\bar{A}$ Marx
arund $\overline{0}: \bar{u}$ Lewis (E.L.D.), apparently on the basis of a statement by an anonymous sixth century
grammarian (Keil, viii. 111. 14); but the Romance points to $u$ Gröber, Archiv, i. 243; Körting, Wörterbuch, col. 71 arvum, arvālis: see arca
ascendō, ascrībō, etc.: à Marx; see § 48 . ascia: ā Marx ; see § 89 .
Asclépiadès: A Marx.
Asculum: $\bar{A}$ Marx.
aspernōr, asportō, etc.: $\bar{a}$ Marx; see $\S 48$. aspiciō, ere, exī, ectus: ēxī Lewis; see above under alliciō.
assus: $\bar{a}$ Marx, as if for *ārsus, which is improbable. See Osthoff, Gesclichte des Perfects, p. 545.
astus: $\bar{a}$ Marx, as if for *axtus; see § 89.
attrectō: $\bar{e}$ Marx, who explains attrēctō as for attrāctō (from trāctus); but $\bar{a}$ never becomes $\bar{e}$ in Latin; on the other hand the vocalism of attrectō points necessarily to a previous *at-trăctō (see § 46. 4. c). Unless, therefore, we reject the evidence in favor of trāctus as the regular form of the participle of trakō and its compounds (see $\S 46$. 3. $b$ ), we shall have to assume the existence of an original 'by-form' trăctus, to which we shall refer attrectō, contrectō, obtrectō, etc. Similar doublets existed in case of $d \bar{d} c$ tus: dïctus (§ 52. s. v.); frūctus: früctus (§ 52. s. v.), and possibly lātus: *lătus (whence Lătium, 'the broad country').
axis : $\bar{a}$ Marx, without warrant; Charisius (Keil, i. 11. 22) and Diomedes (Keil, i. 428) both testify to $\breve{a}$. braccae: $\bar{a}$ Marx ; see § 88.1 .
bess, 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.
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, facessö, lacessō, as originally aorists of the same type as habêssō, 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-cx, 'sedge' (lit. 'rough plant' ?).
carrus, carrūca: à Marx.
Cassandra: Cāss-Marx.
cèd̄̄, -ere, cessī, cessūrus: è Marx; cessi acc. to Priscian, ix. 27 ; the Romance languages point to $e$ in both cessi, and cessūrus (d'Ovidio, in Gröber's Grundriss, i. p. 510; Osthoff, Geschichte des Perfects, p. 537). Körting, Wörterbuch, col. 186, strangely gives $\bar{e}$.
cessō: $\bar{e}$ Marx; see cēd $\bar{d}$.
cingō,-ere, cinxī, cinctus: Marx and Lewis (E.L.D.) regard the $i$ as short in cinxi, cinctus; likewise in -stinxī, -stinctus; tinxī, tinctus (except that Lewis has tinctus); and in pinxi, finxi. The Romance languages seem to point to $\bar{i}$ 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.
assis : $\bar{a}$ Marx, on the basis of an assumed etymological connection with clārus.
cognātus, cognōmen, cognōscō, and other words beginning with $\operatorname{cog} n-:$ the o here is usually regarded as long; but the evidence is not sufficient to warrant this view ; see § 38 .
ōnfestim: $\bar{e}$ Marx, after the analogy of manifestus, which latter is somewhat uncertain.
conjungō, conjūnx: $\bar{o}$ Marx, on the basis of Cónivgi, CIL. v. 1066; vi. 9914, which are too improbable to merit acceptance.
conspiciō,-ere, exī, ectus: èxī Lewis; see above under alliciō.
contrectō. $\bar{e}$ Marx ; see attrectō.
damma: $\bar{a}$ Marx ; see $\S 88$. I.
dëspiciō, -ere, exì, ectus: -èxì Lewis (E.L.D.) ; see under allicio.
dêtrectō: $\bar{e}$ Marx ; see attrectō.
discidium, discrī̄ō, distō, distinguō, distringō: dis- Marx and Lewis (E.L.D.) ; see § 48.
discō: ${ }^{i}$ Marx, on the theory of compensatory lengthening (discō for *di-dc-scō) ; see § 89.
distingū̄, -ere, inxxi, inctus: see cingō. duumvir: $\bar{u}$ Marx and Lewis (E.L.D.) ; see § $42 . \mathrm{I}$.

Dyrrhachium: $\bar{y}$ Marx, who cites the modern name Durazzo.
$\overline{\text { entormis : } \bar{o} \text { Marx and Lewis (E.L.D.); }}$ see norma.

Erinnys: i Marx; of. § 88. I.
exstinguō, -ere, inxī, inctus: see distinguō.
facessō: $\bar{e}$ Lewis (E.L.D.); see capessö.
fastigium: $\bar{a}$ Marx, on the theory of compensatory lengthening; see § 89 .
fastus, 'disdain': $\bar{a}$ Marx, on the theory of compensatory lengthening; § 89.
festinus, festinō: © Marx, on the theory of compensatory lengthening, as though for fendt-; see $\S 89$.
festūca, fistuica: $\bar{e}$ and $\bar{i}$ Marx, on the theory of compensatory lengthening (see § 89), as though for ferst-. fingō, -ere, finxī, fïclus: see cing $\overline{0}$.
fistula: i Lewis (E.L.D.), but the Romance shows $i$; Gröber ( $A r$ chiv, ii. 288) ; Körting (Wörterbuch, col. 328).
flectō,-cre, fexī: fēxī Lewis (E.L.D.); see under alliciō.
fluctus: d'Ovidio in Gröber's Grundriss, i. p. $5^{15}$, and Körting, Wörterbuch, col. 334, regard the $u$ as long on the basis of the Romance ; but it is admitted that the evidence is not altogether clear. If Italian fiotto is the descendant of Latin Auctus, this points to $u$.
fluō,-ere, fluxū, fuxxus: flūxū, Lewis (E.L.D.); fūxī, fūuxus, Körting (Wörterbuch, col. 334); fūxus, d'Ovidio (Gröber's Grundriss, i. p. 515); but the evidence is extremely scanty and conflicting.
föns, fontis: $\bar{o}$ in the oblique cases, Lewis (E.L.D.), see § 4 I .
fors, forsit, forsitan, forte, fortasse, fortassis, fortūna, fortuitus: $\bar{o}$ Lewis, apparently on the basis of
the apex in CIL. vi. 9493; 7527. But the second of these occurs in an inscription which has Hórtis. See under arca. Marx writes försit and forsitan on the basis of the Romance. This may be correct for these two words; but it is difficult to believe that the other words of this group have $\bar{o}$. Greek transliterations show фортıv, Фópтts.
fortasse, fortassis: $\bar{a}$ Marx, who cites nothing in support.
frendō, -ere, frenduī, frēsus, or fressus: -éssus Marx ; § 98. 2.
fröns, frondis: $\bar{o}$ in the oblique cases, Lewis; see §41.
fröns, frontis : $\bar{o}$ in the oblique cases, Lewis; see §4r.
futtilis: $\bar{u}$ Marx ; see § 88. 1.
Garumna: $\bar{u}$ Marx.
garriō, garrulus: $\bar{a}$ Marx, who connects with Gr. $\gamma \bar{\alpha} \rho v^{\prime} \omega$.
gignō: $i$ by most authorities; see $\S 38$. gluttiō, gluttus: : $\bar{u}$ Marx ; see § 88. 1. grallae: $\bar{a}$ Marx.
hallūcinor: $\bar{a}$ Marx ; see § 88 . I .
helluō: $\bar{e}$ Marx ; see § 88. І.
hesternus: hēs- Lewis, on the testimony of Marius Victorinus (Keil, vi. 15. 15). Historical grammar shows that the $e$ was originally short. Cf. heri, Gr. $\chi \theta$ es, ett. Hence, it is doubtful whether the isolated statement of a fourth century grammarian should receive credit as an index of the classical pronunciation.
lircus: 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, col. 389).
hirund $\overline{0}: \bar{u}$ Lewis, on the basis of an anonymous sixth century grammarian (Keil, viii. III. 14). But the Romance points unanimously to $u$; see Gröber (Archiv, iii. 139) ; Körting (Wörterbuch, col. 389).
hispidus: i Marx and Lewis. Marx cites the Romance, but the word is probably 'literary' in the Romance; see § 36.5 fin. Neither Gröber nor Körting include it in their collections.
 $\bar{i} c \bar{o}$ seems to have been the normal present; while $\bar{i} c \bar{o}$ occurs only in rare cases of metrical lengthening. Hence, in the absence of specific evidence, ictus is more probable than īctus.
imm $\bar{o}$ : $\bar{i} m m \bar{o}$ Marx, in view of $\overline{i m u s}$; but cf. § 88. I.
incessō: $\bar{e}$ Marx ; see cēdō.
inspiciō,-ere, exī, ectus: -ēxī Lewis; see allicio.
intercessiō: $\bar{e}$ Marx ; see ce$d \bar{o}$.
jubeō, -ère, jussi, jussus: jūssī, jūssus Marx ; jussi, jūssus Lewis. The only authority for $\bar{u}$ in jussus is lv́ssvs, 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 jūssi we find Iv́ss[IT, CIL. xii. 1930 ; IV́ssit, iv. 25531 ; 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 jŭssi. The shortening occurs in accordance with the principle explained
in \& 88. r. In view of Quintilian's additional statement that jussi 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 $j \bar{u} s \bar{i}$ and $j u ̈ s s i$. 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. 1. lacessō: © Lewis; see capessō. lascivus : $\bar{a}$ Marx, on the basis of an assumed etymology, which connects the word with the root làs. ( $\bar{l} \bar{a} r$.) of lārua.
Z̄bertus: è Lewis; see arca.
T̄bertās: ē Lewis; see arca.
limpidus: i Marx, on the basis of the Romance lindo; so Körting, Wör. terbuch, col. 454; but others question the connection of lindo with limpidus, and refer the former word to a Germanic origin.
littera: i Marx ; see § 88. I.
Messalla: $\bar{a}$ Marx; see § 88. і.
misceō, miscēre, miscū̄, mixtus: ì throughout acc. to Marx ; mixtus Lewis. The Romance shows $i$ throughout. Gröber, Archiv, iv. 117; Körting, W:̈̈rterbuch, col. 494; 496.
mittō, miltere, mīsi, missus: missus Lewis (E.L.D.). 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.
mōns, montis: $\bar{o}$ in oblique cases, Lewis; see § 4 I .
musca: $\bar{u}$ Marx; $u$ acc. to the Romance.
mussō: $\bar{u}$ Marx, who compares mūtiō. mussitō: $\bar{u}$ Marx; see mussō.
Narbō, Narbōnēnsis: $\bar{a}$ Marx; see under arca.
nesciō, nescius: $\bar{e}$ Lewis; but compare nequē. The Romance points to $e$.
norma: $\bar{o}$ Marx, who connects with Gr. $\gamma \nu \omega ́ \rho \iota \mu o s$.
nusquam: $u$ Lewis; see $\bar{u} s q u a m$.
obtrectō: $\bar{e}$ Marx; see attrectō.
ostrum: $\bar{o}$ Marx, who connects with austrum.
pannus: $\bar{a}$ Marx; of. § 88, I.
pelliciō: see alliciō.
perspiciö: see aspiciō.
pestis: $\bar{e}$ Marx, in accordance with a fanciful etymology.
pilleus: $\bar{\imath}$ Marx; see $\S 88$. 1.
pingō; see cingō.
pons, pontis: ō in oblique cases, Lewis; see § 4 I .
posca: $\bar{o}$ Marx, who compares pō-culum; but the root had also a reduced form por- (§ 69); cf. Gr. тото́р,
poscō: $\bar{o}$ Marx, on the theory of compensatory lengthening ( pōscō for *porscō) ; see § 89 .
postulō: $\bar{o}$ Marx, as in the case of poscō.
promiscuus: i Marx, as in the case of misceō.
propinquus: i Lewis; but the Provençal, which apparently is the only Romance language that inherited the word from Latin, points to $i$.
pulmō: $\bar{u}$ Marx and Lewis. Marx
compares Gr. $\pi \lambda \epsilon v \mu \omega \prime \nu$, which proves nothing for Latin; the Romance points to $u$. Cf. Stolz, Lat. Gram., p. 283, who explains pulmō as for *plmō; see § 100. 1.
quoūsque: Lewis $u$; see $\bar{u} s q u e$. recessus: $\bar{e}$ Marx ; see cēdō.
respicio, -ere, exi, ectus: -exxi Lewis; see alliciō.
Sallustius: à Marx.
sēcessus: $\bar{e}$ Marx; see cēdō.
sescenti: 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.
sinciput: i Marx and Lewis, on the basis of the etymology sēmi + caput, i.e. sinciput for *senciput by vowel assimilation; § 90.
stannum: $\bar{a}$ Marx, on the basis of the 'by-form,' stägnum.
stella: stela acc. to the Romance; probably the form with two $l$ 's had $e$. strenna: $\bar{e}$ Marx; see $\S 88$. $\mathbf{1}$.
supparum: $\bar{u}$ Marx; cf. § 88. I
suspiciō,-ere, exi, ectus: $\bar{u}$ Marx; see § 48. On suspexi, see alliciō. taxō: $\bar{a}$ Marx.
testa: $\bar{c}$ Marx and Lewis, on the theory of compensatory lengthening (testa for *tersta); see $\S 89$. The Romance points to $e$.
testis, testor, testāmentum, testimōnium, etc.: $\bar{e}$ Marx, on the theory of compensatory lengthening (tèstis for *terstis); see § 89 .
tingū, -ere, tinxī, tinctus: see cingō. orreō,-ēre, torruì, tostus: tōstus Marx, on the theory of compensatory lengthening (töstus for *torstus); see § 89. The Romance points to
o. See d'Ovidio in Gröber's Grund. riss, i. p. 520; Körting (Wörterbuch, col. 726); Gröber (Archiv, vi. 129).
tressis: è Marx; see bés, bessis.
Tusci$: \bar{u}$ Marx and Lewis, on the theory of compensatory lengthening (Tūscì for *Turscì); see § 89 . The Romance points to $u$.
Tusculum: $\bar{u}$ Marx and Lewis; see Tusci.
ultrā, ulterior, ultimus, etc.: $\bar{u}$ Marx and 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 ōrca; but the Romance points to $u$.
urna: $\bar{u}$ Marx and Lewis. Marx compares ürinātor; but urna is to be referred to the root arc-, weak form urc- (§ 100. 2), whence $\operatorname{ur}(c) n a$. The Italian urna, if a genuine Latin inheritance, would point to $\bar{u}$; but it is probably purely literary ; § 36.5 fin.
$\bar{u} r o \bar{o}$,-ere, ussī, ūstus: ūssì Marx ; but Priscian (Keil i. 466.6) gives ŭssï. See under jubeo.
viscum: i Marx and Lewis. Marx cites the evidence of the Romance;
but Gröber (Archiv, vi. 144), Körting (Wörterbuch, col. 766), and d'Ovidio (Gröber's Grundriss, i. p. 503), interpret the Romance as pointing to $i$.
vectĭgal, vectis, vectō, vector, vectüra, etc. : $\bar{e}$ Lewis. The only evidence is that furnished by the Romance in the case of vectis; this points to $e$. The related words must have had the same quantity.
ehō,-ere, vexī, vectus: vè $\bar{e} \bar{i}$, vēctus Lewis. Forvēxi, see under alliciō; on vectus, see vectigal.
Venafrum: $\bar{a}$ Marx, and the lexicons; on what grounds is not clear.
vescus: $\bar{e}$ Marx, on the basis of the questionable etymology $v \bar{e}+\bar{e} s c a$. exōo : $\bar{e}$ Lewis; see vectigal.
victor, victus, victōria, etc.: i Lewis, on the basis of repeated inscriptional markings, such as vIctor, CIL. vi. 10056; 10115; 1058; vICTORINVS, vi. IO58; vICTORIAM, vi. 2086; invíctar, 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.

## CHAPTER IV.

## ACCENT.

See Brugmann, Grundriss, i. $\S \S 679$ ff.; Stolz, Lateinische Grammatik, ${ }^{2}$ pp. 317 ff.; Lateinische Lautlehre, pp. 95 ff.; Seelmann, Aussprache des Latein, pp. 15 ff. ; Lindsay, Latin Language, pp. 148 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. 1. The Latin accent was essentially a stress accent ; so far as a musical accent existed, it was subordinate to the other. In
the prehistoric period the Latin 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 the 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 *éx-arceō; cōnficiō for *cónfaciō; exīstumō for ${ }^{*}$ éxaistum $\bar{o}$; inimūcus for ${ }^{*}$ in-amīcus; contubernālis for * cóntabernālis; cecīd̄̄ for *cécaid̄̄ (caedō) ; conctūdō for *cón-claudō; Mānlius for Mánilius.
b) Syllable-loss: repputī for *ré-pepul̄$; ~ s u r p u \bar{\imath}$ for *súr-rapū̄; $\bar{u} n$-decim for *íno-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; inimìcus became inimícus; éxīstumāmus became éxīstumámus. Where the penult was short, the preceding syllable seems to have received the secondary accent, as éxístumō for éxistumō ; cónficiunt 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 is extremely improbable that Latin in the historical period was 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 all 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. édīcēbātur.' A strong stress accent is inconsistent with such conditions, as may be seen from the strongly stressed modern languages. Cf. Eng. inévitable with Latin inēvitábile. While, therefore, stress always remained the essential characteristic of the Latin accentuation, yet the stress was relatively slight, and probably slighter in the historical period after the establishment of the 'Three Syllable Law,' than in the prehistoric period when the principle of initial accentuation prevailed. It seems a fair conclusion that the diminution in the intensity of the stress accent was due to the encroachments of the quantitative principle. Thus a long penult is seen to have developed a secondary stress which ultimately gained complete ascendancy and became the primary accent of the word.
4. 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 disturbăt for disturbávit; mūn̂̀t for mūnt̂vit. The principle is stated by Priscian (xv. 17-18). Arpinás, Samnís, nostráas, Campāns, etc., are also cited by the grammarians as having an accent upon the last syllable, as though for Arpinátis, Samnítis, nostrátis, Campánus, etc. See, for example, Priscian iv. 22. Such forms as benefácit, satisfácit, are properly written bene facit, etc.
5. Various Latin grammarians have seemed to 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. These
writers recognize an acute ( ${ }^{\prime}$ ) and a circumflex (^), and lay down specific rules for their employment. According to them, the acute stood upon all short vowels as nux , 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 régès. 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 Hiilfsbiichlein fiir 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 unfrequently 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 8 th century of the city (Brugmann, Grundriss, I. § 431 ; 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 que (equī, eqū$\overline{0}$, equīs, etc.) in time naturally produced the change from ecus to

[^2]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. 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, v.).
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) exstingzunt; so exstinguontur developed through the medium of exstinguntur to exstinguuntur.
58. Assimilation of the Final Consonant of Prepositions in Compounds.
a) In compounds of ad the preposition appears, -

1) Before c, as ac-, e.g. accipiō.
2) Before $\mathbf{f}$, as ad- or af-, e.g. adfero or afferō.
3) Before g , as ad- or ag-, as adgredior or aggredior.
4) Before 1 , as ad- or al-, as adlātus or allätus.
5) Before n , as ad- or an-, as adnitor or annitor.
6) Before p, as ad- or ap-, as adporto or apporto.
7) Before r , as ad- or ar-, e.g. adrīdeō or arrīdeō.
8) Before s, as ad- or as-, e.g. adserō or asserō.
9) Before $t$, as at-, e.g. attineō.
ro) Before $\mathbf{q}$, as ad- or ac-, e.g. adquīrō or acqū̄rō.
Note. - Yet in all the above instances, even when ad- is written, it is probable that af-, ag-, al-, an-, etc., were regularly spoken, i.e. the matter was a purely graphical one. A sense for the etymology and a desire to indi-
cate the actual component elements of the word prompted a spelling which, strictly speaking, was inexact.
10) Before gn, sp, sc, st, we find sometimes a-, sometimes ad-, e.g. agnōscō, adgn̄̄scō; aspīrō, adspīrō. Here again 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.
11) In all other cases ad was retained both in spelling and pronunciation.
b) In compounds of com-, the preposition appears -
12) Before $\mathrm{b}, \mathrm{p}, \mathrm{m}$ as com-, e.g. combibō, comportô, commoror.
13) Before $\mathbf{c}, \mathrm{q}, \mathrm{g} ; \mathrm{d}, \mathrm{t}, \mathrm{n} ; \mathrm{f}, \mathrm{s} ; \mathbf{j}, \mathrm{v}$, as con-, e.g. conciliō, conquārō, congerō; cond $\bar{o}$, conterō, connāscor; cōnferō, cōnserō; conjungō, convincō.
14) Before 1, as con- or col-, e.g. conlātus or collatus.
15) Before $r$, as con- or cor-, e.g. conruō or corruō.

Note. - Before 1 and $\mathbf{r}$, even though con- was written, col- and cor- were probably spoken. See note on ad above.
5) Before $g n$ con- dropped its $n($ see $\S 105.1$ ), e.g. $\operatorname{cog} n \bar{n} s c \bar{o}$.
6) The origin of cō- in cōnītor, cōnīveō, cōnūbium, etc., and of cŏ- in cŏăctus, cŏ-add $\bar{o}$, etc., is uncertain. Some regard cŏ- as a different word here.
c) The Preposition ex ( $=$ ecs) before f lost the $\mathrm{c}(\$ 105 . \mathrm{I})$ and then assimilated $\mathbf{s}$ to $\mathbf{f}$, e.g. efferō, for e(c)sferō (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, -

1) Before $\mathbf{1}$ as in- or il-, e.g. intātus or illãtus.
2) Before r as in- or ir-, e.g. inrump $\bar{o}$ or irrump $\bar{o}$.
3) Before $\mathrm{m}, \mathrm{p}$, and b as in- or im-, e.g. imbibō or $i n b i b \overline{0}$; importō or inportō; immortalis or inmortālis.
Note. - Yet in all these cases even when n was written, it is probable that assimilation occurred in the actual speech. See above, under ad, note.
4) In all other cases in- was both written and pronounced.
e) The Preposition ob
5) Is regularly assimilated to oc-, of-, og-, op- before $\mathrm{c}, \mathrm{f}, \mathrm{g}$, and $p$ respectively, e.g. occurrō, offendō, oggerō, oppōn̄o.
6) Elsewhere the $b$ is regularly retained in writing and in pronunciation, except that before s and $\mathrm{t}, \mathrm{b}$ 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 r is retained; pèjerō does not contain the preposition per.
g) The Preposition sub
7) Is regularly changed to suc-, suf-, sug-, sup- before c , f, g , and p respectively, e.g. succurrō, suffectus, suggestus, supplex.
8) Before $m$ appears as sub- or sum-.

Note. - Yet subm- was probably merely the etymological spelling for summ- See note, under ad, above.
h) The Preposition trāns
r) Is regularly retained before vowels and $\mathbf{b}, \mathrm{c}, \mathrm{f}, \mathrm{g}, \mathrm{p}, \mathrm{r}, \mathrm{t}, \mathrm{v}$, e.g. tränsē, tränsferō, tränsportō, trānsversus.
2) Becomes tran-, often before s, and always before sc-, e.g. trān-serō, trān-scrībō.
3) Becomes trä- before $\mathfrak{j}, \mathrm{d}, \mathrm{l}, \mathrm{m}, \mathrm{n}$ (§ 105. 2), e.g. trāiciō, $\operatorname{tr} \bar{a} d \bar{u} c \bar{c}, \operatorname{tr} \bar{a} n \bar{o}$. Yet before these sounds trāns- is often restored by re-composition (§ $87 \cdot 3$ ).
59. Seelmann (Aussprache des Latein, p. 6i f.) thinks that such spellings as 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.

On the whole, there seems very little to commend the employment of the etymological spelling. If we take it as intended to indicate pronunciation, we can hardly reject the express statements of the grammarians that such pronunciation was wrong. If, on the other hand, we regard the etymological spelling as purely graphical, there seems no advantage in writing adl, adg, inr, inl, etc., where all, agg, irr, ill were actually spoken, especially since the Romans themselves often indicated the assimilation. For the purposes of elementary instruction in particular, the assimilated forms are decidedly to be preferred as a uniform spelling.
60. Compounds of jacio. As indicated in Gr. § 9. 3, these are better written iniciō, adiciō, etc. That a $j$ was pronounced after the preposition, is made probable by the fact that the first syllable of these words is used as long in verse. Possibly the analogy of èiciō, dèiciō, rēiciō (where a $j$ would naturally be pronounced, even if not written) led to the omission of $j$ in other compounds also.
61. List of the Most Important Words of Doubtful or Varied Spelling. ${ }^{1}$
abiciö: better than abjiciō; $\S 60$. $a d$ in composition : $\S 58$. adiciō: better than adjiciō; $\$ 60$. adotescèns: see adutescēns.
Adria: see Hadria.
adulèscēns: Brambach (Neugestaltung, p. 52) restricts this spelling to the noun, 'young man,' and for the participle of adotesso writes adotescēns.
adulèscentia, aduluescentulus : like $a d u$ lèscēns.
Aeduì : preferable to Haeduiz, acc. to Brambach (Hülfsbüchlein, p. 22).
aèneus, aènus: better than ahēneus, ahènus.
agnōscō and $\operatorname{adgnō} s \bar{o}: ~ § 58, a)$.
Alexandrēa: this is the correct form
for the Ciceronian period. Later
Alexandria is found.
aliöquī and aliöquīn.
allium and $\bar{a}$ lium : § 88. I.
allec: not ālec.
ancora: not anchora; §31. 3 .
antemna : also antenna.
Antiochēa, Antiochīa: like Alexan-
drēa, Alexandriáa.
ànulus: not annulus.
Apenninus and Appenninus.
Aputeius and Appulēius: cf. § 88. I.
$\overline{A p u l i a}, \overline{A p}$ ulus.
arbor: arbōs is archaic and poetic.
arcesso: in early Latin also accersō.
arcesso: in early Latin also
Areopagita and Ariopagita.
${ }^{1}$ 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 $\$ \S 57-60$ are, for the most part, omitted from the list.

Arēus pagus and Arius pagus. artus, artäre: not archus, arctāre. arundō: not harundō. auctor: not autor. auctōritās: not autōritās. aurichalcum: better than ōrichalcum. autumnus: not auctumnus.

## B.

bāca: not bacca.
balbūtiō: not balbuttiō.
ballista and balista.
balneum, balneae: balineum occurs in early Latin.
bèhua: not bellua.
beneficium: preferable to benificium. beneficus : preferable to benificus.
benevolentia: preferable to benivolentia.
benevolus: preferable to benivolus. bibliothēca: bybliothēca also occurs. bipartilus and biperititus: $\S 87 . \mathbf{x}$.
Bosphorus: § 31.3 fin.
bracchium: also brāchium.
Britannia, etc. : better than Britt-.
Brundisium: not Brundusium.

## C.

caecus: not coecus; § 1 I.
caelebs: not coelebs; § 11
caelum and derivatives have $a e$, not coel-; § II.
caementum: not cèmentum; § 1о. 2.
caenum: not coenum ; § II.
caerimonia and caeremonia: not cerimōnia; § 1о. 2.
caespes: not cespes; § 10. 2.
caestus: not cestus; § 10. 2.
caetra: not cētra; § 10. 2.
Camëna: not Camoena; § II
causa: caussa was the pre-Augustan form ; § 98.2
cèna: not coena; § II.
Cereālis and Ceriālis; Ceriālia.
cèterì: not caeterī; § 10. 2.
Cethëgus: Cetegus is pre-Ciceronian; § 3 I .3 .
circumeō and circueō.
claud $\bar{o}$ : clùdō is rare and the result
of 'De-composition' ; see § 87. 2.
clipeus: better than clupeus, the early spelling ; § 6. 2.
Clytèmèstra: not Clytemnēstra.
coclea and cochlea; §31. 3.
com- in composition: $\S 58, b$ ).
comissāri and comisāri.
comminus: not cominus.
comprehend $\bar{o}$ : better than comprēnd $\bar{o}$. con-in compounds : $\S 58, b$ ).
condiciō (con and root dic-) : not conditiō.
cōnectō and derivatives : not connectō, etc.
conicio: better than conjiciō; $\S 60$.
A form coiciō also occurs.
cōnitor: not connītor.
cöniveō: not conniveō.
conjünx: better than conjux.
cōntiō (for coventiō): not cōnciō; § 25.3 .
cōnūbium: not connūbium.
convicium: not convitium; $\S 25.3$. cottidiē and cotidiē : not quotidiē. cothurnus and coturnus: $\S 3 \mathrm{I} .3$
culleus, culleum: not cūleus, cūleum; § 88. 1.
cum: never quum; see § 57.3 .
cumba: also cymba. cupressus: not cypressus. cur: quor is ante-classical.

## D.

damma: not dāma; § 88. I.
Dānuvius: not Dānubius. Cf.§16.2. Dārēus: better than the later form Därius.
Decelea: better than the later form Decelza.
dēfatīgō, dēfatīgātiō: also dēfet-; see § 87. 1 .
dēiciō: better than dējiciō; see $\S 60$. dēlēclus, 'choosing'; also dēlēctuus. dēlēniō: better than dēliniō ; cf. § 90. deprehend $\overline{0}$ : also the contracted form dēprēndō.
dērig $\overline{0}$ : also dīrigō, which is probably the original form. Brambach, however, recognizes two independent verbs: dērig $\overline{0}$, 'to move in a particular direction,' and di rigō, 'to move in different directions.'
dētrectō: also dētractō; § 87. 1.
dexter, dextera, dexterum : also dextra, dextrum; but regularly dextera when used as a substantive.
diciō: not ditió; § $25 \cdot 3$. dinōscō: earlier dignōscō. disiciö: better than disjiciō; $\$ 60$. Duīlizs or Duillius.
dumtaxat: not duntaxat; § 87. 1. dipondius: earlier dupondius; § 6.2.

## E.

cculus: of. § 57. d).
ēiciō: better than ējiciō; § 60 . elleborus: better than helleborus. èmptus, èmptiò, èmptor: not èmtus, etc. epistula: better than epistola.
Erinys: not Erinnys.
erus, era, erilis : not herus, etc.; § 23 .

Esquiliae, Essquil̄̄nus: not Exquiliae, |hallūcinor and hātūcinor; cf. §88. I; etc.
Euander: not Evander.
exedra and exhedra.
existimātiō, exīstimō: existumātiō, existumō are the early spelling; § 6.2.
exsanguis, exscindō, exscrībō, exsilium, exspectō, and other compounds of ex
with words having initial $s$ : better
than exang $u i s$, excind $\bar{o}$, expect $\bar{o}$, etc.

## F.

faenerātor, faenerō: not fenerātor, etc.; § 10. 2.
faenumn: not fenum, nor foenum, § II.
faenus: see faenerātor.
fecundus, etc.: not foecundus, etc., § II.
fêmina: not foemina; § II.
fetidus, etc.: not foetidus, etc., § II.
felus: not foetus; § in.
finitimus: earlier -umus; § 6. 2.
forēnsia and forēsia: § 20. 2.
futtilis: better than fütilis; $\S 88.1$.

## G.

gaesum : not gēsum; § 10. 2.
garrulus: not gārulus.
Genēva : acc. to Gröber in Wölfflin's
Archiv, ii. 437.
genetivus: not genitivus.
genetrix : not genitrix.
glaeba and glēba.
gnärus: also nārus in Cicero's time.
gnātus, gnāta: this is the early form,
used also in poetry; later nātus, nàta.
grāàs and grātizs. The latter form is archaic.

## H.

Hadria, etc. : not Adria, etc.; § 23. Halicarnāsus.
also $\bar{a} l-$, all-; $\S 23$.
Hammōn: better than Ammōn; §23. Karēna: better than arēna; $\S 23$. hariola; also ariola; $\S 23$.
haruspex: better than aruspex; § 23 . haud: sometimes haut; § 28. haveō and avē; § 23 .
hedera: better than edera; $\S 23$. helluō, helluātiō : better than hēluō, etc.
Henna: better than Enna; § 23.
Heraclēa: later Heraclīa.
herciscō and erciscō: § 23 . heri: also here (a different formation).
Hiber, Hiberess, etc.: not Iber, etc.: § 23 .
hiems: not hiemps.
Hílōtae: not Hēlötae.
Hister: better than Ister; $\S 23$.
holitor, holitörium: see holus.
holus: better than olus; § 23 .

## I.

imb- in compounds: $\S 58 . d) 3$ ). imm- in compounds: § $5^{8 . d}$ d) 3 ). $i m m \bar{o}:$ not $\bar{i} m \bar{o}$.
imp- in compounds : § $5^{8} . d$ ) 3). inclitus and inclutus: not inclytus. incohō and inchoō.
ingrātis and ingrātīs.
iniciō: better than injiciō; § 60 .
inl - in compounds: $\S 58, d)$ 1).
in prīmis, īnprimis, imprimis: § 58. d) 3 ).
inr - in compounds: $\S 58 . d)$ 2). intellegentia, intellegō: see §87. 1. intumus: earlier intumus; § 6. 2.

## J.

jūcundus: not jōcundus.
F̄üdaea: not đ̛ūdēa; § 10. 2.
jüniperus: not jünipirus.
Fuppiter: better than $\mathcal{F}$ üpiter; § 88. 1.

## Kaesō and Caesō

Kalendae : better than Calendae
kalumnia: in legal expressions fo calumnia.
Karthagō and Carthāgō.
L.
lacrima: earlier lacruma (archaic dacruma) ; § 6. 2 ; not lachrima nor lachryma; § 31. 3 .
lagoena: not lagēna; § 1 1.
lāmina and lammina, also syncopated lāmna.
lanterna: better than laterna.
Lārentia (in Acca L.) : not Laurentia. lautus: better than lōtus.
lëgitimus: earlier lēgitumus; § 6. 2. libet, libēns, lib̄̄dō: earlier lubet, etc.; § 6. 2.
$l_{i s}$ : but stlīs in the legal phrase stītibus jūdicandès; § 104. 1.b).
littera: better than litera; $\S 88$. г.
litus: rather than littus.
loquèla: not loquella.
M.
maereō, maestus, etc.; not moere $\bar{o}$, etc.; § if.
Mäja: § 15.3 .
malevolentia: better than malivolentia. malevolus: better than malivolus.
mancipium: earlier mancupium
§ 6. 2.
manifestus: earlier manufêstus; § 6.2. manipretium: earlier manupretium; § 6.2.
maritimus : earlier maritumus; §6.2. Mauretānia: also Mauritānia.
mäximus: earlier māxumus; § 6. 2 Megalēnsia and Megalēsia; § 20. 2. mercēnnarius: not mercēnārius.
Messalla : better than Messāla : $\S 88$. I
mìlle: plural mìllia and milia. minimus : earlier minumus; § 6. 2. monumentum and monimentum; §6.2. muccus: earlier mūcus; § 88 . I. multa: not mulcta. multō: see multa. mūraena: not mürēna; § 1о. 2 murra and myrrha.

## N.

nāvus: earlier gnāvus.
$n \bar{e}$, 'verily': not nae; § 10. 2. neglegö, neglegentia: § 87 . I. negötium, negōtiātor: not negöcium, etc. ; § 25.3 .
nënia: not naenia; § 10. 2. nëquícquam and néquiquam. novicius : not novitius; § 25.3 . nunquam and numquam. nüntiō, nūntius: not nūnciō, etc.; § 25.3 .
O.
obiciö: better than objicio: $\S 60$. oboediō: not obēdiō; § II.
obscennus: better than obscaenzs; not
obscoenus; § 10. 2; 11 .
obs- in compounds: not ops-; § 58 . e) 2).
obsōnium : also opsōnium (b $\psi \omega$ ढ́vlov).
obsōnāre: see obsōnium.
obstipēscō: earlier obstupēscō; §6. 2. obtemperō, obtineō, obtuī: not opt-; § $58 . e)$ 2).
ōpiliö: 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; § 10. 2. Paelognī: not Pélıgni; § 1о. 2. paenitet: not poenitet; § II. paenula: not pènula; § 10. 2.

Parnāsus: not Parnassus.
parricida, etc.: earlier pāricida § 88. I.
Paullus and Paulus.
paulus: preferable to paullus. pedetentim and pedetemptim.
pedisequus : not pedissequus.
pejerō: not pējurō; perjū $\bar{o} \bar{o}$ is a dif ferent word.
percontor, etc.: better than percunctor, etc.
perjūrus and pē̄̄̄rus.
pessimus: earlier pessumus; § 6. 2.
pilleus, etc.: not pileus, etc.; § 88. r.
plaustrum : not plōstrum.
plebs: not pléps; § $58 . e$ e) 2).
Pollio: better than Pōliö.
pomērium: not pōmoerium.
Pomptinus: not Pontinus.
pontifex: earlier pontufex; § 6. 2.
Porsenna and Porsena; also Porsinna
and Porsina.
prehendō and prēndō.
prēlum: not praelum; § 10. 2.
proelium: not praelium; § II.
proiciö: better than pröjiciō; § 60.
promunturium : better than promonturium.
proscaenium: not proscēnium; § 10. 2.
proximus: earlier proxumus; § 6. 2.
Pūblicola: on the early forms Popli-
cola, Puplicola, see pūblicus.
pūblicus (from pūbēs): poplicus (early
Latin) is from poplus = populus;
puplicus is the result of the con-
tamination of püblicus and poplicus.
pulcher: early Latin pulcer; §3I. 3.

## Q.

quamquam and quanquam.
quathor: better than quatuor.
querèla: better than querella.
quicumque: better than quicunque.
quicquam and quidquam.
quicquid and quidquid.
Quinctus, Quinnctius, Quinctilis,
Quinctilius: these are the forms
for the Republican period; under
the Empire Quintus, Quintīlis, etc. quom: § 57 .
quor: see cūr.
quotiēns and quotiēs.
R.
raeda: better than rēda; not rh-; § 10. 2.
Raetia, Raeti: not Rhaetia, etc. reccidì (Perf. of recid $\bar{o}$ ) : not recid $\overline{2}$. reciperō: earlier recuperō; § 6. 2.
Rēgium: not Rhēgium.
rēiciō: better than rē̈iciō; $\S 60$. religiō: not relligiö.
reliquiae: not relliquiae.
reliquus: early Latin relicuos; § 57. repperi (Perf. of reperiō) : not reperi. reppuī (Perf. of repellō) : not repuli. reprekendō or reprēndō.
rēs püblica: not rēspūblica.
rettul̄ (Perf. of referō): not retuli.
rotundus: in Lucretius sometimes rutundus; § 90.

## S.

sacculum : not sēculum; § Io. 2 saepès: not sēpès; § 10. 2
saepiö: see saepés.
saeta: not sēta; § 10. 2.
Sallustius: not Sālustius.
sāriō: better than sarriō.
satura: also later satira; not satyra. scaena: not scēna; § 10. 2.
sepulcrum: not sepulchrum; of.
§ 3 I .3.
sescentì: rather than sexcenti.
sētius: less correctly sēcius.
singillātim: not singulātim.
sōlācium: not sōlātium; § 25.3 . sollemnis : not sollennis. sollicitō, elc.: not sōlicitō. stelliō: not stêliō; § 88. I. stillicidium : not stilicidium.
stilus: not stylus.
stuppa, etc.: not stūpa, etc.; § 88. I. suādēla: not suādella.
subiciō: better than subijciō; § 60 . subm- in compounds: $\S 58 . \mathrm{g})$ 2). subotes: rather than soboles; $\S 90$. subtemen: rather than subtegmen. subler, subtilit: § 58 . e) 2). succ- in compounds : $\S 5^{8} . \mathrm{g}$ ). 1). succus: rather than sūcus; § 88. 1. Suē̄̄̄̀: not Suēvī; § 16. 2. suff- in compounds: § $58 . g$ ) i). sulpur and sulphur: not sulfur; §31.4. supp- in compounds: $\S 58 . \mathrm{g})$ 1). suscēnseō: rather than succēnseō. suspiciò: not suspitiō; § 20.3. Syrācūsizus: also Syrācosius. Syria : earlier Suria ; § 1. 5

## T.

taeter: not feter; § io. 2. tanquam and tamquam. Tarracina : not Terracina. temperi (Adv.): not temporī. tentäre and temptäre. Thatia: Thatea is pre-Augustan. thêsaurus: thēnsaurus is archaic. Thrāx and Thraex ( $\Theta \rho \hat{a} \xi \bar{\xi}$ ). ting $\bar{o}$ : also tingzū. totièns: also toties. trājectus : not tränsjectus; § 58. h) 3). trāns- in composition : § $58 . h$ ).
trānsiciō and trāiciō: better than trānsjiciō, trājiciō; § 60. tränsnäre and tränāre: $\$ 58$. h). Trèverì: rather than Trēviri. tribūnicius not tribūnitius: § 25.3 . tripartitus and tripertitus: $\S 87$. I.
triumphō, triumphus: not triumpō, elc. tropaeum and trophaeum. tūs: rather than thūs. tūêla: better than tūtella.

## U.

ubicumque: better than ubicunque. Ulixēs: not Ulysses. umerus: better than humerus; § 23 . ümidus, ümor, etc.: not hümidius, etc.; § 23.
$u n g u \overline{0}$ and ungō.
unquam and umquam. urbs: not urps; (f. § 58.e) 2). urgeō: not urgueō. utcumque: better than utcunque. . utrimque : not utrinque.

## V.

valètū$d \bar{o}:$ not valitūu $\bar{o}$. vehemēns: in poetry often vēmēns. Vergiliae, Vergiiius, Verginius: not Virg.
versus (versum) : early Latin vors-. vertex: early Latin vortex. vertō: early Latin vortō. vester: early Latin voster. vícēsimus: commoner than vīgēsinuus. victima: earlier victuma; § 6. 2. vilicus: not villicus. vinculum and vinclum; § 91 . vinolentus and vinulentus. Volcānus: § 57.a). Volsci: § $57 . a$ ). Volsiniènsis: § 57.a). Volturnus: § 57.a). Vortumnins: under the Empire also Vertumnnus; cf. vertō. vulgzs: earlier volgus; § $57 . a$ ). vulnus : earlier volnus; $\$_{57 . a}$ ). चulpès: earlier volpès; § $57 . a$ ). vultur: earlier voltur ; § $57 . a$ ). vullus: earlier volus; § $57 . a$ ).

## CHAPTER VI.

## THE LATIN SOUNDS.

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

## Ablaut.

62. The Indo-European parent-speech, from which the Greek, Latin, Sanskrit, Avestan, Slavic, Teutonic, Keltic, Armenian, and Albanian languages are descended, had a vowel system of considerable regularity. By variation of the root vowel, each monosyllabic root 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 'ablautseries.' Six such ablaut-series have been shown to have belonged 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 grades; gn-, which has been weakened by the loss of the e, is the weak grade. The first of the two strong grades gives its name to the series in which it occurs. There are six Indo-European ablaut-series:
[^3]| Series. | Weak Grade. | Strong Grades. |  |
| :---: | :---: | :---: | :---: |
| ā-Series : | ${ }^{1}$ | ā | $\bigcirc$ |
|  | le.g. bho - | \{e.g. bhā- | bhō- |
| $\overline{\mathrm{e}}$-Series : | \{ 0 | è | ¢ |
|  | leg. dha- | \{e.g. dhe- | dhō. |
| $\overline{\mathbf{o}}$-Series: | \{ 0 | - | ${ }^{\circ}$ |
|  | le.g. po. | \{e.g. pö. | pō- |
| ă-Series : | \{ Vowel vanishes | a | à, ¢ |
|  | \{ e.g.g- | $\mathrm{ag}_{\mathrm{g}}$ - | $\overline{a_{g}}$. |
| ě-Series: | (Vowel vanishes | ě | ¢ |
|  | e.g.pt- | $\{\mathrm{pet}$. | pot- |
|  |  |  | dork- |
| 厄-Series : |  | $\left\{{ }_{\text {ofd }}\right.$ | $\stackrel{\text { of }}{ }$ - |

63. 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, i. § 307 ff. ; Lindsay, Latin Language, p. 253 ff.; Stolz, Lat. Gr., § 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.

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

64. The $\breve{e}$-series is by far the best represented of any in Latin ; it embraces three sub-types.

[^4]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 disco (for *di-dc-scō); dec-et; doc-ē̄; root sd-, sed-, sod-, seen in sid̄ō (for *si-sd-ō); sed-ē̄; sol-ium (for *sod-ium; see § 95.2). 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 §§ гоо, 102. Thus from the Indo-European root $g n$-, 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 mn-, men-, mon-, the Latin has mèns (for * $m n-t(i) s$ ) and mon-e $\bar{o}$.
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 $\bar{\imath}$, while the others became $\bar{u}$, except that oi (oe) has been retained in a few words. Examples: root ful-, feid-, foid-, seen in fid-ēs; fïdo (for feid-ō) ; foed-us (earlier foid-us) ; root duc-, deuc-, douc-, seen in düc-em, dūuco (for earlier * deuc- $\bar{o})$.

Further examples of Ablaut in the $\breve{e}$-series are given in Stolz, Lat. Grammatik, p. 263 f. ; Lat. Lautlehre, p. 157 ff. ; Lindsay, Lat. Language, p. 255.

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

65. No root shows all three grades in Latin ; 2, the obscure vowel, develops variously as $\breve{a}, \breve{i}, \breve{e}$. The root $d h a-$, $d h \bar{e}-, d h \bar{o}-$, 'place,' 'put,' shows the weak grade in con-dti-tus, etc., and one of the strong grades in sacer-d亠̄os; fānum (for *fass-num) shows
the weak grade; fês-tus the corresponding strong grade. Cf. also $r a ̆-t u s, r \bar{e}-r \bar{\imath} ;$ să-tus, sē-men.

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

66. The obscure vowel $\partial$ develops as $\breve{a}$. The weak grade is seen in fa-teor; the corresponding strong grade in fā-ri, fāma. Cf. also stă-tus; stā-men, Stātor; rād-ere and rōd-ere exhibit the two strong grades.
$\bar{o}$-Series.
67. The obscure vowel $a$ appears as $\breve{a}$. The weak grade is seen in $d \breve{a}-m u s$, d $\breve{a}$-tus; the corresponding strong grade in $d \bar{o} m u m$, $d \bar{o} s . \quad C f$. also căt-us, cōs (for * cōts).

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

68. One form of the strong grade is seen in $\breve{a} g^{-}-\bar{o}$, the other in ambāges. The $a$ may combine with $i$ to produce the diphthong ai. An instance of this is seen in aes-tus (for *aid-tus), 'burning heat'; the weak grade of the same root is seen, $\bar{z} d-\bar{u} \bar{s}$, originally an adjective : 'burning,' 'bright,' with noctēs understood, i.e. 'the bright nights' when the moon was full, and so the risth of the month, 'the Ides.'

## ŏ-SERIES.

69. Examples of this scantily represented ablaut-series are föd-ere, fōd-ī, - both strong grade. Cf. also ŏd-ium, $\bar{o} d \bar{\imath}$; nŏster, nōs.
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 genitive horti, which is for *hort-e-i; see § 126. 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 both as -ĕs and -ŏs; e.g. ped-is (for *ped-ĕs), senatu-ŏs (early Latin).

Vowel Changes.

## ă.

71. $\breve{a}$ in syllables which were accented at the time of the early Latin accentuation (see § 55) remains unchanged; in syllables which were unaccented at that period, $\breve{a}$ develops as follows :
I. Before two consonants, before $r$, and in final syllables, $\breve{a}$ regularly becomes $\check{\text { é, e.g. acceptus for *áccaptus; particeps for *pár- }}$ ticaps; cōnfectus for *cónfactus; impertiō for *impartiō; reddere for *reddare; pede, mīlite, etc. (so-called Ablative, really Instrumental Singular) for *peda, *mìlita, etc.
72. Before a single consonant in the interior of a word, $\breve{a}$ becomes $\stackrel{\imath}{\imath}$, e.g. adigō for *adag $\bar{o}$; concinō for *concanō; insitus for *insatus; redditus for *reddatus.
73. Before $l+$ a consonant (but not before $l l$ ), $\breve{a}$ becomes $\breve{u}$, e.g. exsultōo for *éxsaltō; inculcō for *incalcō.
74. Before labials, $a$ becomes the sound which was represented by $u$ in the earlier period, and later by $i$ (see § 6. 2), e.g. mancupium, later mancipium, for *máncapium.
75. Before $n g, \breve{a}$ becomes $\breve{i}$ (through the medium of $\cdot \breve{e}$ ), e.g. attingō for * áttangō.
à.
76. $\bar{a}$ regularly remains unchanged in Latin in all situations, e.g. māter; contrāctus for * cóntrāctus.
ě.
77. 78. $\breve{e}$ is 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 $\breve{z}$ :
a) Before a single consonant in syllables which were unaccented by the early accentuation (§55), e.g. collig $\bar{o}$ for * collegā; mīlitis for *mitétés; obsideō for *óbsedeō; prōtinus for *prōtenus.
b). Sometimes before $n$ or $m+$ a consonant, e.g. simplex for *sem-plex (from sem-, 'one'), vīgintī for *vūgentī; tinguō for *tenguō; quīnque for *quenque (earlier *penque).
2. $\breve{e}$ becomes $\breve{o}$ before $v$, e.g. novos for an original *nevos (Gr. $\nu \boldsymbol{\nu}^{\prime}$ fos).

$$
\overline{\text { è. }}
$$

74. $\bar{e}$ is regularly retained in Latin in all situations, e.g. rectus, corrēctus, corrēxī, diē.

## i. i.

75. $\grave{\imath}$ and $\bar{\imath}$ are regularly retained in all situations, e.g. quǐs, tur$\breve{r u b u s ; ~ v i ̄ v o}$, inctīn $\bar{o}$, except that final $-\stackrel{\imath}{\imath}$ may become $-e$, e.g. mare for *mař̆; sedīle for *sedilĭ.

## ǒ.

76. 77. $\breve{o}$, except in the very earliest stages of the language (prior to 230 B.c.), has regularly become $\breve{u}$ in unaccented syllables, e.g.filius, for earlier filios; dōnum for *dōnom; opus for *opos; vehunt for *vehont; contut̄̄ for *contotz; sèdutō for *sè dotō. Final syllables in -quos, -quom; -vos, -vom; -uos, -uom, etc., retained the $\breve{o}$ to a considerably later period; see $\S 57$. r. $\breve{o}$ was also regularly retained before $r$, e.g. temporis.
1. Before a nasal + a consonant, $\breve{b}$ also occasionally changes to $\breve{u}$, e.g. uncus for a primitive *oncos; umbiticus for *ombiticos.

## $\overline{0}$.

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

## ü.

78. $\breve{u}$ before labials, became $\breve{z}$ about the close of the Republic (see § 6. 2), e.g. libet for earlier lubet; lacrima for earlier lacruma; lacibus for earlier lacubus.

## $\bar{u}$.

79. $\bar{u}$ is regularly retained in all situations, e.g. fu$m u s$, conjīnctum, etc.

## ai.

80. r. In syllables which, under the early accentuation (see § 55 ), were accented, original $a i$ was retained, becoming about 100 b.c. $a e$, which, in turn, late in imperial times, developed into a monophthongal sound ; see § 10. 2.
81. In syllables which, under the early accentuation (§55), were unaccented, original ai became regularly $\bar{i}$, e.g. inquī̄o for *inquairō; exīstumō for *éxaistumō ; virtūt̄, mīlitī, etc., for *virtūtai, etc.; mēnsīs, portīs, etc., for mēnsais, etc.

## oi.

81. I. In syllables which, under the early Latin accentuation (see § 55), were accented, original oi, though retained in the oldest monuments of the language, early passed into $\bar{u}$, e.g. $\bar{u} t i l i s$ for oitilis; $\bar{u} n u s$ for oinos. In a few words, however, oi was retained and passed into oe, e.g. foedus, moenia; § 11.
82. In final syllables, which, under the early accentuation (§55), were unaccented, oi became $\bar{i}$, e.g. horti (Nom. Plu.) for *hortoi; hortis for *hortois (§ 86). A trace of -ois is preserved in oloes, for earlier *olois (Festus, p. 19, M.).

## ei.

82. It is uncertain whether $e i$ was still a diphthong in the earliest monuments of the Latin language or had already become a monophthong. Certainly the monophthongal value (i) estab-
lished itself very early, and $\bar{i}$ came to be the regular orthography for the earlier ei, e.g. dīcō for deicō; fīdō for feidō; dīvus for deivos, etc.

## ui.

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

## au.

84. 85. $a u$ is regularly retained in syllables which, under the early accentuation (§55), took the accent, e.g. aúrōra, claud $\bar{o}$. 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 language. Examples are : Clōdius for Claudius; plōd̄̄, in explōd̄̄, implōdō, etc.
1. In syllables which, under the early accentuation (§ 55 ), remained unaccented, au regularly became $\bar{u}$, e.g. inclūu$d \bar{o}$ for *inclaudō; dēfrūūō for *défraudō.

## eu and ou.

85. Primitive Latin $e u$ and $o u$ are nowhere preserved in the existing monuments of the Latin language. $e u$ first became $\dot{o} u$ (seen in early Latin doucō for * deucō ), and subsequently developed to $\bar{u}$, e.g. du $\bar{u} c \bar{o}$, $\bar{u} c e \bar{o}$. Original ou became $\bar{u}$ directly.

## Shortening of 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 ; of these $\bar{a} i, \bar{a} u$, and $\bar{o} i$ were inherited by the Latin in a few instances and developed as follows:
a) In the interior of a word before a consonant, the long diphthongs suffered shortening of the first element, e.g. *hortöis (for *hortōis), whence hortīs (see § 81. 2) ; gaudeō for *gāudeō (cf. gāvīsus) ; năufragus for *nāufragus (cf. nāvis).

## Vowel Changes.

b) When final, $\bar{a} i$ and $\bar{o} i$ probably became $\breve{a} i$ and $\breve{o} i$ before an initial vowel, but $\bar{a}$ and $\bar{o}$ before an initial consonant. Thus, in the Dative Singular of $\bar{a}$-stems (primitive termination $-\bar{a} i$ ), we should originally have had *portā, for example, before consonants, portăi before vowels. The ante-vocalic form portai (portae; § 8o. r) ultimately established itself as the sole inflection. Yet in early Latin, we find traces of the ante-consonantal form, e.g. Matvta, CIL. i. 177. In the Dative Singular of $o$-stems (primitive termination $-\bar{o} i$ ) the ante-consonantal form prevailed, e.g. poputo. Yet, in the earliest Latin inscription (CIL. xiv. 4123 ), we find Nvmasiol, the ante-vocalic form.

## Re-composition and De-composition.

87. 88. 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 *appitō, *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 exaequu $\overline{0}$, conclausus, exquaerō, where phonetic laws would demand *exīquō, conclūsus, exqū̄rō.

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. ctūd $\bar{o}$ for claud $\bar{o}$, after inclūu $\bar{o}$, 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 trādūcco, which also occurs. $C f$. also sescenti (the phonetic form ; § ro5. 1), but sexcentī (Recomposition).

## Shortening of Long Vowels.

88. I. 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, hallūcinārī, parricīda, bacca, gluttus, giuuttire, bucca, damma, muttire, stuppa, futtilis, Messalla, braccae, puppa, allium, stellio, 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.
89. The vowel was regularly shortened in final syllables in $m$ and $t$; also in the original $-\bar{a} r$ and $-\bar{e} r$ of Passive forms; and in the Nominative endings -tèr, $-\overline{\bar{o}} r,-s \bar{o} r,-\bar{o} r,-\bar{a} l,-\bar{a} r$.
90. Words of original iambic form, e.g. mĭhī, tībū, sĭbū, mŏdō, č九to $\overline{0}$ cĕd $\bar{d}$, often suffered permanent shortening of the ultima, giving mĭhĭ, tibŭ, modŏ, cedŏ, etc. The name of 'Breves Breviantes' ('shorts shortening') has been given to this process.

## Compensatory Lengthening.

89. In accented syllables, an $s$ before a voiced consonant is often dropped with lengthening of a preceding short vowel, e.g. sïdo for*si-sd-ō; querèla for *queresla; egènus for *egesnos. Often the consonantal group contains other consonants before the $s$, which first disappear (in accordance with § 105. 1), e.g. àla for *acsla; rèmus for *retsmos; scāla for *scantsla; temō for * Eecsm $\bar{o}$. This lengthening of the short vowel in compensation, as it were, for an omitted consonant, is designated 'compensatory lengthening.'

## Assimilation of Vowels.

90. Vowels are occasionally assimilated to each other in successive syllables, e.g. nihil for *nehil; nisi for *nesi; sobotēs for subotēs; rutundus (chiefly in poetry) for rotundus; tugurium for *tegurium (tegō); purpura for $\pi о \rho \phi \dot{\rho} \rho \alpha$; and in reduplicated perfects, e.g. momordì for memordì ; totond $\bar{\imath}$ for tetondì; pupugì for pepugī; etc. Assimilation is mainly restricted to short vowels, but possibly we should recognize the assimilation of a long vowel in fïlius, lit. 'suckling,' for ${ }^{*} f \bar{e}-l i u s$, root $d h \bar{e}-$; in suspicio for *suspēciō (root spec-) ; subtīlis for *subtêlis (tēla).

## 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 *poplos; and several words borrowed from the Greek, e.g. Aescutāpius ('А $\sigma \kappa \lambda \eta \pi \iota o ́ s)$; 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 $(i) d \bar{o}$; aetās for aevitās; prū̀̄ēns 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 *agr $(0) s$, *agrs, *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. r. Final $\breve{e}$ and $\breve{\imath}$ often disappear, e.g. et (for *eti; Gr. $\ddot{\epsilon} \tau \iota$ ), aut (for *auti) ; quot, tot (for *quoti, *toti; cf. toti-dem) ; ob for *obi; and in neuter $i$-stems, e.g. animal for *animā̃̈; calcar
for ${ }^{*}$ calcā$\breve{r}$. But dissyllabic $\breve{\imath}$-stems change $-\breve{\imath}$ to $-\breve{e}$, e.g. mare for *mari.
94. Final $\check{o}$ disappears in $a b$, for an original *apo (Gr. ámó) ; and sub for *supo (cf. Gr. vimó). On the change of $p$ to $b$, see今 96 . I .

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

The Mutes.

## The Palatal and Guttural Mutes, $c, q, g$.

94. I. There were two series of $k$ and $g$-sounds in Indo-European, the former designated as 'Palatals,' the latter as 'Velars.' The Palatals were formed further forward in the mouth, and developed in most languages as $k$ (in Latin regularly as $k(c)$, rarely as $q$; in Sanskrit and Slavic as sibilants, $s, s h$, etc.). The Velars were formed further back in the throat, and fall into two subdivisions :
a) The Velars of the first type develop in all languages as plain gutturals, $-k, g$.
b) The Velars of the second type 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 $g u$.
95. Examples of the different Gutturals are:

Palatals : centum, dīcere, socer; agō, genū, argentum.
$q u$ for $c$ appears in queror, què̄, equos (cf. Skr. áşas), but never $g u$ for $g$.

## Velars:

a) Without Labialization: cavēre, canere; grūs, get̄̄ , teg $\overline{0}$.
b) With Labialization: quis, qū̄, etc.; sequor; -que; -linqū̄; stinguō, unguen. Before $u$ or a consonant, $q u$ appears as $c$, e.g.
${ }^{1}$ See in general Brugmann, Grundriss, $\$ \S 320-598$; Lindsay, Latin Language, chap. iv. ; Stolz, Lateinische Grammatik, §§ 42-61 ; Lateinische Lautlehre, pp. 232-291.
stercus (cf. sterquilinium), arcus (cf. arquitenèns); -līctus (cf. -linqu $\bar{o})$. When initial, $g u(i . e . g v)$ loses the $g$ and becomes $v$, e.g. (g) venïre, (g) vīvos, ( $g$ ) vorāre.
3. -cn - and -cm - occasionally develop as gn and gm , e.g. satignus from salix (root salic-) ; dīgnus for*dec-nus ; segmentum for *sec-mentum (sec-ō).

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

95. I. $t$ regularly appears as $t$, but in the Indo-European suffix -tlo-, $t$ became c, e.g. piäclum (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, *lavātlom; in quadrāgintā, quadringenti, $d$ has not developed from $t$; quadr-probably represents a different word; see $\S$ I 83 . I 3 .
96. $d$ 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) ; tèvir for * $d \bar{e} v i r ~(G r . ~ \delta \bar{\alpha}(f) \eta ́ \rho)$.

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

96. 97. $p$ regularly remains unchanged; but in the prepositions $a b, o b, s u b, b$ has developed from an earlier $p$. The original forms of these words were *apo (Gr. $\dot{a} \pi o ́)$, ${ }^{*} o p-i$ (in Ablaut relation to Gr. $\grave{\epsilon \pi i}$; cf. § 64. a) ; supo (cf. Gr. $\dot{v \pi} \pi{ }^{\prime}$ ). By loss of the final vowel these became *ap, ${ }^{*} o p$, ${ }^{*} s u p$ (cf. sup-er, suprāa); ap- and $o p$ - are probably to be recognized in aperio and operio ; but before voiced consonants the $p$ of $a p, o p$, and sup regularly became $b$ by partial assimilation, e.g. ab düce, ob dēlīcta, sub dēcessūu, whence the forms with $b$ ultimately became predominant. In bibō the initial $b$ is for an original $p$ by assimilation ; cf. Skr. pibāmi. By assimilation also, an original *penque became quīnque; and *pequō became first *quequo , then coquō.
1. $b$, as the descendant of Indo-European $b$, is by no means a frequent sound in Latin, particularly initial $b$. Examples are baculum, balbus, brevis; lūbricus, 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 and velar) ; $p h, t h, c h$ were extremely rare. These voiced aspirates developed in Latin as follows:
98. Indo-European $6 h$ became:
a) $f$ at the beginning of words, e.g. fägus (for *bhāgos; Gr. $\left.\phi \eta \gamma{ }^{\prime} s\right)$; $f \bar{a}-r \bar{u}$ (root bhā-; Gr. $\left.\phi \eta \mu i\right)$; $f u-\bar{i}$ (root bhu-; Gr. фúw) ; fer-ō (root bher-; Gr. ф'́ $\rho \omega$ ).
b) $b$ in the interior of words, e.g. $a m b \bar{o}$ (for *ambhō; Gr. $\left.{ }_{a}{ }^{\prime \prime} \mu \phi \omega\right)$; orbus (root orbh-; Gr. ỏpфavós); mor-bus (suffix -bho-).
99. Indo-European $d h$ became :
a) $f$ at the beginning of words, e.g. fümus (for *dhūmos; Gr. $\theta v \mu o ́ s$ ) ; fémina (root $d h \bar{e}-$; Gr. $\theta \hat{\eta}-\lambda v s$ ) ; forum (root dhor-).
b) Usually $d$ in the interior of words, e.g. medius (for * medhios; cf. Gr. $\mu \epsilon$ ́́ $\sigma \sigma o s$ for $\left.{ }^{*} \mu \in \theta \iota o s\right)$; aedès, 'fire-place,' '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. $\bar{u} b e r$ (root oudh-; Gr. oỉӨap) ; rubro(root rudhro-; Gr. є́pv $\theta$ pós) ; and in the suffixes -bro(for -dhro-; Gr. $\theta \rho o-$ ), e.g. crī-brum. Similarly before $l$ in the Indo-European suffix -dhlo- (Gr. - $\theta \lambda \lambda_{0}$ ), $d h$ becomes b, e.g. stabulum (with -bulum for -blum; see § 91 ).
100. Indo-European $g h$. Here we must distinguish palatal and 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. $\chi є \mu \dot{\omega} v$ ) ; holus (root ghol-) ; vehō (root vegh-) ; ànser (root ghāns-) has lost the initial $h$; see $\S 23$.
b) $g$ after $n$, e.g. fing $\bar{o}$ (root dheigh-, with the infix $n$ ).
c) $f$ before $u$, e.g. fu-ndō (root gheu-).
B. Velar gh.
a) Unlabialized velar $g h$ becomes regularly $h$, but $g$ before r, e.g. hostis (for *ghostis) ; pre-hendō (root ghend-) ; gradior (for *ghrad-).
b) Labialized velar $g h$ becomes, -
i) $f$, when initial, e.g. formus (for *ghormos).
2) gu after $n$, e.g. ninguit (root ( $s$ )nigh-, with infix $n$ ).
3) $v$ between vowels, e.g. nivis, nivī, etc. (root snigh-).

The Spirants, $s, f, h$.
98. r. $s$ 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-sī, ges-tus) ; dirimo for *dis-emō (cf. distingzū ) ; temporis for *tempos-is (cf. tempus) ; portārum for *portasom. This change took place within the historical period of the language. It had been consummated before the close of the fourth century b.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. làrva (root las-). But this is only apparent ; $v$ in such cases is secondary, having developed from $u$, so that the rhotacism is regular: làr-u-a (for
*Lās-u-a) ; cf. Lar-ēs (for Lasess) ; fur-u-os (for *fus-u-os; of. fus-cus) ; Mener-u-a (for *Menes-u-a) ; lā-ru-a and Miner-u-a are both found in Plautus.
2. Wherever $s$ appears between vowels in the classical language it is a result of the reduction of ss after a long vowel or a diphthong, e.g. mìsì for mīssì (i.e. $\left.{ }^{*} m i ̄ t-s \bar{s}\right)$; suāsì for suāssī (i.e. *suādsī) ; haesì (for haes-sī) ; causa for caussa; dīvīsio for dìvīssio.

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. fissus, scissus, 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 caesariès as a result of dissimilation (§ 110), i.e. in order to avoid *mirer, * caeraries.
4. By analogy, the $r$ resulting from rhotacism sometimes crept into the Nominative from the oblique cases, e.g. honor (originally honōs) after honōris, honṑ̄ (originally *honōsis, etc.).
5. For the omission of the spirant $h$, see $\S 23$.

## The Liquids, $l, r$.

## The Liquids as Consonants.

99. I. As corsonants, 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). Sometimes $r$ disappears altogether as a result of the tendency to avoid two $r$ 's in successive syllables, e.g. praestigiae for praestrigiae (praestring $\bar{o}$ ) ; 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 $\S 64 . b$ ), the $l$ or $r$ (by the disappearance of the $e$ or $o$ ) became sonant, i.e. endowed with vocalic character, usually indicated by $l, r$. English has these sounds in botl (written bottle) ; centr (written centre), etc. These IndoEuropean sonant liquids developed in Latin as follows :
I. ! developed regularly as $u l$, sometimes as ol, e.g. pulsus (for an Indo-Eur. ${ }^{*} \mathrm{pl}$-tós; root pel-) ;-cultus in oc-cultus (for an IndoEur. *cl-tós; root cel-) ; tollo, i.e. ${ }^{*}$ tol-n $\bar{o}$ (for ${ }^{*} t l-n \bar{o}$, root tel-).

Sometimes the sonant $l$ was long in quantity and then developed as al or lā, e.g. saluus for *sl̄-vós; lāna (i.e. *vlāna) for *vī-ná, from root vel-; cf. vel-lus; lātus (i.e. *tlātus; § 104. I a), from root tel.
2. $r$ developed regularly as or or ur, e.g. curvus (for * crvós, root cerv-; cf. cerv-īx) ; porta (for *pr-tá, root per-; cf. Gr. $\pi \in \epsilon^{\prime} \rho \omega$, for * $\pi \epsilon^{\prime} \rho-\iota \omega$ ) ; curtus (for * cr-tós, root cer- ; cf. Gr. кєí $\rho \omega$ for * *є́ $\rho-\iota \omega$ ).

Like the sonant $l$, the sonant $r$ was sometimes long in quantity. It then developed as ar or $\bar{a}$, eg. armus (for $\bar{\circ} m \dot{c}^{\prime} s$ ) ; strātus (for *str-tós; root ster-in sternō) ; crātis (for * c $\bar{\circ}$-tis).
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 ${ }^{*} \operatorname{agg}_{\circ}(r)$, 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 $* \bar{a} c r$, whence $\bar{a} c e r$. Other instances of the same change are tibertās for *libr-tās (root tībro-), acerbus for ${ }^{*} \dot{a} c r-$-bus; incertus for *incrtus (from *incritos, root cri-) ; sēcernō for *sécrnō (from *sēcrinō, root cri-) ; agellus, i.e. *ager-lus for *ágr-lus, from agro-.

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. 1) ; 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 $\mathrm{em}, \mathrm{om}$; en, on, became reduced to the weak grade (see $\S 64 . b$ ), 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 *septom) ; decem (for *decm) ; ped-em, militem, etc., for *pedm, militm, etc.; mementó for *me-mn-tód; tentus for *tn-tós (root ten-); and in the suffix $-m e n$ for $-m n$, e.g. nōmen.
103. Like the liquid sonants (see $\S$ roo. $\mathbf{1}, 2$ ) the nasal sonant $n$ is sometimes long, and then develops as an or $n \bar{a}$, e.g. antae for *ìtae; gnā-tus (for *gñ-tós; root gen-) ; gn $\bar{a}$-rus (for *g $\bar{n}$-rós).

The Semi-vowels $j, v$.
103. r. Primitive intervocalic $j$ regularly disappeared, e.g. ea for ${ }^{*}$ eja; $\bar{o}$ for *ejō; très for *tre-es (i.e. *trejes) ; monḕ, etc., for *monejo.
2. When following a consonant, primitive $j$ became $i$, e.g. venio for *venjo; capiō for *catjō; medius for *medjos.
3. Intervocalic $v$ also often disappears, e.g. contiō for co(v)entiō; lātrina for *la (v) ātrinna; nōtō for *ne(v)otō; jūcundus for
$\dot{j u}(v)$ icundus; jünior 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. domuй for * dómavī; abluō for *áblavō; dènū̀ for dê novō; impluō for *implovō; indūo for *indovō; suus and tuus for earlier sovos and tovos, owing to their frequent enclitic (unaccented) use.

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

Initial Combinations.
104. I. Initial consonant combinations often drop the first consonant. Thus:
a) Mute lost:

1) $p$ in tilia for *ptilia (Gr. $\pi \tau \epsilon \lambda \epsilon$ a) ; sternuō for *psternuō.
2) $t$ in lātus for *tlātus (root tel-); $d$ in Jū-piter for *Djeu-pater (cf. Gr. Zev́s for * $\Delta_{\text {tevs }}$ ).
3) $g$ in lac for *glact (cf. үáخaктos), 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-gnātus). By analogy cognōmen takes a $g$ (for *comnōmen).
b) $s$ lost:
4) before mutes: in caedō for *scaido (cf. sci(n) dō) ; triō for *striō (root ster-) ; torus for *storus (root ster-, stor-; of. ster-n̄̄, stor-ea, 'mat'); tegō for *stegō (cf. $\sigma \tau \in \prime \gamma \omega)$; further, in līs, locus, làtus, 'broad,' for stlīs, stlocus, stlātus. Early Latin still has stlocus (e.g. CIL. v. 7381) and stlātus, while sttīs is regularly used in the phrase Xvirī stītibus jūdicandēs. $\quad C f$. also Quintilian, i. 4. 6.

[^5]2) Before liquids and nasals: in tūbricus for *stūbricus, ninguit, nix (for *sninguit, *snix) ; mīrus for *smīrus.
c) $v$ lost in lāna for *vlāna; rād̄̄x for *vrād̄̄x.
2. Other initial changes :
a) st stands for an initial $s p$ in stud-eō (cf. Gr. $\sigma \pi \epsilon \dot{\delta} \delta \omega$ ).
b) sve- becomes so- in soror for *sve-sor; socer for *svecros; sommus, i.e. ${ }^{*}$ sop-nus, for *svepnos. But sv- is retained in suā-vis, sū̄adeō, suēscō; while it develops as $s$ in sex (for *svex), and $s \bar{\imath}$ for enclitic *svai ( $c f$. Oscan svai).
c) $d v$ - becomes $b$ in bellum (and derivatives) ; in bonus and bis (earlier dvis; cf. Gr. $\delta i$ is for $* \delta_{f} \iota s$ ) ; bìmus for *dvi-him-us, 'of two winters.' The early forms dvellum, dvonōrum are preserved in inscriptions, and as archaisms in the poets.

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-tend $\bar{o}$; misceō for
 stris; suèscō for *suēdscō; ecferrī for *ecs(ex)ferrī; pāstus for *pāsctus; mulsī for *mulg-sì; ultus for *ulctus; quīntus for *quīnctus; $\bar{a} r s i ̄ ~ f o r ~ * a ̄ r d s i ̄ ; ~ t o r t u s ~ f o r ~ * t o r c t u s ; ~ u r s u s ~ f o r ~ * u r c-~$ sus; sparsī for *spargsī; bimēstris for *bimēns-tris; poscere for *porcscere; Tuscus for *Turscus (cf. Umbrian Turskum); almus for *alsnus; fulmentum for *fulc-mentum; urna for *urc-na (cf. urc-eus), quernus for *querc-nus.
Here also belong such compound forms as ignnōscō 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. pilum, '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 è became established in compounds, it came to be used separately. So also $\operatorname{tr} \bar{a}-$ arose, e.g. $\operatorname{tr} \bar{a} d \bar{u} c \bar{c}$ for $\operatorname{tra} \bar{a} n s d \bar{u} c \bar{o}$, ${ }^{*} \operatorname{tr} \bar{a} s d \bar{u} c \bar{o}$. Trānsdūco is the result of 'Re-composition' $(\$ 87 \cdot 3)$.
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. sculpsī, serpsī, planxī, though these may be due to analogy. Compounds like trānscrībō, trānsporto, which are 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 :
bc to cc, e.g. occurrō.
bg to gg, e.g. suggerō.
bf to ff, e.g. suffero.
bp to pp, e.g. supporto.
dc to cc, e.g. accurro.
$d g$ to gg, e.g. aggerō.
$d l$ to $l l$, e.g. sella (*sed-la); lapillus (*lapid-lus).
$d n$ to $n n$, e.g. mercènnarius for *mercèd-narius.
ds to ss, e.g. jussus for *jud-sus (root judh-).
$d p$ to pp, e.g. apporto.
tc to cc, e.g. siecus for *sit-cus (cf. sit-is).
ts to ss, e.g. quassì for *quatsì.
$p m$ to $m m$, e.g. summus for *sup-mus.
pf to $\not f$, e.g. officina for *opficina, i.e. *opi-ficina; 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 ${ }^{*} \bar{u} n l u s, ~ i . e ~ * \bar{u} n u l u s ; ~ s e e ~ § ~ 92 . ~$
$n s$ 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 § roo. 3); paullus for *paur-lus (cf. Gr. $\pi \alpha \hat{v} \rho o s)$.
2. By progressive assimilation the following changes occur:
$l d$ to $l$, e.g. mollis for *moldis. Assimilation affects only a primitive $l d$; in valdē (=valide ; $\S 9^{2}$ ), for example, the $l d$ remains unchanged.
In to ll, e.g. pellis for *pelnis; In resulting from Syncope (§ 92), as in ūlna for *iulena; volnus for *vol-inus, is not affected by this change.
Is to $l l$, e.g. velle for *velse; facillumus for *facilsumus.
$r s$ to $r r$, e.g. ferre for *fer-se; torrère for *tors-ère. Secondary rs, for rtt, as in versus for *verttos (see § ro8. 1) 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).
3. 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 gem-) ; con-tendō for *com-tendō, 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. $\bar{a} c$ ctum (for ${ }^{*} \bar{a} g$-tum) ; scrīp-s $\bar{i}$ for *scrībsi.
c) The labial mutes $p$ and $b$ are changed to the corresponding nasals before $n$, e.g. somnus for ${ }^{*}$ sop-nus (earlier *suep-nos; § 104. 2. b); Samnium for *Sab-nium (cf. Sabīnī) ; antemnae for *ant-ap-nae; lit. 'opposite fastenings,' - hence 'yards.'

## Metathesis.

107. Metathesis or transposition is perhaps to be recognized in fund $\bar{o}$ for ${ }^{*} f u d-n \bar{o}$; unda for *ud-na; pand $\bar{o}$ for *pat-n $\bar{o}$; and tend $\bar{o}$ for ${ }^{*} t e-\operatorname{tn}-\bar{o}$ (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 ${ }^{*} \bar{u} t t u s ; ~ d \bar{v} v i \bar{s} u s$, earlier divīssus, for *dividtus. In such forms as lāp-sus, pulsus, nexus (= nec-sus), fixus, 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 $t t$, e.g. cette for *ced-ate (cf. cedo), attendō; 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 $s \bar{u} m p s i \bar{i}$, contemp $p \bar{i}$, and between $m$ and $t$ in $\overline{e m p t u s}$ and contemptus; hiems did not develop this $p$; the phenomenon apparently was confined to accented syllables.
110. An original -sr-became $b r$. The steps in this change were first from $s r$ to $\operatorname{pr}(\beta=$ Eng. th $)$, then to $f r$, whence $b r$. Examples are : sobrinus for *sosr-īnus (*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).
111. For the disappearance of $s$ before $l, m, n, r, b, d, g$ in accented syllables, combined with lengthening of a preceding short vowel, see $\S 89$. In unaccented syllables $s$, in such cases, was lost without affecting the quantity of the previous vowel, e.g. vidïmus for *vidismus; corpulentus for *órposlentus; satïn for sátisne; pótĭn for potisne.

## Consonant Changes at the End of Words.

109. r. 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 $\S 98$. 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- $\bar{o}(n)$; *arō $(n)$, 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. praedā 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 sè- for sēd-, which latter appears in séditiō.
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. ${ }^{*}$ fels (§ 106. 3); far for *farr, i.e. *fars ( $\S$ 106. 3) ; yet it is probable that geminated consonants were spoken in these words, e.g. hocc (for *hodc), not $h \bar{o} c$; so ess, 'thou art,' farr, fell, ass.
111. Groups of two consonants at the end of a word are sim-plified,-
a) By dropping the second, e.g. mel for *melt; lac for *lact; os for *ost; cor for *cord. In fers, fert, volt, est, the final consonant is retained after the analogy of agis, agit, etc. A regular exception to the general principle is seen in final $p s$ and $x$, e.g. ops, urbs (bs $=p s$; see § 27 ) ; rēx, โex .
b) By dropping the first, e.g. mìles for *milets; pès for *pēds; and in final syllables in $-n s$, as agrōs for *agrōns; 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 *dèbilitā-tāre; calamitōsus for *calamitātōsus; dentiō for *dentītiō; portōrium for *portitörium; venēficus for *venēnificus; voluntārius for *voluntātārius; sèmodius for *sēmi-modius.

## CHAPTER VII.

## INFLECTIONS.

Declension of Nouns and Adjectives. ${ }^{1}$

## $\bar{A}$-Stems.

111. In the Indo-European parent-speech there was Ablaut (§ 62) in the suffix of $\bar{a}$-stems. The weak grade of $\bar{a}$, viz. $\vec{a}$ (§66) occurred in the Vocative Singular, and also in the Nominative and Accusative Dual, if Brugmann's theory be correct ; see § 120. Elsewhere the suffix remained $\bar{a}$.
112. Nominative Singular. - ı. The original Nominative Singular had $-\bar{a}$, e.g. *porta. But $-\bar{a}$ was shortened to $-\bar{a}$ before the beginning of the historical period. Possibly this shortening was owing to the influence of the Accusative Singular, where *-a $m$ regularly became shortened to $-\breve{a} m(\S 88,2)$. 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 :
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servŏs : servŏm
früctŭs : früctŭm }: : portă: portăm.
\mathrm{ gnněs: ignǐm}
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Possibly the law of Breves Breviantes (§88.3), by which *fugg $\bar{a}$, *férā, *rŏtā, etc., regularly became füğă, féră, rŏtă, etc., led to the

[^6]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 $\bar{a}$.
2. The Latin has developed a number of Masculine $\bar{a}$-stems, e.g. agricola, 'farmer' (probably originally 'farming'); cf. optiō m., 'centurion's assistant,' from optiō, $f$., ' choice, selection.' Other languages exhibit this same phenomenon, e.g. Greek. Thus $\nu \in \alpha-$ viās, 'a youth,' probably goes back to a lost ${ }^{*} v \varepsilon a v i a ̄ a, ~ ' y o u t h ' ~$ (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 of varying accentual conditions of the parent-speech. In the case of $\bar{a}$-stems, the case-ending had already united with the $\bar{a}$ - of the stem producing the contraction $-\bar{a} s$. This 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. viäs (Enn. Ann. 421 Vahl.), fortünās (Naevius).
114. The Genitive Singular in -ae goes back to an earlier $-\bar{a} \bar{\imath}$ (dissyllabic), which is found in the poets as late as the Augustan Age. This termination $-\bar{a} \bar{i}$ apparently arose by appending the Genitive termination $-\bar{\imath}$ of the $o$-stems directly to the stem, e.g. port $\bar{a}-\bar{i}$. Whether $\bar{a} \bar{i}$ became $a i, a e$ by regular phonetic processes, or partly under the influence of the Dative and Locative ending $a e$, is uncertain.
115. Dative Singular. - The Indo-European case-ending of the Dative Singular was -ai. But this had already in the IndoEuropean parent-speech contracted with the final $-\bar{a}$ of the stem producing *- $\bar{a} i$, whence successively $-\breve{a} i$, $-a e$ (ante-vocalic form ; $\S \S 86 ; 80.1$ ). On an early Dative in $-\bar{a}$ see also $\S 86$.
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 *-ām, e.g. *portām; but the vowel in all 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). Thus *portă would represent the Indo-European Vocative Singular of portă. This *portă would become in Latin *porté according to $\S 7 \mathrm{I}$. r. Hence the Vocative in actual use must be referred to another origin ; it is probably simply the Nominative transferred to Vocative uses. The same is true of most Latin Vocatives in all declensions.
118. Ablative Singular. - The Indo-European case-ending of the Ablative Singular seems to have been $d$ with some preceding vowel, i.e. $-\breve{a} d$, $-\breve{d} d$, or $-\breve{o} d$. In the noun-declension, this caseending belonged in Indo-European exclusively to the $\check{o}$-stems (see $\S$ I3O). 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. 196. 8, ${ }_{17}$. These inscriptions belong to the period of Plautus, and such Ablatives are probably to be recognized in the text of his comedies. 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, praid $\bar{a} d$, etc. But the ante-consonantal form early became predominant, probably by 175 B.c.
119. Locative Singular. - The case-ending of the Locative Singular in Indo-European was $-\breve{\imath}$. 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 $-a \mathfrak{a}$, later $-a e$, just as in the case of the Dative (§ $1 I_{5}$ ).
120. Nominative and Vocative Plural. - The original caseending of the Nominative Plural in Indo-European was $-\stackrel{\iota}{s}$ 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 $-a ̆ i$, which Brugmann takes as an original Nominative and Accusative Dual (cf. Skr. $d u v \bar{e}=$ Indo-Eur. $\left.{ }^{*} d u v-\breve{a} i\right)$ that has taken on a Plural function. But an original final -ăi regularly becomes $-\bar{i}$, so that we should expect *porti (for *portăi), if the Nominative Plural were descended from this Dual form. Final -ai in Latin, as seen in the case of the Genitive, Locative, and Dative Singular (§§ II4, ${ }^{11} 5$ ), can come only from an original $-\bar{a} i$, as the ante-vocalic form (§86). Hence Latin portae (early Latin *portai) must go back to an original ${ }^{*}$ portāi. The exact nature of this formation is not clear; but Greek $\chi^{\hat{\omega}} \rho a \iota, \mu \hat{\nu} \sigma a \iota$, etc., are apparently of the same origin. The Vocative Plural of $\bar{a}$-stems is simply the Nominative employed in a Vocative function.
121. Genitive Plural. - It is uncertain what form the caseending of the Genitive Plural had in Indo-European. It was either $-\bar{o} m$ or $-\stackrel{\circ}{m}$, with the probabilities in favor of the latter

[^7](Brugmann, Grundriss, ii. p. 689). 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 $-\bar{a} r u m$, a termination borrowed from the Genitive Plural of the Pronominal Declension. This - $\bar{a}$ rum is developed by Rhotacism (§ 98. r) from an earlier -assom, which appears in Homeric Greek in the form - $\bar{\alpha} \omega v$, e.g. $\theta \in a ̂ ́ \omega \nu$ for $\theta \epsilon \hat{a}(\sigma) \omega \nu$. 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, possibly after the analogy of such Genitives as Aeneadum (from Aeneadès).
122. Dative and Ablative Plural. - The Indo-European par-ent-speech 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 lative Plural of $\bar{a}$-stems in - $\bar{a} b u s$ (on -bus, see $\S$ 144) appears only in a few words where distinction of sex is important, e.g. equābus, filiābus, $\grave{i}$ bertābus, etc. Elsewhere we have the termination $-\bar{i} s$, 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 -is (see § 8o. 2).

Some advocate a Locative origin for these forms, but that is less probable.
123. The Accusative Plural. - The case-ending of the Accusative Plural in Indo-European was -ns. The $n$ disappeared according to $\S 109.3$, i.e. portās for *portàns.

## 0 -Stems.

## A. Masculines and Feminines.

124. In the Indo-European parent-speech there was Ablaut $(\S 70)$ in the suffix of 0 -stems. Both forms of the strong grade
occur, $\breve{e}$ and $\check{o}$. The former appears in the Vocative and Locative (Genitive) 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 § roo. 3 .
126. Genitive Singular. - The so-called Genitive Singular of $o$-stems is in all probability a Locative that has taken on the function of the Genitive. The suffix took the form $e$ (see § 124 ) which, with the Locative case-ending $i$, gave by contraction $-e i$, whence regularly $-\bar{i}$. The Locative function is still apparent in $h u m \bar{\imath}$, belli, dom $\bar{\imath}$, her $\bar{\imath}$; also in town names, e.g. Corinth $\overline{\mathrm{c}}$.
127. Dative Singular. - The Indo-European case-ending -ai early combined by contraction with final $o$ of the stem, producing $-\bar{o} i$. Perhaps we have this in Numasioi in our earliest Latin inscription, CIL. xiv. 4123 . In the historical period $-\bar{o} i$ has become $\bar{o}$ (ante-consonantal form, § 86). Cf. Mātūtā for Mātūtāi (§ 86).
128. The Accusative Singular. - The regular ending $-m$ is appended to the stem in 0 , e.g. horto-m, classical hortum (§ 76. r).
129. Vocative Singular. - The stem with the $e$-suffix serves as a Vocative, e.g. hort-e; there is no case-ending.
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. $-\breve{a} d,-\breve{e} d$, or $\check{o} d$. 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 * réctod, and with the latter * rected. Forms with $d$ appear in early Latin, e.g. popli$\overline{c o} d$, faciluméd. Later (by 175 B.c.) the $d$ disappeared ; see § 118. The forms in $-\bar{e}$ became appropriated as Adverbs, - rectē, facillumē, etc.
131. Nominative and Vocative Plural. - The Nominative Plural of $o$-stems in Indo-European was originally formed by appending the case-ending -ěs 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 $\bar{\imath}$, the classical termination, e.g. horti. In Plautus and in early inscriptions, we find also a termination -ès, e.g. magistrés. This represents a borrowing from the $i$-stems (see § 154 ), helped doubtless by the existence of qués as a 'by-form' of quì (the relative).
132. Genitive Plural. - The original termination was $-\bar{o} m$, the result of contraction of final 0 of the stem and the case-ending $-o ̆ m$ or $-\bar{o} m$ (§ 121 ). This termination, shortened to $-\circ{ }^{\circ} m$ (§42. 1 ), appears in early Latin, e.g. Rōmānom, and in the form -um (§ 76 . 1) is also regular in certain words in the classical period, e.g. talentum, modium, deum, etc. (Gr. § $25.6 . a)$. The usual ending - $\bar{o} u m$ 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 $-i s(\S 81,2)$, the classical termination. Cf. § 122 .
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 case-ending, 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.

## Consonant Stems.

A. Masculines and Feminines.

The original case-endings are seen to best advantage in the Mute stems.
137. Nominative Singular. - The case-ending is $s$, which combines with the final consonant in the ways enumerated in $G r$. §§ 32,33 , e.g. princep-s; miles, dux.
138. Genitive Singular. - Of the three forms of the IndoEuropean case-ending, viz. $-s,-e s,-o s$, the second, $-e s$, is the one which regularly appears appended to consonant stems. This becomes -ǐs according to $\S 73.2$ a a), e.g. ped-ǐs, mìlitǐs. Traces of the ending -os are seen in early Latin nomin-us ( $-u s$ for -os acc. to § 76. 1), Castor-us, honōr-us, etc., - perhaps also in opus in the phrase opus est, 'it is necessary.' Cf. § 341.2.
139. Dative Singular. - The Indo-European case-ending was probably -ai, which regularly became $-\bar{i}$, e.g. ped-ī for *ped-ai; mīlitī for ${ }^{*} m i ̀ l i t a i$.
140. Accusative Singular. - The Indo-European case-ending was $-m$, which, after a consonant, necessarily became sonant (§ 102. 1) and developed as -em, e.g. pedem for *pedm; principem for *principm.
141. Ablative Singular. - The termination $-\breve{e}$ may represent either the Indo-European Instrumental case-ending $-\breve{a}$ or the Locative $-\stackrel{\imath}{ }$. Each of these would regularly become - $\breve{e}$ in Latin (§§71. 1; 75). Probably we should recognize the presence of both formations in the Latin Ablative, just as we recognize the presence of both Instrumental and Locative meanings in that case.
142. Nominative and Vocative Plural. - The Indo-European case-ending of the Nominative Plural was $-\breve{s}$, seen in Greek - $\epsilon$ (e.g. фúdak-єs), but is not preserved in Latin. Plautine canĕs, pedĕs, turbinĕs, etc., come under $\S 88$. 3. The ending $-\bar{e} s$ which appears regularly in all nouns of so-called Third Declension has been borrowed from the $\grave{\imath}$-stems ; see $\S 154$.
143. Genitive Plural. - The regular ending $-u m$ is for earlier -om. Whether this was -ŏm or $-\bar{o} m$ in Indo-European is uncertain; see § 121 .
144. Dative and Ablative Plural. - The Indo-European ending was -bhos, which became -bos (\$ 97. 1. b). This appears once or twice in early Latin, but soon became -bus (§ 76. 1). The $i$ of $-i$ bus, the regular termination of all consonant stems, is borrowed from the $i$-stems ; $\S{ }_{15} 6$.
145. Accusative Plural. - The Indo-European ending - $n s$ became $-n s$ (§ 102. 1) after a consonant. This regularly became ${ }^{*}$-ens, whence $-\overline{e s} ;$ § rog. 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 § 136 .

## Stem-Formation of Consonant Stems.

147. Several formative suffixes originally showed Ablaut ( $\$ 862$, 70). Thus:
148. S-Stems. - Stems formed with the suffix os $(-u s)$, 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- $\bar{i}$ (§ 98. r). 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 adverbs temp-er-i, temp-er-e. Cf. also temp-es-tās, temp-es-tivus, 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. p̄̄gnerī (Plautus).
149. Nasal Stems. - The suffixes of many nasal stems originally had Ablaut ( $\S \S 62,70$ ). Thus:
a) The suffix $-\bar{o} n$ - (lengthened from $-o n$-, strong grade ; $\S 62$ ) had another strong form, $-e n$-, and a weak one, $-n$-. Most words have lost-the $-n$ - grade, and show only -on- or -en-, e.g. umb-ō for umb-ō (n) (§ 109. 1), Gen. umb-ōn-is, etc., $\bar{o} r d-\bar{o}(n)$, ōrd-in-is (for * $\bar{o} r d-e n-i s, ~ § 73.2$ ), turb- $\bar{o}(n)$, turb-in-is. Car- $\bar{o}(n)$, Gen. car-n-is, 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 we have only -iōn, e.g. $\bar{c} c t i \bar{o}(n)$, $\bar{a} c t i-\bar{o} n-i s$.
c) The suffix $-m \bar{o}(n)$ had also the grades -men- and $-m n$-. Sometimes the -men- grade appears in the oblique cases, e.g.
ho-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 $-m n$ ( $§$ 102. 1), e.g. nō-men for * $n \bar{o}-m n$. In the oblique cases min- is for men-, e.g. nō-min-is 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 ; $\S 62$ ). The Greek has clung quite closely to the original declension, $\pi \alpha-\tau \dot{\eta} \rho, \pi \alpha-\tau \rho$-ós, $\pi \alpha-\tau \epsilon \rho-\alpha$. In Latin the $-t r$ - 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. -tör-, tōr-, -tr-. In Latin these have all practically been reduced to one, -tōr (Nominative -tör being for earlier *-tōr; $\S 88.2$ ). The weak grade -tr-, however, appears in the corresponding feminine nouns of agency, e.g. vic-tr-īx, gene-tr-īx, etc.

## Ĭ-Stems.

## A. Masculine and Feminine $\breve{\imath}$-Stems.

148. These originally had Ablaut ( $\S \S 62 ; 70$ ) in the suffix. The strong form of the suffix was $-e i$-, 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; of. Gr.
 *ßatıs) ; -tentiō (earlier-tentis; cf. Gr. тáбıs for *тatıs).
149. Nominative Singular. - This is regularly formed by appending -s, e.g. īgni-s, turri-s. Several nouns have lost the $i$ before $s$ by Syncope ( $\S 92$ ), 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 ( $\S 138$ ). 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 regularly became $-\bar{\imath}$ as in consonant stems, and this $-\bar{\imath}$ contracted with the $\breve{\imath}$ of the stem, e.g. turri for *turri- $\bar{\imath}$.
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 : hortod : : turris: turrim : turrid). These $-d$-forms, however, are attested by only scanty examples; the $d$ early disappeared (§ rog. I), leaving the termination $-\bar{\imath}$.
154. Nominative Plural. - The suffix of the Nominative Plural took the form $-e i-\left(\begin{array}{l}\text { § } \\ 148) \text {. Thus the primitive formation would }\end{array}\right.$ be represented by *turr-ei-čs. The $i$ between vowels first became $j$, and then regularly disappeared. The resulting *turrĕĕs then became turrés by contraction. Cf. in Greek $\pi$ ód $\epsilon \iota s(\epsilon \iota=\bar{e})$ for ${ }^{*} \pi \sigma \lambda_{\epsilon}-\epsilon \varsigma$.
155. Genitive Plural. - The ending $-u m$ 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 $\bar{l}$-suffix, e.g. tur-ri-bus. On -bus for *-bhos, see $\$ \S 97$. 1. 6; 76. 1.
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 $-i s$, is borrowed from the Consonant stems.

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

158. I. These changed the final $-\breve{\imath}$ to $-\breve{e}$ by a regular law (§ 75). Stems of more than two syllables then dropped the $-\check{e}$ thus developed, while dissyllabic stems retained it, e.g. calcar(e), animal(e) ; but mare, rète.
159. The case-endings of Neuter $\check{\imath}$-stems are in general the same as for Masculines and Feminines. 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 $i$-Stems.159. As stated in the Grammar, $\& 40$, the adaptation is practically confined to the Plural, viz. the Genitive and Accusative, where -ium and $-\overline{i s}$ take the place of the normal $-u m$ and $-\bar{e} s$. Several distinct groups of words belong here :
160. One of the most important classes consists of nouns in $-\bar{e} s$, e.g. aedēs, $n \bar{u} b \bar{e} s, e t c$. These seem to have been originally Neuters with the suffix -os-, ees- (§ 147.1 ). Thus aedés is the Greek aitos ; sēès is the Gr. édos, 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 no stems of this class ever show $-i m$ in the Accusative Singular or $-\bar{t}$ in the Ablative Singular, ${ }^{1}$ whereas regular $\breve{z}$-stems in $-i$ is frequently show these endings, makes it impossible to regard nouns in $-\bar{e} s$, Gen. $-i s$, as actual $\check{\imath}$-stems.
161. Nouns in -tàs, Gen. -tātis, may possibly represent $\bar{i}$-stems, i.e. civitāt-i-; yet the absence of $-i m$ and $-\bar{z}$-forms in the Accusative and Ablative Singular is against this. Cf. I above.
[^8]
## $\breve{U}$-Stems.

## A. Masculine and Feminine $u$-Stems.

160. Like the $\breve{\imath}$-stems, the $\breve{u}$-stems had a suffix which appeared in two forms, viz. $-e u$ - and $-u$-. The former was strong; the latter 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, viz. -eu-. To this was added the Genitive case-ending in its weakest form, viz. -s (§ 138 ), thus *frūct-eu-s, whence regularly frūctūs ( $\S 85$ ). 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 caseending.

The termination $-\bar{u} s$ cannot be explained as the result of contraction from either -uis or -uos. Neither $u i$ nor $u o$ 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. senātī.
163. Dative Singular. - The Indo-European case-ending -ai appended to the stem regularly gives $-\bar{i}$, e.g. frūctu-i . The Dative in $-\bar{u}$ is not formed from that in $-u \bar{u}$ by contraction; for $-u \bar{u}$ does not contract to $\bar{u}$. The forms in $\bar{u}$ are either Instrumentals or Locatives. Thus frūetū may be for *frūctu-e by contraction. On $\breve{e}$ as the representative of an original - $\breve{a}$ (Instrumental caseending), see § 141. If Locative, frūctū is for Ffrücteu, a peculiar $^{\text {I }}$ suffixless fromation.
164. Accusative Singular. - The regular ending $-m$ is appended, e.g. frūctu-m.
165. Ablative Singular. - The earliest Latin formation had $-d$, e.g. früctūd. This, however, was not inherited from the Indo-

European, but was a new formation, specifically Latin. See § 153. The $-d$ was soon dropped, giving frūctu.
166. Nominative Plural. - The original formation would have been in *-eu-ĕs, i.e. the strong form of the suffix (§ 160 ) + the Nominative case-ending - $\breve{s}$; *-eu--ॅs 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 $-\bar{\imath} s$ from $\check{i}$-stems, which are likewise Accusatives in Nominative function.
167. Genitive Plural. - Frūctu-um, etc., are for earlier früctu-om. On -om, see § 121 .
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 $u$-, c.g. früctu-bus. Later, either owing to the influence of Consonant and $\check{l}$-stems, or to the tendency of $\breve{u}$ to become $\breve{\imath}$ before labials ( $\$ 6.2$ ), -ubus often became -ibus. Tribubus never becomes *tribibus,- for what reason, is not clear.
169. Accusative Plural. - The primitive formation would be represented by $*$ früctū-ns (case-ending $-n s$ ), whence regularly frūctūs; § 109. 3.b.

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

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

## $\bar{I}$ and $\bar{U}$-Stems.

171. r. The only $\overline{\bar{c}}$-stem in Latin is $\bar{v} s$. 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 vrm for *vim is regular; § 88. 2. In the Plural $\bar{i} r \bar{e} s$, virium, etc., result from the conception of the stem as $v \bar{l} s-$, whence $* v \bar{\imath} s-\bar{e} s$, vīres, etc.; § 98. r. Cf. the early Latin Plural, spèe $\bar{e} s$ from spēe-s, an $\bar{e}$-stem.
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. Subus is not a contraction of suibus, but represents another formation.

## $\bar{E}$-Stems.

172. $\bar{E}$-stems are represented by $s p \bar{e} s, q u i \bar{e} s$, and nouns in $-i \bar{e} s$, e.g. rabiès, aciēs, faciès, speciès, etc. The suffix -iè- 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. On res and dies, which were originally diphthongstems, see § i8o.

172a. Nominative Singular. - The case-ending is $-s$ as elsewhere.
173. Genitive Singular. - The $-\bar{\imath}$ of $-\bar{e} \bar{\imath}$ is probably borrowed from $\check{o}$-stems, precisely as in case of the ending $-\bar{a} \bar{\imath}$ of $\bar{a}$-stems; subsequently $\bar{e}$ was shortened before $-\bar{l}$, when a consonant pre-
 e.g. aciē, diè (in such expressions as quīntī diē, postrīdie, prīdiè, etc.) is not Genitive, but Locative. The original formation was *diēi (Locative ending $-\stackrel{l}{i}$ ). But under certain conditions this diphthong $-\bar{e} i$ became $-\bar{e}$ (cf. § 86) ; hence diē for * diēi.
174. Dative Singular. - The genuine Dative formation is seen in aciē̄̄ for *aciē-ai (§ 80. 2). The Locative in $-\bar{e}$ serves not only as Genitive (§ 173), but sometimes also as Dative, e.g. fide, rée.

174a. 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 aciē, etc., are for an earlier *aciéd, etc. This formation would be secondary, after the analogy of the Ablative Singular of $\check{o}$-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 -erum is after the analogy of - $\bar{a}$ rum of the $\bar{a}$-stems and $-\bar{o}$ rum of the $\check{o}$-stems.
178. Dative and Ablative Plural. - The ending -bus, for IndoEuropean -bhos (§97. I.b), is appended directly to the stem.
179. Accusative Plural. - The primitive Latin formation would be represented by *acièns, whence acies ( $\$$ rog. 3. b).

## Stems ending in a Diphthong.

180. 181. Rēs, originally a diphthongal stem, viz. *rēis, had become $\overline{r e s}$ in the Indo-European period.
1. The Nominative Singular of nāvis was originally *nāus. This form disappeared ; nāvis is a new formation after the Genitive $n \bar{a} v i s$, Dative nā$v \bar{\imath}$.
2. $B \bar{o} s$ is probably not a genuine Latin word, but is borrowed from one of the Italic dialects (Oscan?) ; $\bar{o}$ represents earlier $\bar{o} u$.
3. The stem of $\sqrt{\bar{u}}$ (piter) was, in Indo-European, ${ }^{*}$ DjevInitial $d j$ regularly became $j$ (§ 104. r. $a$ ) ; hence *Djev- became ${ }^{*}$ Jev-, and further Jov- $(\S 73 \cdot 3)$. From this stem are formed the oblique cases Joz-is, Jov-i, Jov-em. The Vocative consisted of the simple stem, namely ${ }^{*}$ Jev, which became ${ }^{*}$ Jeu, $J \bar{u}$ - ( (§ 85 ). It is this last which combined with -piter (i.e. pater, § 73. 2) gives Jüpiter, really a Vocative, but used as a Nominative as well.

The original Nominative was *Djēus, with a 'by-form' *Dijēs. From the latter came Dies (§ 86) seen in the archaic Diespiter, which is the real Nominative corresponding to Jüpiter. The same
dies as a common noun, 'day,' passed over into the inflection of the $\ddot{e}$-stems.

## Formation of the Comparative and Superlative. ${ }^{1}$

181. The Comparative. - The regular Comparative Suffix in Latin was -ios-, with -ies- as another form of the strong grade, and $-i s$ - as weak grade (§ 62 ). But -ios- alone survived in Latin. In the Nominative Masculine and Feminine the original formation was -ios. In the oblique cases $s$ became $r$ (§ 98. r), e.g. melioris for * meliōsis, and the $r$ was subsequently transferred by analogy to the Nominative. The Neuter kept $s$, changing $o$ to $u$ (§ 76.1 ), e.g. melius. Minus is not for *min-ios (which would be impossible in Latin), but was probably originally a Noun, minus, Gen. *mineris. This became an Adjective and developed a Masculine minor, after the analogy of other Comparatives.
The Indo-European parent-speech had another suffix, which in some languages developed Comparative force, viz. -tero-, -ter $\bar{a}-$, e.g. Greek какю- $\tau \epsilon \rho$ оs. 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.
182. The Superlative. - We have three Superlative suffixes in Latin :
183. -mo- seen in sum-mus for *sup-mus (§ 106. 2) ; prī-mus; brūma 'winter,' lit. 'shortest day,' for *brev-ma (brev-is) ; pessimus; also in extrēe-mus, postrē-mus, suprē-mus; plūri-mus, proximus (for *proqu(i)s-imus).
184. -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 );

[^9]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. Tegi-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 -ıттos) and -mus; for -istimus could not become -issimus. It is more likely that -issimus is for *isti-timus. By syncope this would become *-isttimus, whence -issimus (§ 108. 1). Acerrimus is probably for an original *acr-is-imos, whence by Syncope ( $\$ 92$ ) *ácrosimos, *ācersimos (§ 100.3), àcerrimus (§ 106.4). Similarly facillimus is for *fácil-is-imos, ${ }^{*}$ facilsimos, facillimus (§ ro6. 3) ; $-i s$-, 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. Ünus is for earlier oinos; § 8r. r. (cf. Greek olv ${ }^{\text {o }}$, the one-spot' on dice). German ein and English one are the same word ; Greek eis is not related to $\bar{u} n u s$, but to semel, singuli.
1. Duo is for earlier * duō according to $\S 88.3$; cf. Greek $\delta$ ów. The formation was Dual.
2. Trēs. The stem shows Ablaut (§ $64 . c$ ), strong grade trei-, weak grade tri-. The former stem originally appeared in the Nominative, *trei-ĕs, whence *tre-ĕs, trēs. The other cases have tri-, viz. tri-um, tri-bus, tri-a, trīs (for *trī-ns; § 109. 3)
3. 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; -ör regularly became $\breve{o}$; $\S 88.3$. The change of the

[^10]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. § i6. r. f.
5. Quinque. The Indo-European form was *penque; of. Skrt. panca, Greek $\pi \epsilon \in v \tau \epsilon$. 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 *pi-bō (Skrt. pibāmi). The change of $e$ to $i$ is in accordance with $\S 73.2$. $b$. The lengthening of $i$ awaits satisfactory explanation.
6. Sex. The Indo-European form was apparently *sveks; on $s$ - for $s v$, see § 104. 2. b). Cf. Greek ${ }^{\epsilon} \xi$, Doric $f^{\prime \prime} \xi\left(\right.$ for $\left.\sigma_{f} \dot{\epsilon} \xi\right)$.
7. Septem. The Indo-European form was *septn, which would have regularly developed in Latin as *septen (§ 102. 1; cf. Eng. sev-en; German sieb-en) ; the final -em is the result of association with dec-em and novem.
8. Octō is descended from an Indo-European *octō. The form was a Dual ('two fours'?).
9. Novem. The Indo-European form was *nevn, which in Latin would regularly have appeared as *noven (§ го2. 1 ; cf. Eng. $n i-n e$; German neu-n) ; -em for -en is due to the following dec-em.
10. Decem is for Indo-European *decm; § 1о2. 1.
ir. 'Eleven' to 'Nineteen.' These are regularly formed by composition, - ündecim, tredecim, etc. On -im for -em, see § 73. 2. For trëdecim we should expect *trèdecim according to § 89. The $\breve{e}$ remains unexplained. 'Eighteen' and 'Nineteen' were usually expressed by duodèvigintì, ùndévĭgintī.
12. Vïgintī. The Indo-European form was *vī-kmtī, in which $v \bar{u}$, 'two,' is for * $d v \bar{u}$, an original Neuter Dual, from the root * $d u$-; -kmitī, whence in Latin *-gentī, -gintī (§ 1о2. r) .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 -gint $\bar{a}$, which in Indo-European was *-kontā (cf. Gr. трı́́коута, тєббара́коута, etc.), a Neuter Plural meaning 'tens' ; *-kontā shows the strong grade of the root whose weak grade *knt- lies at the basis of vïginti (see
above) ; -gintā for *-gontā is due to the influence of vigintí. On $g$ for $c$, see above. Trī- in trīgintā 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 quadr $\bar{a}-$-, 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 ; § 102. I. Eng. hund-in hund$r e d$ is the same word. Gr. $\mathfrak{e}$-кaróv has prefixed $\epsilon$-, for ${ }^{\epsilon} v$, 'one.'
15. The Hundreds present few difficulties. On trë-centi, see 1o above. Quadringenti, octingentī (for quattuor-, octō-) have borrowed the -ing- from quingenti (for *quing-genti; § 105. 1) and septingentī (for *septem-genti), where -ing- developed regularly. Sescentī is for sex-centi, according to § 105. 1. Sexcentī, which also occurs, is the result of 'Re-composition'; $\S 87 \cdot 3$. On $g$ for $c$ in -genti, see above, I .
16. Mille. - The most probable etymology of this word is that which connects it with Greek $\chi^{i} \lambda \iota a$, Doric $\chi \eta \dot{\eta} \lambda \iota a$ (for * $\chi^{\prime} \sigma \lambda \lambda \iota a$ ), 'thousand.' The Indo-European form of this was *gheslia, which in Latin would regularly develop as *hélia ( $\$ 889$; 97.3.A.), and, by assimilation ( $\S 90$ ), *hillia. The initial $m$ would represent $s m$-, weak form of the root sem-, 'one,' seen in sem-per, sem-el, $\operatorname{sim}$-plex, sin-gulī. Cf. also Greek $\mu$-ía for ${ }^{*}(\sigma) \mu i ́ a$. Hence originally in Latin *sm(h)īlia, ' one thousand.' On $m$ for initial sm-, see § 104. I. b).

## Ordinals.

184. i. Prìmus for *pris-mos is a Superlative formation ; $\S 89$.
185. Secundus is from sequor, hence originally : 'the following.'
186. Tertius is not clear in its relation to tres.
187. Quārtus, Quīntus, Sextus are formed from the respective cardinals by adding -tus.
188. Septimus, Decimus are probably for an original *septm-mos, *decm-mos; see § 102. і.
189. Octāvus is for an earlier *octōvus.
190. Nōnus is for *noven-os; cf. § 183.9.
191. Vicēsimus and the other tens are formed with the suffix -timo-, i.e vīcēsimus for *vicent-timos; § ro8. 1.
192. Centēsimus and the Hundreds. - Inasmuch as the element - $-\bar{e}$ imus 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, ducenti, etc. The suffix -timo-would have given *centum-timus, or else *cēsimus for *cent-timus.
193. Millēsimus follows the analogy of the hundreds.

## Distributives.

185. 186. Singuli, from the stem sm-klo-, shows the weak form of the root sem-, 'one,' seen in sem-el, 'once,' sim-plex, sem-per, etc.
1. The other Distributives are formed with the suffix -no-, e.g. bīn̄̀ for ${ }^{*} b i s-n \bar{\imath}$; trīnı for ${ }^{*} t r i s-n \bar{\imath}$. Beginning with septēnī, the Distributives are formed by the suffix $-\bar{e} n \bar{\imath}$, which is borrowed from $\bar{e} \bar{n} \bar{l}$ (for ${ }^{*} \operatorname{secs}-n \bar{n} ; ~ \S \S 105.1 ; 89$ ). The cardinal form to which this suffix is added, usually loses its final syllable, sometimes the last two syllables, e.g. sept(em) $\bar{e} n \bar{\imath}$, nov (em) $\bar{e} n \bar{\imath}$; dènì, vīcēnì.

## Multiplicatives.

186. r. Semel, 'once,' is from the root sem-; § 185 . r.
187. Bis is for dvis, preserved in the Glosses of Festus ; § ro4. 2. c). Cf. Greek סís.
188. Ter is for *tris (cf. Gr. $\tau \rho \prime$ 's) in unaccented position. The sequence of development would be ${ }^{*}$ tris, ${ }^{*}$ trs ${ }^{*}{ }^{*}$ trr, ter; §§ 106. 3 ; 100. 3 .
189. Quater is for *quatur, with $e$ for $u$, owing to association with ter.
190. The other Multiplicatives are formed by the suffix -iens, -ies (see §20.2), which is variously explained. Some see in it the Participle of $\bar{e}$, so that sex-iens would mean literally 'going six.' Others identify it with the Sanskrit suffix -yant.

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

## Personal Pronouns.

187. First Person. - I. The Nominative Singular, ego, for earlier $\operatorname{eg} \bar{o}$ (§ 88.3), represents an Indo-European *egō.
188. The Genitive Singular, meì, is simply the Genitive Singular Neuter of the Possessive meus, used substantively.
189. 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 ( $\$ \S 97.3$ A ; 8r. 2). The change of $\breve{e}$ to $\breve{z}$ took place first when *meh $\bar{\imath}$ was in unaccented position; § 73. 2. On the shortening of the final $\bar{\imath}$, see § 88. 3. Mi may be a contraction of mihi or may be identical with Greek $\mu$ oi (also Locative).
190. The Accusative and Ablative Singular, mé, was mēd in early Latin. Possibly $m \bar{e} d$ was originally Ablative only, with the caseending discussed in § 130 ., Before an initial consonant méd would become $m \bar{e}$, remaining $m \bar{e} d$ before vowels. Assuming that the original Accusative Singular was $m \bar{e}$, the existence of $m \bar{e}$ and $m \bar{e} d$ side by side in the Ablative would naturally lead to the rise of $m \bar{e} d$ by the side of the already existing $m \bar{e}$ in the Accusative.
191. Nominative and Accusative Plural, nōs, is apparently an inherited Indo-European formation.
192. Genitive Plural. - Nostrum, nostrī are the Genitive Singular and Genitive Plural of the Possessive Pronoun used with substantive force.
193. Dative and Ablative Plural. - Nōb̄̄s has apparently borrowed its termination -bīs from vōbīs; see below.
194. Second Person. - The Indo-European stem was tve-, with weak grade tu-. A collateral form te-also appears.
${ }^{1}$ See Brugmann, Grundriss, ii. §§ 407-459; Lindsay, Latin Language, chap. vii; Stolz, Lateinische Grammatik, §§ 89, go.
195. Nominative Singular. - tīu corresponds to German $d \bar{u}$, Greek $\tau \bar{v}$ - in Homeric $\tau_{\hat{u} v \eta \text {. }}$
196. Genitive Singular. - Tū̃, like meì (§ 187.2 ) is the Genitive of the Possessive Pronoun used substantively.
197. Dative Singular. - Tibi is for an earlier *tebi; on $\ddot{i}$ for $\breve{e}$, see under mihi, § 187.3 . The origin of the termination $-b i$ is uncertain. On the shortening of the final $-\bar{\imath}$, see § 88. 3 .
198. Accusative and Ablative Singulur. - Te is for earlier ted. On the origin and relation of the two formations, see § 187.4 .
199. Nominative and Accusative Plural.- Vōs represents an Indo-European formation.
200. Genitive Plural. - Vestrum, vestri are of the same formation as nostrum, nostrī; see § 187. 6. Vostrum, vostrī, for vestrum, vestrī, result from association with nostrum, nostrī.
201. Dative and Ablative Plural. - Vōbis is formed with the suffix -bhīs, the relation of $-b \bar{\imath} s$ in $v \bar{o}-b \bar{s} s$ to $-b \bar{c}$ in $t i-b \bar{\imath}$ being perhaps determined by that of illīs to illī; istis to issti, etc.

The Reflexive Pronoun.
189. The stem of the Reflexive is *sev-, with the collateral form *se-

1. Genitive. - Sū̃, like meì and tū̀, is the Genitive Singular of the Possessive used substantively.
2. Dative. - Sibi, earlier sib̄̄, is for *seb̄̄. See under mihi, § 187.3 . On the shortening of the final $\bar{i}$, see § 88. 3 .
3. Accusative and Ablative.- $S \bar{e}$ is for earlier sēd. See on $m \bar{e}, \S 187.4$.

The Possessive Pronouns.
190. These are formed by appending $-o s(-u s)$ to the stems of the Personal Pronouns.

1. Me-us is regular. The Vocatiye Singular $m \bar{\imath}$ is probably in origin a Dative of Reference of the Personal Pronoun.
2. Tu-us is from the stem tev-, whence originally *tev-os, later tovos ( $\$ 73.3$ ), preserved in early Latin. In enclitic position ov
became $u$, whence tuos, tuus; see § 103. 4. With Latin *tev-os, cf. Homeric Greek $\tau \in(f)$ os.
3. Su-us is from the stem sev-, whence originally *sev-os, later sovos $(73.3)$ preserved in early Latin. In enclitic position, e.g. pátrem sovom, ov became $\breve{u}$, whence suos, suus; see § 103. 4. With primitive Latin *sev-os of. Homeric Greek éfós for *'ধєfós. The weak form of the root sev-was sv-. It is this which appears in Greek ös for $\sigma$ fós, and traces are present also in Latin, e.g. in such forms as sīs (Dat.-Abl. Plu.), for *svīs (root swo-), found in early Latin.

According to another view suus is an independent formation, collateral with sovos.

The Demonstrative Pronouns.

## Hic.

191. 192. The stem of $h \bar{i} c$ was $h o-, h \bar{a}-$. To the regular caseforms of this stem was added the suffix -ce, often reduced to $-c$; ce itself represents a pronominal stem meaning 'here.'
1. Nominative Singular.
a) Masculine. In $h \bar{c} c$, the first part, $h \bar{v}-$-, is probably for $h o+i$, a formative element recognized elsewhere in the inflection of this pronoun. Inasmuch as oi in accented syllables regularly becomes $\bar{u}$ (see § 81. 1), hī- for ${ }^{*} h o i$, must have arisen in combinations where the pronoun was proclitic. Cf. quì for *quo-i. By the side of $h \bar{c} c$ we find $h \check{c} c$ in early Latin. The relation of this to $h \bar{c} c$ is difficult to determine. Possibly *hĕc, from he- (Ablaut of ho-; § 64) was the original form, whence hic in unaccented syllables (§73.2). Some find this *hec in one of the Scipio inscriptions CIL. i. 32 hec cepit; but $e$ here may be $\bar{e}$, which in early Latin sometimes stands for an open $\bar{i}$, so that $h \bar{e} c$ would simply be a graphical variation of $h \bar{c} c$.
b) Feminine. Haec for *hā-i-c(e), presents the formative element, $-i$-, appended to an original ${ }^{*} h \bar{a}$ (cf. *port $\bar{a}$ ).
c) Neuter. $H \bar{o} c$ is for $* h o d-c(e)$, in which $-d$ is a case-ending
peculiar to the Pronominal Declension. The long quantity of the $o$ is difficult to account for. Some have thought that the 0 was really short, and that the ante-consonantal form was $h \check{o} c$, e.g. $h o \check{o}$ templum for *ho(d)c templum (§ 105. I), while the ante-vocalic form was hocc, e.g. hocc erat.
2. Genitive Singular. - The earliest form of the Genitive Singular was *hoi-os, whence hoius, preserved in early Latin. This possibly developed a parasitic $j$ which became permanent, producing *hoijus, hūjus (§ 81. 1). In the primitive *hoi-os, -os was the Genitive ending discussed in § 138 , while hoi- may be $h o-+$ the formative element $i$ seen in the Nominative.
3. Dative Singular. - The earliest form of the Dative Singular seems to have been hoi-c. The causes which produced huic from this are uncertain.
4. Accusative Singular. - Hunc, hanc are simply for earlier *ho-m-ce, *ha-m-ce, with obvious phonetic changes.
5. Ablative Singular. - Hōc, hāc for earlier *hōd-c(e), *hād-c(e) represent the same Ablative formation as regularly seen in $\bar{a}$ - and $o$-stems; §§ II8; I30.
6. Plural Forms. - These all follow the regular termination of $\bar{a}$-and $o$-stems, except the Nominative and Accusative Plural Neuter, haec, where $-a i$, -ae (instead of $-a$ ) represents a termination of the Pronominal Declension.

## Is.

192. 193. The root of this pronoun is $e i$-, weak form $i$ - $(\S 62)$. By appending the suffixes $-o-$ and $-\bar{a}$ we get the stems $e j o-, e j \bar{a}$-, or (by disappearance of the intervocalic $j$ ) eo-, e $\bar{a}$-.
1. Nominative Singular.
a) Masculine. Is shows the root in the weak form with the case-ending -s.
b) Feminine. $E a$ is for ${ }^{*} j-\bar{a}$; see above, $\mathbf{r}$.
c) Neuter. Id shows the weak form of the root with the Pronominal case-ending $-d$.
2. Genitive Singular. - The earliest formation is thought to have been eei (Locative), for ${ }^{*} e j-e i$ (stem ejo-). To this was added the Genitive ending -os (-us), giving * ${ }^{\circ}{ }_{e} j$-os, ${ }^{*} \bar{j} j o s, ~ \bar{e} j u s$.
3. Dative Singular. - Eì for *e-ei, earlier *ej-ei, was in formation a Locative from the stem $\check{e} j o-$ (see i). In the Pronouns the Locative served not only as Dative, but also as Genitive. But the Genitive (see 3) has added a further suffix for the purpose of differentiation.
4. Accusative Singular. - Eum, eam represent an earlier *ĕjom, *е̌jam (see r).
5. Ablative Singular. - $E \bar{o}$ and $e \bar{a}$, earlier $e \bar{o} d, e \bar{a} d$, were formed from the stems ${ }^{*} \check{e} j o$-, $\check{e} j \bar{a}$-. The case-ending is the same as that of $\bar{a}$ - and $\check{o}$-stems.
6. Plural Cases. - These are all formed regularly from the stems *ĕjo-, ${ }_{\mathrm{e} j}^{\mathrm{j}} \overline{\mathrm{a}}_{-}$.
7. Idem is simply is with the suffix -dem.

## Iste, Ille, Ipse.

193. These three pronouns presumably contain in their second syllable the Indo-European pronoun *so, 'he'; *s $\bar{a}$, '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, *issa, *istod. The regular Accusative of *so was *tom, *tām, *tod (cf. Greek $\tau o ́ v, ~ \tau a ́ v, ~ \tau o ́ o ́(\delta)), ~$ whence *istom, *istam, *istod. The preponderance of forms with $t$ eventually caused *issa to become ista and *isso to become *isto, later iste after the analogy of 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 alliptation to such forms as iste, ipse, is. Olle, however, may be
for *ol-so, *ol-se, whence olle ( $\$ 106.3$ ). 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 $l l$ are assumed to have gained the supremacy over those with $l t$.
196. Ipse. $I$ - here seems the root of is (cf. early Latin eappse, eumpse, eōpse, etc.), while -pse may be for -pe-se by Syncope (§ $9^{2}$ ) ; -se would then represent an original so (§ 193). No traces of $t$-forms (§ 194) appear; the $-s e,-s a$ of the Nominative have extended to the other cases. 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 istiuls, illiuus, ipsīus are formed by appending -os $(-u s)$ to istī, illi$, ~ i p s i ̄, ~ L o c a t i v e s ~ f r o m ~ t h e ~ s t e m s ~ i s t o-, ~ i l l o-, ~ i p s o-. ~$ These Locative formations served originally as both Dative and Genitive in the Pronouns. Later the Genitive was differentiated from the Dative ; § 192. 3.

## The Relative, Interrogative, and Indefinite Pronouns.

198. т. These are all formed from the same root, which appears as quŭ-, quŏ-, quā-.
199. Nominative Singular.-Quis shows the stem qui- with the case-ending $-s . \quad Q u \bar{i}$ is for $q u o+i$, a formative element which appears elsewhere in the Pronominal Declension ; oi in accented syllables regularly becomes $\bar{u}$, but $\bar{\imath}$ 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 quoius, ${ }^{*}$ quoios seems best explained like hījus; § 19r. 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 $\check{l}$-stems having -em for -im, 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 $q u \bar{i}$ used for all genders and (in early Latin) for both numbers. This may have been a genuine Ablative form ( $q u \bar{u}$ 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- ( $\$ \mathrm{I} 33$ ); it has no formal connection with quibus.

## 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; īllus, nūllus; sōlus, tōtus, $\bar{u} m u s$. 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 :

1. 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.

[^11]2. The strong (i.e. unsigmatic) Aorist has disappeared almost entirely.
3. 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.
4. The original Middle Voice has disappeared, being superseded by a new inflection peculiar to Latin and Keltic.
5. The Subjunctive and Optative do not appear as separate moods, but have become fused into one, designated Subjunctive.
6. In the Imperfect and Future Indicative of the $\bar{a}$ - and $\bar{e}$ conjugations we meet new formations in $-b a m$ and $-b \bar{o}$, which, like the $r$-Passive, are peculiar to Latin and Keltic.
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 $-v \bar{l}$ and $-u \bar{l}$, 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-fis). The other type of Present formation has no thematic vowel, and hence is called Unthematic. Unthematic presents originally had Ablaut $(\S 62)$. The strong form of the root appeared in the Singular, the reduced form in the Plural. This change was connected with primitive accentual conditions. In the Singular the accent rested on the root syllable, in the Plural on the endings.

In Greek, the Unthematic Conjugation is represented by the $-\mu t$ verbs $\left(\tau_{i}^{\prime}-\theta \eta-\mu t, \tau_{i}^{\prime}-\theta \epsilon-\mu \epsilon \nu\right)$, while $-\omega$ verbs are thematic, e.g. $\lambda \epsilon ́ \gamma-o-\mu \epsilon \nu, \lambda \epsilon ́ \gamma-\epsilon-\tau \epsilon$.

## 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 :

1. $\mathrm{D}_{0}, d \bar{a}-s$, dăt (for earlier $d \bar{a} t$ ); Plural dă-mus, dă-tis, dănt.
2. Eō. - The two forms of the root were $e i$ - (strong), and $-i$ (weak). The primitive inflection was probably :

$$
\begin{aligned}
& \text { *ei-ō *i-mos (Gr. } \left.{ }_{\imath}^{\imath} \mu \epsilon \nu\right) \\
& \text { *ei-s } \\
& \text { *ei-l } \\
& \text { *i-tis (Gr. ì } \tau \tau) \\
& \text { *i-nt }
\end{aligned}
$$

In the First Singular *eiō regularly became $\bar{o}$ (§ ro3. 1) ; *eis became is $(\S 82)$; and *eit, it, later $\imath$ t. The Plural seems to have early abandoned the weak form of the root in favor of the strong ; ìmus, ītis, eunt, therefore, represent *ei-mos, *ei-tis, *ei-ont.
3. Sum. - The strong form of the root is es-, the weak $s$-. The original conjugation, therefore, was probably :

| * es-m | *s-mos |
| :---: | :--- |
| *es-s | *s-tis $^{\text {es-t }}$ |

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 probably represents a special thematic formation ${ }^{*} s-o-m$; and of the same formation are su-mus for ${ }^{*} s-o-m o s$ and sunt for s-o-nt. 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 joined in writing with a previous word, e.g. bonumst $=$ 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 no Ablaut, but appears everywhere as ed- or, by euphonic change, as $\bar{e} s$ - for $* \bar{e} d-t$ - (§ ros. 1) ; here $\bar{e} d-$ represents a stronger form of the root than ed-.
5. Ferō. - The unthematic inflection is only partially preserved, viz. in fer-s, fer-t, fer-tis.
6. Volō. - The only forms which are certainly unthematic are vult and vultis (earlier volt, voltis). The root in the Singular was normally *vel-(cf. vel-im, etc.), but *vel-t became volt after the analogy of vol-tis, for vl-tis, from weak root $v l_{-}$(§ roo. 1). The Second Singular viss is not for *vel-s, but comes from the root vei-, also meaning ' wish'; cf. in-vītus. Nōtō is for *ne votō, and mālō for * mag(e)volō.

## 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 $\%$. 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 $\breve{c}$-Series had $\breve{e}, e i(\bar{\imath}), e u(\bar{u})$; those of the $\bar{a}$-Series had $\bar{a}$, etc. The $\breve{c}$-Series is most fully represented. Examples are :
ĕ-Series: leg-e/o, root leg-; teg-e-/ $/$., root teg- ; veh-c-/ $/ 0$, 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 düc- $^{-}$).
$\breve{a}$-Series: ag-e-/o., root ag- ; caed-e-/o., root (s)caid- (§ 68).
$\bar{a}$-Series: vād- ${ }^{\circ} /{ }_{o}$, root vād-
$\bar{e}$-Series: c̄ed-e $/_{o}$, root cèd-
$\bar{o}$-Series : rōd-e-/o. root rōd-
II. Reduplicating Class. - The Present Stem is formed by prefixing to the root + the thematic vowel $\mathrm{c} / \mathrm{c}$, a reduplicating syllable, which consists of the initial consonant of the root $+\mathfrak{i}$. The root appears in its weak form (§ $\sigma_{2}$ ). Examples: gi-gn-el/o.,
root gen- (cf. Gr. $\left.\gamma^{\prime}-\gamma v-o-\mu a \iota\right)$; sī-d-e-/o. for sĭ-sd-e-/o. (§ 89), root sed-. Sistō, root stā, and se-rō for ${ }^{*} s i ̈-s \bar{o}(\$ \S 98 . ~ r), ~ r o o t ~ * s e ̄-, ~$ do not strictly belong here. They were originally unthematic formations (cf. Gr. ( $\sigma$ ) $i-\sigma \tau \eta-\mu \ell$, $(\sigma) i-(\sigma) \eta-\mu t)$, but have passed in Latin into the thematic conjugation; $b i b \bar{b}$ is not properly a reduplicated formation. The root was pib- (cf. Skr. pibāmi; Gr. $\dot{\epsilon} \pi i \beta \delta \alpha$ for $* \dot{e} \pi \iota-\pi i \beta-\delta \alpha$ ). 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 $t=/ 0$. . Examples are: nec-t $-/ 0$., plec-telo., pec-te $/$ o., flec-te. $/ 0$. .
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\% $/$.- The root appears in the weak form. Examples: finde-/o., root fid-; rump-e-/o-, root rup-; jung.e-/o., root jug-. Originally the infix was confined to the Present system, but in some words, as jung $\bar{o}$, it appears throughout the entire verb, e.g jungō, jünxī̀, jünctus.
V. NO-Class. - To the root in its weak form is added the suffix $n^{\epsilon} / 0$. 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$-\bar{o}$ | *ster-nŭ-mos |
| :--- | :--- |
| *ster-nū-s | *ster-nŭ-tis |
| *ster-nū-t | *ster-nŭ-nt |

But *ster-nu-mos, *sternutis, *sternunt $(i)$ regularly developed phonetically to sternimus, sternitis, sternunt. These forms were identical with the thematic inflection, and hence led to sterno , sternis, sternit in the Singular, after the analogy of dicimus, dīcitis, dicunt to dīcō, dīcis, dicit. Other examples are sper-nō, temn $\bar{o}$, li-n $\bar{o}$, si-n $\bar{o}$, tollō for ${ }^{*} t l-n \bar{o}$ (§ 100. 1).
VI. SCO-Class. - The Present stem is formed by appending $s c e-\%$. to the root, e.g. hī-sc $\bar{o}, g \bar{l}-s c \bar{o}, ~ c r \bar{e}-s c \bar{o},(g) n \bar{o}-s c \bar{o}$, posco for * porc-scō, suèscō for *suēd-scō.

Many secondary formations also occur, as gemī-scō, tremè-scō; especially derivatives from contract verbs, as flōrēscō from flōrēo; la $\bar{b} \bar{a} s c \bar{o}$ from $l \bar{a} b \bar{o}$; and even from nouns and adjectives, as lapidèscō, rōrēscō, dürēscō.
VII. J0-Class. - The Present Stem is formed by appending the suffix $j^{e}$ - $/ 0$ - to a root or stem. Several different formations must be distinguished.
a) $j^{c-} / o_{0-}$ - Presents from roots ending in a consonant. Here $j$ becomes $i$, e.g. $j a c-i \bar{o}$ for *jac- $j \bar{o}$; capiō for ${ }^{*}$ cap- $j \bar{o}$, 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 -iō, -ire (see $b$, below), e.g. veniō, venīre.
b) $j^{c} / / \sigma_{0}$ - 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 : imple-mus for *imple-jo-mos, root ple-; intrāmus for *intrājomos, root trā-.
2) Dissyllabic verb-stems: domāmus for *do-mājo-mos, stem dom $\bar{a}$-.
3) Noun and Adjective stems in - $\vec{a}, \breve{e}, \vec{z}: c \bar{u} r \bar{a} m u s$, stem $c \bar{u} r \bar{a}-$; rubēmus, stem rub̆--; fīnīmus, stem fiňu-.
These $\bar{a}$-contracts form the so-called First Conjugation, the $\bar{c}$ and $\breve{e}$-contracts the Second Conjugation, and the $\breve{\imath}$-contracts the Fourth Conjugation.
c) Causatives in eje-/o., e.g. mon-ḕ, doc-ē , torr-ēo. 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 -ojo- probably once existed in Latin, but have disappeared. Thus arō, arāre was probably originally *arōo (for

* arojō) ; cf. Gr. ápów. The adjective aegrōtus is likewise possibly to be referred to an original *aegro.

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 *amābhvām, *monēbhväm, *legēbhvàm, *audībhvām. On $b$ for $b h$ in the interior of words, see $\S 97$. 1. $b$; bhv-regularly becomes $b$, e.g. superbus for *super-bhv-os. 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 -iebam 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.

Some have thought that the element preceding the -bam in the Imperfect was an old Infinitive. Cf. $\bar{i}$-licet, lit. 'it is permitted to go '; scī-licet, 'it is permitted to know'; vidē-licet, 'it is permitted to see '; also such compounds as are-facio, 'to make dry.'

Eram for earlier ${ }^{*}$ es- $\bar{a} m$ ( $\$ 98$. r) exhibits the same praeterite formation as that assumed for *-bhv-ām 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 $a m \bar{a} b \bar{o}$ (for *ama $\bar{a}-b h v \bar{o}$; § 204) literally means 'I become loving.' Cf. the analogous German ich werde lieben. On $a m \bar{a}-;$, mone - in this formation, see $\S 204$. The Future in $-b \bar{o}$ is
found also in verbs of the Fourth Conjugation in early Latin, e.g. scībō, 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 taken on Future force. The ist Singular in -am (for ${ }^{*}-\bar{a} m$ ) is an $\bar{a}$-Subjunctive; the remaining forms are $\bar{e}$-Subjunctives. See $\S \S 221 ; 222$.
2. The Future in -s $\overline{0}$. - This formation appears in such archaic forms as $d \bar{i} x \bar{x}$, fax $\bar{o}$, which are in reality Aorist Subjunctives that have taken on Future force. The Future of sum, erō, is similarly a Present Subjunctive, for ${ }^{*} e s-\bar{o}$ ( $\$ 98.1$ ) ; cf. Homeric Greek $\dot{\epsilon}(\sigma) \omega$, Attic $\dot{\omega}$ (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-di (early Latin), spopond $\bar{i}$, ste-tī. 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, $p u-p u g-\bar{l}, d i-d i c-\bar{i}$, spo-pond-i ; but the original forms with $e$ are often found in early Latin; e.g. memordì, pepugì, spepondi,$~ f H E F H A K E D ~$ CIL. xiv. $4^{123}$.

The Reduplication has disappeared very largely in Latin, yet traces of its earlier presence are sometimes distinguishable, e.g. in rettul̄̀ for * ré-(te) tut̄̀ (§ 92 ) ; repperī for ré-(pe)perì; reccidì for * ré-(ce)cid $\bar{\imath}$. In the same way fid $\bar{\imath}$, scid $\bar{\imath}$ represent an earlier *fefid $\bar{\imath}$ " ${ }^{*}$ scecidī̀ (cf. early Latin scicidī).
2. In Verbs beginning with a Vowel. - The Reduplication here consisted in prefixing $e$. Only a few verbs have preserved it, e.g. $\bar{e} g \bar{\imath}$ for ${ }^{*} e-a g \bar{\imath} ; \bar{e} d \bar{\imath}$ for ${ }^{*} e-e d \bar{\imath} ; ~-\bar{e} p \bar{\imath}\left(\right.$ for ${ }^{*} e-a \bar{p} \bar{\imath}$ ) in coepì, for ${ }^{*}$ co$\bar{e} p \bar{\imath}$, root $a p-$; $\bar{e} m \bar{\imath}$ for ${ }^{*} e-e ̆ m \bar{l}$.

## 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 $\check{o}$ or $\bar{o}$ (see the various Ablaut Series, $\S 62 \mathrm{ff}$.). Several of the Indo-European languages, as Sanskrit, Greek, 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-čud-ì, tu-tüd $\overline{-z}$. In most Latin verbs, however, other formations have largely displaced both of those just mentioned. This has come 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 Langzage, p. 494 f.

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

208. The Perfect in $-s \bar{i}$, 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 $d \bar{z} x-\bar{\imath}$ with


Greek ${ }^{\ddot{\epsilon}}$ - $\delta \iota \epsilon \xi-\alpha$. Some verbs have preserved both the true Perfect and this Aorist Perfect, e.g. pepercì and parsī; pupugī and (in compounds) -punxī; pepigi and (in compounds) -panxī.

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

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, $-v \bar{\imath}$ is borrowed from
 belongs to the stem.

$$
\text { D. The Perfect in }-u \bar{t} \text {. }
$$

210. The Perfect in $-u \bar{u}$ is a development of that in $-v \bar{v} ;-v \bar{\imath}$ is thought to have been added to extended forms of the root, e.g. *gen-e-vī (root gen-), *dom-a-vī (root dom-), whence genuū, domuit; § 1о3.4. From forms like these the category might easily extend itself. Its diffusion was probably assisted by the existence of such Perfects as fūu, plū for early fu$v \bar{u}$ (Ennius), plu$v v \bar{\imath}$, 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. víd $\bar{z} 1$ | víd-i-mus |
| 2. ? | ? |
| 3. *víde | *vid-ent (for *víd-nt) |

[^12]Of these forms $v \bar{\imath} d \bar{\imath}$ in the First Singular represents an IndoEuropean middle, *vid-ai. The Second Singular and Second Plural cannot be conjectured with any degree of satisfaction.
213. The type of Aorist with which the true Perfect was ultimately fused was a formation consisting of the root + the suffix -es- (-is- ; §73.2), to which the Personal Endings were appended directly (unthematic formation; § 20r). The inflection may be reconstructed as follows :

| Singular. | Plural. |
| :--- | :--- |
| 1. *vid-er-em (for*vid-es-m ; §§ 98. 1; 102. 1) | vid-i-mus (for *vid-is-mos) |
| 2. *vid-is (for *vid-is-s) | vid-is-tis |
| 3. *vid-is-t | *vid-er-ent (for*vid-is-nt) |

214. The identity of the First Plural of the Perfect and Aorist seems to have furnished the starting-point for the formal fusion of the two tenses ; vidistis in the Second Plural is the Aorist form ; so is viderunt in the Third Plural, with *-ent changed to -unt after the analogy of other tenses, e.g. regunt, amàb-unt; $\bar{e}$ (for $\breve{e}$ ) in -èrunt 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, $\bar{v} \bar{d} \bar{\imath}$ has already been explained as originally a Middle which has assumed the function of the Active. The Second Singular vídist $\overparen{\imath}$ is difficult of explanation. Possibly the primitive form of the Second Singular Perfect may have been *visti. If so vīdisti may be a contamination of *vīsti (Perfect) and *vīdis (Aorist), helped on by the influence of the Second Plural vidistis. The assumption of a Perfect *vistī, however, involves difficulties. The Personal Ending of the Second Singular Perfect was -tha in Indo-European. Cf. Greek oi $\theta \alpha$ for ${ }^{*}$ foi $\delta-\theta \alpha$. In Latin -thă should become -te (§7r. r). Influence of the Second Singular Middle ending *-sai ( $=$ Latin $-s \bar{s}$ ) has been suggested. The Third Singular * vide early assumed the regular Personal Ending,
$t$, of the other tenses. This gave *videt, vidit. Some have thought that in the true Perfect in Latin the primitive Third Singular was *vid (a Middle form, like the First Singular). Some evidence in favor of this view is found in the frequent long quantity of $-i t$ in early Latin poetry.

## The Pluperfect.

215. The Pluperfect Indicative in -eram is a development of the Aorist mentioned above in $\S 213$. The starting-point of development was the First Singular. This was first *vīdĕrem, which became videram, apparently under the influence of the Imperfect in -bam. The remaining inflection also follows the Imperfect.

## The Future Perfect.

216. The Future Perfect Indicative is an Aorist Subjunctive. Thus vīderō is for a primitive *veid-es- $\bar{o}$ (§ 98.1 ), in which -es- is the same Aorist suffix as already mentioned in $\S \$ 213,215$. Greek $\epsilon^{i} i \delta \hat{\omega}$, which has become a part of the Perfect system, represents
 (Homer), $\epsilon i \delta \hat{\omega}$ (Attic).
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, with which it regularly agrees in the other persons and numbers.

## The Optative.

217. There were two Optative formations in Indo-European, a thematic and an unthematic. Greek $\lambda \hat{v}^{\prime}-o-\iota-\mu \iota$ represents the former, $\sigma \tau a-i \eta-\nu$ 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 specia? 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:

| Singular, | Plural. |
| :---: | :---: |
| 1. *s-ie-m (siem; 88.3) | s-i-mus |
| 2. $s$-iè-s | $s-\bar{z}-\mathrm{i}$ S |
| 3. $s-i \bar{e}-t$ | *s-i-nt (s-i-nt) |

The classical inflection of the Singular, sim, siss, sit, is not original, but is formed after the analogy of the Plural. Similarly in early Latin we find siemus, siètis, sient after the analogy of siem, etc. The weak form of the root, as above, regularly appeared in this formation. Other illustrations of this Optative are velim (for *vel-īe-m, after vel-̄-̄-mus), nōlim, mālim, edim (ed̄̄, ' 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 -es- already mentioned in $\$ \$ 213,215$, to which is further appended the Optative suffix $i \bar{e}-, \overline{i-}$ ( $\$ 218$ ). Thus the original inflection of viderim was:

| *veid-es-iè-m | *veid-es-i-mus |
| :--- | :--- |
| *veid-es-iè-s | *veid-es- $\bar{z}-$ tis |
| *veid-es-iè-t | *veid-es-i-nt |

By change of $e i$ to $\bar{\imath}(\S 82)$ and by rhotacism ( $\S 98$. 1) this gave *vīderièm, etc., Plural vīderimus. But the $\overline{i e}$ of the Singular was early changed to $\bar{i}$ after the analogy of the Plural, giving vïderim, vīderis, vīderit. The long vowel was sometimes retained in the (rare) ist and 2 d Plural.

Latin *videriem is identical with Greek eiठєinv (for ${ }^{*} f^{\epsilon \epsilon \delta-\epsilon \sigma-\iota \eta-\nu) \text { ), }}$ which, like $\epsilon i \delta \hat{\omega}$ (see § 216), has become associated with the Perfect system.

Another Aorist formation was by means of the suffix $s$ in place of -is-. This is seen in dīxim, faxim, ausim, for earlier * dìc-s-iè-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 is confined exclusively 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. $\overline{\mathrm{A}}$-Subjunctives. - Examples are moneam (for *mone$j \bar{a}-m)$, reg-a-m, audiam, earlier *regām, *audiām; §88. 2.

## 222. $\overline{\mathbf{E}}$-Subjunctives.

1. 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 ; *am $\bar{a}$ - $j \bar{a}-m$, etc., would have given *amām, *amās, *amāt.
2. The so-called Future Indicative of the Third and Fourth Conjugations is (outside the First Singular) a Present Subjunctive of the $\bar{e}$-formation which has taken on Future function, e.g. fer-e-s, audi-e--s, etc.
3. The Imperfect Subjunctive also belongs here. There are two types, both Aorists in origin :
a) -s- Aorists. Examples are: es-s-em, ferrem for ${ }^{*}$ fer-s-em (§ ro6. 3), vellem for *vel-s-èm (§ 106.3) ; amā-r-em for *amā-$s-\bar{e} m$ (§ 98. 1) ; monēe-r-em for *monē-s-èm, audè-r-em for *audī-$s$-èm.
b) -es- Aorists, e.g. reg-er-em for *reg-es-ēm (§ 98. г).
4. The Pluperfect Subjunctive is an -es- Aorist, with a second $s$ of uncertain origin, i.e. vídissem for *vĩd-es-s-èm.

The Imperative.

## 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: $\bar{\imath}, e s, f e r, \operatorname{leg}-e, a m \bar{a}$ (for *am $\bar{a}-j e$ ), mone (for *mone-je), audi (for *audī-je). Verbs in $\overline{i o}$ of the Third Conjugation follow the root class (§203. 1), e.g. cape. Dīc, diuc, fac are probably for dīce, dūce, face by dropping off the final short $e$.
224. Present, Second Plural. - This is formed by adding -te to the stem, e.g. $\overline{\text { - }}$-te, fer-te, es-te, legite (for *lege-te; § 73.2), amāte, monēte, audite.
225. Future, Second and Third Singular. - The termination is -tō, earlier -tōd, 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. licētod, datōd, violātōd.
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 $-n t \bar{o}$ is a new formation ( $c f$. § 225) after the analogy of the relation existing between the Third Singular and Third Plural of the Present Indicative, i.e.

$$
\begin{aligned}
& \text { suntō : estō } \therefore \text { sunt : est } \\
& \text { reguntō: regitō }: \text { regunt : regit } \\
& \text { amantō : amàtōo: : amant }:{ }^{\text {amamat }} \\
& \text { B. Passive. }
\end{aligned}
$$

227. The Present. - The Second Singular ending -re represents an original -so, so that Latin seque-re corresponds exactly to Greek ${ }_{\epsilon}^{\prime \prime} \pi \epsilon(\sigma)$ o, $\epsilon^{\prime \prime} \pi o v$. The Second Plural in -minī is probably an
old Infinitive which has taken on the function of the Imperative. Cf. the Homeric use of the Infinitive as an Imperative. According to this view Latin legi-mini $=$ Greek $\lambda \epsilon \gamma^{\prime} \mu \epsilon \mathrm{val}$, both forms being originally the Dative of a verbal noun with the suffix -men. Cf. ger-men, Dat. ger-minī.
228. The Future forms are the result of appending the Passive $-r\left(\begin{array}{l}\text { 235 }\end{array}\right)$ 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 $-m i$ (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.
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. vhevhaked, feced, fecid, sied; -ti, 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.

[^13]232. rst Plural. - The only ending appearing in Latin is -mus, earlier *-mŏs, which seems to stand in Ablaut relation (§ 62 ) to Greek - $\mu \mathrm{Es}$ (dialectal).
233. 2d Plural. - The Latin ending -tis probably represents an Indo-European -thĕs, which was the ending of the 2 d Dual.
234. $3^{\text {d }}$ Plural. - The Indo-European endings were -nti (primary) and $-n t$ (secondary). In the Italic languages -nti became -nt, while -nt became -ns. Oscan and Umbrian preserve this distinction, but in Latin, ${ }^{*}-n s$ 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 Indo-European family. Its origin is not clear. 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 ist 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 formed by adding $r$, e.g. regor (earlier - $\bar{o} r$; §88. 2), amābor. Where the Active ends in $-m$, the Passive has $r$ instead of $-m$, e.g. amer, amābar.
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 ${ }^{*}$ sequerĕ-s ( $\$ 73.2$ ). This was possibly the result of an effort to distinguish the Indicative 2 d Singular from the Imperative.
238. $3^{\text {d }}$ Singular. - To the original Middle formation, e.g. * leg- $i-$ to, for * $\operatorname{leg}-e-t o$, with secondary ending -to (cf. Greek $\epsilon^{\epsilon}-\lambda \epsilon \epsilon \gamma-$ $\epsilon-\tau o)$ was added the Passive $-r$, e.g. * legito-r, legitur.
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 have here a periphrastic formation; legiminī, etc., stand for legimin̄ $\bar{\imath}$ estis, in which legimin̄̄ is a Middle Participle of the same type as Greek $\lambda_{\epsilon \gamma \text { ó }}$ $\mu \in \nu-o t$. This formation must have originated in the Present Indicative; legēbāmin̄ , legèminì, legàminū, legerēmin̄ are all secondary, formed after the analogy of legiminī.
241. $3^{d}$ Plural. - The 3 d Plural, like the 3 d Singular, was originally a genuine Middle formation, in -nto, the termination of the secondary tenses, e.g. *legunto for *lego-nto (cf. Greek t- $\lambda$ '́ $\gamma o-$ $v r o$ ). To this was added the Passive $-r$, e.g. *lego-ntor, leguntur.

## The Infinitive.

242. In Latin, as in other Indo-European languages, the Infinitives are oblique cases of verbal nouns which have become stereotyped 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. *reg-os. Unthematic verbs appended -se (for -si), e.g. es-se, fer-re, for ${ }^{*}$ fer-se; vel-le for *vel-se.
244. Perfect. - The Locative $-s-e$ (for $s i$ ) is appended to the -es- Aorist stem $(\$ 213,215)$, e.g. vidd-is-se.
245. Future. - In such forms as dictūrum esse, it is probable that originally dictūrum was not a participle, but an Infinitive. The form has been plausibly explained as being contracted from dictü *erom, where dictū is Supine, and *erom (for *es-om; § 98. r) 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 dictū see §252.2). The foregoing explanation accords excellently with the use of dicturum and similar forms without esse and (in early Latin) with a Plural subject, e.g. crē̃ō inimū$\overline{c o s} s m e \bar{s} h \bar{o} c$ dictūrum, 'I believe my enemies are for saying this,' i.e. 'will say this' (C. Gracchus, cited by Gellius, i. 7). After the analogy of periphrastic forms, dictürum esse subsequently supplanted dicturrum, etc., and thus gave rise to the Future Active Participle in -ūrus, $-a,-u m$.

## B. Passive.

246. Present. - Such forms as reg-ì, $d \bar{\imath} c-\bar{\imath}$ are Dative forms; § 139. Other verbs append the Dative ending to -es-stems, e.g.
 Cf. $\$ 243$. 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 explain agier, for example, as for *agī-ar, ar being the Preposition seen in ar-biter, etc., in a post-positive use. On -er for -ar, see § 71. 1. Others think that -er represents the apocopated Active ending -ere. This seems to have been fairly frequent in colloquial Latin, e.g. biber for bibere; tanger for tangere. Agier, therefore, and similar forms would represent Passive Infinitives with an added Active termination.
247. Perfect and Future. - Periphrastic forms are used here, e.g. dictus esse, dictum $\bar{\imath} \uparrow \bar{\tau}$. 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 $-n t$-, 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 *ei-o-, e.g. euntis for *ei-o-ntis.
249. Future Active. - See $\S 245$.
250. Perfect Passive. - The suffix was -tus, earlier -tos, appended originally to the weak form of the root, e.g. dic-tus, düctus, tentus for *tn-tos (§ 1O2. 1). 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 ${ }^{*} \bar{u}$-tos. By an extension this spurious ending, -sus, became appended also to some guttural and liquid stems, e.g. lāp-sus, fixus, 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 from the same stem (cf. $\S_{1} 6_{3}$ ).

## 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 :
255. Accusative of Result Produced (Gr. § 176.2 ; 3), e.g. multum, ptêrumque, ptūrimum, aliquid, facile, fortius, etc.
256. Appositives, e.g. vicem, partim; etc.; § 310.
257. Limit of Motion, e.g. forās.
258. Ablatives. - Here belong :
259. Adverbs in $-\bar{e}$ (for $-\bar{e} d$; § 130 ) from $\check{o}$-stems, e.g. pulchr $\bar{e}$, sānē; certissimē.
260. Adverbs in $-\bar{o}$ (for $-\bar{o} d$; § 130 ) from ŏ-stems, e.g. certō, continuō. Cf. early Latin meritöd.
261. Adverbs in $-\bar{a}$ (for $-\bar{a} d$; § 118 ) from $\bar{a}$-stems, e.g. extra $\bar{a}$, supr $\bar{a}$, infrā, contrā, suprā, ultrā, citrā, jūxta $\bar{a}$. Cf. early Latin exstrād, suprād. Many words, clearly Ablative in form, apparently became Adverbs through the medium of Instrumental constructions, e.g. $\bar{u} n \bar{a}$, rēctā, quā, e $\bar{a}$, e $\bar{a} d e m$ (sc. vi $\bar{a}$ ), etc. Cf. § 341. 5 .
262. Locatives. - Here belong:
263. True Locatives, e.g. her̄̄, vesperī, humī, bellì, mīlitiae, domī, postrīdiē (§§ 126; 173), meridie, diè crāstinī; noctū̀; also the Pronominal Adverbs $h \bar{i}-c$, illi$-c$, is $t \bar{i}-c$ (§ 197).
264. Ablative in Locative function, e.g. foris.
265. Instrumentals. - Here belong:
266. citō, modŏ for ${ }^{*}$ citō, * modō ( $\$ 88.3$ ), where ${ }^{*}-\bar{o}$ resulted by contraction from *cito-ă, *modo-ă. Had these been Ablative (* citōd, *mod $\bar{o} d$ ), the $\bar{o}$ would not have been shortened upon the disappearance of the $-d$.
267. benĕ, matĕ for *benē, *maté ( $\$ 88.3$ ), where *-è resulted by contraction from *bene- $\breve{a}$, * male- $\breve{a}$. Had these been Ablatives (*benēd, *mated), the $-\bar{e}$ would not have been shortened upon the disappearance of the $-d$.
268. sponte, forte, repente.
269. Even a few Nominatives have become Adverbs, e.g. adversus; rūrsus for reversus; prōrsus for prōversus.
270. Many Adverbs were originally phrases, e.g. đēnū̄ for dē novō (§ 103.4) ; īlicō 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 perriod 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
${ }^{1}$ See especially Lindsay, Latin Language, chap. ix.
ultimately crystallized as Prepositions ; yet an independent adverb ial usage often remained.

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. $\bar{A}$, ab, abs, au-. - Three historically independent words of identical meaning are here to be recognized :

1. $\bar{A}$ is identical with Sanskrit $\bar{a}$, West Germanic $\bar{o}$.
2. $A b$, abs go back to an Indo-European *apo, Greek $\dot{\alpha} \pi \dot{\sigma}$. By loss of the final $o$, this became in Latin ap-, seen in ap-erio. But in composition and in phrases before voiced consonants $p$ became $b$, c.g. $a b d \bar{o}$ for *ap-d $\bar{o} ; ~ a b$ rāā̄ce for ${ }^{*} a p$ rā $\bar{\imath} c e$, 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 ( $\S \mathrm{I}_{3} 8$ ), an element frequently employed in amplifying prepositional and adverbial formations. Cf. ex $(=e c-s)$ from ec-; sub-s (in suscipiō for *sub-s-cipiō; § 105. 1) from sub; obsfrom $o b$; also Greek $\dot{\epsilon} \xi$ by the side of $\epsilon \kappa$; $\bar{\epsilon} v s$, whence Attic $\epsilon$ is, by the side of ${ }^{\epsilon} \nu$; $\dot{\alpha} \mu \phi \dot{i}^{\prime}$ by the side of $\dot{\alpha} \mu \phi \dot{\prime}$.
3. Au-, Sanskrit ava, goes back to an Indo-European ava. It appears in Latin only in aufugiō, and auferō for *ava-fugiō, *ava-ferō by Syncope (§ 92). Cf. auspex for *av(i)spex; augurium, etc.
4. A form of *apo, with aphæresis of the initial consonant, is po-, seen in pōnōor for $p o-s(i) n \bar{o}(\$ \S 92 ; 89)$; cf. po-situs. Poalso possibly appears in po-liō (root $l i-;$ cf. $l i-n \bar{o}$ ), 'rab off, polish.'
5. A form af, found in early inscriptions and occasionally later, is of uncertain origin. It is probably historically distinct from all the preceding words.
6. Ad is obscure in origin. In early Latin inscriptions we find a form $a r$-, used before $f$ and $v$ in composition, e.g. arfuērunt, arversus; also ar-biter. Whether ar-was a phonetic variant of $a d$-, or a different word, is uncertain.
7. Ambi-, Greek ${ }^{3} \mu \phi \dot{\prime}$, is probably an old Locative.
8. Ante for *anti, Greek áví, is probably an old Locative.
9. Apud seems to be Indo-European *apo (§ 261. 2) with an appended $d$.
10. 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 ; circ $\bar{a}$ is probably a late formation after the analogy of extr $\bar{a}$, suprā ( $§ 255 \cdot 3$ ). Circiter probably contains the Comparative suffix $-\operatorname{ter}$ (§ 181). Cf. inter, propter, subter.
11. Cis, citrā are from the root $c \check{c}$-, 'this.' On the final -s of cis, see § 26 r. 2. Citra has the Comparative suffix (§ 181). On the formation, see $\S 255 \cdot 3$.
12. Clam evidently contains the root of ce$t \bar{t}$, 'conceal.' The formation is uncertain.
13. Com- (cum), co-. -See § 58.b).
14. Contrā. -See § $255 \cdot 3$.
15. Dē may be an old Ablative formation for * $d \bar{e} d$.
16. $\operatorname{Erg} \bar{a}, \operatorname{erg} \overline{0}$ are obscure in etymology and formation.

17. Ex, ec-, ef-, è. See § 105. 2. On the final $s$ of $e x$ ( $=e c-s$ ), see § 261. 2.
18. Extra is formed from ex by means of the Comparative suffix terŏ- (§ 181). On the case-formation, see § $255 \cdot 3$.
19. In is the unaccented form of Indo-European *en, Greek $\dot{\epsilon} \nu$. The original form of the Preposition is seen in early Latin en-do. Cf. Greek ${ }^{\epsilon} v \delta o-\theta c,{ }_{\epsilon} \nu \nu-\delta o v$. Another form of endo is indu-(indi-) seen in indi-genus, ind-otes, and in several early Latin words, e.g. indu-gredī.
20. Īnfrā. Cf. ìnferus, and see § $255 \cdot 3$.
21. Inter, intrā are formed from in by means of the Comparative suffix -tero-; $\S \S 18 \mathrm{I} ; 255 \cdot 3$.
22. Intus contains the same suffix as seen in divinitus, funditus, etc.
23. Jūxtā is from the stem $j \bar{u} x t \bar{a}-$-, a Superlative of $j \bar{u} g i s$. For the case-form, see § $255 \cdot 3$.
24. 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 *op, exactly as $a b$ from *ap (\$261. 2); yet op- appears in op-eriō, and is preserved in Oscan.
25. Per is for an Indo-European *peri (Locative). Cf. Greek $\pi \epsilon \rho i$.
26. Post, early Latin poste, apparently goes back to a Locative *posti.
27. Prae, praeter. - Prae is very likely a Locative from prā-, an extension of $p r$ - (weak form of per-). Cf. prō (d) from prŏ-. Praeter bears the same relation to prae as inter to in; subter to sub.
28. Prō, prŏ-, por-. - The relation between prō and prŏ- (e.g. in prŏfugiō, prơficīscor, prŏtegō) is uncertain. Very likely prō (earlier prōd, seen in prōdesse, prōdire; § 109. 1) was an Ablative formation, while pror- (cf. Gr. $\pi \rho \rho^{o}$ ) represents the simple stem, Por-, e.g. in por-tendō, porriḡ̄, polliceor (for *por-liceor) may rep-
resent $p_{0}$-, weak form of the root per- (§ 100.2 ), with which all the above words are ultimately connected.
29. Prope, propter. - Prope is for pro + pe. Cf. quip-pe. Propter bears the same relation to prope as inter to in, etc.
30. Re-, red-. - Re- is the earlier form; the $d$ of red- is of uncertain origin.
31. Secundum is an Accusative from secundus, lit. 'following' (sequor).
32. Se-, early Latin sēd-, preserved in séditió, may have been an Ablative formation; sō-, seen in sō-cors, sō-brius, may represent the Ablaut of $s \bar{e}$-.
33. Sub, subter. - The Indo-European form is *upo. Cf. 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 * $(k) s u p$ would represent the primitive formation. For the change of $p$ to $b$, see § 261. 2. On subter, cf. inter.
34. Super, suprā. - Super goes back to an Indo-European ${ }^{*}$ uper. Cf. Greek vimé (with irregular rough breathing). For the initial $s$, see § 289. Suprā sustains the same relation to super as intrā to inter.
35. Tenus is probably the Accusative of an obsolete tenus, -eris, lit. 'a stretch,' root ten-.
36. Trāns is probably the Present Participle of *träre seen in intrāre, penetrāre, i.e. originally trāns fiumen mīlitēs dūxit meant he led his troops, crossing the river. On trā-, see § 105.2.
37. Uls, ultrā from root ol-, 'that' (cf. olle; § 195), are the pendants to cis, citr $\bar{a}$.
38. Versus, versum, etc. - See § 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 'deviation,' and was accordingly first employed to denote the oblique cases, as being 'deviations' ( $\pi \tau \omega \boldsymbol{\sigma} \epsilon \iota$ ) from the Nominative. The Nominative itself, therefore, was not at the outset a $\pi \tau \bar{\omega} \sigma \iota s$, though it early came to bear this name.
296. The Greek names of the cases were :
 $\gamma є \iota \iota \kappa \bar{\prime}$, Genitive.
боткки́, Dative.
aiтıатıкท́, Accusative.
$\kappa \lambda \eta \tau \iota \kappa \eta^{\prime}$, Vocative.
[^14]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 $\gamma \epsilon \tau \kappa \kappa \dot{\eta}$ is in dispute. Some have thought it meant 'the case of source or origin.' But the usual meaning of $\gamma \in \nu \iota \kappa o ́ s$ 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 $\gamma^{\text {evos }}$ to which it applies, e.g. love of parents, 'fishers of men,' tons of earth.

The Dative was called $\delta o \tau \iota \kappa \bar{\eta}$, 'the case of giving,' though this is simply one prominent function of the case.
In calling the Accusative airautıк , the Greeks intended to designate this case as the 'case of effect,' i.e. of the thing caused (aitía). 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.
$\kappa \lambda \eta \tau \iota \kappa \eta$ ' means 'calling case ' or 'case of address.'
297. The Romans in devising grammatical terms for their own language simply translated these Greek names. óvoнaбтiкí became Nōminātivus (sc. cāsus). In translating $\gamma є v \iota \kappa \dot{\prime}$ by Genetivus 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. סотьки́ became Dativus. airıaтıки́ was falsely rendered Accūsātivus, as though aircauıкฑ were derived from airıáouaı, accuse. к $\lambda \eta \tau \iota \kappa \eta$ became Vocātīvus. The Greek had no Ablative, and for this case the Romans were therefore obliged to coin a new term ; they named it Ablātivus, '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 present 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 1831 in a work Ueber die Casus, ihre Bildung und Bedeutung. Hartung started with the assumption (largely a correct one) 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 $i n$-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 in-function, while the Dative has developed new meanings.

Hartung's theory has been styled 'thorough-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. 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 : 1) 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 must 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 ( $G r . \S_{175 \text { ) on the one hand and the Accusative }}$ of the Result Produced $\left(G r\right.$. $\left.\S{ }_{1} 76\right)$ 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 Greek philosophers gave the name aiтьaтькŋ́ 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
[^15]Object,' 'Effect'). The Romans, in transferring the Greek name of the case to Latin, should have rendered it by some such word as Causātivus (a designation actually employed by Priscian) or Effectivus. 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. $d$ ) 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 Ausfiuhrliche 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 collécta, 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 Vergil, Aen. ii. 273 per pedēs träjectus töra, 'having had thongs drawn through his feet.' For a few instances in which a Synecdochical Accusative occurs with Passive verbs, see $\S 307$.
305. Accusative of Result Produced. - The different constructions grouped together under $G r$. § 176. 1-5, are often referred to the Cognate Accusative as the original from which they have all developed. The Cognate Accusative, however, is so restricted
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 category. Cf. Brugmann, Griechische Grammatik ${ }^{2}$, § 178.2 , who classifies
 and $v \iota \kappa \hat{a} v$ ví $\eta v$, 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 ( $G r . \S 178$ ). - The true character of this construction is best seen in phrases where the Acctsative of Result is a Neuter Pronoun or Adjective, e.g. té haec rogō, id mé docess, the essential point being that the Latin was able not only to say id docēs (Acc. of Result) and mē docès (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 rogas 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. tè sententiam rogō, after te hōc rogō; te cēlāvī sermōnem after té id cèlāvī.
307. The Synecdochical or Greek Accusative (Gr. § 180).There can be little doubt that this construction is a Grecism. Cf. 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 the Accusative usually belongs under $G r$. § $175.2 . d$ ), 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. A typical instance is, Vergil, Aen. ii. 57, manūs juvenem post terga revinctum, 'tied as to his hands.'
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 jussī eum abīre, eum was originally the object of $j u s s i$, while the Infinitive was a noun in the Locative ( $\S 243$ ), the force of the entire phrase being: Iordered him to a going ( $\$ 351$ ). But in course of time the cum abire 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 necār $\bar{r}$, where puerōs could never have been the object of jussit. When once the construction of the Accusative with the Infinitive became established, its extension was rapid. Expressions like jussit puerōs necān̄̀ easily led to dīxi puerōs necātōs esse, whence puerī necāti 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 virì 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 tīerī muliebre secus, 'children of the female sex,' lit. 'children, the female sex' (of children), but also līberōrum (Līberīs) muliebre secus.
3. Meam vicem, tuam vicem, etc. - The appositional origin of
this phrase seems to be indicated by such early Latin usages as Plautus, Mostellaria ii. r. 8 qū̄ hodiē sēsè excruciā̀̄̄ meam vicem possit patī, '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. Māgnam partem, māximam partem. - The appositional origin of these phrases is less certain, yet expressions like Livy, v. 14 and ix. 37.9 māximam partem ad arma trepidantēs caedēs oppressit, seem to point in that direction.
311. Original Force of the Accusative Case. - Rumpel in his Casuslehre, published in 1845 ( $c f$. § 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:
I. 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 Indo-

European 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 exsequiās ìre, infitiàs ire, pessum dare, venum dare, point to a freer use of the same kind in early times. The Supine in $-u m$ 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 víginti mìlia prōcessit would originally have meant 'he advanced to the limit of twenty miles,' whence arose secondarily the notion of extent. Similarly vīgintí annōs vüxit 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 originally designated the limit of the action of the verb. Thus aedès strūxit would originally have meant 'he performed an act of building, the goal of which was a house.' Similarly videō 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 de $\bar{o}$, 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; Brugmann (Griechische Grammatik,2 § 175) expresses the opinion that the notion of direction in the Dative is as old as the parent-speech; if so, it 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' (Gr. § 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'; ruīna nōb̄̄̄s 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 Ihnen, 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. inire 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. periculis incurrit. But 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 nōb̄is hostés 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 this construction into 'Dative of Advantage' and 'Dative of Disadvantage' is quite useless. These designations 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 me that this is true,' i.e. 'I must do this.' Similarly nōbēs 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 receptui canere, 'to sound the signal for a retreat,' was originally 'to sound the signal in the direction of a retreat'; reī pūblicae clād̄̀ 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 Gr. § 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: cōnsuétū̀dō hominum, 'intercourse with men'; excessus vītae, 'departure from life' ; ira praedae amissae, 'anger on account of the loss of the booty'; argentī ōrātiō, 'talk about the money.' These 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 homo māgnae virtūtis was probably originally 'Virtue's man.' In conformity with this origin, the Genitive of Quality regularly denotes a permanent quality, as opposed to the Ablative of Quality, which was primarily employed to designate qualities which were more or less transitory. 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 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.
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 was felt as memor sum. Obliviscor followed the analogy of its opposite, memini. Cf. English differ with after the analogy of agree with.
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 avāritiae coarguit is to be regarded as standing for Verrem avāritiae crimine coarguit; 'he convicts Verres on the charge of avarice.' Occasionally crīmine was expressed, e.g. Tacitus, Annals, vi. 14. 2 cecidēre conjūrātīnis crimine; iii. 44.8 mājestātis 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 familiärem cūrāre. For the Ablative Singular Feminine of the Possessive with refert and interest, see $\S 349.3$.
330. Genitive with Other Verbs. - With verbs of plenty and want, e.g. compleo, impleō, indigeō, the Genitive, where used, is employed after the analogy of its use with adjectives of plenty and want; thus compleō after plènus; indigeō after egēnus, 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, possibly a Locative (§ 122 ). The same is true of $\breve{o}$-stems as of $\bar{a}$-stems. In Consonant stems the Ablative Singular in $-e$ (e.g. mìlite) is either an Instrumental or a Locative (§ 141), while the Plural ending -ibus is a true Ablative. In the $-\stackrel{i}{-},-\breve{u}$-, 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 in-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. - The causes leading to syncretism in the Ablative were of twofold nature :
a) In the first place certain Ablative, Locative, and Instrumental formations, originally distinct, came to be identical in form. Thus in consonant stems the original Locative ended in $-i$, the Instrumental in $-\breve{a}$. But by phonetic laws $-\stackrel{\imath}{ }$ and $-\breve{a}$ both became $-\breve{e}$. Thus an original ${ }^{*} m \bar{\imath} l i t-\breve{\imath}$ and an original $* m \bar{\imath} l i t-\breve{a}$ both became milit-ě. Similarly in the Ablative Plural of $\bar{a}$ - and $\check{o}$-stems -īs (for *-āis, *-ōis; § 122) may possibly represent both a Locative and an Instrumental formation. So probably some other formations.
b) In the second place the Locative, Ablative, and Instrumental cases, in spite of their radical differences of meaning, 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. Similarly equō 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 $\bar{i} r \bar{a} \bar{a} \bar{r} d \bar{c}$ ere might mean either 'to burn 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,' 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, coupled with certain outward resemblances in form, 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 tüce clārius, lātius opinionē, etc.
When plūs, minus, longius, and amplius are used as the equivalents of plüs quam, mimus quam, etc., the plūs, minus, etc., were probably originally appositional. Thus amplius vïgintī urbès 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.'

## 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. r.
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. lib̄̄dō scelere jüncta, 'lust joined with crime'; mella vin̄ō miscēre, 'to mix honey with wine'; bellum agricultürē permūtant, 'they exchange war for farming'; assuètus 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 Ab lative of Means, as is done in $G r . \S 218.5 ; 7$.
338. Ablative of Attendant Circumstance (Delbrück's 'Instrumentalis der Begleitenden Umstände'; Vergleichende Syntax, § 105). -This construction also is a direct outgrowth of the sociative idea inherent in the Instrumental. Thus dat sonitu $m \bar{a} g n \bar{o}$ strāgem means 'occasions destruction in connection with a loud crashing'; nèmō mea fūnera flētū faxit, 'let no one celebrate my obsequies with weeping'; exstinguitur ingentī lüctū, 'he dies under circumstances of great sorrow,' etc.
339. The Ablative of Manner is another obvious development of the sociative idea. Thus in māgna 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, d̄̄gnitāte, etc.
340. Ablative of Accordance. - The construction treated under Ablative of Manner in Gr.§220. 3, viz. sū̄s 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, parés autem vetere prōverbiō cum paribus facillime 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 teto percussit is primarily 'he smote his foe (in connection) with a spear.' Out of this sociative idea the notion of means or instrument developed secondarily. Yet there are few instances of the Ablative of Means in which traces of the sociative notion are not apparent, and in some cases this idea is very prominent, e.g. pilā lūdere, 'to play (with a) ball'; deōs precibus adōrāre, 'to worship the gods with prayers.'
r. 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.
342. With opus est the Ablative is a secondary construction after the analogy of $\bar{u} s u s$ est with the Ablative. In $\bar{u} s u s$ est aliqu $\bar{a} \bar{r} \bar{e}$, '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 $\bar{u}$ sus 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 ops, 'help, service.' The formation would then be a relic of Genitives of the type of nöminus, 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 aliquā $\bar{e} \bar{e}$ 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.
343. 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 cōnstäre and consistere; continēr they explain as a Locative use. 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 $e x$ 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, p. 230.
344. Quid hōc homine faciās; quid mē fiet? 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, 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 Latin are : ut jugis Octogesam perveniret, 'that he might reach Octogesa by way of the mountains' ; portis èrumpunt; frūmentum quod fiumine Ararī subvexerat.
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, § 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. ūnō die longiōrem mènsem 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 vigginti minīs $\bar{e} m i t$, '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 millibus cōnstat, 'it costs 6000 sesterces'; asse cārum, 'dear at a farthing.'
The use of tanti, quanti, 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 serpēens immān̄̀ corpore incédit, the original idea was 'the serpent moves 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 tuèns immānī corpore serpēns became possible. Here the phrase immāni corpore can be conceived only as an Ablative of Quality, limiting serpèns; 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 hortatur 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 māagn animī, 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. Thus physical and bodily characteristics, as belonging to this latter class, are regularly designated by the Ablative.
346. Ablative of Specification. - This seems to be a development of the sociative force of the Instrumental. Thus Helvétio virtüte 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. I3 rem paternam mé adjūtrice perdidit, the sense is : 'he lost his property (in connection) with me helping him'; so frequently $m \bar{e} j \bar{u} d i c e$, ' with me as judge '; te praesente, 'with you present.' Cf. further scissā veste, passīs capillis, '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).
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 are forced to find the beginnings of the construction in the temporal force of the Locative, e.g. Serviō regnante, '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 confectō, 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 originally designated the space in or within which something is done. From this meaning the notions at, on subsequently developed (Delbrück, Vergleichende Syntax, p. 183). The Locative uses of the Ablative naturally fall into two classes : Place Relations and Time Relations.
34.9. Place Relations.-These may be either literal or figurative.
r. In its literal force the Locative may mean:
a) 'in,' as premit altum corde dolōrem.
b) 'on,' as pharetram fert umerō.
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 $G r . \S 228$. г

Some recognize a Locative use in tenēre sē castrīs, aliquem téctō recipere, pūgnā 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 animī in animī pendère) ; stāre prōmissīs, 'to stand by one's promises'; stāre conventīs ; manēe prōmissìs. In his Ablativus, Instrumentalis, Localis (1867), p. 39, Delbrück formerly pronounced in favor of recognizing a Locative usage in connection with glörior, dēlector. But now in his Vergleichende Syntax, p. 253, this scholar regards the construction as Instrumental in origin. The same explanation is also to be preferred for laetor, gaudeō, etc. Similarly with fīdō and cōnfìdō 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 rēfert originally limited the $\overline{r e}$ (Ablative of $\bar{e} \bar{e} s$, 'thing') of refert. If the construction was Locative in origin, me $\bar{a}$ réfert 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 refert in consequence of similarity of meaning. Some regard mea réfert as equivalent to ex me $\bar{a} r \bar{e} f e r t ; ~ m e \bar{a} r \bar{e}$ has also been explained as a stereotyped Dative ( $\$ 86 . b ; 174$ ), and even as a Nominative.
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 ( $\$ 34$ r. 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. Cf. 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 adveniēns.

## Surviving Locative Forms.

352. All the genuine Locative formations in common use are enumerated in Gr. § 232. Beside these we should probably recognize the Locative of an $u$-stem in noctū, and (by association with noctī) in diū. On diē, as the Locative of dies in such expressions as quartí diē, postrīdiē (for posterī diē), see § 256 . $\mathbf{~}$. Plural formations in $-\bar{\imath} s$ from $\bar{a}$ - and $\breve{o}$-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 $-\varsigma$ of the Third Declension, e.g. Sulmōne, may (possibly) be original Locatives, or they may be Instrumentals ; § 14 r .

THE MOODS.

## The Subjunctive.

353. 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 these 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:

Subunctive Forms.
I. All regular Presents, e.g. amem, moneam, regan, audiam; §§ 221 If
2. All Imperfects, e.g. essem, amārem, monêrem, etc.; § 222. 3 .
3. All Pluperfects, e.g. amā$\overline{\mathrm{v} i s s e m,}$, $\bar{z}-$
xissem, etc.; § 222.4 .
354. 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 futurity. 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 ( $\S 216$ ). All of these formations bear witness to a 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.
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 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, e.g. aliquis dīcat, 'some one may say.' This is obviously a weaker type of Future than that belonging to the Subjunctive (in Greek), just as in its meaning of wishing the Optative expresses a weaker phase of thought than the Subjunctive.
356. It will be observed that the notion of futurity expressed by the Subjunctive is related to the notion of willing expressed by the same mood as the objective to the subjective. Thus when I employ surgat in its Volitive force the thought is expressed with reference to myself (subjective) $=$ 'he's to stand up, and at my bidding,' i.e. 'let him stand up.' But surgat in its Future sense (assuming theoretically that this use once belonged to Latin) is used without reference to me (objective), = 'he's to stand up, and I have nothing to do with it,' i.e. 'he's going to stand up,' ' will stand up.'

So also in the case of the Optative. Dicat aliquis as a wish, in the sense 'May some one say' is subjective, i.e. it is conceived with reference to me; but aliquis dicat, 'some one may say,' is objective, i.e. is conceived as outside of, and apart from, me.

The two meanings, therefore, which we discover in the Subjunctive and Optative are in reality in each instance simply two phases (the subjective and the objective) of the same thought.
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.

$$
\left.\begin{array}{ll}
\left.\begin{array}{l}
\text { Volitive } \\
\begin{array}{l}
\text { Pure Future } \\
\text { Optative }
\end{array} \\
\text { Contingent Future }
\end{array}\right\} \text { Indo-European Optative. }
\end{array}\right\} \text { Indo-European Subjunctive. }
$$

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, ero audiam, viderō, etc. ( $\$ 205.2,3$; 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. I. Volitive Subjunctive.

a) Jussive, expressing a command. This use is found :
I) 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 Present, often with indefinite force, but not necessarily so. An example is $\bar{u} t \overline{t a r e ~ v}$ bus, 'use your strength,' i.e. 'let a man use his strength ' (indefinite).
b) Of determined resolution. This rare usage is confined to the Present First Singular, e.g. Terence, Hautontimorumenos 273 manē: hōc quod coep̄̄ prīmum 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. loquàmur, 'let us speak,' i.e. ' I'm bound to speak, and do you speak.'
d) Prohibitive. 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. Elmer's investigation has shown that neither construction is at all frequent in classical prose, and that the real difference of force between the two constructions is that stated in $G r . \$ 276$.
e) Deliberative. This occurs in affirmative questions often implying doubt, indignation, etc., e.g. quid faciāmus, 'what are we to do!' 'what can we do!' It seems natural to explain this as originally 'we are to do, -what?' 'you want us to do,what?' Cf. the colloquial English, what let's do? for a similar development of a Volitive phrase to an interrogative form.

For derived uses of the Deliberative, see § 363 .
f) Volitive clauses with concessive force, e.g. ne sit māximum malum dolor, malum certē est, 'granting that pain is not the greatest evil, it at least is an evil,' lit. 'let not pain,' etc.
g) Volitive clauses of proviso, e.g. moderātiō vērium adsit, ne ille đ̄esideriō vürium nōn tenēbitur, 'provided there be a moderate degree of strength, surely a man will not feel the lack of strength,' lit. 'let there be a moderate degree,' etc.

Some scholars attribute the last two uses to the Optative force of the Subjunctive, but the notion of will and authority regularly present in such clauses seems too strong to admit of that interpretation.
359. Optative Subjunctive. - The original use of the Optative is to denote a wish. This usage is mostly confined to the Third Plural of the Present, e.g. sint féticees, 'may they be happy.'
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 dixerit, '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, it has been suggested that the Perfect (originally Aorist; § 219) lays stress upon the accomplishment of the act, while the Present calls attention to its progress.
b) Where some condition is implied or expressed, e.g. velim, 'I should wish,' i.e. 'if I were to have my way'; dicūs, '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. dixxerim, 'I should say'; crēdiderim, 'I should believe.' Where the condition is expressed, we get a Conditional Sentence of the Second Type (Gr. § 303), e.g. laetēris, sì 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 $\S 366$.

## B. Derived Uses.

361. The uses here enumerated are secondary developments from those cited above in $\S \S 35^{8} \mathrm{ff}$.
362. Extension of the Jussive. - Corresponding to the Jussive loquātur there developed an Imperfect use, e.g. loquerētur, 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 loquerētur, therefore, must have been formed after the analogy of loquātur. The Pluperfect Subjunctive also occurs in this sense, e.g. eum imitātus essēs, '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. $n \bar{e}$ poposcisses, 'you ought not to have asked.'
363. Extensions of the Deliberative. - a) Corresponding to the Deliberative use of the Present Subjunctive, e.g. quid faciāmus, 'what are we to do?' we have secondarily quid faceremus, 'what were we to do!' ' what could we do!' This usage is just as obviously secondary, as is loquerētur cited above in $\$ 362$.
b) Similarly all negative Deliberatives are of secondary origin. For if cūr veniāmus be explained as 'we are to come, -why!' then in negative sentences of this kind we should expect $n \bar{e}$ as the negative, if the sentence be originally Volitive. As a matter of fact the negative is regularly $n \bar{o} n$, and this circumstance shows that the Volitive origin had been lost sight of at the time the negative Deliberative came into existence, i.e. negative Deliberative sentences are a secondary development from the affirmative type, not a direct development from the Volitive itself.
364. Extension of the Concessive Volitive. - Corresponding to $n \bar{e}$ sint vīres in senectute, 'granting that there is not strength in old age,' we find the Perfect Subjunctive used with concessive force, e.g. fuerit aliīs, tibi quandō esse coepit? 'granted that he was such to others, when did he begin to be so to you?'

It is obvious that this use is secondary, since a volition or act of willing cannot refer to the past. The use of the Perfect could have come into existence only after the concessive use of the Present had become a well-established idiom.
365. Extension of the Optative. - The use of the Imperfect and Pluperfect Subjunctive in expressions like utinam t $\bar{u}$ vateress,
utinam adfuissess, 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 félīcès, 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.
366. Extensions of the Subjunctive of Contingent Futurity. There are two 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. dicās $=$ '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 vidères, 'one could see'; cernerés, 'one could observe'; créderess, 'one could believe.' The usage is an extension of $a$ ) above, and, like that, is Potential in the strict sense of that term.

Subjunctive in Dependent Clauses.
367. 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. ē̄s monē, désinant, 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, $\S 385$.

All uses of the Subjunctive in subordinate clauses are naturally derived uses.

## Subjunctive of Purpose.

368. I. 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 d̄ pecūniam ut panem emās originally meant ' I give you money ; just purchase bread.' The original force of ut here is somewhat uncertain. Probably it was a weak, Indefinite adverb meaning 'somehow,' 'just.' Cf. ut in ut pereat, 'may he just perish,' uti-nam in utinam veniat, 'may he just come!' This Indefinite force of $u t$ bears the same relation to the Interrogative and Relative meanings 'how?' and 'as' of the same word, as the Indefinite quis bears to the Interrogative quis and the Relative qui.

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 $\bar{e}$ 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. Quī, quae, etc., in relative clauses of purpose had practically a demonstrative force, e.g. tibi librum dō quem legās, '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 $G r . \S 282.3$ 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 dignus, idōneus, etc. As regards the meaning of the relative clause with dīgnus, indīgnus, idōneus, it seems impossible to separate a sentence like dat mihi sūrculōs qū̄s seram, 'he gives me shoots to plant,' from dat mihi sūrculōs d̄̄̄nnōs qū̄os seram, 'he gives me shoots fit to plant,' originally 'he gives me fit shoots, to plant.' So hominès dīgnōs èlēgit quàs mitteret seems originally to have meant: '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. 45 et puer ipse cantārī dīgnus, 'worthy to be praised'; Pliny, Paneg. 7.4, dignus éligì, 'worthy to be chosen.' The Gerund with ad also occurs, e.g. Cic. Rep. i. 18. 30, dīgnus ad imitandum; and sometimes even an $u t$-clause, e.g. erās dı̄gnus 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 digmus, etc., as a Clause of Characteristic. It is of course quite true that $d_{\text {ignus }}$, 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 § 37 I .
369. 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 peciuniam 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 § 368 .

## Clauses of Characteristic.

370. The Clause of Characteristic is a relative clause developed from the Subjunctive of Contingent Futurity ( $\S 360$ ). Thus in neme est quī putet, the original sense is: 'there is no one who would think'; so sapientia est ūna quae maestitiam pellat, 'philosophy is the only thing that would drive away sorrow.' But in all these cases the notion of contingency is so slight as easily to disappear, leaving the relative clause essentially one denoting a fact; see also § 406. I.
371. 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 ōrā̄tiōnēs quās alī̀ dīcerent, 'he wrote speeches for other persons to deliver,' the clause quàs alī̃ 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

- 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 habeo quod agam, 'I have nothing to do' (Hor. Sat. i. 9. 19) ; nu! sciō 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 senectuterm oblectet, either 'you will have some one who cheers' (Characteristic) or 'some one to cheer' (Purpose).
372. Clauses of Characteristic Denoting Cause or Opposition. - In sentences like $\bar{o}$ fortūnāte adutescēns quī tuae virtūtis Homèrum praecōnem invēneris 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 qū̄, 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.
373. Clauses of Characteristic Introduced by Quīn. - 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 $q u \bar{u}$, which he thinks was capable of standing for any case either Singular or Plural. According to this view, quīn might be equivalent to qū̀ nōn, quae $n \bar{n}$, quod nōn, etc.; the quin mentioned in $\S \S 383$, 391 must then be regarded as a separate word.

## Clauses of Result.

374. Clauses of Result, introduced by ut, ut nōn, quīn, qū , are a development of the Subjunctive of Contingent Future, viz. from
its second phase, where there is a condition implied ( $\$ 360,6$ ). Thus in the sentence hōc flagitium tāle est ut quīvis 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. Cf. in English, Shakespeare, Julius Cesar, 3. 2 Who is here so base that would be a bondman? i.e. as to be a bondman. See Hale, Sequence of Tenses, p. 24, who cites other illustrative uses from English and Greek.
375. 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 quā pā̀ēre vestris dēcrḕtis nōn dubitet, the clause qui . . . 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.
376. Clauses of Result with Quin. - These are really Relative Clauses of Result, and differ from Clauses of Characteristic introduced by quīn 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.

377. Causal Clauses Introduced by Quod, Quia, Quoniam. When these take the Subjunctive, it is on the principle of Indirect Discourse.
378. 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

379. The treatment in the Grammar, § 288 f., follows the elaborate and convincing exposition of Hale in his CumConstructions, Cornell Studies in Classical Philology, Vol. i. (Ginn \& Co.). Hale shows that the cum-clause is simply a form of the Clause of Characteristic. Cum, earlier quom ( $G r . \S_{9.1}$ ), 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. Thus the Subjunctive cum-clause primarily characterized a time by giving the situation existing at that time, just as any other Clause of Characteristic. The Indicative cum-clause, on the other hand, like the Indicative quī-clause, was primarily a defining clause and hence used to denote a point of time or date.

## Clauses Introduced by Antequam and Priusquam, and by Dum, Dōnec, and Quoad.

380. Where these are followed by the Subjunctive, Hale (The Anticiputory Subjunctive in Greek and Latin, Chicago Studies in Classical Philology, Vol. i., University Press of Chicago [printed separately], p. 68 ff .) recognizes a survival in Latin of the IndoEuropean 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 ; $\S 360$ ).

## 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 $\S 295$ are the developments of an earlier parataxis (see § $3^{6} 7$ ), in which the Subjunctive was Volitive (Jussive, Deliberative, etc.) in nature.
382. The earliest form of these clauses would be represented by such examples as $\overline{t e} \bar{o} r \bar{o}$; cum juvēs, lit. 'I entreat you; help him !' Sometimes, especially in early Latin and in the poets, we find the inverted order, e.g. eum juvēs, te $\bar{o} r \bar{o}$, 'help him! I entreat you.' In both instances the Volitive character of the Subjunctive is clearly apparent. Sentences of the type te ōrō ut eum juvēs, are a later development, the $u t$ being added after the Subjunctive had come to be felt as an object clause and as needing some introductory particle. This need of an introductory particle in affirmative clauses of this kind would be felt the more keenly, since in negative clauses, e.g. te $\bar{o} r \bar{o} n \bar{e} a b e \bar{a} s$ (originally 'I entreat you ; don't go away!'), the $n \bar{e}$ had come to be felt as a subordinate conjunction; at the outset, of course, it was a mere negative adverb.
383. Substantive Clauses Introduced by Quōminus and Quīn after Verbs of hindering. - As explained in $G r$. § 295. 3 a, clauses of this sort are probably developed from genuine Purpose Clauses. However, they have their ultimate origin in the Volitive, since the Purpose Clause 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 quōminus velint, originally: 'fear hinders men, in order that they may not be willing,' i.e. prevents them from being willing. Qūminus lit. means ' by which the less, by which not,' and hence 'in order that not.'

Clauses with quīn after verbs of hindering are apparently of the same nature as clauses with quöminus. Quīn is compounded of $q u \bar{\imath}$ (an old Instrumental) and ne, lit. 'by which not,' 'that not,'
'lest.' In signification it is nowise different from quōminus. In fact, after verbs of hindering accompanied by a negaţive, qū̄ominus and quīn may be used interchangeably without difference of meaning. Thus Cic. de Sen. 17.60 nec aetās impedit quōminus agrī colendì studia teneāmus, 'nor does old age prevent us from continuing the pursuits of farming'; but Auct. ad Herenn. iii. r. I ne impediāris qū̄n prōgredı̄ possīs, 'that you may not be prevented from being able to advance.'

Clauses introduced by quīn after negative expressions of hindering are sometimes classified as Result Clauses. Such a classification is inconsistent; for te impediō quōminus faciās is regularly taken by all grammarians as a Purpose Clause. If it is, then nee te impediō quöminus faciās must also be a Purpose Clause, for the mere prefixing of the negative to impediō cannot alter the relation of the quominus-clause to its verb. But nee te impediō quōminus faciās may be expressed with perfect equivalence by nee tē impediō quīn faciās. Hence the two types should not be dissociated in treatment.

It is of course true that in its developed meaning the quinclause after negative expressions of hindering does at times seem to indicate a (negative) result, e.g. nec impeditit sunt quin 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 impediō quōminus haec faciās might theoretically be conceived as meaning 'I hinder you so that you do not do this.' But qū minus is clearly a purpose particle, so that the original purpose character of the quomimus 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 eis 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 qū̄n-clauses, they have been developed from Purpose Clauses.
384. Substantive Clauses after Verbs of deciding, resolving, etc. (Gr. § 295.4 ). - The Volitive origin of these is seen in such sentences as Sall. Cat. 29. 2 senātus dēcrēvit operam darent cönsutes, 'the senate decreed: let the consuls take heed!' Ter. Eun. 578 édīcit ne vir quisquam ad eam adeat, 'he issues the order: let no man go near her!'
385. Substantive Clauses after Verbs of striving, caring for, etc. (Gr. § 295.5).-Expressions like fac cogites, 'see to this, reflect!' (Sall. Cat. 44.5) point to the Volitive origin of these clauses. C $\bar{u} r \bar{a} n \bar{e}$ quid dēsit originally meant 'Take care: let nothing be wanting!'
386. Substantive Clauses after necesse est, reliquum est and sequitur, 'it remains,' licet, oportet ( $G r . \S 295.6$ ).-The Volitive origin of the Subjunctive in clauses with necesse est, licet, oportet, is seen in the regular retention in classical prose of the early type of expression without ut ( $\$ 382$ ), viz. dicam necesse est, 'it is necessary that I speak' (lit., let me speak ; it is necessary'), Cic. de Or. iii. 22. 85 ; taceat oportēbit, 'it will be fitting that he keep silent' (lit. 'let him keep silent ; it will be fitting'), Cic. de Or. iii. 21 . 79 ; fateāre necesse est, 'confess ! you must,' Lucr. iii. 275.

Where sequitur means 'it remains,' 'the next thing is,' the utclause is a development from the Volitive, e.g. sequitur ut doceam, ' it remains for me to show,' Cic. Nat. De. ii. 32. 80. ${ }^{1}$
${ }^{1}$ Sequitur in the sense 'it follows that' takes a Substantive Clause of Result ; § 390 .

So also with reliquum est, e.g. reliquum est, ut egomet mihi consulam, 'it remains for me to look out for myself,' Nep. Att. 21. 5. This view of these clauses is confirmed by the occurrence of the early form of expression without $u t\binom{$ 3 }{82} , e.g. Cic. ad Fam. xv. 21. 6 reliquum est tuam profectionem amōre prōsequar. ${ }^{1}$
387. Substantive Clauses in Sentences of the Type: nūlla causa est cūr, nūlla causa est quārē, etc. ( $G r . \S 295 \cdot 7$ ). - These have been explained as developed from the Deliberative. This is the view, among others, of Schmalz (Lat. Synt. § 308), and is supported by the history of these clauses. Cf.e.g. Cic. ad Fam. ii. 17. I quīn dēcēdam 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.

388. 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 comedy and colloquial language voto 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 voto must be referred to a Volitive origin, e.g. volō eam dūcās, 'I want you to marry her.'
389. After Verbs of fearing ( $G r . \S 296.2$ ). - Instructive for the history of the construction are such early Latin uses as Ter. Andr. 277 Haud verear sī in tè sit sōtō situm: sed ut vim queās ferre, 'I should not fear, if it were to depend on you alone; but

[^16] Clause of Result ; § 390 .
may you be able to withstand compulsion'; 705 diès hīc $m \bar{\imath} u t$ satis sit vereor ad agendum, 'may this day be sufficient (I'm afraid though).'

## Substantive Clauses of Result.

390. Expressions like efficiō ut intellegātis, lit. 'I bring it to pass (in such a way) that you know,' and 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. vèrisimile nōn est ut ille antepōneret, 'it's not likely that he preferred'; accēdit ut doleam, 'another fact is that I am suffering'; praeclārum est ut ḕs amèmus, 'it's a noble thing that we love them'; reliquum est ut virtūs sit frūgālitās: ' the fact remains that economy is a virtute.'

## Substantive Clauses Introduced by Quin.

391. In the expressions nōn dubitō qū̄n, quis dubitat quīn, nōn est dubium quīn, haud dubium est quīn, the quīn-clause is probably developed from the Deliberative Subjunctive. Thus quis dubitat qū̄n 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.

## Indirect Questions.

392. 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 more frequently employ the Indicative in such sentences, unless there be some reason for the Subjunctive.

## Conditional Sentences.

393. The treatment in the Grammar follows the traditional classification, which has regard exclusively to what is implied in the Protasis in each instance.
394. 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 $s \bar{i}$; yet conditional sentences without $s \bar{\imath}$ occur with more or less frequency in all stages of the Latin language ( $G r . \S 305.2$ ). They are simply a relic of the earlier paratactic stage. The origin of the conjunctional use of $s \bar{\imath}$ was as follows: $S \bar{i}$ was originally an adverb meaning so. It is etymologically identical with English so, and by formation was a Locative, *sva-i, from the Indo-European root svā-. This *svai regularly became $\bar{i} ;$ § 104. 2. The most primitive type of a conditional sentence with $s \bar{s}$ would be seen in bene est si , valet, i.e. 'it is well so (viz. that), he is well.' In this expression $s \bar{\imath}$ limits bene est, and valet is really an appositive of the adverbial idea in $s \bar{i}$. The use of $s \bar{i}$ as a conjunction is secondary and the result of its association. With sī cf. English so in such expressions as so you pay me, I shall be satisfied.
395. Conditional Sentences of the Second Type. - Here the Subjunctive in the Protasis was originally Jussive in character. Thus a sentence like sī videat, crēdat would, in its earliest form, have been videat, crēdàt, 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.'
396. Conditional Sentences of the Third Type. - The origin of this type is obscure. Perhaps the Protasis was originally an

Optative, i.e. si 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 sï Pomptejus occisus esset, fuistisne ad arma iturrī, 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 dēbēbās, sī ūlla in té pietās esset the full sense is: 'it was your duty to revere him (and you would now be doing it), had you any sense of devotion.'

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

397. 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 oderint, 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 $n \bar{e}$.

## Use of Moods in Relative Clauses. ${ }^{1}$

398. A relative clause represents a kind of subordination which, in its original and simplest form, differs from co-ordination only in the substitution of a relative pronoun, adjective, or adverb for the corresponding demonstrative or personal pronoun. The expression ille est homō qū fécit, 'he is the man who did it,' is in every respect exactly like ille est hom $\bar{o}$; ille fécit, 'he is the man; he
${ }^{1}$ This treatment of Relative Sentences is the friendly contribution of my colleague, Professor Elmer.
did it,' except that $q u \bar{\imath}$ has taken the place of ille. Such a transition from parataxis to hypotaxis is well illustrated in English by the history of the word that, which, though originally only a demonstrative pronoun, has come to be frequently felt also as a relative.

The earlier history of the Latin language shows an increasing fondness for the relative construction. In the classical period this tendency had become so pronounced that the relative was often used to introduce a sentence that was logically quite independent, e.g. Cic. de Sen. 3.8 nec hercule, sì ego Serïphius essem, nec tū, sī Athēniēnsis, ctārus umquam fuissēs. Quod eōdem modō dè senectüte dīcī potest, - instead of $h \bar{o} c$ $\qquad$
This use of the relative to introduce a logically independent sentence is almost unknown in Plautus, but becomes more common in Terence, and reaches its height in the time of Cicero.

While relative clauses in their earliest stage could be replaced by grammatically independent clauses, they gradually acquired functions which the corresponding independent clauses did not perform. We may accordingly divide Relative Clauses (both Indicative and Subjunctive) into those of original and those of developed types.

## Indicative Relative Clauses.

399. An Indicative Relative Clause may :
1) Inform one of a fact.
2) Refer for various purposes to a fact presumably already known.
3) Assume a fact.

## A. Original Uses.

400. r. The Determining Clause. - This apparently was used in connection with some object to which the speaker was pointing or at which he was looking. The clause then identified that ob-
ject as the one with reference to which the act or state expressed by the clause was true. Two independent clauses, each introduced by a demonstrative, would express this relation equally well. Cf. That is the man that did it, in which the second that originally corresponded exactly to the Demonstrative ille, but later came to be felt as subordinating its clause and so equivalent to the Relative quī.
401. Clauses Adding Information or a Statement of Fact. - These may be subdivided as follows :
a) Parenthetical clauses that interrupt for a moment the train of thought, e.g. Livy xxii. I3. II nec abnuèbant, quod ūnum vinculum fidè est, meliōribus pārēre, 'nor did they refuse (and this forms the only bond of fidelity) to obey their betters.'
b) Independent clauses that carry forward the train of thought, e.g. nec hercule, sī eso Serīphius essem, nec tūu, sī Athēniēnsis, clārus umquam fuissès. Quod eōdem modō dē senectūte dīcī potest.
402. Causal and Adversative Clauses. - It is commonly stated that these clauses require the Subjunctive ; yet they often admit the Indicative, e.g. (causal) Cic. ad Att. xiii. $30 \bar{O}$ te ferreum quī illius perīcutīs nōn movēris, ' O you hard-hearted man, who (i.e. since you) are not moved'; (adversative) Cic. Phil. i. 9. 23 quae quidem ego, qū̄ illa numquam probāvī, tamen cōnservanda arbitrātus sum, 'enactments, which, though I never approved them, I nevertheless thought ought to be maintained.' See Hale, The CumConstructions, p. 114 ff . The difference between the Indicative and the Subjunctive in such clauses seems to be that the Indicative calls to mind the fact without special reference to its logical relation to the principal clause, while the Subjunctive brings this relation into prominence.

## B. Developed Uses.

401. r. Determining Clause of the Developed Type. - This clause serves as a means by which, without further aid, one may distinguish from all other objects one particular object (or sev-
eral particular objects). For this purpose it mentions some act or state which is, for the moment at least, exclusively associated with the object referred to, e.g. ille quī in Catilīnam ōrātiōnēs scrīpsit annōs trés et sexāgintā vīxit. This sentence cannot be divided into two independent assertions, as can the clause of the original type. Two such sentences as ille in Catilinam ōrātiōnes scrīpsit; ille annōs trēs et sexāgintā vīxit, would, without the presence of the person referred to or further explanation, be meaningless. On the other hand, the clause with the Relative is complete in itself.
402. Clause Equivalent to Sī with the Indicative. - This clause deals not with any individual case, but with an assumed indefinite case. It takes the Indicative wherever a si-clause would take this mood under similar circumstances, e.g. quī valet, fortūnātus est, 'the man who has good health is blest' ( = sì quis valet, etc.). This usage probably arose through the medium of the determining clause.
403. Restrictive Clauses having Attinet, Est, Potest, as their Verb, e.g. ut se tōta rès habeat, quod ad eam civitātem attinet, dèmonstrābitur, 'how the whole matter stands as regards that state, will be shown.' For the Subjunctive in restrictive clauses, see § 406. r. n. I.
404. It should be carefully noted that any Indicative relative clause of whatever type may characterize the antecedent of the Relative. Examples:
1) Determining and characterizing, tum primum reperta sunt quae per tot annōs rem pūblicam exēdēre, here 'the (particular) things which,' etc. This quae-clause is primarily determinative, incidentally characterizing. If it had had the Subjunctive exēderint, the clause would have been primarily characterizing and the meaning would have been: 'things were found which' instead of 'the (particular) things which.' See below under Subjunctive uses, § 406. I.
2) Parenthetical and characterizing, e.g. ego, qū̄ sum longē fortior, fame pere $\bar{o}$. Here the quī-clause is a parenthetical statement that characterizes the antecedent. It may be laid down as a rule (to which exceptions are rare) that a characterizing clause takes the Indicative when it may be dropped without impairing the sense of the main clause. In the sentence last given, ego pere $\bar{o}$ fame is complete in itself without the addition of the quiu-clause. See Hale, The Cum-Constructions, pp. 85, 94, I38.
3) Conditional and characterizing, e.g. neque enim est ūlla fortitūud $\bar{o}$, quae rationnis est expers, 'for there is no bravery, which lacks reason,' i.e. 'if it lacks reason,' whence the Indicative. In such conditional clauses, however strongly characterizing they may be, the Subjunctive is rare and confined almost exclusively to clauses with negative antecedents. See Hale, The CumConstructions, p. I 33 .

We may say, generally speaking, that three things are necessary to throw a characterizing clause into the Subjunctive (except where the Subjunctive would be used in the corresponding paratactical form of expression) : First, it must be essential to the thought of the main clause ; secondly, its characterizing function must be primary, not incidental ; thirdly, it must not be equivalent to an Indicative clause with $s \bar{i}$. Characterizing clauses that do not fulfil these three conditions stand, with rare exceptions, in the Indicative.

## Subjunctive Relative Clauses.

403. A Subjunctive Relative Clause may give expression:
r) To somebody's will.
2) To a possibility.
3) To a future contingency.
4) To actual facts (with or without a causal or adversative bearing upon the main clause).
Any one of these clauses may be used to characterize the antecedent of the Relative.

## A. Original Uses.

404. I. Representing an Independent Volitive.
a) Relative Clause of Purpose, e.g. mìlitès missī sunt quī oppidum capiant, 'the soldiers have been sent to take the town.' The $q u \bar{\imath}$-clause here represents an independent illi capiant, ' they shall take (let them take) the town.' Cf. the identical development of $u t$-clauses of Purpose, $\S 368$.
b) Volitive Characterizing Clause, e.g. Cic. de Sen. 43 qū̄ jūdicābant esse profectō aliquid nātūrā pulchrum atque praeclārum, quod suà sponte peterētur, quodque optimus quisque sequerètur, 'these were of opinion that there surely existed some lofty and noble ideal, to be sought for its own sake, and for all the best men to pursue.' The quod-clauses here represent independent Volitive Subjunctives meaning: 'let this be sought'; 'let all good men pursue this.' Such clauses should be carefully distinguished from relative clauses denoting pure purpose, as in the example given under $a$ ).
c) Clause equivalent to $s \bar{z}$ with the Subjunctive. Examples: nūlla tam facilis rēs, quīn difficilis siet, quam invītus faciās, 'nothing is so easy that it does not become difficult, if you do it against your will,' lit. ' assuming you do it' ; philosophia, cui quī pāreat omne tempus sine molestiā possit dègere, i.e. if one should obey philosophy, etc.

For further illustration of the Volitive Origin of such clauses, see § 395 .
2. Characterizing Clause Representing an Independent Potential, e.g. est unde fiat, 'there exists that by means of which it may (can) be done.' The unde fïat here represents an independent inde fiat, 'by that means it may (can) be done,' which ascribes certain possibilities to the means referred to in inde, i.e. characterizes them.

This form of clause is rare, its place being commonly taken by some form of potest with the Infinitive.
3. Clauses Developed from a Subjunctive of Contingent Futurity.
a) Characterizing Clause of Contingent Futurity, e.g. ille est quī $n \bar{n}$ mentiātur, 'that's a man who would not deceive.' Here quī nōn mentiātur represents an independent ille nōn mentiātur,' 'that man would not deceive.'
b) Characterizing Clause of Obligation or Propriety, e.g. nihil est quod gaudeās, originally, 'there is no reason why one would rejoice (if one were to act with propriety),' hence 'no reason why one should rejoice, ought to rejoice.'
405. Hale, in his recently published Anticipatory Subjunctive in Greek and Latin, expresses himself in favor of recognizing a new class of relative clauses developed from the Anticipatory Subjunctive, i.e. from the phase of the Indo-European Subjunctive which had pure Future force (see § 354 ). As illustrations of this type he cites: Vergil, Aen. i. 286 f. nāscētur pulchrā Trōjānus orīgine Caesar, imperium $\bar{O}$ ceanō, fāmam qū̀ terminet astrīs, 'who shall bound,' etc.; Eclogues, 4.34 f. alter erit tum Tiphys, et altera quae vehat Argō dētēctōs hērōas, 'and a second Argo, which shall carry,' etc. Others regard such clauses as a secondary development of Purpose Clauses.

## B. Developed Uses.

406. These are all outgrowths of the Subjunctive of Contingent Futurity. Here belong :
407. Characterizing Clauses Asserting an Actual Fact (technically designated as 'The Clause of Characteristic'; Grammar, § 283 ; App. § 370), e.g. ille est quī nōn mentiātur, 'he's a man who doesn't deceive.' This represents an easy transition from the original meaning of such clauses (cf. § 404.3.a), viz. 'a man who would not deceive (under any circumstances).'

Note 1. A still further development of these clauses is represented by such expressions as Catōnis ōrātiōnès quàs quidem invē-
nerim, lit. 'the speeches of Cato that I have discovered,' i.e. 'at least so far as I have discovered them.' Here the characterizing clause has weakened into one that merely restricts. Strictly speaking, the discovery of the speeches has nothing to do with their character.
Note 2. A clause that is primarily characterizing may be incidentally determinative. See § 402 .
2. Causal Clauses, e.g. miserum senem, qū̄ tam longā in vītā mortem contemnendam esse nōn videris, ' O pitiable old man, who (since you) have not even in so long a life discovered that death ought to be regarded with indifference.' This use probably began with some such expression as Clōdius contemnendus est, quī quaelibet faciat, ut inimīcum expellat, 'Clodius should be treated with scorn, who (since he) would stoop to anything whatever to get rid of a personal foe.' Such a qū -clause would easily come to mean 'who stoops to anything,' etc. A feeling might then naturally arise that any $q u \bar{i}$-clause bearing a causal relation to the main clause might take the Subjunctive.

For the difference of meaning between the Indicative and the Subjunctive in causal quī-clauses, see $\S 400.3$.
3. Adversative Clauses. - The Subjunctive in these clauses has had a history similar in every way to that of the Subjunctive in causal clauses.

For the difference of meaning between the Indicative and the Subjunctive in adversative quí-clauses, see $\S 400.3$.
407. It will be understood that what has been said of $q u \bar{i}-$ clauses applies equally to relative clauses introduced by $u b i, q u \bar{o}$, unde, etc.

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[^0]:    ${ }^{1}$ English translation under the title: Elements of Comparative Grammar of the Indo-Germanic Languages. Strassburg, 1887. A second edition of Vol. I. of the Grundriss is in preparation.

[^1]:    ${ }^{1}$ 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.

[^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. Прот $1 \nu \kappa \mathrm{kos}$, CIG. 6430. Manuscripts also preserve numerous traces of such spellings. For examples occurring in the Palatine codex of Vergil's Aeneid, see Bersu, p. 88, N.

[^3]:    ${ }^{1}$ See Brugmann, Grundriss, §§ 28-319; Lindsay, Latin Language, chap. iv.; Stolz, Lateinische Grammatik, §§ 7-41; Lateinische Lautlehre, pp. 112-229.

[^4]:    ${ }^{1}$ ə represents an obscure short vowel, which developed variously in the different Indo-European languages, - as $\breve{a}, \breve{e}, \stackrel{i}{\imath}, \breve{o}$.

[^5]:    ${ }^{1}$ See especially Stolz, Lateinische Grammatik, §§ 62-69; Lateinische Lautlehre, pp. 295-334

[^6]:    ${ }^{1}$ See, in general: Brugmann, Grundriss, ii. §§ 184-404; Lindsay, Latin Language, chaps, v. and vi.; Stolz, Lateinische Grammatik, §§ 75-88.

[^7]:    ${ }^{1} \mathrm{~A}$ few possible vestiges occur in the early language.

[^8]:    ${ }^{1}$ Neue (Formentehre i. ${ }^{2}$ 235) gives one or two extremely doublful exam-
    les of -i from Mss. ples of $-\bar{i}$ from Mss.

[^9]:    ${ }^{1}$ See Lindsay, Latin Language, p. 404; Stolz, Lateinische Grammatik, § 92.

[^10]:    ${ }^{1}$ See Brugmann, Grundriss, ii. $\S \S 164-18 \mathrm{r}$; Lindsay, Latin Language, p 408 ff.; Stolz, Lateinische Grammatik, § 91.

[^11]:    ${ }^{1}$ See in general: Brugmann, Grundriss, ii. $\$ \S 460-1086$; Lindsay, Latin Language, chap. viii.; Stolz, Latcinische Grammatik, $\S \S 96-118$.

[^12]:    ${ }^{1}$ No attempt is here made to discuss Ablaut changes.

[^13]:    ${ }^{1}$ The endings of the Perfect Indicative and of the Imperative have already been considered in $\S \$ 211 \mathrm{ff}$., 223 ff .

[^14]:    ${ }^{1}$ See especially Brugmann und Delbrück, Grundriss der Vergleichenden Grammatik, vol. iii. (Vergleichende Syntax, von Delbrück), Erster Theil. Strassburg, 1893 . Dräger, Historische Syntax der Lateinischen Sprache, 2 vols. 2d edition. Leipzig, 1878, 1881. Kühner, Ausführliche Grammatik der Lateinischen Sprache, vol. ii. Hannover, 1878. Schmalz, in Müller's Handbuch der Klassischen Altertumswissenschaft, vol. ii. 2d edition. Nördlingen, 1889. Riemann, La Syntaxe Latine. 3d edition. Paris, 1894. Roby, Latin Grammar, vol. ii. 5th edition. London, 1888.

[^15]:    ... ...... ${ }^{1}$ For the original force of the Accusative, see § 3 ir.

[^16]:    ${ }^{1}$ Religuum est in the sense 'the fact remains that' takes a Substantive

