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# The Phonology of Gallic Clerical Latin 

## After the Sixth Century.

an introductory historical study based chiefly ON MEROVINGIAN AND CAROLINGIAN SPELLING AND ON THE FORMS OF OLD FRENCH LOAN-WORDS.

Thesis Presented to the Division of Modern Languages of Harvard University in Candidacy for the Degree of Ph. D.

## By CARLC. RICE.

MAY 1, 1902.


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# The Phonology of Gallic Clerical Latin After the Sixth Century. 

AN INTRODUCTORY HISTORICAL STUDY BASED CHIEFLY ON MEROVINGIAN AND CAROLINGIAN SPELLING AND ON THE FORMS OF OLD FRENCH LOAN-WORDS.

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## Department of French and Other <br> Romance Languages and Literatures.

The undersigned, a committee of the Division of Modern Languages, have examined the thesis of Carl Cosmo Rice on "The Phonology of Gallic Clerical Latin after the Sixth Century," presented in candidacy for the degree of Doctor of Philosophy, and have found it satisfactory.

Signed) E. S. Sheldon.
C. H. Grandgent.

## INTRODUCTION.

The brief account of the phonology of Gallic clerical Latin here presented is based on significant spellings, both Latin and French, on the forms of Old French loan-words, and on the statements of grammarians. The distinguishing features of Merovingian and Carolingian Latin have been recently pointed out by Gaston Paris in his essay entitled Les mots d'emprunt dans le plus ancien français, ${ }^{1}$ published in the Journal des Savants for the year 1900, pp. 294-307, 356-375. In this article, Paris showed that some sound-changes which had hitherto been considered as exclusively popular, took place regularly even in the speech of those who wrote and spoke the most correct Latin of the Merovingian period; that these popular peculiarities in the pronunciation of clerical Latin were largely corrected at the time of the Carolingian reform in orthography, although the result of the correction was often only graphically identical with the ancient form desired -e.g., Merovingian $\underset{e}{e}<$ classic $\check{\check{c}}$ was changed to $i$; and that a study of these and similar phenomena would be a useful work. The questions which Paris asks in this article have been considered, and an attempt has been made to answer them all, together with others which suggested themselves in the course of the investigation. It would of course be impossible to give a complete account of the

Prefatory note. An outline of this treatise was published in the Transactions and Proceedings of the American Philological Association (Proceedings for December, 1903, pp. lxiv. f.). The investigation is now (July, 1909) printed in full as written in 1902. ${ }^{2}$ An expression of thanks is due to Professor C. H. Grandgent, at whose suggestion the investigation was undertaken, for most helpful instruction and encouragement.
C. C. R.

[^0]pronunciation of Latin from the seventh to the fifteenth century in a study like the present, but it has nevertheless been found indispensable to present a general outline of the features of the pronunciation of Latin used in Northern Gaul during this whole period, in order to arrive at general conclusions. Much of the investigation in the later periods is facilitated by the work of Thurot, who, in bis Notes et Extraits and in his Prononciation française, has catalogued most of the important testimonies of grammarians relating to the pronunciation of Latin from the tenth to the eighteenth century.

The precise condition of Latin learning in the seventh and eighth centuries remains yet to be determined. An attempt has recently been made ${ }^{1}$ to show that tolerably good schools must have existed in this period, and that education and culture were not so entirely neglected as is generally supposed. If, however, we may assume that the royal scribes spoke and wrote the learned Latin of their time, we shall have to admit that the education received by clerks of the period was quite elementary. The standard of correct spelling has very low, so that two or more letters might be used indifferently for the same sound without offense. Confusions of the vernacular sounds with those of the clerical language were not infrequent, especially in the seventh century, when these two forms of the same language were not yet extremely dissimilar. Reforms in the pronunciation of Latin have generally resulted from a renewed interest in the study of antiquity, and a broader and deeper knowledge of the life of the ancients. At the time of the modern Renaissance, the traditional French pronunciation of Latin, proved by antiquarian research and contact with the foreign world to be false, suddenly fell into disrepute, and a new standard of correctness was set up. Just so the spelling and pronunciation approved by the Merovingians were considered barbarous by the cultured foreigners whom Charlemagne called to his court about the year $782,{ }^{2}$ and a new standard of writing was set up at once. Nor was the reform graphic only: on the contrary, it appears that a remodeling of the pronunciation of Latin was begun at the same

[^1]time. In a capitulary of 789 (Baluze I., col. 237) we read the following: Et ut scholae legentium puerorum fiant. Psalmas, notas, cantus, computum, grammaticam per singula monasteria vel episcopia discant. Sed et libros catholicos bene emendatos habeant. Et pueros vestros non sinite eos vel legendo vel scribendo corrumpere; quia saepe dum bene aliquid Deum rogare cupiunt, per inemendatos libros male rogant. In another capitulary of Charlemagne (Baluze I., col. 204) occurs the following passage:. . . . non sumus passi nostris in diebus in divinis lectionibus inter sacra officia inconsonantes perstrepere solaecismos. The fact that the well-known council of Tours in 812 directed that sermons should be translated into the rustica romana lingua, indicates that the reformed pronunciation which made the clerical language quite unintelligible to the people, was coming into general use in Central France at that date. The documents published by Tardif, which were nearly all written in the immediate vicinity of the Center, take on a more correct appearance soon after the year 769 (number 67): But since the royal diplomas were prepared in this period by German scribes, ${ }^{1}$ their evidence must not be taken as proving that the transition from the old to the new system was accomplished within a few years. On the other hand, it is clear that those clerks who learned to read before 780 cannot have changed their manner of pronouncing Latin on account of the advent of the new fashion. The Merovingian method must, then, have been in use in Central France, side by side with the new system, at least as late as 830 . From the Center the new method of pronouncing must have been adopted in all localities together with the Carolingian culture. Distinctively Merovingian spelling appears in Mabillon's collection as late as 872 (number 103, probably written at Caunes), in a document from the Midi, apparently showing that Carolingian civilization had not yet banished Merovingian ignorance from this region for a generation after the new learning had taken possession of the North. L. Maitre (Les écoles épiscopales, p. 72) notes that there is no direct evidence showing that Charlemagne's school reforms went into operation in the ecclesiastical provinces of

[^2]Burges, Bordeaux, Avignon, Alby or Toulouse before the tenth century, but adds that it is hard to believe that the reforms had no effect in these regions in the ninth century. A curious document (T. 231) reflecting grammatical ignorance almost Merovingian, apparently written in LeBerry-i.e., in Indre or Cher,- bears the spellings territurio and accepio, as late as 939. In the absence of confirmatory evidence, however, it will scarcely be suspected that the document has a serious chronological importance. A remarkably anomalous diploma, written at York in 960, shows many spellings like prepusito, nustrum, pussessio, munachus, also the form univirsa ( $\mathrm{\Gamma} .234$ ). ${ }^{1}$ Since these forms, especially prepusito, univirsa, appear to be neither Merovingian, Carolingian nor English, one is almost inclined to suspect the authenticity of the document, in spite of its apparent genuineness. The orthography of the cartulary of Cluny, which is the most important Eastern collection, is often puzzling because it was evidently written by badly educated scribes, and because of our ignorance as to the early history of the vernacular of the region; but it seems not unlikely that the phonetic reform was here accomplished soon after it took place in Central France. The clerks of the Center from whom we have documents of later date than the eighth century were accomplished Latinists, spelling the dead language with alinost impeccable accuracy. Not so, however, the provincial scribes from whom diplomas have come down from the ninth century and later, who did not enjoy such superior training, and sometimes made significant orthographic errors. Considerable differences must have existed between the Latin pronunciation of the Center and that of the provinces down to the time of the Renaissance. We are, however, justified in assuming that the main features were the same in each case, particularly in the pronunciation of groups of consonants which did not exist in the vernacular of either of the regions in question.

There is some information to be derived from the statements of medieval grammarians, published by Thurot in his Extraits,

[^3]although their interpretation is sometimes doubtful. It is often obscure whether the rules given are based on the usage of the author's time, or are merely a bit of grammatical tradition handed down by ancient grammarians. In other cases there is a possibility that the writer in question was an Italian, whose pronunciation of Latin would of course have been very different from a Frenchman's. Notwithstanding this element of uncertainty, however, all those statements of grammarians which seemed to have any phonetic significance have been considered.

As to the general character of the artificially acquired clerical language and of the vernacular of the seventh and eighth centuries, reference should be made to the well-known discussions by Schuchardt, Vokalismus I., pp. 60-63, and Paris, J. S. 1900, pp. 298-301. It is in general clear that these two forms of the same language, at least as early as the seventh century, exhibited considerable phonetic differences and at the same time both differed greatly from classic Latin, which cannot be said to have existed at all in the period. The forms of early Old French loanwords prove beyond all doubt that a conservative form of language, based on the spelling of the time and on oral tradition, must have existed in both the seventh and eighth centuries. It is the precise relation which existed between these two idioms that remains to be determined. A considerable part of the present thesis has naturally been devoted to this obscure subject. It is generally recognized that in every period of every cultivated language, two forces are active: the tendency toward change and the tendency toward preservation or restoration. The tendency toward change in sound, according to all appearances, often takes the course of a modification which is extremely gradual, occupying many generations, so gradual, indeed, that a sound-change has actually occurred in the speech of all classes of society before many are aware of it. The Latin language of the decadent period, whatever may be said of the earlier stages, was no exception to this rule: the operation of the sound-laws must have affected all speakers of the language. So, for instance, the vowel $a$ in stare must have advanced from the back to the front of the oral cavity in clerical or conservative speech just as in the vulgar tongue; the accented $e$ in bene must have diphthongized into $i e$; and the vowel $o$ in bonus must have passed into $u o$. The process
was simple and natural: the popular developments were followed in learned speech because no one knew that any change was taking place. And even after the change had occurred, many generations must have passed before these grave sins against ancient correctness were considered as faults. No Merovingian clerk could have been expected to know that the ancients did not pronounce opus with a diphthong in the first syllable, or that the two $a$ 's in amare had the same quality many generations before his time. The fact that these important changes in sound rarely or never found graphic expression in Merovingian times is not of the slightest consequence: for as long as scribes were taught in school to indicate the sound uo by the letter $o$, even the most ignorant would never have thought of using two letters to spell the diphthong. The spelling of the English pronoun $I$ with a small letter by the ignorant is natural and common; but a spelling $u i$ or $a i$ would be remarkable and exceptional, and would hardly be expected to occur at all, for the reason that the analysis of the sound-group presupposed by such a form would be surprising. It was apparently only when the popular pronunciation came into evident conflict with the traditional spelling that the school-teacher saw any need of correcting what seemed to be a faulty pronunciation of the language. We are obliged to reject, on the strength of what seem to us to be very sound principles, the assumption, hitherto generally adopted and recently formulated by Meyer-Lübke, ${ }^{1}$ that vulgar sound-laws did not affect the language of educated speakers of Latin. We unhesitatingly assume that each and every gradual sound-modification must have had a decided effect upon the earlier learned and later pseudo-learned pronunciation; and it is our task to determine how far the popular development was followed, and at what stage it was checked by conservative tendencies or reforms. The question as to absolute chronology is often difficult to answer. A valuable auxiliary in the work of determining chronology is the evidence of Merovingian spellings. Their interpretation, however, is not always easy. Merovingian clerks were so insufficiently

[^4]educated that they sometimes pronounced a vulgar sound long after the restoration of an earlier sound was generally accomplished in the clerical language: they made many errors of this kind particularly on account of ignorance of etymology. Thus petere and elitigare ${ }^{1}$ were often spelled and pronounced by the royal scribes with a $d$ instead of a $t$ as late as the eighth century, simply because the clerks who handed down these words from an earlier period had not discovered that they were spelled with a $t$ in ancient times. On the other hand, there are striking indications that clerks would often pronounce a voiceless consonant in cases where the ancient stop was voiced, under the impression that they were restoring a correct form which had become corrupted. The tendency which we feel to pronounce the $p$ in Merovingian forms like opetum, opidiencia as $b$ is doubtless fallacious. Speakers of Latin of some education must certainly have pronounced a voiceless in the place of a voiced stop with considerable frequency soon after the soundshifts $p>b, t>d, c>g$ occurred, when the distinction between the vulgar and the correct forms was being carefully taught in the schools, as we may suppose to have been the case. Thus the Old French loan-word pretiet (cf. Koschwitz, Commentar, p. 132) evidently goes back to a Merovingian Latin pretegatum ( $=$ praedicatum), with a mistakenly restored $t$ in the second syllable. To be sure, if a scribe used two consonants like $b$ and $v$ almost interchangeably, we should doubtless be justified in concluding that the characters stand for a single sound; but indisputable cases of this kind do not often occur, and on that account general theories regarding the clerical pronunciation, when based on spelling alone and unsupported by the testimony of vulgar loan-words, can be advanced only with caution.

Considerable aid in the work of establishing the chronology of Merovingian and Carolingian Latin is furnished by the Old French loan-words, or words transferred from the learned language to the vernacular. All loan-words naturally followed the developments of the learned language down to the time of their introduction into

[^5]the vulgar tongue, after which they were treated as vernacular words. Many of them show unmistakably by their form that they must have become vulgar at least as early as the sixth century. Whenever the date of their introduction into the language of the people can be determined, such words can be used to establish both the sequence of the vulgar sound-changes and the state of the clerical language at the time when they were borrowed. Thus Paris (J. S., 1900, p. 369), on the strength of forms like obëir, showing the loss of intervocalic $d$, argues not only that similar words were popularized during the Merovingian period, but that clerks then sounded Latin intervocalic $d$ as a spirant. The argument is quite valid for the reason that no words showing a contrary development can be proved to have existed. The loan-words cited in this thesis will generally be found, except when another source is mentioned, in H. Berger's well-known treatise. ${ }^{1}$

Another auxiliary in the task of establishing the chronology of clerical Latin, almost as important as the forms of loan-words and the spellings of Latin documents, is the spelling of texts written in the vulgar tongue. It is well known that there was no established French orthography until the Renaissance period. Old French texts are spelled in general phonetically, strict orthographic traditions, particularly in the earliest texts, being absent. The phonetic basis on which Old French scribes used the letters of the alphabet was naturally their own pronunciation of Latin; for since during the middle ages the vulgar tongue was not considered worthy of special study, reading and spelling were learned in Latin only. Thus it came about that scribes, when writing French, except in rare cases where they unconsciously followed the Latin spelling of individual words, used the letters with the phonetic value which they had in Latin; or, if the sound which they wished to represent had no exact equivalent in their Latin, they chose the letter which they pronounced in Latin with the sound nearest the vulgar sound to be indicated. The two earliest French texts, both from the ninth century, namely the Strassburg Oaths (842) and the Eulalia

[^6](about 881), give valuable information as to the way in which Latin was pronounced by the scribes who wrote them. A comparison of the vowel-signs adopted by these two Frenchmen shows very marked differences:

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Sound pronounced: \(e<a\) ei ie uo ou a
Symbol in 842: \(\quad a \quad\) (ei)i \(e\) o \(u\) a \(a, e, o, u\)
Symbol in 881: e ei ie uo ou (a)e
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Since the scribe of 842 was contemporary with the scribe of 881 , or very nearly so, we have no good reason to believe that the former spoke a more ancient form of French than the latter. On the contrary, it seems very evident that the language of the two must represent the same stage of linguistic development. Moreover, it is not improbable, according to Paris's opinion, ${ }^{1}$ that both scribes used the very same dialect. We are therefore obliged to explain the apparent differences in their vowels on a purely graphic basis. It is clear that the scribe of 881 used the vowel-signs, in general, with the same meaning that they had in later times - the fact is quite generally recognized. In other words, the phonetic basis on which he spelled his French was a pronunciation of Latin practically identical with that in use in the twelfth century. From this we infer that he had learned his Latin at a school in which the Carolingian system of pronouncing was taught. Since he must have acquired the art of reading somewhere near the middle of the ninth century, we thus establish an important date. On account of the spelling of this Old French monument alone, we may be sure that the Carolingian method of reading Latin was practiced in the Northeastern monasteries as early as 830 or 850 . The scribe of 842 , on the other hand, chose his vowel-symbols according to an entirely different principle,- a circumstance which leads us to suppose that he read his Latin in a different manner. Since, moreover, the letters which he actually used are just those which he would naturally have chosen if he had learned to read his Latin according to the Merovingian method, we conclude that this was the case. ${ }^{2}$ The discussion of each of the vowels concerned will

[^7]establish this point beyond question. Now inasmuch as the scribe of 842 must have learned to read not far from the end of the eighth century, we may conclude with confidence that the Merovingian method was still in vogue in some schools of the Northeast as late as 790 or 810 . It thus appears that in this region the reform was generally accomplished in the course of the first half of the ninth century; and it should doubtless be assumed that in the neighborhood of Paris, the new method carried the day at least as early as in the Northeast.

The Latin literary language, which had led a precarious existence for some centuries previous to the time of Charlemagne, was given its death-blow by Carolingian scholars. The reform in pronunciation carried with it sudden and violent changes in phonological structure, including the transfer of the accent to the ultima, which caused it to be felt for the first time as an entirely foreign language. For many centuries more, however, it maintained its ancient ascendency over the vulgar speech, which did not come to its natural rights until after the Renaissance. It is well known that the education of clerks, in the later middle ages, consisted mainly in the study of Latin, which was written and spoken by all who claimed to be educated. It is accordingly inconceivable that sounds or groups of sounds, the utterance of which would naturally have been difficult for the Frenchmen of the period, should have existed in Latin. Dead languages have always been pronounced with the sounds native to the learner, and the Latin of the middle ages was not an exception to the rule. So it was that the Carolingian reform did not restore certain consonant-groups for the reason that they must have caused difficulty in articulation. Knowing, as we do, that the $c$ in the graphic group $c t$ was not sounded in the seventh century, nor yet in the twelfth, we may assume, in the absence of evidence to the contrary, that the Carolingian reform did not restore the ancient phonetic group $k t$, which was doubtless still unpronounceable. The intimate relation which existed in France at least as late as the sixteenth century, between the pronunciation of Latin and the pronunciation of French learned words which were felt as being of Latin origin, is quite remarkable. For instance, even at the beginning of the Renaissance period, the first consonant in the group ct was sounded neither in French learned words nor
in Latin. As soon, however, as French Latinists discovered the incorrectness of this traditional pronunciation, the ancient phonetic group $k t$, which had ended its natural existence over a thousand years before, suddenly sprang into new life both in Latin and in French learned words, and has lived on ever since. Noting how closely reforms in the pronunciation of learned words followed upon the heels of reforms in Latin pronunciation during the Renaissance, we may readily assume that similar conditions existed in the middle ages, and inversely, that when groups of consonants were simplified in the pronunciation of Old French learned words whose Latin etyma must have been well known, the same process must have regularly occurred in the pronunciation of Latin.

It is largely on this basis that the pronunciation of Latin in the later middle ages must be reconstructed.

## DATES AND REFERENCES.

The first date given after any spelling refers to the original document; the second date to the extant copy. The date of an extant original.MS is followed by the letter O , and the date of a document copied in a period which is uncertain or which cannot readily be indicated, is followed by the letter C . Roman numerals stand for centuries. X./ means "the end of the tenth century." /XI. means "the beginning of the eleventh century." Thus 675, X./XI. means "a copy, written at the end of the tenth or the beginning of the eleventh century, of a lost manuscript of the year 675." The first arabic numeral after the name of a collection invariably refers to the number of the document. Commas between arabic numerals separate distinct references. References printed in italics mean the same as ibid.: that is, the date of the document cited is given just above.

## LIST OF ABBREVIATIONS. ${ }^{1}$

A. L. L.: Archiv für lateinische Lexicographie und Grammatik. Altfr. Bibl.: Altfranzösische Biblothek.
A.S. N. S.: Archiv für das Studium der neueren Sprachen und Litteraturen.

C: Copy; i.e., not an original manuscript.
f. b.: from the bottom of the page, or from the end of a document (used in citing lines).
Fr. St.: Französische Studien.
J. S.: Journal des Savants.
K. Z.vgl. Sprf:: Kuhn's Zeitschrift für vergleichende Sprachforschung.

Litbl.: Litteraturblatt für germanische und romanische Philologie. Mon. Germ. Hist.: Monumenta Germaniae Historica.
O: original manuscript.
R. F.: Romanische Forschungen.

Rom.: Romania.
Rom. Bibl.: Romanische Bibliothek.
Rom. St.: Romanische Studien.
T.: Tardif, Monuments historiques.
Z.F.S.L.: Zeitschrift für französische Sprache und Litteratur.
Z. R. Ph.: Zeitschrift für romanische Philologie.
${ }^{1}$ For the full titles of books cited by the name of the author, or of cartularies cited by the name of a locality, see the list of books and articles (p. 109) and the list of sources (p. 105). Note also the method of citing dates (p. 13).

## UNACCENTED SYLLABLES IN GENERAL.

## The Penult in Proparoxytones.

It is well known that the penultimate vowel in proparoxytones was dropped at various periods in the history of the vernacular of Gaul, according to the nature of the consonants in its environment. It seems more than probable that the learned language showed this tendency in each case for a certain time, while the phonetic law was in operation. The evidence at hand, however, does not enable us to determine with any exactness the effect of the popular development on the pronunciation of Latin. The following unimportant spellings may be noted:
pareclo (= pariculo): T. 40.40 and 41: c. 700 O; Paris. Cf. pariclo, ibid., 41.
deburat: T. 48.4: 716 O ; Compiègne.
The dissyllabic form of dominus was in use in Merovingian times, and was not corrected out of existence for many centuries.
dommus: Т. 13.5: c. 657 O.
domnus: Т. 1.3, 6, 8 etc.: 528, X.
donni, etc.: T. 3.4, 21, 22, 23, 24, 25, etc.: 566, X.; Paris.
Cluny 2987, l. 3: 1049-60, XI./XII. Cluny 2988, l. 1: 1049-60, XI./XII.

## The Protonic Non-Initial Vowel.

The dropping of this vowel seems to have begun somewhat later in the vernacular than that of the penultimate vowel in proparoxytones; but the development did not occupy so great a space of time. ${ }^{1}$ The following spellings give no clue as to the date of the phenomenon, but they tend to show how long, in certain cases, the development might remain uncorrected in the learned speech.
composcionalem (= compositionalem cf. DuCange s. v.) T. 14.2: 658 O.

[^8]Chilpricus (cf. Chilpericus, 46.1): T. 46.16: 716 O; Compiègne. Both forms also occur in T. 49 ( 716 O ; Compiègne) and elsewhere.
extiblacione ( $=$ stipulatione): T. 67, p. 55, col. 1, l. 5 f. b.: 769 O.
vintores: T. 67, l. 2: 769 O.
admanto (for adamante): T. 40.30 : c. 700 O; Paris.
cruciclata: T. 40.25 : c. 700 O; Paris.
capalanus ${ }^{1}$ : T. 78, p. 62, col. 2, 1. 12: 777 O; Héristal.
cepstaticum (= cespitaticum): T.85, p.66, col. 1, 1.2:
786 O; Worms.
mosterio: T. 85, p. 66, col. 1, 1. 14: 786 O; Worms.
somnensibus ("ad Somonam pertinens," Du Cange s.v.):
T. 125, p. 85, col. 2, l. 13 f. b.: 832 O; St.-Denis.
mosterii: T. 154, 1.5: 847 O ; Compiègne.
The following Old French loan-words are of interest as indicating, though to be sure quite indefinitely, the early date at which the vowel was restored - if indeed it was ever generally dropped - in the clerical language: benëir, benëiçon, benëistre, chandelabre, chasteé, empedechier, emperëour, enemi, ${ }^{2}$ enfermeté, ermite, ${ }^{3}$ homecire, ${ }^{4}$ malëir, maleiçon, meriene, obëir, pentecoste, penëance, penëant, prëechier, tradetor. ${ }^{5}$ It seems quite probable that merïene (cf. p. 83), penëance, penëant (cf. p. 61) were introduced into the vernacular as early as the sixth century. If so, these words go to show that the protoric non-initial vowel was regularly pronounced in the clerical language of that period.
${ }^{1}$ The antepenultimate vowel of this word is apparently 2.
${ }^{2}$ On enemi cf. Thomas, Essais de philologie, pp. 12 f., note 2, who shows that the word is very probably of learned origin.
${ }^{3}$ This word was popularized later than penëant (note the $t$ ). The failure of the clerks to restore the vowel in the learned language was due to ignorance of the ancient form.
${ }^{4}$ On homecire, cf. L. Havet, Rom. VI., p. 256.
${ }^{5}$ On tradetor, see Sheldon, Harvard Studies and Notes in Philology and Literature, 1892, p. 120, who proves that the word is learned in origin. Cf. Paris, Rom. XXII., p. 617. The word occurs in the Roland, but has been somehow overlooked by Berger, who does not mention it.

## The Vowel of the Ultima.

The tendency of the vulgar tongue to reduce the vowel of the ultima to $\partial$, or, under certain circumstances, to drop it, must of course have been felt by speakers of clerical Latin. The tendency to drop the vowel admitted of easy correction, and a vowel-sound was doubtless soon restored. Not so, however, the tendency to reduce the final vowel to $a$. It appears that the only correction possible here, considering the condition of the vernacular, was that which was made later, when the accent was shifted to the ultima. So the scribe of the Strassburg Oaths, who was educated at a school where the Merovingian system of pronouncing Latin was still in vogue, must have read all posttonic vowels as a: for otherwise the choice of letters which he makes to represent this sound would be very hard to understand (poblo, karlo, karle, karlus, fradre, fradra, sendra, fazet, suo part, etc.). The following interesting spellings may be simply registered here: ${ }^{1}$
menso: T. 2.13: 558, X.
ficirint (=fecerunt): T. 39.4: 697 O; Bougival.
in. loco noncopant Mairilaco: ibid., 6.
minso: T. 68, p. 56, col. 1, 1. 21: 770 O.
infre: Cluny 199, p. 187, l. 5: 915 O.

## VOWELS.

$\overline{\mathbf{I}}$

## 1. ${ }^{2}$ In accented syllables.

Accented $\bar{i}$ was regularly pronounced as $i$ in nearly all the Gallic territory. The following spellings may be noted:
fileciter: T. 25.17: 688-9 O; Compiègne. T. 37.13: 696 O; St.-Cloud. This word, which was doubtless rarely spoken, may possibly have had the vowel $e .^{3}$ The
${ }^{1}$ Cf. also p. 39.
${ }^{2}$ Cf. Schuchardt, II., pp. 69 ff.
${ }^{3}$ The reading is, however, very uncertain; see Letronne, plates XXII. and XXXII. The end of the word feliciter appears here, as elsewhere, in an abbreviated form which may well stand for -iciter; sometimes it is written with an astonishing scrawl, as in T. $5,21,22,25,33,35,42,43,44$, $46,47,48,49$. Compare the facsimiles in Letronne's collection.
curious statement of Alcuin relating to the form may be noted (Orthographia Albini Magistri, Keil VII., p. 302, li. 15 ff .): Felix qui accipit, filex per quem datur felicitas. Aprelis: 'T. 96, p. 71, vol. 2, I. 3 f.b.: 797 O; Aix-laChapelle.
confenis: Fredegarius (ed. Krusch), I., 57.2: c. 613, VII. or VIII.; Burgundy.
vetam: Fredegarius II. 103. 28: c. 642, VII. or VIII.; Burgundy. On these two spellings from Fredegarius, cf. O. Haag, R.F. X., p. 846, who thinks that they are orthographic blunders.
aprelo: Cluny 263, p. 257, 1. 3: 926 C.
aprelis: Cluny 2894, 1. 14: 1034 C.
These forms appear to prove that the peculiar development $e<$ accented $\bar{\imath}$ existed in Burgundy as early as the seventh century. It is quite difficult to believe that the last four spellings are nothing more than orthographic errors, for the reason that such confusion of $i$ and $e$, in words which must have been very familiar to the writer, does not occur elsewhere. ${ }^{1}$ On the Burgundian development, cf. P. Meyer, Rom. VI. (1877), p. 42, who cites the forms des (dixi) and dest (dixit) from a Burgundian manuscript dating from the beginning of the fourteenth century; and E. Goerlich, Fr. St. VII. (1889), p. 78, who cites from the thirteenth century a few Burgundian forms showing the development $\bar{\imath}>e$ before a nasal, and refers to the corresponding treatment of $\bar{\imath}+$ nasal in the modern patois of the region. We thus seem to have reason to believe that in some part of Burgundy, accented $\bar{\imath}$ regularly developed into some kind of an $e$. In this connection should be mentioned the muchdiscussed passage from Consentius (fifth century ?), Keil V., p. 394: Galli pinguius hanc [ $=i$ litteram] utuntur, ut cum dicunt ite, non expresse, sed inter $e$ et $i$ pinguiorem sonum nescio quem ponentes. Consentius certainly meant to say that the Gauls regularly pronounced $\bar{\imath}$ as $i$. To make this statement harmonize with the established fact that the Gauls pronounced $\bar{\imath}$ as $i$, one is tempted to assume that it refers to the supposed Burgundian development discussed above. Until the history of the Burgundian vowel is

[^9]cleared up, however, it would be unjustifiable to conclude with confidence that the doubtful development $\bar{\imath}>e$ is to be assigned to so early a date.

## 2. In unaccented syllables.

Unaccented $\bar{\imath}$ before a nasal, having under certain conditions ${ }^{4}$ become $e$ in the initial syllable, was not restored until Carolingian times.
defenita: T. 14.7: 658 O.
lemenebus: T. 19.29: 670-1 O; La Morlaye.
demedium: T. 67, l. 4: 679 O.
defenita: T. 75, p. 60, col. 1, 1. 5, f. b.: 775 O; Duren.
demediam: Paleographical Society, plate XI., col. 2, l. 17:
812; probably Canterbury.
Unaccented $\bar{\imath}$ not before a nasal followed in the vernacular the development of $e$, except when initial. The common development of feci, presi, etc., in French, Provençal, Spanish, Portuguese and North and South Italian (Meyer-Lübke, Rom. Gram. I., pp. 98, 256) is noteworthy. The coalescence of $e$ and $\bar{\imath}$ in the ultima must be dated at least as early as the fifth century. Schuchardt (II., p. 80) gives two fourth-century examples coming under this head. There can of course be no doubt that the vulgar change of $\bar{\imath}$ in the ultima to $e$ took place long before the seventh century.
vise fuemus: T. 11.10: 653 O; Clichy.
Dioninse: T. 14.1: 658 O. T. 15.2: 658 O. Also T. 15.3, 6.

Chlodovie: Т. 15.3: c. 658 O.
se ( $=$ si): T. 19.17, 24, 25, etc.: 670-1 O; La Morlaye.
vise : T. 21.15: 677-8 O; La Morlaye.
Dioninsiae: T. 21.13: 677-8 O; La Morlaye.
Chlothachariae: T. 19.38: 670-1 O., La Morlaye. farinaries (abl. pl.): T. 19.19: 670-1 O; La Morlaye. Martine: T. 22.11: 679-80 O; Lusarches.
in augmentes: T. 23.17: c. 681 O.
pro remedium anime nostri: T. 25.5: 688-9 O; Compiègne.
sanctis basilices: T. 26.56: c. 690 O; Arthies.
fisce nostri: T. 31.23: 692 O; St.-Cloud.
se (=si): T. 35.21: 695 O; Compiègne.
paices (= pagis): T. 41.13: c. 700 O .
se (=si): T. 44.23: 710 O; Montmacq. T. 50.2: 717 O; Compiègne.
Dionisie (1. 9), Dioninsiae (1. 20): T. 56, p. 47, col. 2: 755 O ; Compiègne.
monasteriae suae: T. 69, p. 56, col. 2, 1. 17: 771 O; Worms. se ( $=s i$ ): ibid., l. 1.
These spellings prove that final unaccented $i$ did not exist in the clerical language of Northern Gaul in the second half of the seventh and the first half of the eighth century. The restoration of the ancient $i$, accompanied and rendered possible by the shift of the accent to the ultima, belongs in the Carolingian period. Since this correction must have gone hand in hand with the change of $\check{\imath}$ to $i$, I may simply refer, for details pertaining to the chronology, to the following discussion of the treatment of $\check{\zeta}$ in the clerical language.

## $\breve{\mathbf{I}}$.

The sound $\dot{\ell}$ had passed entirely out of existence in Central France long before the beginning of the seventh century. The correct spelling of $\ell$ in documents of the seventh century is either $i$ or $e$, just as the correct spelling of the ancient $a e$ is either ae or $e$. The Merovingian pronunciation followed the vernacular developments, $\check{\imath}$ being sounded as $e, e, e i, i e i$, according to its phonetic environment. ${ }^{1}$ This state of affairs was considered unsatisfactory by Carolingian scholars, who, to obviate the graphic confusion of $e$ and $i$, made the sound of $\check{\imath}$ identical with that of $\bar{\imath}(=i)$. In the following treatment of the chronology of this process, I shall present first the manuscript forms ${ }^{2}$ showing $e$ for $i$ and vice versa, in three groups: I. $i$

[^10]for $e$ or $e$ for $\ell$, not followed by a nasal; II. ditto, followed by nasal; III. ditto, followed by nasal + consonant. Each group is divided into two sections, to allow the separate treatment of accented and unaccented vowel.

## I for $\overline{\mathbf{E}}$ and E for $\overline{\mathrm{I}}$, not followed by a Nasal.

## 1. In accented syllables.

baseleca: T. 4.4: 625 O; Etrepagny.
mercides: ${ }^{1}$ T. 5.5: c. 627 O; Etrepagny.
fidilium (2), tetulum (4), possedire (10), recto (10): T. 6 : c. 628 O.
mercide (2,6), ${ }^{1}$ mistirium $^{3}(3)$, citeros $^{1}(3,4)$, quïte (5), decrivemus, conservitur (10): T. 11: 653 O; Clichy.
requiiscat (2), adoliscens (4) habire (6), viditur (6): T. 13: 657 O.
aeclisia ${ }^{4}$ (2), legetemo (4): T. 17: c. 659 O.
semeleter: T. 19.16, 18: 670-1 O; La Morlaye.
fedilis: T. 20.2: 677-8 O; La Morlaye.
aeclisiae ${ }^{2}$ (2), pontefecum (9, 15): T. 21: 677-8 O: La Morlaye.
ligebus: T. 22.5: 679-80 O; Lusarches.
requiissit (4), monastirio ${ }^{3}$ (11): T. 23: c. 681 O.
viro: T. 24.9: 682-3 O; Pressagny.
monasthiriae ${ }^{3}$ : T. 25.11: 688-9 O; Compiègne.
tenire ${ }^{4}$ (26), censire (55): T. 26: c. 690 O; Arthies.
$m i$ : Т. 29.17: с. 691 O.
ricto: T.32.5: 692 O; Lusarches.
adcriscat: T. 37.3: 696 O; St.-Cloud.

[^11]monastyrio ${ }^{1}$ (5), debirit (7), ficit ${ }^{2}$ (14): T. 42: 703 O; Quiersi.
fedilibus (2), cliricus (22), etc.: T. 43: 709 O; Quiersi.
baselica, etc.: T. 44.5: 710 O ; Montmacq.
fidilibus, ficit ${ }^{2}$ : T. 45.7: 710 O; Montmacq.
habire (5), decrivemus (15), etc.: T. 46: 716 O; Compiègne.
drictum: Т. 53.5: 750 O.
cliricos (1.4), baselica (1.12): T.56, p. 48, col. 1: 755 O; Compiègne.
pontefecum (1.4), mercide $^{3}$ (1.6): T. 61: 768 O; St.-Denis.
viro (1. 7), firmesima (1.14): T. 67: 769 O.
habire (1.4), monastirio ${ }^{1}$ (1.6), viditur (1. 22, etc.), commanire (1. 22), possedire (1.27): T.69, p. 56, col. 2: 771 O; Worms.
monastyrio (l. 13, etc., etc.), adhabire (p. 59, col. 2, 1. 10 f. b.): T. 75: 775 O; Duren.
ponteficum: Mabillon 53, 1. 3: 778 O; Göttingen (Goddinga villa).
possiderat: T. 96, 1. 19: 797 O; Aix-la Chapelle.
bistiae ${ }^{4}$. Fragmentum Parisinum, in Corpus Glossariorum III., p. 99, 1. 7: IX.
decto: Mabillon 63, ll. 7, 12: 812 O. Cf. Tardif 103, l. 13 and I. 12 f. b., who however reads eao (blunder for aeo $=$ eo?).
indegenis: Paleographical Society, plate XI.: 812; probably Canterbury.
baselica: Mabillon 65, 1. 9: 821 O; doubtless Caunes.
vaselica: Mabillon 71, 1. 2: 825 O; doubtless Caunes.
accipi: Redon 181, l. 3: 834, XI.; De Bain.
baselica: Musée 5, 1. 13, and p. 12, 1. 6: 834 O; apparently Fontjoncouse, Aude, arrondissement de Narbonne.
drictum: T. 180, p. 114, col. 1, 1. 17: 861 O; Compiègne.
accipi: Redon 153, l. 8: 865, XI.; Ranuuorogan?
siro ${ }^{\text {² }}$ : Cluny 222, l: 6: 920 O.

[^12]eigitur: Cluny 234, 1. 1: 923 C.
accepio: T. 231, 1. 11: 939 O; Le Berry?
circio: Vienne 52, 1. 7: 975-93, XII. Cf. circio: Vienne 25, p. 25, 1. 15: 1005, XI.; - cercio: 51, 1. 4: 975-93, XII.; 26, p. 26, l. 3: 1018, XII.
cirtio, cersio, cercio, etc. occur often in the Cartulary of Cluny in documents of the tenth century (copied XI./XII.): see, for example, numbers 1769, 1833, 1901, 1902, 1910. baselica: Marseille II. 1046, l. 10: 1034.

## 2. In unaccented syllables.

princepum (1. 2), sacerdotebus (1. 3), oportunetate (1. 3), intuetu (1. 6), sagacetas (1.9), etc.: T. 56: 755 O; Compiègne.
pontefecum (p. 50, col. 2, l. 4), regis (p. 51, col. 1, l. 13), dilectet (p. 51, col. 2, 1.9): T. 61: 768 O; St.-Denis.
vecariis (col. 1, 1. 3), dinarius (col. 2, last line): T. 64, p. 53 : 769 O; Samoussy.
confirmationis: T. 66, p. 54, col. 2, 1. 6: 769 O; Attigny.
aspecientes (plural): T. 68, 1. 9: 770 O.
parentis (1. 1), citerorum (1. 7), climentiae (1. 10), diberit (l. 24, etc.): T. 69, p. 56, col. 2: 771 O; Worms.
mercis: T. 71, l. 17: 774 O; Duren. T. 76, 1. 5: 775 O; Thionville.
evindecatum (heading, etc.), terrebilia (1. 6), civetate (1. 11): T. 75: 775 O; Duren.
sigellare: T. 77, p. 61, l. 2 f.b.
sigellavimus: Musé, p. 3, l. 3: 777.

[^13]magnetudo, genetore: Mabillon 53, D: 778 O; Göttingen (Goddinga villa).
segelare (l. 7 f. b.), adepisci (l. 10 f. b.), confirmaciones (l. 16 f. b.), feliceter (last line): T. 82, p. 64, col. 1: 779 O; Duren.
infedelitate: T. 86.47: 787 O ; St.-Denis?
mercis: T. 93, p. 71, col. 1, l. 17: 794 O: St.-Germain-des-Prés.
noctis: T. 103, l. 8: 812 O.
discriptio: Musée, p. 3, l. 7 f. b.; 813-14; probably Marseilles.
vegaria: Redon 125, 1. 8: 850, XI.: De Saviniaco?
indominecatum: T. 232, 1. 11: 943 O.
Meliduni: T. 276, l. 17: 1059 O; Melun. Cf. T. 257, l. 18: Meleduno ( $\mathbf{1 0 5 8} \mathrm{O}$; Melun).
diffinitum: T. 269, p. 210, col. 2, 1. 16: 1118 O; Paris. ${ }^{1}$

## I for $\overline{\mathbf{E}}$ and E for $\overline{\mathrm{I}}$ followed by a Nasal.

## 1. In accented syllables.

simet, etc.: T. 61, p. 51, l. 9 f. b.: 768 O; St.-Denis.
fimena (l. 2), convinit (1. 10): T. 67: 769 O.
obvinit: T. 68, p. 55, col. 2, l. 3 f. b.: 770 O.
invinimus: Musée, p. 2, 1. 12: 777: royal diploma from Charlemagne.
obvinit: T. 93, p. 71, col. 1, l. 3: 794 O; St.-Germain-desPrés.
vinit: T. 103, p. 76, col. 1, l. 12: 812 O.
deberimus: T. 118, p. 82, col. 2, l. 19: 824 O; Argenteuil. ${ }^{2}$
redimerint: Redon 193, 1. 11: 856, XI.; De Caroth et de Ruminiac.

## 2. In unaccented syllables.

diniare (1.5), dinuscitur (1. 11), inemicos (1. 15): T. 56, p. 47, col. 2: 755 O ; Compiègne.

[^14]emunitate (p. 50, col. 2, 1. 5), firmissemam (p. 50, col. 2, 1. 12), climentia (p. 50, col. 2, 1. 8, etc.), legitema (p. 51, col. 2, l. 1): T. 61: 768 O; St.-Denis.
fimena (1. 2), vindemus (present: 1. 3): T. 67: 769 O.
fuemus: T. 68, l. 15: 770 O .
confidemus (1.4), emmunitate (1. 12, etc.): T. 69, p. 56, col. 2:
771 O; Worms.
ordenare (1. 7), termenandum (1.9), resederimus (1.9), homenis
(p. 60, col. 1, 1. 2), fuemus (ibid., 1. 23), firmissemum (ibid., l. 9 f. b.): T. 75: 775 O; Duren.
alemoniis: T. 99, p. 74, col. 1, l. 9: 799 O; Aix-la-Chapelle. facileme: Fragmentum Parisinum, Corpus Glossariorum III., p. 94, 1. 2: IX.
elemosenarius: Mabillon 65, 1. 5: 821; probably Caunes. Cf. elemosinario, ibid., D.
nomene: Mabillon 103, B: 873 O; probably Caunes.
emunitate: T. 228, p. 143, col. 1, l. 13 f. b.: 917 O.
evagenaverit: Dombes I., p. 9, § 34: 1269.
III. I for $\overline{\mathbf{E}}$ and E for $\overline{\mathbf{I}}$ followed by Nasal + Consonant.

## 1. In accented syllables.

cinso: T. 24.12, 13: 682-3 O; Pressagny.
eximtis: T. 31.3: 692 O; Saint-Cloud. T. 34.7: 695 O;
Compiègne.
vindat: T.39.12: 679 O; Bougival.
eximtis: T.47.2: 716 O ; Complègne.
vindemus: Т. 67, 1.3: 769 O.
Belviacinse ${ }^{1}$ (1. 7), minso (= mense, p. 56, col. 1, 1. 21): T. 68: 770 O.

Adratinse (1. 13 f. b., etc.), cf. Ambianense (1. 6 f. b.): T. 99, p. 73, col. 2: 799 O; Aix la-Chapelle.

[^15]Bedolinse (1. 15), cf. Beloacense (1. 18): T. 120: $\mathbf{8 2 8}$ O; Aix-la-Chapelle.
vendicet: Redon 5, p. 5, l. 4 f. b.: 833, XI. 14, p. 14, l. 16: c. 834, XI. 64, I. 17: 848, XI. Etc.

Camliacinse (heading), cf. Camliacense (p. 97 col. 1, last line): T. 147: 845 O; Compiègne.
Moravinse (heading) cf. Moravense (p. 109, col. 1, l. 1): T. 171: 859 O ; Compiègne.

Teatininsi (1. 1), cf. Teatinensi (1. 3): Mabillon 104, p. 544, B: 874 O; Casa-aurea.
Matisconinse (ll. 9, 12), cf. Maciacense (1. 12): Cluny 392: 931 O.
vindimus: Cluny 547, 1. 6: 942 O. 678, ll. 2, 7: 946 C.
Moslicinse: T. 235, p. 147, col. 2, 1. 22: 980 O; Brussels.
Briosinse (1. 8), cf. Aquitaniensium (1. 1): Musé 16: 985 O; Aquitania?
vendicas: Grenoble 23, p. 54, l. 12: 1095, copied in first third of 12th century.
sexagenta: Dombes, I., p. 8, § 17, and p. 9, § 34: 1269.

## 2. In unaccented syllables.

vindendi: T. 60, p. 50, col. 2, 1. 5: 768 O; St.-Denis.
vinditionis: T. 89, 1. 12: 790 O; Kufsein.
vendicare: Cluny 14, p. 17, l. 8 f. b.: 870 ?, C.
vinditores (1. 2), vindedimus (1. 3), vindicione (p. 16, 1. 6), cf. vendimus (1. 8): Cluny 13: 870 ?, C. ${ }^{1}$
imtore (1. 4), cf. emtore (l. 6): Cluny 62: 898 C.
vendicare: Cluny 710, l. 5: 947-8, XI./XII. Vienne 17, l. 17: 967, XII.
vindendi: Musé 18, p. 38, l. 3 f. b.: 989 O; probably Py-rénées-Orientales.
vendicare: Lérins 9, p. 9, l. 13: 1030-46, /XIII. Grenoble 15, p. 25, 1. 6: 1034, copied in first third of twelfth century. vindicionis: T. 290, p. 181, col. 2, l. 4 f. b.: 1073 O; La Chapelaude.

[^16]vendicare: Redon 159, p. 129, 1. 27: 1190, copied early in 13th century; Le Mans (apud Cenomanum).

## Testimony of Grammarians on the Change in the Pronunciation of $\overline{\mathrm{I}}$.

Two grammarians who wrote in the second half of the eighth century correct faults which they may have observed in the pronunciation of Gallic Latinists. Bedae de Orthographia, Keil VII., p. 265, l. 3: Accedit per e ab ambulando, accidit per i ab eventu. Id., p. 271, l. 16: Desperatus per e scribendum, dispersus per i. discedo per i, descendo per e. In the Orthographia Albini Magistri, Keil VII., p. 300, l. 11, delictum and dilectus are distinguished, and p. 306, 1.11 obnixus and obnexus are treated similarly. ${ }^{1}$ Thurot, Extraits, p. 520, quotes the following from a tenth-century manuscript which, according to Thurot, follows mainly Isidore's Origines: ${ }^{2}$ Irritum, ilico, igitur, imitator, imago, ima, immo, icona (igona Cod....), iter, iterum per $i$. P. 521: Genetrix, auxiliatrix, adiutrix scriptrix, distructrix, vindix, victrix per $i$ et $x$ scribitur. A thirteenth-century writer (Thurot, op. cit., p. 532) has the following: Tempora, non timpora. Extemplo, non extimplo: Saltem, non saltim. This piece might be of some value if we knew to what locality the author should be assigned. For the sake of completeness I add the following from Erasmus, De Pronuntiatione Dialogus, col. 838 B: Et hic [in pronouncing $i$ ] bifariam peccatur a multis. Siquidem apud Brabantos, campestres quidam pro $i$, sonant diphthongum Graecam $\varepsilon$, quam evidenter audis quum nostrate lingua dicis ovrim, et quum Latine dicis, hei mihi, veluti quum pro via dicunt veia, pro pia peia.

Conclusions based on the Latin manuscript forms. The testimony of the grammarians just cited is apparently of little account, but the manuscript evidence has a certain value. Here a difference in the treatment of accented and of unaccented syllables is not perceptible. Summing up briefly, we find the interchange of $i$ and $e$ uncommon everywhere in Gaul after the beginning of the

[^17]last quarter of the eighth century. The spelling of the Carolingian period distinguishes $\tau$ and $\bar{e}$ so carefully as to establish a very strong probability that the phonetic reform which identified $\check{\imath}$ and $\bar{\imath}$ was generally accomplished in the North before the middle of the ninth century. Before the group $n+$ consonant, however, the vowel in some quarters was not changed to $i$ until the eleventh century or later (cf. the forms given on p. 33). The spelling -insis beside -ensis, occurring in documents from the Center as late as the second half of the ninth century, is of rather doubtful significance, but may perhaps indicate that $\check{\imath}$ before nasal + consonant was still sounded as $e$, the nasalization of the vowel having prevented a reform, as was the case in the group $\mathrm{u}+$ nasal + consonant. ${ }^{1}$ Learned words borrowed before the reform have an $e$ in French representing the clerical Latin $\ell$, while those borrowed later present an $i$ (cf. Paris, J. S. 1900, pp. 366-7). Some of those, however, which have an $e$ in Old French must have had an $i$ at the time of their adoption, the $e$ being perhaps due to later dissimilation: ${ }^{z}$ on the other hand, some Merovingian loan-words show an $i$ for $\ell$ in O. F., this $i$ being due to a partial correction effected in Carolingian times. Cf. Paris, J. S. 1900, p. 366, note 1, p. 370, note 7. Note the following forms in $e$ : batesme, chardenal (cf. Godefroy, s. v.), chasteé, crucefis, descepline, enemi, esperit, estoire, fermetet, glorefïer, húmele, empedement, inuitele, mesericordie, sacrefier, sacrefise, salvetet, seignacle, senefier, signeficacion, tradetor, treble, vegile, vivefier. Observe also the following forms in $i$ : abisme, altisme, avarice, cantilee, chapitle, charitet, cigogne, cigüe, coutiver, discipline, domnizelle, edifïer, ensigne, fortisme, juïse, justise, livre, nobilie, saintisme, sinagoge. The scribe of the Strassburg Oaths certainly

[^18]pronounced $₹$ as $e$, e ẹi: cf. the forms savir, podir, quid, sit, and note also in, inquant, prindrai, int. ${ }^{1}$ The scribe of the Eulalia, however, used the letters $e$ and $i$ as they were used later, and so must have pronounced every Latin $i$ as $\underset{\text {. . As examples may be given anima, }}{\text { a }}$ inimi ( $i$ certainly $=i$ ), Maximien, virginitet, figure. The fact that the writer did not spell rex, qued, concreidre (note the use of two letters), degnet, with an $i$ instead of $e, e i$ is also significant. The value of the $i$ in domnizelle is rather doubtful, but it seems not improbable that it also stands for $i$ : for the other view, see Paris, J. S. 1900, p. 301, note 1, who believes that Berger was wrong in calling the word learned. ${ }^{2}$ At any rate this single word cannot prove that the scribe ever pronounced Latin $\check{\imath}$ as $e$ or as $e i$.

## $\overline{\mathrm{E}}$.

The spelling for the ancient $\bar{e}$ which appears to have been correct in the seventh century is either $i$ or $e$. The sound pronounced, identical with the sound of $\check{\imath}$, varied according to the position of the vowel with regard to the accent and according to the nature of the following consonant or consonants (e, ei, iei >i). The vernacular development of $i e i$ into $i$, which was doubtless followed for a certain period, must have been corrected sooner or later, on account of the evident conflict of this pronunciation with the spelling. But it is not clear that the spelling itself, in this instance, did not follow the popular pronunciation for a considerable time. The word segrei $>$ segroi, secrei (cf. Godefroy s.v.) was popularized in Merovingian times: the form secré, riming with words in $e<a$, shows a change of termination indicating that the endings -etum and -atum sounded almost alike in the Merovingian period. MeyerLübke (Litbl. 1891, col. 303) is perhaps right in taking cruel as a borrowing from the learned language; ${ }^{3}$ but there is no reason for considering the vowel $e$ riming with $e<a$ as the regular vowel in

[^19]Old French "book-words," as this scholar apparently does. Loanwords popularized after the Merovingian period regularly present the vowel riming with $e<e$; cf. [Schwan-] Behrens, p. 36, who cites prophete (Roland 2255), secret and decret. All the evidence goes to show that this vowel was chosen as the sound for every Latin $e$ at the beginning of the Carolingian period. It is hard to see just what is meant by the following passage (J.S. 1900, p. 360): "Elle (the Carolingian reform) a prononcé è et é, $\delta$ et $\sigma$, d'après des règles inconnues du latin classique." It seems possible that Paris has been misled by Meyer-Lübke's supposed view noted above, or by the ambiguous statement made by the latter in the Romanische Grammatik, I., p. 28, to the effect that Latin $e$ was pronounced close in France "bis ins XVI. Jahrhundert." This rule is based on a passage from Sylvius ( 1531 A . D.), which I quote in the fuller form given by Thurot (Pronunciation, I., p. 76, note): Syllabam el nonnunquam voce Latinorum proferimus, ut crudelis, cruel, quomodo Gabriel, aliquando autem ore magis hianti, ut....elle. $E$ etiam ante $r, s, t, x$, et quasdam alias consonantes, in omnibus apud Latinos vocem non habet eandem. Nativum enim sonum in pater, es a sum et textus pronuntiatione quorundam retinet. In erro, autem, gentes, docet, ex, nimis exertum et, ut sic dicam, dilutum. Sic apud Gallos sono genuino profertur in per a par, paris, es, es a sum, et conjunctione..., alieno autem et lingua in palatum magis reducta diductisque dentibus in erracer...eradicare, escrire, ettoné, a pedo pet, eppeler. . .extraire. The only fair inference to be drawn from these words is, that at the beginning of the sixteenth century, French e before certain consonants was passing into $\varepsilon$ (for further evidence of this fact, see Thurot, Prononciation, I. pp. 55 ff .), and that speakers of Latin in this late period were pronouncing $e$ in that language precisely as in analogous French words. The circumstance that in both Provençal and Italian learned words accented $\bar{e}$ is regularly represented by $\ell$, argues for an early adoption of the pronunciation of Latin $\bar{e}$ as $\varepsilon$ in Northern France. Pio Rajna (Biblioteca delle scuole italiane, 1891, p. 293) ${ }^{1}$ informs us that at present, in all Italy except Lombardy, Latin accented $\bar{e}$ as well as accented $\mathscr{\ell}$ is read as $\varepsilon$. He also expresses the

[^20]surprising opinion that this system is some fifteen centuries old. Since, however, he has apparently not investigated the orthography of the eighth and ninth centuries, we seem to have reason to doubt his chronology. Some documents written in this period (Historiae patriae Monumenta I., numbers 8 and 9, Brinetto, Codice diplomatico toscano, Part I., Vol. II., number 37, and Marini, number 98) seem to present the occasional graphic interchange of $e$ and $i$, indicating that $\bar{e}$ and $\breve{\check{ }}$ were still identical. Learned words having $e$ for $t$, such as molteplice, partecipe, seem to point in the same direction. ${ }^{1}$

## E.

In an early period with which I need not concern myself. here, Latin $\check{e}$ and $\bar{e}$, when unaccented, had coalesced in Gaul. The ancient qualitative distinction between $\check{\ell}$ and $\bar{e}$ in this position was never restored in learned speech. The spellings given below under this head furnish some little additional evidence concerning the period in which the value of Latin $\check{\imath}$ was changed to $\underset{i}{i}$. In the accented position, the pronunciation of $e$ in learned Latin followed all the vernacular developments ( $e>$ nasal $e>$ nasal $a, e>e e$ $>i e, e+$ palatal $=e i>e e i>i e i>i)$ step by step for certain periods, after which it was liable to correction. In Carolingian times $\mathscr{E}$ and $\bar{e}$ were identical in all positions. I may note here once for all that when preceding a nasal in a closed syllable, the value of $\check{\varepsilon}$ ( $=$ nasal $\ell$, later nasal $a$ in the Center) was not changed to nasal $a$ (later $\varepsilon$ before nasal only, the nasal being sounded) until the sixteenth century. Cf. Thurot, Prononciation, II., pp. 459-76.

## I. $\breve{\mathrm{E}}$ not followed by a Nasal.

## 1. In accented syllables.

dies dieci: T. 19.38: 670-1 O; La Morlaye. K. Nyrop, Grammaire historique, I., $\& 166$, regards this spelling as

[^21]a genuine example of $i e<\check{e}$, while P. Marchot, Petite Phonétique, pp. 26-8, attributes the first $i$ in dieci to the influence of the preceding word. Since however the scribe in his vernacular doubtless pronounced decem with the vowel $i$ in the first syllable, it is also possible that the $e$ in dieci (for dici) is due to the $e$ in dies, which itself was indistinctly sounded.
delictit: ${ }^{1}$ T. 37.11: 696 O; St.-Cloud. On this important form, see below, p. 35 .
subnixa: T. 101, p. 75, col. 1, l. 6 f. b.: 811 O; Bonneuil. ${ }^{2}$ This spelling occurs occasionally from the ninth to the eleventh century, and perhaps later, when it can have no significance. Other examples: T. 157 and 231 and 232; Redon 42; Cluny 2826 and 2863.
univirsa: ${ }^{3}$ T. 234, p. 146, col. 2, l. 5 f. b.: 960 O; York.

## 2. In unaccented syllables.

deberit: T. 6.8: c. 628 O.
oportit (2), licerit (5): T. 11: 653 O; Clichy.
subscribire: T. 13.5: c. 657 O.
derelinquire (4), deberit (5), parti (abl., 5), etc.: T. 15: c. 658 O.
pertenit: T. 23.2: 681 O.
pristote: T. 26.52; c. 690 O; Arthies.
rispunsis: T. 28.5: 691 O; Chatou.
milli: T. 30.4: 692 O; St.-Cloud.
intromittire: T. 36.3: 696 O; Chatou.
obponire (7), cf. obponere (6): T. 42; 703 O; Quiersi.
inpidimento: T. 50.17: 717 O ; Compiègne.
quietim (abl.): T. 61, p. 51, col. 2, 1. 10: 768 O; St.-Denis.
vindicit: 'T. 76, p. 55, col. 1, I. 6 f. b.; 769 O.
Sancti Mariae (1. 7), diberit, ingredire (1. 24): T. 69, p. 56, col. 2, 1. 24: 771 O; Worms.

[^22]accipire: T. 77, p. 61, 1. 11: 775 O.
comis: T. 81, p. 63, col. 2, l. 10: 779 O; Héristal. T. 88, p. 68, col. 2, l. 9 f. b.: 790 O; Mercia? T. 89, l. 10: 790 O; Kufsein.
aelymosina: T. 89, p. 69, col. 1, l. 4 f. b.: 790 O; Kufsein.
polix dumo: Cassel Glosses, Förster and Koschwitz, Übungsbuch, col. 39, l. 43: IX.
dedivet: Mabillon 65, D: 821 O; probably Caunes.
sigale: ${ }^{1}$ T. 123, p. 85, col. 1, l. 14: 832 O; St.-Denis.
Hirmengardam (four later MSS have $e$ instead of $i$ ): Vita Hludowici, Mon. Germ. Hist. II., p. 626, l. 2: after 840 IX./ or X.
uxorique: T. 232, l. 17: 941 O.

## II. E. followed by a Nasal. $^{\text {a }}$

tinendum: Vienne 130, p. 94, 1. 2: 927, XII.
tineo: Cluny 2263, l. 17: 994 C .
III. $\breve{\text { E }}$ followed by Nasal + Consonant.

## 1. Accented.

vivindum: Joca Monachorum, ed. P. Meyer, Rom. I., p. 486, § 10: VI.'?, VIII.
vidintur: T. 25.14: 688-9 O; Compiègne. T. 31.12: 692 O; St.-Cloud. T. 34.2: 695 O; Compiègne. T. 37.10: 696 O; St.-Cloud.
conservintur: Т. 34.17: 695 O ; Compiègne.
nimpe: T. 36.20: 696 O; Chatou.
tollintur, exigintur: T. 44.7: 710 O; Montmacq.
Novimbres: T. 128 p. 90 l. 4 from end: 832 O; St.-Denis.
novimbri: Cluny 414, p. 401, l. 9: 933-7 O.
settinber: Cluny 2705, p. 729, l. 1: 1016 C.
decimbrio: Vienne 28, last line: 1032 ?, XII.
${ }^{1}$ This word may well be a proparoxytone. In that case it does not belong here.

## 2. Unáccented.

debirint: T. 13.5: c. 657 O.
$r[e f e r] a n d a r i i s: ~ T . ~ 15.2: ~ c . ~ 658 ~ O . ~ I ~ c a n n o t ~ e x p l a i n ~ t h i s ~$ form.
timtaverunt: T. 19.26: 670-1 O; La Morlaye.
direxsissint: T. 22.19: 679-80 O; Lusarches.
prindendum: T. 69, p. 56, col. 2, 1. 18: 771 O; Worms.
timporib' chinnapahhun: Cassel Glosses, Förster and Koschwitz, Übuingsbuch, col. 37, 1. 9: IX.

Conclustons regarding the history of $\check{\mathbf{E}}$ in clerical Latin. - As to the treatment of accented $\not \subset$ before nasal + consonant, ${ }^{1}$ it is evident from the occurrence of forms like vidintur, nimpe in documents of the seventh century, that when preceding this group, accented $\check{e}$ and accented $\bar{e}$ had coalesced in the vernacular and in clerical Latin. Since this coalescence never occurs in this period under other circumstances, we are entirely justified in concluding that the vowel was nasal. In other words, the nasal vowel $e<\bar{e}$, $\ell$, $\check{c}$ (followed by a nasal + consonant) existed in Central France at least as early as the seventh century. The clerical language followed the vernacular developments of $\check{e}$ preceding a nasal in closed syllables until long after the Old French period (cf. p. 31). When not in position and not followed by a palatal, accented $\ell$ was pronounced by Merovingian clerks as a diphthong (ie). The scribe of the Strassburg Oaths still pronounced this ě as $i e$, as may be inferred from his choice of the symbol $e$ to represent the French diphthong in sendra < senior. ${ }^{2}$ The diphthong in Old French loan-words like teniebres, liepre, siecle points in the same direction. Paris indicates the difficulty of such forms in the following words (J. S. 1900, p. 372, n. 4, and p. 367, n. 5): "Le mot siecle est surprenant, à cause de la diphtongaison de l'e; peut-être est-ce siegle refait sur le latin." "Cette forme [liepre] .... semble prou-

[^23]ver que la réduction de $p$ à $b$ est antérieure à la diphtongaison de l'e." Since the interpretations which Paris here suggests ${ }^{1}$ are evidently not convincing even to him, and since moreover we may be fairly sure on general principles alone that the diphthong must have come into existence in careful as well as in vulgar speech while the phonetic law was operating, we are convinced that siecle at least, and very probably the other two forms also, merely indicate the presence of the diphthong ie in Merovingian clerical Latin. The Carolingian reformers invariably pronounced $\check{e}$ as $e$ riming with $e<e^{2}{ }^{2} \quad$ The scribe of the Eulalia was obliged to use two letters to spell the diphthong in ciel.

Turning to the development of accented $\check{\varepsilon}+$ palatal, we must first discuss the chronology of the vulgar change $i e i>i$. Paris (J.S. 1900, p. 367), to explain the Old French words eglise, empire, matire, reconstructs the forms egliesie, empierie, matierie, which, as may be seen by their final vowel, he appears to assign to the eighth or ninth century. There are, however, unmistakable indications that the stage $i<i \ell i$ was reached before the seventh century. In the first place must be observed the seventh-century forms in -irium < - $\boldsymbol{\eta} \rho \iota o v$ (pp. 21 f.): here, to be sure, the uncertainty as to the value of $\eta$ leaves some doubt. In the second place, however, we should call attention to the remarkable spelling ( $p .32$ ) from the year 696 (delictit). Inasmuch as the letter $i$ never stands for accented $\varepsilon$ in the royal diplomas, and since the form must have been very familiar to the writer, we may be sure that the second syllable of this word was pronounced litt'. Then in the third place we may cite the form empirium, Fredegarius I. 49.3 (c. 613, VII. or VIII.), which surely cannot be due to the analogy of martyrium, as Haag thinks (R. F. X., p. 842). In the fourth place must be mentioned the seventh-century form aeclisia (p.21), which has been discussed by Schuchardt, Z. R. Ph., 1901, pp. 344 f. This scholar is somewhat inclined to believe that the $i$ in aeclisia stands for $e$.

[^24]Paris, Rom. 1901, p. 446, in a very brief review of Schuchardt's article, remarks that both pronunciations, $e$ and $e$, must have coexisted. It does not seem likely, however, that Paris assumes the coexistence of $e$ and $\rho$ in the same locality. At any rate we may, I think, be certain that the $i$ in this word does not stand for $e$, but for $\underset{i}{ }$. A seventh-century Latin form in $e$, would have developed into *egloise - a form which did not exist. The evidence of Old French words ending in iere and ire should also be added. Cohn (Suffixwandlungen, pp. 283-91) takes matiere matire, bautestiere batestire, maiestiere maestire, empiere empire, cimentiere cimentire, as showing a change of suffix. Paris (J. S. 1900, p. 367, note 4) remarks that matière is a modern form modeled after manière. The presence of the diphthong indicates, however, that the word was current in eighth-century French. ${ }^{1}$ The existence of remiere beside remire $<$ remedium and of miere beside mire $<$ medicum $^{2}$ shows, I believe, that such forms in -iere beside forms in -ire must have some common phonetic explanation. The early development of $\check{e}+$ palatal into $i_{\varepsilon} i>i$ presents the key to the difficulty. Speakers of correct Latin must have followed the popular development of $\check{e}+$ palatal at least as far as $i e i$. Since, however, in the sixth century at least, the conservative power of the written letter must still have been strong, it is inconceivable that good speakers should have pronounced the $e$ in words like materia as $i$ for any considerable period. At that stage of the development of the Latin language in Northern Gaul, the correct sound of accented $\check{\varepsilon}$ before a single consonant was $i e$, the sound $\varepsilon$ having gone entirely out of existence in this position. We should accordingly not be at all surprised to find that the sound introduced to replace the incorrect $i<i \ell i$ was not $\ell$, but $i e$. And such, indeed, must have been the case. It seems likely enough that maniere beside manire belongs in the same category, whatever be the relation between *manaria and $*_{\text {maneria }}$.

[^25]
## Prothetic E.

On the prothetic $c$ in clerical Latin during the Merovingian period, see Paris, J. S. 1900, pp. 299 f. The tendency to remove the vowel which was apparently always prefixed, both in the learned language and in the vernacular, to words beginning with certain groups of consonants (as in eschola, escripsi, etc.), seems to have begun in the Carolingian period in Ile-de-France, although in some regions the old phonetic form was not corrected out of existence until the sixteenth century and, later. I quote a few spellings, which might be multiplied, from the eighth and ninth centuries. ${ }^{1}$
supraescripto: T. 48.5 and 13: 716 O; Compiègne.
escripsi: T. 67, p. 55, col. 2, l. 15: 769 O.
escripsit: T. 68, 1. 2 from end: 770 O.
istibulatione: T. 68, p. 56. col. 1, l. 19: 770 O.
iximus ( $=$ scimus): Mabillon 65, l. 10, and D, 1. 6: 821 O; probably Caunes. This spelling shows that, in some quarters at least, the prothetic $i$ was handed down by learned tradition attached to words in sc long after the group had developed into $s$, and after the necessity for such prothesis had disappeared. Hence O. F. escient is not necessarily, on account of its initial vowel, a loanword introduced before the "alteration" of $c$, as Paris is somewhat inclined to think (J.S. 1900, p. 300, note). Such spellings, to be sure, do not exist in documents written in Ile-de-France; but there is nothing to show that the phonetic phenomenon was confined to certain regions.

## A.

## I. In Accented Syllables.

rogitus, rogetus: This word is apparently a paroxytone. In any case it shows a change of conjugation. It occurs in the following places: T. 19.35 (bis) and 36: 670-1

[^26]O: La Morlaye. T. 29.19. c. 691 O. T. 36.32, 35 and 38: 696 O. T. 39.24 and 27: 697 O; Bougival. Cf. T. 40.94: c. 700 O; Paris (here the word is spelled rogatus). T.78, next to last line: 777 O ; Héristal. Cluny 30, p. 39, l. 13 (roytus): 887 C. Cluny 32, p. 39, 1. 13 (roytus): 888 C. Cluny 71, p. 81, l. 17 (roitus): 901 C.
minuare: T. 21.17: 677-8 O; La Morlaye.
pristitum ${ }^{1}$ (= praestato): T.37.3: 696 O; St.-Cloud. There can be no doubt whatever that this word is a paroxytone: for the letter $i$ never stands for accented $e x$ in these documents (except before nasal + consonant).
abolare ${ }^{2}$ : T. 39.16: 697 O; Bougival.
In the vernacular of Northern France, accented $a$, when not in position, was gradually transferred from the back to the front of the oral cavity, becoming $e$. This vowel, in Old French, was identical neither with $e<$ accented $\check{\check{n}}$ nor with $e<$ accented $\check{\ell}$. In other words, three front vowels besides $\underset{i}{ }$ existed in Central France in the twelfth century. This development of $a$ to $e$ was followed, step by step, in the learned pronunciation of Latin. We should not expect to find many cases of the interchange of $e$ or $i$ with $a$ in Merovingian spelling, for the reason that $\bar{e}$ and $a$ as developed under the accent were clearly distinguished in pronunciation during the seventh and eighth centuries, just as they were later. Under these circumstances, the few spellings given above establish a considerable probability that $a$ not in position was a front vowel in the second half of the seventh century. For on any other basis the confusion of the endings -etus and -atus presented by the forms rogitus beside rogatus, and pristitum beside praestato, is hard to explain. This

[^27]pronunciation of $a$ as a front vowel was evidently considered faulty by Carolingian scholars, who taught that the letter should invariably be sounded as $a$. Loan-words having $e<a$, which are clearly Merovingian, such as megre, egre (Schwan-Behrens, p. 91) came into the vernacular before this reform occurred, while those having a for Latin a not in position such as pape, estat, cave, cas, etc., were certainly borrowed after the accession of Charlemagne. The scribe of the Strassburg Oaths, who still read Latin $a$ not in position as a front vowel, naturally used the letter $a$ to indicate the same sound in French ( $e<a$ ), in words like fradre, salvar. ${ }^{1}$ The scribe of the Eulalia, on the other hand, had been taught the new-fashioned uniform pronunciation of $a$; so that when he tried his hand at writing French, he naturally did not think of using the letter $a$ to express the sound, but chose the letter $e$ instead (virginitet). There can no longer be any doubt that these two scribes pronounced French $e<a$ with the same front vowel.

When preceded and followed by a palatal, $a$ in Northern France passed into $i e i$, later $i$. The following spellings should be noted: Childriciaecas (4), Childriciaegas (11, 16), Childriciagas (8): T.43: 709 O; Quiersi.

## II. A In Unaccented Syllables.

The spelling of Merovingian documents seems to indicate that three final vowels still existed in Central France in the seventh and in the first half of the eighth century: these vowels are $\bar{o} \delta \bar{u} \check{u}$, $\bar{\imath}{ }^{\imath} \bar{e} \bar{e} a e \check{e}$, and $a$. Whether or not the care with which these groups are distinguished in writing is significant, may perhaps appear doubtful. ${ }^{2}$ At any rate the ancient value of $a$, which in the final and some other positions, according to the popular development, became a before the ninth century, must have been restored by the Carolingian reform.

[^28]adjecencias: Т. 12.4; c. 656 O.
adgaecenciasque: T. 14.6: 658 O.
aquerumque: T. 25.8: 688-9 O; Compiègne.
monestirio: T. 41.7: с. 700 O.
monisterium: T. 56, p. 47, col. 2, l. 3 f. b.: 755 O; Compiègne.
adjecenciis: T. 89, l. 15, etc.: 790 O; Kufsein.
adjecentiis: T. 119, p. 83, col. 1, l. 23: 827 O; Quierzi.
cepellam: T. 123, p. 85, col. 2, 1. 19 f. b.: 832 O; St.-Denis.
inmuteretur: T. 128, p. 90, col. 1, 1. 9: 835 O; Doue.
genuario: Cluny 42, l. 3: 891 O . This spelling perhaps shows that the peculiar local Burgundian development of gemais, giemais, jimais, etc. (P. Meyer, Rom. VI., p. 41) goes back to as early a period as the ninth century. H. Bresslau (Urkundenlehre, I., p. 564) remarks that this form of januarius cannot be instanced for Northern France.
ienoario: Toulouse 37, 1. 10: 1155, copied probably 1176-98.
The scribe of the Strassburg Oaths, it should be noted, was doubtless quite unacquainted with the reformed pronunciation: witness the transcriptions salvament, dunat, adiudha, cosa, fradra, sagrament, conservat, sENDRA, nulla, contra. It should be assumed, as is generally done, that the sound $a$ is present in each of these words; cf. fazet, suo part. The scribe would not hạve chosen this symbol if he had not been accustomed to pronounce Latin $a$ in similar positions as ${ }^{2}{ }^{1}$

## on.

This vowel, when not accented, was doubtless treated as in the vernacular until the arrival of the Carolingian reform movement, when it received a value identical with that of the popular resultant of accented $\varnothing$ in position. When accented and in position, it was likewise treated as in the popular speech, becoming nasal before a nasal consonant. When not in position it diphthongized under the accent, but at the time of the Carolingian reform this pronunciation

[^29]was considered faulty and changed to 2 . The scribe of the Strassburg Oaths must have pronounced accented $\varnothing$ not in position as a diphthong: this is indicated by the spelling vol, the $o$ of which was almost certainly pronounced as $u o$, since the undiphthongized form of this word is shown by the few examples given in Godefroy to be very unusual. The spelling buona in the Eulatia proves that the scribe pronounced accented $\varnothing$ as a monophthong: for otherwise he would not have used two letters to indicate the French diphthong. The late loan-words escole, cqfre, apostolie, estorie, memqrie point to the Carolingian pronunciation of accented $\delta$ as $\varrho$. Chanonie, monie owe their vowels to the ancient chanonge, monge which they replaced.

## 1. $\overline{\mathrm{O}}$ not followed by a Nasal.

## 1. Accented.

efudiet (=effødiet): T. 19.2: 670-1 O; La Morlaye. It seems probable that the $u$ in this word is to be taken as an indication that $o+$ palatal had completed its develop--ment in the vernacular before the second half of the seventh century. ${ }^{1}$ The analogy to the treatment of $e+$ palatal is striking (pp. 35 f .). It is improbable that this $u$ is merely a mistaken spelling for $q$ : such errors occur almost never in these documents, the following being the only other example which I have been able to find:
nustros: T. 55 , col. 1, 1.4: 753 O. Is the reading correct? prepusito (l. 18, etc.), nustrum (p. 146, col. 2, l. 7 f. b., etc.): T. 234: 960 O; York. On this curious document, cf. p. 6.

## 2. Una ccented.

puciatur (= potiatur ?): T. 12.9: c. 656 O.
sulicitudo: T. 56, p. 47, col. 2, l. 2: 755 O; Compiègne.

[^30]pussessio: T. 234, p. 146, vol. 2, l. 5 f. b.: 960 O; York. In this remarkable document occur also Daguberti, perhurrescens, putestatem.

## II. ó before a Nasal, Unaccented.

munachorum: T. 88, p. 68, col. 1, 1. 5 f. b.: $\mathbf{7 9 0}$ O; Mercia? Cf. munasterio (ibid., l. 14 f. b.).
bunuarium: T. 114, p. 81, col. 1, l. 11, etc.: 820 O; Servais. Cf. bonuarios: T. 113, p. 80, col. 2, l. 11: 820 O; Compiègne. This word is spelled with o or $u$ indifferently in ninth-century documents from Ile-de-France. The latest examples which I have noted are in T. 200 ( 868 O , Senlis) and T. 227 (916 O).
munasterii (1.12), Diunisii (1. 12), hunorifice (1. 13): T. 234: 960 O; York.

## III. $\overline{0}$ followed by Nasal + Consonant.

## 1. In accented syllables.

ad Munte Sancto Micaelo: T. 56, p. 47, col. 2, 1. 12: 755 O; Compiègne.
sumpnus: Reichenau Glosses, Förster and Koschwitz, Übungsbuch, col. 26, l. 1099: VIII.
dunnus (= dominus): Cluny 1940, 1. 6: 992-3, XI. / XII. This spelling occurs often in documents of the cartulary of Cluny written in the ninth and tenth centuries: e.g., in numbers 1964, 2178, 2197, 2945 (this last document dated c. 1040, XI. / XII.).

## 2. In unaccented syllables.

Muntecellis (=Fr. Monceaux): T. 20.3: 677-8 O; La Morlaye.
cumponat: Vienne 7, p. 9, l. 9: 973 ?, XII. Cluny 2263, l. 20: 994 C .

## $\overline{0}$

When unaccented, $\bar{o}$ had coalesced in an early period with $\check{u}$ and later with $\delta$. Merovingian clerks certainly made no distinction between these three originally different sounds. When under the accent, $\bar{o}$ coalesced only with $\breve{u}$, after which it must have developed as in the vernacular until the advent of the Carolingian reform: when not in position and not before a palatal it was sounded as a diphthong (ou) after the diphthong made its appearance in the vernacular of Central France. Carolingian school-masters evidently corrected this diphthong to a monophthong which was not o, but $q$. It is extremely probable that the scribe of the Strassburg Oaths still pronounced the diphthong, while the scribe of the Eulalia certainly sounded Latin accented $\bar{o}$ as a monophthong: for the former wrote in French amur, which he doubtless might just as well have written amor, whereas the latter wrote bellezour; and it is not at all improbable that these two scribes pronounced the French resultant of accented $\bar{o}$ with precisely the same sound. ${ }^{1}$ Old French loan-words like devot, noble, ${ }^{2}$ glorie point to the Carolingian pronunciation of $\bar{o}$ as $Q$. As long as $o$ was apt to be used interchangeably with $u$ in writing Latin, it may be taken for granted that the value of $\bar{o}$ had not been affected by the reform movement. For chronological evidence of this kind, reference should be made to the lists of spellings given below under $\check{u}$.

## Ŭ

During the Merovingian period, $\breve{u}$ was identical with $\bar{o}$ when accented, and when unaccented, with $\bar{o}, \gamma$. The following lists of spellings tend to show how long this condition existed.

[^31]
## I. $\mathbf{U}$ for $\overline{\mathbf{0}}$ and $\mathbf{0}$ for $\breve{\mathbf{U}}$, not before a Nasal.

## 1. In accented syllables.

nuscetur: T. 4.4: 625 O; Etrepagny.
victuriae: T. 11.3: 653 O; Clichy.
universurum: Т. 15.2: с. 658 O.
cognuscat: T. 20.3: 677-8 O; La Morlaye.
mesericordia muti: T. 21.15: 677-8 O; La Morlaye.
urdene: T. 38.9 and 17: 697 O; Compiègne.
cognuscat (p. 47, col. 2, 1. 7), dinuscitur (ibid., 1. 11), sepol-
crum (p. 48, col. 1, 1. 18): T. 56 : 755 O; Compiègne.
cognuscat: T. 61, p. 51, col. 1, 1. 16: 768 O; St.-Denis.
nus (1. 2), vus (1. 10): T. 67: 769 O.
cognuscite (1. 10 f. b.), terraturiis (1. 14): T. 69, p. 56, col. 2:
771 O; Worms.
terraturiis: T. 70, 11. 7, 11, etc.: 772 O; Héristal.
cognuscite (1. 7), terraturiis (p. 63, col. 1, l. 3 f. b.): T. 81:
779 O; Héristal.
cognuscat: Mabillon 53 D (bis): 778 O; Göttingen (Goddinga villa). 58, l. 3: 793 O; Frankfurt am Main (Franconofurd).
gloriusi: T. 88, heading: 790 O; Mercia?
corte: T. 142, l. 11: 843 O; Quierzy. T. 162, l. 12: 850 O; Cambriliaco villa. Cf. Bromeri-corte: T. 165, p. 105, col. 1, l. 16: 854 O ; Verberie. This word is regularly spelled with a $u$ in ninth-century documents, and generally later. Forms in $u$ occur in the following documents: T. 120 ( 828 O, Aix-la-Chapelle); T. 123 ( 832 O, St.Denis); T. 132 (814-40 O); T. 137 ( 841 O, Bonneuil); T. 147 (845 O, Compiègne); T. 160 (849 O, Chartres);
T. 165, p. 105, col. 1, l. 16, Bromereicurtis (854 O, Verberie;
cf. the form with $o$ quoted above from this document);
T. 232 (943 O); etc., etc.
otiusse: Mabillon 92, B.: 858 O; Metz.
octuber: Cluny 61, p. 71, l. 10: 897, XI. / XII.
territuriis: ${ }^{1}$ T. 1.13: 528, X.
Victurius: ${ }^{1}$ T. 3.25: 566, X.; Paris.
territurio: T. 231, l. 9: 939 O; le Berry?
octubris: Cluny 546, p. 531, l. 4 f. b.: 942, XI. / XII.
Anglurum (1. 1), bonurum (1. 2), ulim (1. 7), eurum (1. 19), denariurum (1. 21), sepolcra (p. 147, col. 1, 1. 2, cf. sepulcra, ibid., col. 1, l. 10), excobant (ibid., l. 4); T. 234: 960 O; York. ${ }^{2}$
territurio: Cluny 2938, p. 140, l. 5: c. 1040 O.

## 2. In unaccented syllables. ${ }^{3}$

titolis (1), jobemus (2): T. 4: 625 O; Etrepagny.
neguciante (3), alecus (4): T. 5: c. 627 O; Etrepagny.
singola: T. 6.2: c. 628 O.
menoare: T. 11.9: 653 O; Clichy.
matrigolarius (acc. pl., 3), genetur (5), ipsus (5), auturetate (4): Т. 13: c. 657 O.
filius suos (nominative, 2, 4), pagus (7): T. 15: c. 658 O.
cum hamedius suos: T. 22.16: 679-80 O; Lusarches.
antecessur (3), suos (4): T. 28: 691 O; Chatou.
pascois ${ }^{4}$ : T. 56, p. 48, col. 1, l. 2: 755 O ; Compiègne.
T. 60, p. 50, col. 1, l. 8 f. b.: 768 O; St.-Denis.
missus (for dative): T. 64, p. 53, col. 1, l. 4: 769 O; Samoussy.
cojouis: T. 67, 1. 1: 769 O. The scribe may have pronounced this word as a paroxytone, in which case it does not belong in this column.
Folerado (generally spelled Fulrado): T. 68, 1. 1: 770 O; near St.-Denis?
ad ipsus mansus: T. 76, 1. 15: 775 O; Thionville.

[^32]jobemus: T. 75, p. 59, col. 2, l. 2 f. b., and p. 60, col. 1, l. 16 f. b.: 775 O; Duren.
gluriosiss. (= gloriosissimi): Marini 70 (p. 104), l. 4 from end: 778, apparently original; a decree of Charlemagne. singolis: T. 81, I. 15: 779 O; Héristal.
doato (= ducatu): T. 82, l. 12: 779 O; Duren.
Folradus (1. 1), Folradi (p. 70, l. 1, l.5): T. 90: 790 O;
Pesche. Cf. Fulradus: ibid., p. 69, col. 2, 1. 11.
minos: Redon 209, l. 6: 840, XI., De Sauaico.
per vius publicus: Redon 214, p. 165, l. 11: 842-3, XI., De Gramcampo.
de sepedictus servus: T. 180, p. 114, col. 1, l. 16 f. b.: 861 O; Compiègne.
fraudolenter: T. 187, p. 121, col. 1, 1. 7 f. b.: 862 O; Soissons.
gluriosus (1. 7), preciusorum (1. 12), solidus (1. 21): T. 234: 960 O; York.
custibulacione (= constipulatione): Cluny 1975, l. 19: 993-4 C.
mulinario: Cluny 2280, p. 410, l. 4: 994-1032 O.
corrente: Cluny 2630, p. 673, 1. 2: 1006 C.
Janoarius, Febroarius.
Forms of these words showing $o$ in the second syllable occur as follows: T. 186, p. 118, col. 2, l. 15: 862 O; Compiègne. Montiéramey 10, p. 15, 1. 23: 883 O; Compiègne. Cluny 27, p. 33, l. 11: 885 C. 67, p. 77, l. 3: 900 C. 713, l. 2 f. b.: 918, XI./ XII. 1753, p. 20, l. 15: $987-96$ C. 1777, 1. 12: 988 C. 1798, p. $53,1.2$ : 989, XI./ XII. 2608, p. 9, l. 3 f. b.: 1028 ?, XI./XII. Lérins 149, p. 138, l. 14: 1032, /XIII. Cluny 2900, l. 5: 1035 C. 2954, p. 154, 1. 12: 1041 C. 2982, p. 180, 1. 24, and 2983, p. 182, 1. 23: 1049-60, XI./XII. Grenoble 3, p. 6, 1. 6: 1105, copied in the first third of the twelfth century. Toulouse 37, 1. 10: 1155, copied probably 1176-98. Dauphiné 3, l. 3: 1304 O; Valreas (Vaucluse). 4, p. 14, l. 3: 1327, "papier du temps." Durbon 691, l. 2: 1328-9 O; Aspres-sur-Buëch. Cf. ibid., numbers 736, 737. Montélimar 48, 1. 2: 1341: Avignon. Cf. ibid., number 49.
II. U for $\overline{\mathbf{O}}$ and $\mathbf{O}$ for $\breve{\mathbf{U}}$, followed by Nasal.

1. In accented syllables.
indictiune (l. 10), preceptiunem (p. 146, col. 2, l. 2 f. b.), emendatiune (p. 147, col. 1, l. 2): T. 234: 960 O; York.
Teintuna: T. 277, p. 172, col. 1, 1. 11: 1059 O; donation from Edward III. of England. Cf. Teintona: T. 288, p. 179, col. 2, l. 4: 1069 O; donation from William I. of England.

## 2. In unaccented syllables.

Diunisii: T.72, p.59, col. 1, 1.3: 775 O; St.-Denis.
mumentaneo: T. 88, 1.4: 790 O; Mercia?
incolomitate: Cluny 3112, l. 6: 1049-1109 ?, XI./XII.
III. U for $\overline{0}$ and 0 for $\breve{\mathrm{U}}$, followed by Nasal + Consonant.

## 1. In accented syllables.

respunsis: T. 14.2: 658 O.
incumptis: T. 19.3: 670-71 O; La Morlaye.
respunsis: T. 22.6: 679-80 O; Lusarches.
prumpta: T. 26.50: c. 690 O; Arthies.
respunsis: T. 48.5: 716 O; Compiègne.
calomniam: T. 60, p. 50, col. 1, l. 26: 768 O; St.-Denis.
respunsis: T. 75, l. 20: 775 O; Duren.
tonso (tunso in text): Monumenta Germaniae Historica II., Vita Hludowici, p. 642, l. $16^{2}$ : after 840, IX./ or X.
dicombito: Redon 144, p. 110, l. 4 f. b.: 865-70, XI.; De
Rufiac. Redon 146, l. 9: 821, XI.; De Rufiac. Etc.-
Du Cange registers a decumbitio.
prumta: Vienne 128, p. 92, l. 1: 927-8, XII. Cf. promta:
Vienne 130, l. 3: 927, XII.

## 2. In unaccented syllables.

volontatem: T. 11.6: 653 O; Clichy.
prumtissema: T. 46.7: 716 O ; Compiè̀nne.
prumptissimam: T. 61, p. 51, col. 1, 1. 19: 768 O; St.Denis.
noncupante: T. 68, 1. 7: 770 O.
prumptissima: T. 70, p. 57, col. 2, l. 24: 772 O; Héristal.
prumptissimo: T. 89, p. 69, col. 1, l. 14 f. b.: 790 O; Kufsein.
calomniare: Cluny 110, 1. 18: 910 C.
Testimony of Grammarians as to tee sound of Ŭ.-The grammarians give little or nothing which can be used in following the changes in the pronunciation of $\check{u}$. The following may be registered here: Bedae de Orthographia, Kcil VII., p. 281, l. 26: nongentos, non nungentos ab novem. Lbid., p. 287, l. 24: Rubor coloris est, robur virtutis, robor arboris. Orthographia Albini Magistri, Keil. VII., p. 308, l. 3: Pudoris per u et per o scribendum est, poderis per o et per e, id est tunica talaris. Thurot, Extraits, p. 520 (from a tenth-century manuscript): ${ }^{1}$ Auctor, defensor, accusator, doctor, scriptor, salvator, protector, compaginator, omnia haec per tor sillabam scribendum est....Apostolos, magistros, discipulos...si de pluribus fuerint, per o scribendum est, si de singulari numero, per $u$. (P. 521) Crux, nux per $u$. Mox, vox per o. Erasmus, Dialogus, col. 936, E, notes the phonetic identity of the $\sigma$ and $\dot{u}$ in tondere, tundere, rhombus, tumbo, sunto, sontes.

## Conclusions as to the History of $\breve{\mathrm{U}}$.

Except in a few words which now have the vowel of the French article un (hunc, nunc, tunc), $\check{u}$ before nasal + consonant has followed the popular developmen't (= nasal $o$ ) down to the present day. A. Eiselein, R. F. X., pp. 524 f., shows by an examination of rimes that Latin final $u m$ had the same value as French final on from the twelfth to the sixteenth century. ${ }^{2}$ On sixteenth-century

[^33]and later pronunciations of $\breve{u}$ in these two positions, see Thurot, Prononciation II., p. 533, and Lesaint, Prononciation, p. 463. The history of $\breve{u}$ in other positions is more difficult. Some time after the third quarter of the eighth century, $\check{u}$, which had previously been identical with $\bar{o}$ in all positions, was given the same sound as that of $\bar{u}$. The negative evidence of the Latin manuscripts which have come down to us from the periods following the third quarter of the eighth century leads us to believe that in the Central region the reform was well in progress before the beginning of the ninth century. The spelling of the word corte with both $u$ and $o$ as late as the middle of the ninth century (cf. p. 44) is probably due to the fact that the corresponding ancient form was unknown. The expression de sepedictus servus ${ }^{1}$ written at Compiègne as late as 861, may perhaps be Merovingian in phonology as well as in grammar; but this is rather doubtful, and even if such is the case, this isolated instance would not suffice to prove that the old pronunciation of $\breve{u}$ was still generally maintained in this region. In other quarters the progress of the reform is hard to make out. The scribe of the peculiar document written at York in $960^{2}$ still confuses $\bar{o}$ and $\check{u}$ to a very remarkable extent. The cartulary of Cluny has some striking examples of this confusion as late as the end of the tenth and the beginning of the eleventh century. The interpretation of the phenomenon is seriously complicated by the fact that $\bar{u}$ and $\bar{o}$ before a nasal and accented are known to have coalesced in the vernacular somewhere in the neighborhood of Cluny. On this point see G. M. Breuer, Girart de Rossillon, p. 23; W. Foerster, Ysopet, p. XXXIV.; E. Goerlich, Makkabäer (Rom. Bibl. II.), p. VIII., and Fr. St. VII. (1889), p. 99; and P. Meyer, Rom. VI. (1877), p. 43. We cannot at present attempt to define the chronology of the reform which identified $\breve{u}$ with $\bar{u}$, in any region except the Center. Here we are justified in concluding that the change was effected in the ninth century, first on account of the absence of the confusion of $\bar{o}$ and $\breve{u}$ in the Latin manuscripts written in this period, and secondly because of the analogy which must be assumed to have existed in the treatment of ${ }_{\imath} \bar{\imath}, \check{\varepsilon} \bar{e}, \delta \bar{o}$, and $\breve{u} \bar{u}$. It has been

[^34]shown that in Central France $\check{\imath}$ and $\bar{\imath}, \check{c}$ and $\bar{e}$, $\begin{gathered} \\ \text { and } \bar{o} \\ \text { were made }\end{gathered}$ respectively identical in the first half of the ninth century. Since the object of this change was obviously to prevent graphic confusion, it is unreasonable to suppose that $\breve{x}$ was left by the reformers identical with $\bar{o}$. It may indeed be urged that French scribes as late as the thirteenth century chose the symbol $u$ to represent the vulgar sound going back to accented $\bar{o}$ in position. It is a fact that this use of $u$ existed not only in England, where it was extremely common, but to a greater or less extent in nearly all parts of Northern France. On this point I may refer to G. M. Breuer, Girart de Rossillon, pp. 21-23; B. Eggert, Z. R. Ph. XIII., p. 365 (La Manche); A. Küppers, Volkssprache des XIII. Jahrhunderts in Calvados und Orne, p. 12.; E. Goerlich, Makkabäer, p. XIX., Nordwestliche Dialekte, p. 55; K. Huber, Roman du Mont SaintMichel, p. 168 (Normandy); Koschwitz, Voyage de Charlemagne, Überlieferung, pp. 32, 33, 34 f. (Norman); F. Harseim, Vokalismus im Oxforder Psalter, p. 295; Koschwitz, Commentar, p. 206 (Saumourois or Touraine); F. Neumann, Lautlehre von Vermandois, p. 45 (Picardy); T. Tenderling, Lautlehre des poitevinischen Katharinenlebens, A.S.N.S., 1882, p. 281. In all the regions discussed by these scholars, to which others might be added, the letter $u$ often or occasionally represents the sound derived from accented $\bar{o}$ in position, not followed by a nasal. Its use for accented $\bar{o}$ followed by a nasal in a closed syllable is much commoner almost everywhere. This last fact is explained by the circumstance that Latin $u$ followed by nasal + consonant certainly had the same value as $o$ in the same position, just as it has today in France. But the interchange of $o$ and $u$ not followed by a nasal should be explained on another basis. It will be noticed that after the Carolingian reform, which made $\check{\delta}$ and $\bar{o}, \breve{u}$ and $u$ respectively identical, $\varnothing$ and $\bar{o}$ being sounded as $\ell$, there was no sound left in Latin corresponding to the vulgar resultant of accented $\bar{o}$ in position. Hence the uncertainty manifested by scribes in choosing a symbol to represent this sound. It thus appears that there is no good reason for supposing, on account of this use of the letter $u$ in French, that Latin $\check{u}$ kept its Merovingian value in some quarters until the thirteenth century. The fact that Latin words ending in -ǔs rime with French words like plus in twelfth-century verse has been noted
more than once, and is all the more striking because such rimes are found in texts which show countless examples of the abovementioned use of the letter $u=o$ (cf. Hofmann and Vollmöller, Brut, p. XXVII., and Mall, Comput, p. 53). The evidence of Old French loan-words has been sufficiently discussed by Paris (J.S. $1900, \mathrm{pp} .366$ f.), who shows that words like moltepleier, avoltre, tomolte came into popular use before the Carolingian reform, while forms having $u$ in French for Latin $\breve{u}$, as for instance tumulte, occulte, estudie, were borrowed later.

## $\overline{\mathrm{J}}$.

This vowel is, as a rule, well distinguished from o in Merovingian documents, particularly in the accented syllable. The following forms may be noted.

## I. 0 for $\bar{U}$, not before a Nasal.

## 1. In accented syllables.

die noctoque: T. 11.10: 653 O; Clichy. Perhaps a change in declension.
paecoliis: T. 34.11: 695 O; Compiègne. Possibly an indication that $\bar{u}$ was not yet $\ddot{u}$, but still a surprising form. poplicus: T. 37.5: 696 O; St.-Cloud. T. 69, p. 56, col. 2, I. 16, etc., etc. Apparently here $o=q$, due to the analogy of populus.
poblica: Cluny 75, 1. 6: 902 C.
polica (= publica): Cluny 77, l. 8: 902 C. 1808, p. 60, 1. 3: 989 C. Cf. ibid., l. 8: pullice. These peculiar forms from Cluny may point to a local coalescence of accented $\bar{u}$ and accented $\bar{o}$; cf. p. 49.

## 2. In unaccented syllables.

majores domos: T. 25.3, etc.: 688-9 O; Compiègne.
Jodicio (= judicium): T. 38, heading: 697 O ; Compiègne. Explanation?

## II. 0 for $\overline{\mathrm{U}}$ unaccented, before a Nasal.

extromento: T. 28.7: 961 O: Chatou.
inmonitate: T. 41.3: c. 700 O.
instromenta: T. 46.9, 13: 716 O ; Compiègne.
Taking the vernacular development into consideration, we may conclude that $\bar{u}$, when not accented and not initial, was identical with $\bar{o}, \breve{u}, \not \partial$ in the clerical language of the seventh and eighth centuries. The correction which identified unaccented with accented $\bar{u}$ must be put in the same period as the reduction of $\breve{u}$ to identity with accented $\bar{u}, i . e$., in the ninth century. As to the actual pronunciation of Latin $\bar{u}$, Paris asks (J. S. 1900, pp. 360 f.): "A quelle époque s'est introduite dans le latin la prononciation française $\ddot{u}$ pour $\bar{u}$, qui, en latin, s'est étendue même à $\check{u}$ ?" There are three points of view from which this question may be answered, and in each case the answer seems to be the same. In the first place, it may be noted that there are apparently no loan-words showing a development of $\bar{u}$ different from that of popular words. This causes us to suspect that $\bar{u}$ has always had the same sound in Latin and in French. For if clerks had sounded Latin $\bar{u}$ as close $u$ in a period when close $u$ did not exist in the vernacular, we should expect to find in some French learned words o for accented $\bar{u}$, showing the inability of the vulgar to pronounce a sound which no longer existed in their language. In the second place, it is highly improbable that the clerks themselves would or could have pronounced in Latin a vowel-sound which was not native to them. This is especially true of the later Merovingian period, when good linguistic training was doubtless unknown, and likewise of the Carolingian and subsequent periods, when Latin was felt and learned as a dead language, to be pronounced, as dead languages always have been, with the sounds native to the learner. Then lastly it may be said that the change of close $u>u \ddot{u}$, if, as Paris thinks (J. S. 1900, pp. 367 f.), it occurred long after the Merovingian period, doubtless took the course of a gradual development, the tongue passing slowly from the back to the front position in the speech of successive generations. Supposing this to have been the case, it seems probable that at each stage of the transition, Latin $\bar{u}$ was sounded as French $u$, the forward movement being so gradual
that is was not noticed. It thus seems fair to conclude, on the basis of general principles alone, that Latin $\bar{u}$ must always have been pronounced in France with the sound of its vernacular resultant.

## DIPHTHONGS. - Au.

Perhaps the only ancient diphthong which existed in Merovingian clerical Latin was au. The chronology of the sound in the learned language is not quite clear. It will probably have to be assumed that the reduction to $Q$, which apparently look place in the Northern dialects in the seventh or eighth century, occurred at about the same time in correct Latin also. At any rate the ancient sound was restored in Carolingian times. ${ }^{1}$ The early O. F. loan-word órie, showing $q$ for $a u$ was adopted before $a u$ became $q$ in the vernacular, or later, before the supposed pronunciation of Latin au as $q$ was corrected. Later loan-words have au in Old French; as, for example, austre, cause, repauser. The following spellings may be noted:
agmentum: T.65, p. 54, col. 1, l. 11 from end: 769 O; Samoussy. Cf. Du Cange s.v. agmentare.
agustas: T. 75, p. 60, col. 1, l. 3 f. b.: 775 O; Duren.
agustus: T. 103, 1. 2: 812 O.
axiliis: Musée 9, p. 21, l. 3: 864 O; Pitres, Eure, arrondissєment de Louviers, canton de Pont-de-l'Arche. paugo (= pago): Cluny 51, l. 6: 893 C.
otoritatem: Cluny 1751, p. 20, l. 9: 987-96 C.
aulodem (p. 514, last line, p. 515, l. 9), cf. alaude (p. 514, l. 5 f. b.), aulaude (p. 515, l. 4): Marseille II. 1046:
1034. Similar spellings occur elsewhere in this document.

[^35]
## CONSONANTS.

## A. SINGLE CONSONANTS.

## I. Stops and Spirants.

## 1. Labials.

## P.

princibebus: T. 13.9: c. 657 O.
adebisci (4), opetum (17): T. 19: 670-1 O; La Morlaye.
opidiencia: T. 21.14: 677-8 O; La Morlaye.
noncobanti: T. 22.4: 679-80 O; Lusarches.
estibulacione: T. 24.18: 682-3 O; Pressagny.
crepius ( $=$ crebrius): T. 26.55 : c. 690 O; Arthies.
noncobantes: T. 28.3: 691 O; Chatou.
noncobante: T. 42.3: 703 O; Quiersi.
accibimus: Т. 67, 1. 9: 769 O.
istibulatione: T. 68, p. 56, col. 1, 1. 19: 770 O.
trephidus: T. 75, p. 60, col. 1, l. 11: 775 O; Duren. (Ph can scarcely have been sounded as $b$.)
suber: Mabillon 65, l. 9: 821 O; probably Caunes.
stibulatione: Musée 8, p. 18, 1. 17: 856 O; near Rodez?
nebotis: Redon 45, 1. 6: 854-65 ?, XI.
estibulatione: Cluny 14, p. 17, 1. 5 f. b.: 870 ? C. At Cluny this word was very often spelled with a $b$ from the ninth to the eleventh century; for instance, in the following numbers: 19, 26, 28, 38, 49, 67, 94, 365, 395, 668, 819 , $1711,1734,1735,1736,1791,1825,2393,2730$ (this last number dated c. 1020, original).
archiepiscobus: Mabillon 103, B (bis): 873 O; probably Caunes.
nocubantes (= nuncupantes): Cluny 51, 1. 7: 893 C.
It would be unjustifiable to conclude from these spellings that French clerks regularly read intervocalic $p$ as $b$ in the second half of the seventh century. The forms princibebus, adebisci, opetum, opidiencia, crepius are quite striking, but they should all be pro-
nounced as they are spelled. They show, however, that the distinction between intervocalic $p$ and $b$ was not yet clearly established, doubtless on account of the ignorance of the clerks. The spelling accibimus from the year 769 seems to be due to a scribe of more than ordinary ignorance, since the interchange of $p$ and $b$ is quite unusual in this period. The form archiepiscobus form the year 873 (Caunes) is a manifestation of the fact that Merovingian conditions prevailed in the Midi for perhaps half a century or more after the Carolingian reform took place in the north. It is also noteworthy that some Burgundian clerks did not learn the etymology of estibulatio until after the opening of the eleventh century.

## B.

## a. Intitial.

vaselica: Mabillon 71, 1. 2: 825 O; doubtless Caunes. In this locality, perhaps initial $b$ and $v$ were identical in the vernacular, whence the inability of clerks to make a phonetic distinction between them in Latin.

> b. Final.
sup integritate: Cluny 61, 1. 11: 897, XI./XII.
sup die: Cluny 858, p. 813, l. 3, f. b.: 953 C.

## c. Intervocalic.

movilibus, inmovilibus: T. 6.5: c. 628 O.
movile (8), inmovile (8, 9): Т. 13: с. 657 O.
movele et in movele: T. 19.19: 670-1 O; La Morlaye.
habunculi: T. 31.7: 692 O; St.-Cloud.
habuncolus: T. 38.6: 697 O; Compiègne.
rovoravit (11), Dagoverti (17), liventer (25), etc.: T. 52: 794, IX./; Italian (papal letter).
scrivere: ${ }^{1}$ Paulus Diaconus, Historia Langobardorum, ed. Waitz, lib. IV. ad fin. (reading of F 1): VIII. or IX.; doubtless Northern Italy, perhaps Milan.
Danuvii: ibid., lib. III., 30, p. 135, l. 7 (reading of A1, A2): IX.; doubtless Rome (A2).

[^36]iubare: ibid., lib. III., 19, p. 125, l. 20 (reading of A1): middle of ninth century; apparently Lombardy. The same reading appears in other codices, particularly in D1, of the tenth century, "in Gallia ut videtur scriptus, vel certe diu adservatus" (Waitz, pp. 29, 30).
arcibo: Rozière 71, p. 97, l. 4 f. b.
revello; Rozière 72, p. 66, l. 3.
captavabit (= captivavit): Boucherie, Vie de Sainte Euphrosyne, § 12: a Montpellier MS, copied /IX.
ebidenter (1.45), ebidens (1.48), corrected to evidenter, evidens: Codex Parisinus, Corpus Glossariorum II., p. 57: IX.
ellubiones ${ }^{1}$ (v. l. elluviones): Codex Parisinus, ibid. p. 59, l. 53: IX.
abogadus (l. 4, cf. vocatus, 1. 5), novis (1. 11), habevat (D), octabo (D): Mabillon 65: 821 O; probably Caunes.
beneficiabit (p. 11, l. 12), arabit et cultabit (p. 11, 1. 21), quolivet (p. 12, 1. 20): Musée 5: 834 O: Fontjoncouse, Aude, arrondissement de Narbonne?
iuvete (l. 9), provare (C), recognobit vel exvacuabit (D): Mabillon 89: 853 O; probably Caunes.
devitum, devitor (B), cf. debitor (D): Mabillon 103: 873 O; probably Caunes.
kavallos: ibid., B.
cavallis: Dauphiné 17, p. 66, l. 2 f. b.: 1342.
Testimony of grammarians.- It is hard to say whether the rules given by the eighth-century grammarians were intended to correct Gallic or Italian errors. Some or all of them may be mere grammatical tradition. Albini Magistri Orthographia, Keil VII., p. 296: Avena sine $h$ per v scribendum est, habena, si ad retinacula iumentorum, per h et per b scribitur. Ibid., p. 297: Avunculus per duo $u$, quia ab avo diminutivum est, vo syllaba in vum conversa. Bedae de Orthographia, Keil VII., p. 272: Excubiae per b, exuviae per v scribendae. Ibid., p. 277: Libidinosus a libidine per b, lividus a livore per v proferendus, larba per b (!). It may be noted

[^37]that the rule given in the Orthographia Albini Magistri, Keil VII., p. 298 (Bile, si fel significat, per b; si abiectum aliquid, quod est vile, per v scribendum est) appears to have been copied, almost word for word, from Cassiodorius, Excerpta de Orthographia, Keil VII., p. 172, ll. 2 f., or from some similar source.

Conclusion: the chronology of intervocalic B in the clerical language.-The Merovingian documents from Northern Gaul show no confusion of $b$ and $v$ in spelling. The only two exceptions are presented by the words abunculus and movile, beside which the regular forms occur. These words, to be sure, point toward a much earlier period in which all intervocalic $b$ 's were apt to be pronounced as $v$ 's: at the time when $b$ and $v$ came to be clearly distinguished in speech, some clerks retained abunculus. and movile because of their apparent connection with $a b$ and movere. The phonetic confusion or perhaps identification of $b$ and $v$ existed in Auvergne in the sixth century (cf. M. Bonnet, Le Latin de Gregoire de Tours, pp. 165-7) and in Burgundy in the seventh century (cf. O. Haag, R. F., X., \& 45, pp. 865 f.). Spellings cited above from manuscripts written or copied in the Midi and in Italy prove that the same condition existed in these regions at least as late as the ninth century. As to the chronology in Central France, it may be said that the loan-words obër and nobilie (< nobilius, v . Paris, J. S. 1900, p. 302), to which should be added teniebres, show that intervocalic $b$ was pronounced as a stop in Merovingian times. Paris (J.S. 1900, p. 369), noting that ${ }^{\text {abboculus gives O. F. avuegle, }}$ and eboreus, O. F. ivorie, while later loan-words like abiter preserve their intervocalic $b$, incidentally assumes that $b$ was restored by the Carolingian reform. In another place, however (J. S. 1900, p. 303), he shows that these very words, avuegle and ivorie, went into the vulgar tongue at least as early as the fifth or sixth century. The assumption that intervocalic $b$ was sounded as $v$ until the Carolingian period is thus shown to be baseless. From the negative evidence of the manuscripts, above discussed, we may conclude without fear of error that this letter must have been read as a stop long before the middle of the seventh century. ${ }^{1}$

## ${ }^{1}$ Cf. Grandgent, Vulgar Latin, p. 134.

The fact that seventh-century scribes do not confuse $b$ and $v$ appears to indicate also that the vulgar $b<p$ had passed into $v$ as early as the sixth century.

## F.

The confusion, or possibly the identification of intervocalic $f$ and $v$ was present in Burgundy in the seventh century (cf. O. Haag, R. F. X., pp. 860 f.). If this confusion occurred in the clerical Latin of the Central region, it must have been almost completely corrected before this period.
referencia ipsius loci sancti: T. 4.5: 625 O; Etrepagny.

## V.

$V$ offers no irregularity. The following spellings have no general significance:

Belloacinse (=Bellovacense): T. 13.3: c. 657 O.
prielegium: T. 36.31: 696 O; Chatou.
Ludoihcco: Mabillon 65, D: 821 O; probably Caunes.
2. Dentals.

## T.

a. Initial.
tuplum: Mabillon 45, E: 764 O; Marlenheim, Alsace (villa Mareleia). Sounded as $d$ or as $t$ ? ${ }^{1}$
b. Final.

It should be assumed that in Ile-de-France final $t$ preceded by a vowel was treated analogously to intervocalic $d$ : that is, generally pronounced as a voiceless dental spirant until the ninth century, when it was made a voiceless dental stop. In other regions, where final $t$ dropped in the vernacular in the ninth century or earlier, ${ }^{2}$ it was dropped for a considerable period in Latin as well.
udum (= ut dum): Mabillon, p. 500, C, 1. 8: 778 O; Göttingen (Goddinga villa).
ipseme: Redon 144, p. 110, 1. 5: 865-70, XI.
au: Cluny 222, p. 211, l. 8, and l. 10: 920 O.
subnexat ( $t$ silent): Cluny 264, 1. 11: 926 C.
ego...qui hanc venditionem scripsit, datavid, etc.: Vienne 6; p. 8, l. 23: 986, XII.

[^38]quiqui (= quicquid, l. 6), postead (d silent, 11. 11, 13): Cluny 2697, p. 724: 1015 C.
etnumerati: Montélimar 28, l. 18: 1285 O. This scribe evidently read $e t$ with silent $t$.
Grammarians.- Two grammarians of the twelfth century make indistinct statements regarding the pronunciation of final $t$, which are very difficult to interpret ${ }^{1}$ satisfactorily, and which may be simply quoted here. Thurot, Extraits, p. 144 (from a writer of the twelfth century): Sonus $t$ in fine dictionis debilitatur, ut amat, docet, et in omnibus, preter at, tot, quot, quotquot, aliquot ad differentiam, et sat et atat propter euphoniam. Precedente $s$ vel $x$, sonus $t$ non debilitatur, ut modestia, questio, ustio, commixtio.Ibid. (from a thirteenth-century MSS of Pierre Hélie, who wrote in the twelfth century): $D$ et $t$ confundunt sonos suos adinvicem, ut pro $d$ ponatur $t$ et e converso. Quod faciunt barbari et maxime Theutonici pro deus dicentes teus... Sicut profertur $d$ in hoc pronomine $i d$, eodem modo pronuntiatur $t$, cum dicimus legit, capit. Unde sunt quidem qui maxime nos reprehendunt, ut Hiberni. Volunt enim sic pronuntiare $t$ in legit, sicut in tibi, dicentes quod aliter nulla erit differentia inter $d$ et $t$. Sed male reprehendunt, cum iste due littere invicem confundunt sonos suos.
c. Intervocalic.
podibat: T. 13.4: c. 657 O.
audentico (77, 79), cf. autentico (78): T. 26: c. 690 O; Arthies. ${ }^{2}$
alote (generally spelled with a $d$ ): T. 31.10: 692 O; St.Cloud.
expedenda (6), lampatebus (25): T. 36: 696 O; Chatou.
repedicione (11), aelidiatum (12, =elitigatum): T. 42: 703 O; Quiersi.
constedit (14), alote (20), elidigatas (23), cf. memorathus (16), comparatho (21): T. 43: 709 O; Quiersi.

[^39]marcado (5), elidiatum (20, etc.), cf. marcatho (heading), vidittur (3), redebittur (6): T. 44: 710 O; Montmacq. ${ }^{1}$
ligedema (9), elidiata (14), rodatico (17), cf. vidittur (8), rotaticus (9): T. 47: 716 O ; Compiègne.
dithatus: Mabillon 36, p. 488, E: 723; Valenciennes.
potestadivas (14), elidiatas (15): T. 53: 750 O.
elidicatum: Mabillon 38, p. 490, D: 750, doubtless original; St.-Denis.
elidegatas: T. 54.19: c. 751 O.
marcado, marcadantes, etc.: T. 55, col. 1, l. 3 f. b.; col. 2, l. 15, l. 20, l. 20 f. b., etc.: 753 O. T. 64, p. 53, col. 2, l. 9 f. b., etc., etc.: 769 O; Samoussy. T. 66, p. 54, col. 2, l. 23: 769 O ; Attigny.
similitter: T. 68, 1. 12: 770 O.
repedit: ibid., p. 56, col. 1, l. 17.
pediit (l. 15 f. b.), pedicione (l. 11 f. b.): T. 69, p. 56, col. 2: 771 O; Worms.
elidicaverint: T. 77, p. 61, l. 21: 775 O.
elidiatum: T. 75, p. 60, col. 1, l. 8 f. b.: 775 O; Duren.
abogadus (l. 4), cf. vocatus (1. 5): Mabillon 65: 821 O; probably Caunes.
comparadis: Redon 211, l. 1: 837-8, XI.; De Gramcampo.
elidicant: T. 180, p. 114, col. 1, l. 8 f. b.: 861 O; Compiègne.
mettas (cf. paco, concrecasione in this document of Merovingian character): Mabillon 163, D: 875 O; probably Caunes.
dadavit: Cluny 20, p. 25, l. 13: 874 ?, XI./ XII. This spelling is not uncommon in the cartulary of Cluny: it occurs also in numbers $28,55,56,68$, etc.
atabendi (=adhabendi): Cluny 241, p. 232, 1. 11: 924 C.
prado: Cluny 2495, l. 7: 999-1032 C.
fosado: Cluny 2555, 1. 4: 1002, XI./ XII.
nadiva: Cluny 2630, p. 672, 1. 3: 1006 C.

[^40]The chronology of intervocalic T in clerical Latin.The forms quoted from the seventh century leave doubt as to how generally $t$ and $d$ were confused in the intervocalic position. There can be no doubt, however, that in the eighth century $t$ was pronounced without voice and sharply distinguished from $d$, as is shown by spellings like memorathus, vidittur. The frequent occurrence of pedere, marcadum, elidigare in this period simply indicates that the etymology of these words was not yet established. The occurrence of intervocalic $d$ for $t$ in the Cluny documents as late as the eleventh century is to be explained on a similar basis. Early loan-words like esperit, matire, tradetor show that the voiceless pronunciation of $t$ was preserved throughout the later Merovingian period. ${ }^{1}$ As to penëance (cf. Provençal penedensa), showing $t>$ $d$, it may have become vulgar in the sixth century or even very much earlier. Words like grammaire < grammatica must likewise have been borrowed in a very early period.

## D.

a. Initial.

Initial $d$ was regularly sounded as $d$. For the peculiar spelling tuplum, see under $t$, p. 58.

## b. Final.

Final $d$ was treated as final $t$ (see pp. 58 f .) until after the Old French period. It may be presumed that the restoration of the sound $d$ took place during the Renaissance.
dereliquid: T. 16.4: c. 658 O.
set: T. 45.9: 710 O; Montmacq.
illut (2), sybymed (11): T. 46: 716 O; Compiègne.
aliut: T. 47.19: 716 O ; Compiègne.
dibiad: T. 48.8: 716 O ; Compiègne.
quitquid: T. 67, 1. 13: 769 O.
at (before vowel): ibid., ll. 2, 6, etc.
quot: ibid., p. 55, col. 1, l. 3 f. b.
aud (s follows: p. 56, col. 2, 1. 25, etc.): T. 69: 771 O; Worms.
permanead: T. 231, 1. 16: 939 O.
${ }^{1}$ On the early ${ }^{*}$ pretegatum $>$ pretiet, cf. p. 9.
valead: Vienne 5, p. 7, l. 16: 973, XII.
quitquit: Cluny 1791, 1. 7: 988 C.
at integron: Cluny 1919, 1. 6: 992 O.
capud: T. 290, p. 181, col. 1, 1. 21: $\mathbf{1 0 7 3}$ O; La Chapelaude.
Tee testimony of grammarians.- Thurot, Extracts, p. 141 (from a grammarian of the thirteenth century): D: hec litera plus sonat in principio, ut dominus, in medio et in fine debilius, ut adheret, id, istud et quod. Erasmus, De Pronuntiatione Dialogus, col. 952, E: Quin frequenter d et t , differentiam confundimus, veluti quum pro David sonamus Davit, et ad Petrum, ad te, at Petrum, at te.

## c. Intervocalic.

Intervocalic $d$ became a voiced dental spirant in Merovingian clerical Latin, as in the vernacular (cf. Paris, J. S. 1900, p. 369). Later on, the voiced dental stop was restored. Since none of the loan-words showing the loss of the spirant (aorer, benëir, crïel, obëir, prëechier) can be proved to be Carolingian, while those having the stop (credulitet, ereditet, idee, multitudene, obedïent, odor) cannot well be attributed to the Merovingian period, we may assume that the restoration of the ancient $d$, or perhaps rather the phonetic identification of initial and intervocalic $d$, was a feature of the Carolingian reform.
trao (= trado): Cluny 73, l. 8: 901 C. Cluny 1107, 1. 11: 961 O.
It is rather difficult to determine whether this spelling, which certainly represents a Latin, not a vulgar word, indicates that the stop was not yet introduced in Burgundy in the tenth century, or whether the fall of the $d$ is simply due to the influence of the vernacular of the scribe, in which intervocalic $d$ did not exist. ${ }^{1}$

## S.

## a. Final.

auctorita: T. 21.20: 677-8 O; La Morlaye. Schuchardt, K. Z. vgl. Sprf., 1874, p. 160, believes that forms of this type must have originated in Italy.

[^41]cum omnibus appendititis seorum: T. 132, l. 20: 814-40 O. This spelling may possibly indicate that final $s$ was not read as $z$ before a following vowel.
The dropping of final $s$ in Latin in the sixteenth century is attested by H. Etienne, A pologie pour Hérodote II., 41 (cf. A. Eiselein, R.F. X., p. 525), who remarks that Catholic ecclesiastics pronounce Dominus vobiscum as Dominu vobiscon, and by Erasmus, De Pronuntiatione Dialogus, col. 953, E, who says: Quid mihi narras Ennios, quasi non idem hodie faciant in oratione soluta Galli, quod Ennius fecit in carmine: prorsus elidentes $s$, quum incidit inter vocalem et consonantem: in fine vero sic obscurantes porrectum in immensum vocali, ut vix sentias, velut in est et domi$n u s$, in quorum priore, eliso $s$, sonant geminum, aut triplex potius eee: in posteriore, $u$ trium vocalium habet spatium.

## b. Intervocalic.

It should probably be assumed that the voicing of intervocalic $s$ occurred in exactly the same period in the vernacular and in the clerical speech. We have no reason to believe that any serious attempt was ever made to restore the voiceless sibilant. Loan-words like cause, repauser show that Latin intervocalic $s$ was voiced when they were adopted by the vernacular. Thurot (Extraits, p. 77) quotes, from a fragment of a tenth-century treatise on reading, the following passage: $R$ et $S$, cum vocalem utrimque admiserint, expressum sonum non habent, ut esurit, deserit, visurus, adheserunt, scelerosus, disertus, exosus. Si vero ab ipsis dictiones [dictione Cod.] ceperint aut in dictionum medio consonantem intrinsecus habuerunt, expresse denuntiantur, ut dispersit, subruit, res, sus. In compositis quoque idem et agitur, exceptis dumtaxat ipsis ubi euphoniae causa prevalens videtur exposcere, ut malesanus, presensit, resolvit, desolata, prosequitur, Iherusalem, quod compositum esse ipsius interpretatio monstrat, et similia, que prudentium respectus advertere aptius potuerit. In reliquis enim æque, ut in simplicibus propalatum est, agitur, ut vesanus, eripit (his adverte), et cetera. It appears that the term expressus sonus, applied to $s$, here means the voiceless sound. When the second element of an apparent compound began with $s$, this letter, in most cases, as in resolvit, desolata, Therusalem, was pronounced as $s$, and in others, as in
vesanus, where the compound nature of the word was not felt, it was sounded as $\%$. These same rules are repeated in the twelfth and in the thirteenth century (Thurot, Extraits, pp. 143 f.). Erasmus (Dialogus, col. 953, A) did not understand why intervocalic s was sounded as $z$ in his time: quod unde venerit in nostram consuetudinem non satis queo conjecturare, quum Romani non varient in huius literae pronunciatione, ${ }^{1}$ nec causam video mutationis, nec ab ullo veterum tale quicquam sit traditum.

## 3. Velar Consonants and Palatals.

K (written $\mathbf{C}$ ).

## I. Initial.

## a. Before e, i.

In the vernacular, initial $k$ followed by $e, i$ advanced gradually from the velar to the prepalatal region ( $k>k^{\prime}>t^{\prime}$ ), and then, in most of the French territory, passed into ts. The chronology of this process has been much discussed, chiefly by Paris, L'altération romane du c latin, Les faits épigraphiques ou paléographiques allégués en prewve d'une altération ancienne du c latin, and J. S. 1900, p. 359; Schuchardt, Vokalismus I., p. 101, Litbl. 1893, col. 360-363; and P. E. Guarnerio, L'intacco latino della gutturale di $c e, c i$ (cf. Mario Roques, Rom. 1901, pp. 617-18); and most recently by Meyer-Lübke, Einführung in das Studium der romanischen Sprachwissenschaft, pp. 123-6. Paris holds that the stage ts was not reached before the eighth century, and that palatalization did not occur before the sixth. Schuchardt, however, dates the stage $k^{\prime}$ at about the beginning of the fifth century, while Guarnerio and Meyer-Lübke believe that this stage belongs to the third (cf. also M. Bréal, J. S. 1900, pp. 149-56, who thinks that the pronunciation $k^{\prime}$ is much more ancient). One important spelling has hitherto been overlooked: namely, the form concinsi, T. 11, p. 11, col. 1, l. 14: 653 O ; Clichy. The word occurs in the following passage:-

[^42]Amalbercthus consinsi et subscripsi.- Chaidebo consinsi et sub-scripsi.-Athildus concinsi et subscripsi.-Varnacharius consinsi et subscripsi.- Bobo consinsi et subscripsi. It is scarcely material whether this scribe pronounced the group $n s$ as $n s$ or as $n t s$, these two phonetic groups being indistinguishable to the average untrained ear. If he pronounced the group as $n s$, his inverse spelling concinsi is not absolutely phonetic. Be that as it may, the form is valuable as evidence that clerks at Clichy sounded $c$ followed by $e$, $i$ as $t s$, at least as early as the beginning of the seventh century. ${ }^{1}$ It should be assumed, as Paris has done (cf. however Guarnerio, op. cit., p. 38), that the advancement of the velar took place simultaneously in vulgar and learned speech. The following spellings, showing an early reduction of $t s$ to $s$ in the South and East, may be added here:
parcerit (= parserit): Lyonnais 3, 1. 8: 868, XV.
sercio (generally spelled with initial $c$ ): Cluny 2505, l. 7:

$$
\text { c. } 1000 \mathrm{C} .
$$

ceptembris: Dombes II. 16, 1. 3: 1000-1010, /XIHI.
concentire: Montélimar 28, p. 66, last line: 1285 O; Montilii.

## b. Initial $K$ before $\mathbf{A}$.

In the vernacular of Tle-de-France; initial $k$ before $a$ passed from the velar to the prepalatal position and then became ts. The origin of the Old French symbol $c h$, used to indicate the sound $t s$, is discussed by Suchier, Z. R. Ph. II., pp. 293-6, and by Schuchardt, Rom. III., pp. 282 f . The chronology of the sound-development is discussed with more or less fulness by Berger, p. 13; H. Flaschel, Die gelehrten Wörter in der Chanson de Roland, p. 27; J. Groene, $C$ vor A im Französischen, p. 9; O. Keesebiter, A. S. N. S. 1886, pp. 348, 351; Meyer-Lübke, Grammatilk der roman. Spr. I., §§ 13, 410, 648; and Paris, J. S. 1900, pp. 299, 361 f., note 5. The most definite results reached thus far are those of Keesebiter, who produces evidence seeming to show that the stage ts was reached in the

[^43]seventh or eighth century, more probably in the seventh. That the whole question is still enveloped in great obscurity is evident from the fact that Berger (l.c.) assigns the change $k a>t s a$ to the end of the seventh century, professedly on the authority of MeyerLübke, I., § 648. The latter scholar, however, in the paragraph referred to, assigns to the end of the seventh century not the stage $t \delta$, but the much earlier stage $k^{\prime}$. The interpretation of the loanwords has likewise caused difficulty. Thus Berger (l. c.), following in general Meyer-Lübke (Rom. Gram., I., § 13) claims that after the operation of the sound-law $k a>t s a$, clerks would sometimes change the initial $c a$ - of certain words to cha-, in order that the people might more readily pronounce them. The examples given are chameil, chandelabre, chapitre, charitet, chaste. Paris (J. S. 1900 p. 299) shows, by pointing out the relation which existed in the early middle ages between the vulgar tongue and clerical Latin, that the explanation given by Meyer-Lübke and Berger of the phenomenon in question, is unnatural and on that account hard to accept. It may be added that there is no good reason for believing that ninth-century clerks would have pronounced any combination of sounds, even in Latin, which the people would have found very difficult to articulate. The clerks themselves spoke the language of the people, and had the same phonetic habits as the people. On the other hand, however, one chronological assumption on which Meyer-Lübke based his theory, namely, the modernity of some of the loan-words in question, appears to be correct. Paris is much inclined to believe that these words were borrowed before the end of the seventh century. It is of course admissible to assume, as Paris does, that chaste, which is shown by its final vowel to have been borrowed, in all probability, after the seventh century, owes its ch to the influence of chastee. But it is difficult to assume the existence of the Merovingian form *chapeitele $>*_{c}$ chapoitre, as we must do if we accept Paris's view of the chronology: for if such a form had existed, it would probably have left traces in literature. It is likewise very improbable that the form chalice in the Cambridge Psalter should be read chalece, as Paris is inclined to suppose. For no traces of this form appear to exist; and even if it could be found, it certainly could not go back to the end of the seventh century, as is shown by the vowel of the accented syllable, which in that case would

have become ie. It might of course be claimed that the supposed form *chalece represented a Carolingian correction of another supposed form something like *chielece, which has not come down to us. But these suppositions now become so numerous as to prove by themselves that they should very probably be rejected one and all. The words chalice, chapitie were almost certainly borrowed in the Carolingian period. Chardenal (cf. Godefroy, s. v.) must be added to the list: a Merovingian *chardenel appears not to have existed. If we are unwilling to accept Meyer-Lübke's explanation of these forms, which, after all, seems quite improbable, we must find another. Thus far no one has noticed the simple fact that while the advancement of the velar was going on in the vernacular, it certainly took place in correct Latin likewise. There appears to be no reason why all late words showing cha-from Latin ca-should not go back directly to a Carolingian Latin form $k^{\prime} a$ - or $t^{\prime} a$-. Keesebiter (A. S. N. S. 1886, pp. 348, 351), as noted above, thinks that the development of $c a$ to cha was completed in the seventh century. He reaches this conclusion by comparing the forms choisir, orguene. His chronological argument may, however, be disputed at almost every step, and his result is on that account extremely suspicious. There appears to be nothing to prove that the sound-group tsa existed in France before the ninth century. If, as Meyer-Lübke says (Rom. Gram. I., \& 648), the stage $k^{\prime}$ belongs to the end of the seventh century, it is more than probable that the stage t $\begin{aligned} & \text { was not }\end{aligned}$ reached until after the end of the eighth. We accordingly conclude that Latin $c a$ was pronounced as $k^{\prime} a$ or as $t^{\prime} a$ at the time of the Carolingian reform, and that the phonetic group $k a$ was introduced into clerical Latin when the vernacular $t^{\prime} a$ was passing into $t s a$, perhaps in the second half of the ninth century, or at the beginning of the tenth.

## c. Initial $K$ before $\mathbf{0}$, $\mathbf{u}$.

Initial $c$ before $o, u$ was always sounded as $k$. Spellings like the following are extremely rare, and are probably to be explained as errors on the part of the copyist:
gurrente (l. 14), cf. currente (l. 15): Cluny 1955, l. 14: 993, XI. / XII.

## II. Final K.

Little can be said as to the history of final $k$. On the somewhat obscure Old French development, see Schwan-Behrens, $\$ 103,3$ and §149. We can scarcely determine whether the following spelling exemplifies a phonological or a morphological peculiarity: ${ }^{1}$
hae auctorita: T.21.20: 677-8 O; La Morlaye.

## III. Intervocalic K.

## a. Before e, i.

Intervocalic $k$ before $e, i$, in the vernacular of Northern France, seems to have passed through the stages $k, k^{\prime}, t^{\prime}, t^{\prime} s^{\prime}, d^{\prime} z^{\prime}, i d z, i z$; but the point at which the voicing occurred is not clear. It is difficult to say just how far the clerical language followed this evolution in the Merovingian period. In Carolingian times intervocalic $c$ before $e, i$ was sounded as $t_{s}$; this is proved by the form of loan-words like crucefis, precept (ef. Paris, J. S. 1900, p. 371). When $t s$ was reduced to $s$ in the Old French period, this change must have taken place also in the pronunciation of Latin. The following spellings may be noted:
precesse (= praeesse): T. 23:4: c. 681 O. This peculiar form may be a mere blunder. ${ }^{2}$
explisitis: T. 228, p. 143, col. 1, l. 16: 917 O; Attigny.
Ludovisi: Cluny 701, l. 2 f. b.: 947 C. This form, and perhaps the preceding one, point to an early reduction of $t s$ to $s$ in the regions from which they come. Cf. pp. 65, 82 .

## b. Before a.

jocalis (= jugalis): T. 14.2: 658 O.
vindegare: T. 33.22: 692 O; Lusarches.
congrecacio: T. 34 15: 695 O ; Compiègne.
Childriciagas (8), Childriciaegas (11, 16), cf. Childriciaecas (4): T. 43: 709 O; Quiersi.

[^44]evindegatas: ibid., 22.
plagabile: T.46.2: 716 O ; Compiègne.
plagabili (l. 2), evogatus (p. 489, l. 6): Mabillon 36: 723; Valenciennes.
elidicatum: Mabillon 38, p. 490, D: 750, doubtless original; St.-Denis.
vegariis ( $=$ vicariis, 2), evindegaverunt (21), evindegatas (22): T. 54: c. 751 O.
doato (=ducatu): T. 82, l. 12: 779 O; Duren. This spelling shows the dropping of $g<k$ preceded by $o$ and followed by $a$, regular in the vernacular (cf. Schwan-Behrens, § 140, p. 83).
abogadus (1. 4), vogatus (D), cf. vocatus (C.): Mabillon 65: 821 O; probably Caunes.
sigale: T. 123, p. 85, col. 1, l. 14: 832 O; St.-Denis.
vegaria: Redon 125, 1. 8: 850, XI.; De Saviniaco?
elidicant: T. 180, p. 114, col. 1, l. 8 f. b.: 861 O; Compiègne.
sigale: T. 186, p. 117, col. 1, l. 18 f. b.: 862 O; Compiègne.
concrecasione: Mabillon 103, B, ll. 4, 7, 9, 10, etc.: 873 O; probably Caunes.
perticas (l. 2), cf. pertigationes (1. 3): Vienne 129, p. 93: 925, XII.
pertigas (l. 6), cf. perticas (1. 7): Vienne 128, p. 92: 927-8, XII.
publiga: Cluny 2812, l. 5: 1029 (or 1019 ?), "copie d'original tirée des papiers de M. Rivaz."

## c. Before 0, u.

matrigolarius: T. 13.3, etc.: c. 657 O.
vicorem: T. 19.27: 670-1 O; La Morlaye.
Parisiago: T. 41.4: c. 700 O.
vigo: T. 44.21: 710 O; Montmacq.
fistugo: T. 53.8: 750 O.
necuciantes (l. 6 f. b., etc., etc.), necocia (last line): T. 55, col. 1: 753 O.
necuciantes (col. 1, l. 4), Parisiago (col. 2, 1. 6 etc.): T. 64, p. 53: 769 O; Samoussy.
magnifigo (l. 1), publigo, vigo (p. 55, col. 1, l. 4 f. b.): T. 67 : 769 O.

Parisiago: T. 81, p. 63, col. 1, l. 6: 779 O; Héristal.
paco (D, 1. 5), cf. Ludoihcco (D, 1. 7): Mabillon 65: 821 O; probably Caunes.
pejora (= pecora): Mabillon 71, l. 4: 825 O; doubtless Caunes.
Parisiago: T. 119, p. 83, col. 1, l. 21: 827 O; Quierzi. T. 120, l. 15: 828 O; Aix-la-Chapelle.
paco: Mabillon 163, B: 873 O; probably Caunes.
monagiis: Cluny 1798, l. 2: 989, XI./ XII.
Conclusions as to the treatment of intervocalic C before $\mathrm{o}, \mathrm{u}, \mathrm{a}$, in clerical Latin.- The spellings indicate a considerable confusion of the voiced and voiceless stops in the seventh and eighth centuries; but it is improbable that intervocalic $c$ was not voiceless as early as the seventh century. Considering the comparatively small number of graphic interchanges, we should doubtless read forms like vicorem, necuciantes as they are written. The scribe who wrote magnifigo, publigo, vigo in the same document as late as 769 was more ignorant than the best Central scribes of the period. Paris (J.S. 1900, p. 370) cites the Merovingian spellings to prove that clerks pronounced intervocalic $c$ as $g$ after the dropping of intervocalic $g$ in the vulgar tongue. The forms given above strongly support this view: they seem indeed to point back to a period, earlier than the seventh century, in which intervocalic $c$ before $a, o, u$ was very often read as $g$. The same scholar (l.c.) also shows that words like dragon, segont, segur were probably borrowed from the clerical language in a period after intervocalic $g$ had fallen in the vernacular. We thus have before us a clear case of imperfect sound-development, due to the conservative tendencies of more careful speakers. That intervocalic $c$, before $a$ at least, was not always sounded as $g$ by Merovingian clerks is proved by the forms vochier < vocare, predechier < praedicare, empedechier $<$ *impedicare, which presuppose a voiceless intervocalic stop in Merovingian Latin. Meyer-Lübke (Romanische Grammatik, I., § 648) remarks that these words became popular after pacare had passed into pagare or payare, but while caput was still kapu. It is not evident on what basis this statement is made, but at any rate it seems probable that words of this type belong to a later stratum than the class segont, segur, etc. Since the latter group belongs to
at least as early a period as the seventh ${ }^{\circ}$ century, the former may with a great degree of probability be assigned to the seventh or eighth. Our general conclusion is, therefore, that intervocalic $c^{\mathrm{o}}$ and $c^{\mathrm{a}}$ were regularly voiceless at least in the eighth century, being treated as initial $c^{0}, c^{a}$ in this period, as in Carolingian times.

## G.

Intervocalic $g$ before $e, i$ followed the vernacular development to $y$. Some time after the group $d \breve{z}$ came into existence, intervocalic $g$ before $e, i$ received this value. O. F. neglience was borrowed before, while negligence was taken after this reform. When preceded by $e, i$ and followed by $a, g$ was sounded as $y$ until the time of the Carolingian reform, when this pronunciation must have been corrected. The Merovingian treatment of this letter under other conditions is not clear.

## I. Intervocalic G before E, I. ${ }^{1}$

exindehieris (= exinde egeris): Formulae Ineditae, Migne, vol. 87, col. 893, B.
neclientia: ibid., col. 899, B.
abstragere: Rozière 52, p. 76, 1. 5.
aligenare: 'T. 19.24: 670-1 O; La Morlaye.
magestatis: Marini XCVI., p. 150, l. 12 f. b.; 690 O; Camiliaco vico.
paices (= pagis): T. 41.13: c. 700 O.
exiendum (= exigendum, cf. E, 1. 4, exigere): Mabillon 53, E, l. 3: 778 O; Göttengen (Goddinga villa).
regi ( $=$ rei): Mon. Germ. Hist., II., Thegani Vita Hludowici, p. 591, l. 33: 835, XI. or /XII. "Forma regi [pro rei] saepius in noni saeculi monumentis occurrit" (editor's note).
redigens (rediens in text): Mon. Germ. Hist., II., Vita Hludowici, p. 668, l. $7^{2}$ : after 840, Italian copy of the twelfth century.
sexainta: Cluny 1870, l. 6: 991, XI. / XII.
${ }^{1}$ Cf. also $g g$ (pp. 95 f.) and $g w$ (p. 97). Schuchardt, Vokalismus I. 69, cites a spelling inienium from Mone, Messen VIII. $(33,18)$.

## II. Intervocalic G before A. ${ }^{1}$

igam (= eam): Rozière 264, l. 10.
naufragiassent: T. 38.10: 697 O ; Compiè̀ne.
aelidiatum, elidiato, etc.: T. 42.12: 703 O; Quiersi. T. 44.20: 710 O ; Montmacq. T. 45.12: 710 O; Montmacq. T. 48.14: 716 O; Compiègne. T. 53.15: 750 O. T. 75, p. 60, col. 1, l. 8 f. b.: 775 O; Duren.
exigiatur: T. 47.11: 716 O ; Compiègne.
deniare: T. 56, p. 47, col. 2, l. 5: 755 O; Compiègne.
viridigario: Musée 6, p. 14, 1. 11: 854 O; Orléans?

## III. Intervocalic G before 0, U.

Daoberctho: T. 4.6: 625 O; Etrepagny.
Daigoberctho: T.45, heading: 710 O; Montmacq. teularum: Reichenau Glosses, Förster and Koschwitz, Übungsbuch, col. 11, 1.435: VIII.

## II. Liquids.

The liquids, $l$ and $r$, require special attention only when they appear in combinations. When standing alone, they seem to offer no difficulty.

## III. Breathing: H.

## a. Initial.

G. Paris, Rom. XI., p. 399, has shown that in the fourth century of the Christian era, Latin $h$ was sounded only by the educated. It is to be supposed that in the learned Gallic Latin of the seventh century the original aspiration was entirely wanting (see the spellings given by O. Haag, R. F. X., p. 872). Sooner or later, however, the new breathing of Germanic origin came into clerical use as the regular sound of initial Latin $h$, as is indicated by the early French aspiration in words like harmonie, héros, hesiter, Hector,

[^45]Hercules, Hannibal (Thurot, Prononciation, II., pp. 403 f.), and by the testimony of the twelfth-century grammarian Pierre Hélie (Thurot, Extraits, pp. 141 f.): De $h$ queritur utrum sit vox. Nos vero dicimus quod non est vox, sed sonus. Non enim plectro lingue formatur; sed ad modum tussis subripitur.- Est . . . aspiratio aspera soni seu flatus spiratio, quam nature actio cum quodam anelitu ab interioribus producit [producitur Cod.]. Unde cum labore proferentis asperitas ictus aeris transmittitur per ysophagum usque ad lingue plectrum.- Circa dictiones aspirandas vel non multum solent tabelliones errare.- (Dictiones multae sunt) que aspirantur in medio vel post predictas quattuor consonantes c $p t r$, quales sunt prehendo, michi, nichil, Philippus, Rhenus, thorus et similia. ${ }^{1}$ Thurot, Extraits, p. 533, from the same writer: Quia sic ponit Priscianus [Keil VIII., p. 79], constat quod abundo non habet aspirationem ante $a$, cum sit compositum ex $a b$ et undo. Plerique tamen dicunt habundo per $h$ aspirationem. In this last passage the use of the verb dicunt (not scribunt) is noteworthy. As to the letter $h$ in manuscripts, we may note that it is used in general with considerable accuracy from the ninth century on, especially in diplomas from the neighborhood of Paris. The cartulary of Cluny, however, particularly in the documents of the ninth and tenth centuries, contains many examples of $h$ omissum and of $h$ spurium.

## b. Intervocalic.

Schuchardt, Vokalismus II., p. 526, thinks that the spelling ch for $h$ indicates a stronger, more guttural breathing, which later became k , as shown by Italian nichilo, annichilare, Spanish aniquilar, O. F. anichiler. This spelling, not without example in Merovingian times (cf. Schuchardt, l.c., and note michi, T. 18.5, 66970 O, Clichy), ${ }^{2}$ becomes extremely common in the Carolingian and later periods, so common, indeed, that it is needless to cite examples. The pronunciation of intervocalic $h$ between two $i$ 's as $k$ evidently prevailed still in the time of Erasmus, who remarks somewhat obscurely (De Pronuntratione Dialogus, col. 951, B): Fortassis excusabitur ab aliquibus, quod pro mii sonamus mihi, rursus pro

[^46]mihi michi, quo jure veteres in Hebraeis usi sunt, quo sonus fit vegetior, ut in Joahim et Joachim.

On the pronunciation of $h$ by German scribes, reference should be made to J. Grimm and A. Schmeller, Lateinische Gedichte des X. und XI. Jahrhunderts, pp. XXI. f., and to H. Althof, Waltharii Poesis, 1ter Teil, p. 52.

## IV. Nasals: Final M.

O. Haag (R.F. X., p. 869, §49) is of the opinion that final $m$ is still silent in Fredegarius. Spellings to be cited below from the cartulary of Cluny show beyond the slightest doubt that by the tenth century the pronunciation had been corrected, the $m$ being sounded as $n$. The forms given suggest that the character of the nasal may perhaps have been influenced by the following consonant. It is probable that in Central France final $m$ was regularly silent in both the seventh and eighth centuries. In the Carolingian period, however, the letter was always sounded. The reformers of the Latin pronunciation must have restored it as a labial nasal: but when Old French final $m$ became $n(o m>o n)$ the same change took place in clerical Latin. Suchier (Altfranzösische Gram., I., $\S 37$ a) thinks that grabatum (Alexius 44 c ) was pronounced with final $m$ as late as the eleventh century. Cf. Paris, Extraits de la Chanson de Roland ${ }^{8}$, p. 19, and note the tenth-century French spellings given on p. 76, infra. The shift $m>n$ seems to have occurred at different periods in the different regions. The discussions of medieval grammarians relating to the sound of $m$ are valueless. We find it difficult to believe a writer, apparently of the twelfth century (Thurot, Extraits, p. 143), whose statement is repeated in a work of the thirteenth and in one of the fourteenth century, when he says: In circumeo, circumi, circumire, circumitus, circumitio, circumago, et que ex his sunt, $m$ scribitur, sed non profertur. The rule is merely a bit of grammatical tradition, and cannot have been generally applied in the twelfth century or thereabouts. Seelmann (Aussprache, p. 282) quotes it from Papirianus apud Cassiodorium ( $\dagger 575$ ). The discussion of Erasmus, Dialogus, col. 932, E, has no direct bearing on the earlier usage. Manuscript evidence as to the date of the restoration of $m$ may be given in two
sections: (a) spellings pointing toward silent $m$; and (b) spellings indicating a pronunciation of $m$ as $n$.

## a. M apparently silent.

nostram....praeceptio: T. 6.8: c. 628 O.
Domini nostri Jhesum Christi: T. 11.3: 653 O; Clichy. (Likewise T. 19.9.)
carta composcionalem habebat: T. 14.2: 658 O.
nepte mea Mummolam instituemus abbatissam (10), dieci (38): T. 19: 670-1 O; La Morlaye.
dece: T. 30.11: 692 O; St.-Cloud.
quindece: T. 33.22: 693-4 O; Valenciennes.
duodece (29, 31, 34), septe (31): T. 40 : c. 700 O; Paris.
conda (= quondam) patrem: Musée 5, p. 11, l. 12: 834 O;
Fontjoncouse, Aude, arrondissement de Narbonne?
alique hominem: Redon 209, l. 3: 848, XI.; De Saviniaco.
probare potebat quem ( $=q u o d$, instead of infinitive): T . 180, p. 114, col. 1, l. 13: 861 O; Compiègne.
talem noticia (accusative): ibid., l. 9 f. b.
tenerem (written with nasal dash over final $e$, for tenere):
Redon 142, l. 9: 867, XI.; DeRufiac.
conda (= quondam) tibi: Musé 18, 1. 2: 989 O; probably Pyrénées-Orientales.
inter alia prefatam villam...: T. 284, p. 175, col. 1, 1. 4
f. b.: $\mathbf{1 0 6 1}$ O. This is certainly a case of careless omission of the nasal dash.

## b. Final M apparently sounded as N in words of one or more syllables.

devotissimun in hoc: T. 36.4: 696 O; Chatou. Scribal error? ${ }^{1}$
cun ipso: T. 40.56: c. 700 O; Paris.
forsetam fiscus: T. 46.13: 716 O; Compiègne.
quan fingo; Thurot, Extraits, p. 13, 1. 6 f. b.: from a grammatical work, probably of the tenth century; MS of the fourteenth.

[^47]nullon contradicenten (1. 8: Si follows in the next sentence), at integron tibi (l. 7): Cluny 1919: 992 O.
a locun Cluiniaco: Cluny 2419, p. 509, 1. 12: 997-1031, XI./XII.
iran Dei: Cluny 2419, p. 509, l. 16: 997-1031, XI./XII.
Observe also the following forms from the Song of Solomon (Förster and Koschwitz, Übungsbuch, col. 87-90): tum ami (l. 8), cf. son ami (1. 5) and similar'forms elsewhere; and sa raisum (1.89). These spellings show very clearly that the scribe pronounced Latin final $m$ as $n$. The strong evidence of the later Old French rimes, pointing in the same direction, is discussed by A. Eiselein, R.F. X., pp. 524 ff .
B. GROUPS OF CONSONANTS.

## I. Groups beginning with a labial.

## 1. P-GRoups.

## Pl.

The history of the development of intervocalic $p l$ in Old French is obscure; cf. Schwan-Behrens, $\S 110$, where it is assumed that the resulting combination in Old French is $b l$, that the preceding vowel is not in position, and that doble, treble are perhaps loan-words. Paris (J. S. 1900, p. 371) likewise believes that the vowel should develop as if not in position, but holds that the consonant combination which regularly results is $p l$. He is inclined to think that düplum and trǐplum were borrowed from clerical Latin in a period when duplum had taken on the form doblum, and that both words were popularized after the occurrence of the vulgar sound-changes $o>o u$ and $e>e i$. He does not attempt, however, to explain how doblum, which surely owes its consonant-development in the first instance to a popular tendency, came to be adopted by the clerks of He-de-France, who, according to his theory, naturally pronounced intervocalic $p l$ as $p l$ in their vernacular. Moreover he implicitly assumes that the vulgar changes $o>o u, e>e i$ did not affect the clerical language in the Merovingian period. It thus appears that doble, treble remain unexplained as before. It seems
probable that they represent the regular development in some dialect other than that of Ile-de-France: perhaps they were commercial terms imported from the Midi.

The group pl in documents is almost invariably spelled $p l$. It is difficult to say how far the spelling puplicus (see pp. 79 ff .) goes towards proving the existence of a clerical pronunciation of $p l$ as $b l$. The form dupplet ${ }^{1}$ (Rozière 46, p. 72, 1. 2), which occurs in a document showing spellings like istus, nus, vidimur, should be mentioned.

> Pp.
> cappella: T. 22.11: 677-80 O; Lusarches. opidum: T. 42.5: 703 O; Quiersi.
> apendiciis: T. 48.12: 716 O ; Compiè̀gne.
> oposita (l. 11), apariat (l. 16): T. 68, p. 56, col. 1: 770 O.

## Pr.

Abrilis: T. 39.19: 679 O; Bougival.
probrio: T. 67, l. 3: 769 O.
subranominati (l. 10), subrascripta, subra, Ábriles (D), subra (E): Mabillon 65, l. 10: 821 O; probably Caunes.

In a certain period, after the popular $p r$ had become $v r$, it appears that some clerks pronounced intervocalic $p r$ as $b r$. M. Bonnet, Le Latin de Gregoire de Tours, p. 160, cites the spellings opproprium, crepras, lebrosi, lebrae ${ }^{2}$, The rare O. F. loan-word sobrecil, going back ultimately to supercilium, may have been popularized in this period. The Merovingian loan-word liepre shows that the $p$ was restored before the correction of the sound of accented $\check{\varepsilon}$ not in position (cf. pp. 34 f.).

## Ps.

psaltis (=saltibus): T. 99, p. 74, col. 1, l. 3: 799 O; Aix-la-Chapelle.
escrixit: Cluny 518, p. 594, 1. 19: 940 C.
escritsit: Cluny 858, p. 813, l. 3 f. b.: 983 C. Here $t s=$ $p s=s$.
issa: Cluny 2914, p. 509, 11. 2, 5, 11, cf. ipsa, 1. 3: 997-1031, XI./XIII. The same form occurs in Cluny 2697: 1015 C.

[^48]deinces: T. 241, p. 151, col. 2, 1. 17: 998 O; Paris.
escrisit: Cluny 2954, p. 154, l. 11: 1041 C.
Before and after the Carolingian reform, $p s$ was sounded as $s$. From the rimes cited by A. Eiselein, R. F. X., p. 537, it appears probable that the $p$ was not restored in French learned words until after the Old French period. We shall scarcely go wrong in assuming that the same holds good for the pronunciation of Latin. Noteworthy are spellings like comps, nomps, raimps, cited by E. Goerlich, Die südwestlichen Dialekte der Langue d'Ö̈l, p.95. Erasmus, Dialogus, col. 952, F, notes the Gallic pronunciations salmus, epsallo. On initial ps in French learned words, see A. Eiselein, R. F. X., p. 535, and Thurot, Prononciation, II., pp. 360 ff.

## Pt.

prepter ( $=$ propter, confused with praeter ?): 'T. 25.6 and 10:
688-9 O; Compiègne.
conscripttas: T. 34.16: 695 O; Compiègne.
abrutis: T. 36.27: 696 O; Chatou.
supraescripthis: T. 43.30: 709 O; Quiersi.
reptemtus (= retentus): Mabillon 65, D: $\mathbf{8 2 1} \mathrm{O}$; probably Caunes.
raptum (= ratum): Formulae Ineditae, Migne, vol. 87, col. 893, B.
sepbtembris: Musée 8, p. 18, l. 18: 856 O.
praescribtis: T. 191, p. 126, col. 1, l. 19: 864 O; Compiègne.
recettore: Cluny 2263, l. 5: 994 C. Cf. recetore, ibid., l. 10.
adatavit: Cluny 2894, l. 13: 1034 C.
sedtember: Cluny 2875, l. 14: 1031-60 C.
"Ratus pro Raptus: Charta Willelmi Comitis Pontivi ann. 1203 in Tabular. S. Judoci." Du Cange s. v. raptus I.

From the second half of the seventh century until after the end of the Old French period, the $p$ in $p t$ appears to have been silent in clerical Latin. A. Eiselein, R. F. X., p. 537, cites Old French spellings which show that in learned words $p t$ was sounded as $t$. Thirteenth-century spellings like quipte, nepte, cipté, noted by E. Goerlich, Die südwestlichen Dialekte, p. 95, point in the same direction. A writer of the fourteenth century (cf. p. 100) warns against spelling sagitta with a $p$.

## 2. B-Groups.

## Bb.

ibbidem: T. 68, 1. 14: 770 O.

## Bl.

The $b l$ of publicus was often written and doubtless pronounced as $p l$, on account of the influence of populus. The form pullicus, common in the cartulary of Cluny, points to a local development ${ }^{1}$ of $b l$ into $l$ in the vernacular, on account of which clerks found it inconvenient to pronounce the group $b l$ in Latin.

## a. Pl for bl .

Forms of puplicus occur as follows: T. 37.5 (poplicus): 696 O; St.-Cloud. Reichenau Glosses, Förster and Koschwitz, Übungsbuch, col. 6, l. 223: VIII. Mabillon 45: 764 O; Marlenheim, Alsace. T. 66, p. 54, col. 2, l. 22; 769 O; Attigny. T. 90, p. 70, col. 1, l. 8: 790 O; Pesche. Paleographical Society, Plate XI., col. 1, l. 2 f. b. and col. 2, l. 6: 812; probably Canterbury. Vita Hludowici, Mon. Germ. Hist. II., p. 619, l. 24, cf. publicum, p. 631, l. 27: after 840, IX./ or X. Cluny 18, 1. 5: 873 C. Cluny 38, l. 16: 889 C. Cluny 110, 1. 6: 910 C. Puplicus, pupplicus, pupblicus, etc., will also be found in the following numbers of the cartulary of Cluny: 271, 2171, 2385, 3178, 3240, 2819, 2850, 2919 (this last document dated 1037, XI. / XII.)

## b. Ll for bl .

pullicis: Redon 43, l. 9: 833, XI.; Grancampo Vico. pulliciter: Redon 125, l. 12: 850, XI; De Saviniaco. pullica: Cluny 22, l. 6: 878 ?, C. Cluny 1777, l. 15: 988 C. Cluny 1802, l. 3: 989 C. Pullica, pullice are also to be found in the following places: Cluny 1898, p. 60, l. 8 (cf. polica, p. 60, 1. 3): 989, XI./XII. Cluny 1829, p. 74, 11. 6,9 : 990 O. Cluny 1856, p. $96,1.5$ : 990-1 C. Cluny 1925, l. 6: 992 C. Cluny 2283, l. 6 (cf. l. 9, publica): 997,

[^49]> XI./ XII. Cluny 2674, p. 705, 1. 13: 1010 O. Cluny 2714, l. $10: 1018$ C. Cluny 2894, l. 5: 1034 C. Cluny 2954: 1041 C.

## Bn'.

abnecti $(b n=d n=n n$, phonetically doubtless $=n): \mathbf{T}$. 40.60: c. 700 O; Paris.
sumnixa $(m n=b n=n)$ : Cluny 56, l. 11: 895 C .

## Br .

Intervocalic $b r$ is never confused with $v r$ in Merovingian manuscripts written in Central France. We are thus justified in concluding that clerks in this region pronounced the group as $b r$ as early as the seventh century. Strong additional support to this view is furnished by the form of the Merovingian loan-word teniebres, which was popularized before the eighth-century (and earlier) pronunciation of Latin er not in position as $i e$ was corrected (cf. pp. 34 f .). If we can reasonably consider chandelabre a borrowing of the seventh' century, as Paris is rather inclined to do (J. S. 1900, p. 299), its testimony may be added also; but the antiquity of this word is very doubtful (cf. pp. 65 ff:). Livre apparently became popular at about the same time as pape - i.e., in the ninth or tenth century: it seems to owe its $v$ to the influence of the Italian ecclesiastical hegemony. ${ }^{1}$ The form that we should have expected is libre, which actually occurs in the Alexander fragment (ef. Berger, p. 165); this monument, however, is written in Provençal.

## Bskw:

The more careful Merovingian pronunciation of this group was doubtless beskw, beside which skw must have existed.
abisquae repedicione: T. 42.11: 703 O; Quiersi.
${ }^{1}$ On the Romance phonology here involved, see Grandgent, Vulgar Latin, p. 134; and note that intervocalic $b$ was not restored in Italy until after the ninth century (supra, p. 57).

## II. Groups beginning with a Dental.

## I. T-GROUPS.

Th.
Thurot, Extraits, p. 78, prints the following from a fragment of a tenth-century treatise on reading: $T$ quoque, si aspiretur, ut C enuntiatur, ut aether, nothus, Parthi, cathedra, catholicus, ethicus [etheus Cod.], Matheus. Cf. Erasmus, De Pronuntiatione Dialogus, col. 952, E: Qui crasse docent, monstrant $\theta$ propemodum sonare quod nobis sonat $t s$, quam syllabam nostra lingua facillime sonat in $t s a$, quum duabus syllabis dicimus, simul $[=$ tsamen]. It seems somewhat strange that this pronunciation of $\theta$ as $t$, which must have been common in some quarters from the tenth to the sixteenth century, is not oftener reflected in the form of loan-words. A. Eiselein, R. F. 'X., p. 542, discussing the Old French spelling arismetique ( ${ }^{\boldsymbol{p} \rho} \boldsymbol{\rho} \theta \mu \in \tau \iota \kappa \mathfrak{\eta}$ ), differs with the editors of the Dictionnaire général (Hatzfeld-Dairmesteter-Thomas), who consider the $s$ as the resultant of the $\theta$ in the Greek word. Since $\theta$ was sounded as $t$ s as early as the tenth century, the latter view appears to be the correct one. ${ }^{1}$

## Ty and Cy.

Since these groups were graphically confused in Merovingian Latin, they may have had the same value in clerical speech. ${ }^{2}$ In Carolingian times they were both pronounced as tsi, as is shown by the form of loan-words like commocïon, especial (cf. Paris, J. S. 1900, p. 360.)
neguciante (3), eciam (4): T. 5: c. 627 O; Etrepagny. tessauriciate: T. 19.2: 670-1 O; La Morlaye. adjeceniis: ${ }^{3}$ T. 25.9: 688-9 O; Compiègne.

[^50]adjacientias: T. 28.18: c. 690 O; Arthies.
agieciencizs: Marini XCVI., l. 16; ageciencias, l. 18; 690 O;
Camiliaco vico.
adjeciencias: T. 33.29: 693-4 O; Valenciennes.
manatiat (1. 131), manaces (157), anetiaverunt (1. 451), anatsavent (1. 509), anatsaverunt (1. 695 and 829), anetsatus (l. 720), anetsor (l. 865), fruncetura (1. 1067), sorcerus (l. 1094): Reichenau Glosses, Förster and Koschwitz, Übungsbuch: VIII. ${ }^{1}$
retrucionem: Vie de Sainte Euphrosyne, ed. A. Boucherie, § 11, l. 11: copy of the ninth century.
agrisione (C), excavasione (D), vacuasione (D): Mabillon 89: 853 O ; probably Caunes.
concrecasione: Mabillon 103, B (quater), etc.: 873 O; probably Caunes.
cersio (= certio): Cluny 1833, l. 6: 990 C. This spelling dates the shift $t s>s$, in the neighborhood of Cluny, as early as the tenth century. Cf. pp. 65, 68.
percussiendum: Dombes I., p. 75, \& 44: 1304, 1408.
inficiari (col. 913, C), pronunciatio (col. 913, E), negocio (col. 914, A): Erasmus, Dialogus: 1528, 1703.

## 2. D-groups.

Db.
$u t b i(=u b i):$ T. 90, p. 69 , col. 2, l. 9 f. b.: 790 O; Pesche. The $t$ is silent here, and perhaps indicates that $a d b$ - was sounded as $a b$.

## Dp.

The $d$ in this graphic combination was evidently not sounded.
adpendiciis (13), cf. appendiciis (19): T. 1: 528, X.
adput ( $=$ apud): Cluny 2215, l. 3: 993-1048, XI./XII.

## Ds.

The $d$ appears not to have been pronounced in words like adserit (T. 46.5, 716 O , Compiègne), although it is often written.
quods ( $=$ quos), ads ( $=$ has) condiciones (bis): Mabillon 65: 821 O; probably Caunes.

[^51]> Dst.
> adestare: T. $45.14: 710$ O; Montmacq.
> Dy (intervocalic).

Since this group is not appreciably confused with $y$ in the spelling of Merovingian manuscripts, it may be assumed that the $d$ was actually sounded at least as early as the seventh century. ${ }^{1}$ The form of the Merovingian loan-words envire, homecire, remire leads to the same conclusion: on these words cf. Schwan-Behrens, p. 240, § 143; Meyer-Lübke, Rom. Gram. I., p. 520; S. F. Eurén, Etude sur l'R français, pp. 33-6; H. Andersson, Litbl. 1898, col. 24 and E. Gorra, Studj di filologia romanza, VI., pp. 581-3. The still more ancient loan-word meriene (cf. Berger, p. 179) was doubtless popularized at least as early as the sixth century. The Carolingian value of the group was $d \ddot{\imath}$ (cf. O. F. cotidïan).

Madius: T. 30.26: 692 O; St.-Cloud.
madias: Mabillon 103, D: 873 O; probably Caunes.
madio: Cluny 20, p. 25, l. 13: 874?, C.
madii: Cluny 50, 1. 19: 893 C.
madio: Cluny 71, p. 81, l. 16: 901 C. Cluny 206, p. 195, 1. 22: 917 C. Vienne 4, l. 2 f. b.: 975-93, XII. Cluny 1823, 1. 12: 990 C. Cluny 1923, l. 11: 992 C.
madii: Toulouse 9, l. 15: 1125, copied probably 1176-98. Toulouse 44, l. 12: 1164, copied probably 1176-98.
This spelling is suspicious, because it is found in but a single word. By later ignorant scribes this word must have been pronounced with a $d$.

## 3. S-GROUPS.

Sk (followed by $e, i$ ).
sussetarit: P. Meyer, Joca Monachorum. Rom. I., p. 488, § 46: VI.?, VIII.
hujussemodi (so Codex): Lérins 53, p. 52, 1. 1: IX.,/XIII. iximus ( $=$ scimus): Mabillon 65, l. 10, and D, 1. 6: 821 O; probably Caunes.
sivimus: Mabillon 89, D, l. 6: 853 O; probably Caunes.
ximus: Mabillon 103, C, l. 8: 873 O; probably Caunes. sussepimus: Cluny 2393, 1. 3: 997 C.
${ }^{1}$ The etymology of agiecienciis (Marini XCVI., 1. 16; 690 O; Camiliaco vico), beside ageciencias (ibid., 1. 18) was unknown to the ignorant scribe.

## Sn.

Under this head may be noted the following spellings, which show that in the vernacular of Burgundy, $s$ followed by some consonants became silent before the twelfth, or perhaps before the eleventh century.

Gausfredus: Cluny 1444 bis (Vol. II. p. 755) 1. 8: 978, XI./XII.
resnante: Cluny 2587, 1. 12: 1004 C.
immusnis: Cluny 2935 l. 1: 1040, XI./XII.

## Ss.

tessauriciate: T. 19.2: 670-1 O; La Morlaye.
proceset: P. Meyer, Joca Monachorum, Rom. I., p. 485, § 1: VI. ?, VIII.
posiessio: ${ }^{1}$ T. 43.21: 709 O; Quiersi.
aserebänt (10), asericienté (15): T. 44: 710 O; Montmacq.
posiderunt: T. 45.4: 710 O; Montmacq.
vindedisit, accipisit (D, l. 6), vindedisit (D, l. 9), recepisit (p. 709, l. 1) rogasit (ibid.), fuisit (p. 705, l. 4), etc.: Bouquet-Delisle IV., 120: 726, doubtless original; Pontegune.
firmesima (1. 14), gloriosisimus (p. 55, col. 1, last line): T. 67: 769 O.
posessio (1. 13), posedendum (p. 56, col. 1, 1. 5), etc., firmisimam (p. 56, col. 1, l. 8): T. 68: 770 O.
fidejusoris: T. 69, p. 56, col. 2, 1. 20, etc.: 771 O; Worms.
jusi: T. 90, p. 70, col. 1, l. 4: 790 O; Pesche.
serenisimus: T. 103, l. 1: 812 O.
otiusse: Mabillon 92, B, l. 10: 858 O; Metz.

## Sy .

retrucionem: Vie de Sainte Euphrosyne, ed. A. Boucherie, § 11, l. 11: copy of the ninth century.
franchigias (generally spelled franchisias): Cluny 3046 p. 237, l. 3: 1049-1109, XI./XII.

[^52]
## 1II. Groups beginning with a Velar.

## 1. K -groups.

$\mathbf{K k}$ followed by e, i.
This group was pronounced as $t s$ in Merovingian and doubtless in Carolingian times, later as s. A. Eiselein, R. F. X., p. 559, gives a list of Old French spellings (aucent, acetable, assepcion, aucident, Ocident, acepter, occean, ocisïun, etc.) from which he ought hardly to have hesitated to conclude that $c ¢$ was regularly sounded as $c$ in Old French learned words. The correction of this pronunciation to $k s$ doubtless occurred after the Old French period. The testimonies cited by Thurot (Prononciation II., p. 331) show that some uncertainty in spelling and pronouncing this group existed as late as the seventeenth century. The following Latin spellings may be noted:
acinctus: T. 23.9: с. 681 O.
sucedire: T. 25.2: 688-9 O; Compiègne.
sucessoribus: T. 39.15: 697 O; Bougival.
acepissent: T. 45.12: 710 O; Montmacq.
crocces (l. 1), licceat (1. 6): Mabillon 36, p. 489: 723; Valenciennes.
acepimus: Cluny 2871, p. 86, 1. 4: 1031-60 C.
icirco: Montélimar 20, 1. 2: 1262 O; Montilii.
Testimony of Grammarians. Albini Magistri Orthographia, Keil VII., p. 297: Accentus per duo c, ubi vox levatur in verbo. Thurot, Extraits, p. 141 (from a grammatical work of the thirteenth century): C litera muta suaviter sonat, $e$ vel $i$ sequentibus, ut cecitas, nisi interponitur $r$, ut cremium. Aliis iuncta vocalibus grande sonat, ut cadit, codex, culpat. Magis quoque sonat in principio quam in medio, ut occidit. In fine bene sonat.

## Kl , Kkl.

neclixit: T. 30.21: 692 O; Saint-Cloud.
eglesiae: Mabillon 65, I. 8: 821 O; Caunes.
neclexcrit: Gallia Christiana Novissima, III., 212, 1. 12: 871;
Arles.
eglesia (C), cf. ecclesia (B): Mabillon 103: 873 O; probably Caunes.
gliencium: T. 290, p. 181, col. 2, 1. 2: 1073 O; La Chapelaude. The $g$ is here due to a scribal or paleographical error.
Before speaking of the pronunciation of intervocalic $c l$ in clerical Latin, it will be necessary to discuss the chronology of the vulgar sound-change $c l>l^{\prime}$. Paris (J.S. 1900, pp. 372 ff.), after proving beyond the shadow of a doubt that the only regular representative of intervocalic $c l$ in Old French is $l^{\prime}$, explains the apparent exceptions (avuegle, bogle, seigle, siegle, avogler, bogler, bugler, eglise, jaglel, jagloi, jogler, jogledor, marreglier) by saying that all these words found their way into the vernacular after $c l$ had completed, or at least carried to a considerable distance the evolution which was to result in $l^{\prime}$, and before the voicing of intervocalic $c$ : that $c l$ in such forms became $g l$ when $c$ became $g$ in the vernacular, and that in the group $g l$ the $g$ was not affected by the later, distinctively Northern development of intervocalic $g$ into $y$. Since it is difficult to see why the $g$ in this particular group should have been exempt from the development into $y$, it may not be improper to suggest a slight modification of this view, which seems to furnish a somewhat more harmonious explanation of all the facts involved. Is it not very probable that the parallelism which appears to exist between the groups segont segur, megre egre, siegle marreglier, is real? If this question be answered in the affirmative, we must admit that since the first two groups represent a conservative development or partial correction, the third is to be placed in the same category. We then arrive at the conclusion that the first stage of the vulgar sound-change $k l>l^{\prime}$ was probably $g l$, just as the first stage of the development $k r>i r$ was certainly $g r$. The Provençal developments $l^{\prime}<k l, g r<k r$ are readily explained on this basis, since they may likewise go back to a pan-Gallic stage $g l, g r$, the distinct treatment of the group gl, due to the closer phonetic relation existing between its elements, being secondary and peculiar to this region, where intervocalic $g$ did not become $y$. On the whole, then, we should scarcely go astray in admitting that a clerical or conservative pronunciation of $c l$ as $g l$ existed in a period after this $g l$ had passed into $l^{\prime}$ in the mouths of the common people, just as intervocalic $c$ before $o$ was sounded as $g$ by clerks after it had disappeared from ordinary speech, and just as $k r$ was sounded as $g r$ by clerks
after it had become $i r$ in the vernacular. Later on in the Merovingian period, probably in the seventh and eighth centuries at least, the ancient $k l$ must have been restored in clerical Latin, as is shown by the form siecle, derived directly from the Merovingian sieclum (spelled saeclum). Paris (J.S. 1900, p. 372, note 4) is surprised at the diphthong in this word, and takes it to be a revised form of siegle ("siegle refait sur le latin"). The presence of the diphthong is, however, explained above (pp. 34 ff .) on a more satisfactory basis.

## Kr .

sagrata: T. 42.2: 703 O; Quiersi.
sagramentum: T. 45.9: 710 O; Montmacq.
sagris: Mabillon 36, p. 489, 1. 1; 722; Valenciennes.
sagramentum (l. 1), sagrosancto (1. 9): Mabillon 65: 821 O; probably Caunes.
Merovingian loan-words like egre, merge, segret (cf. SchwanBehrens, § 158, note), sagrament (cf. Koschwitz, Commentar, pp. 29 ff.) show that clerks pronounced intervocalic $c r$ as $g r$ for a certain period after $g r$ had become ir in the vernacular. Berger (p. 29) remarks, in effect, in his discussion of the form sagrament, occurring in the Strassburg Oaths, that the sound-change $g r>i r$, according to his opinion, took place after the middle of the ninth century. This view, being contrary to all known analogies, is improbable. The clerical pronunciation of $c r$ as $g r$ was corrected in the Merovingian period, as is shown by the forms secré, secrei (cf. Godefray, s. $v$.), and even the earlier $g r$ must have coexisted with the popular form ir.
Ks (X).

## 1. Before and after consonants.

From the seventh to the eleventh century, and doubtless later $x$ preceding or following a consonant must have had the value $s$.
extromento: T. 28.7: 691 O; Chatou.
extiblacione: T. 67, p. 55, col. 1, l. 5 f. b.: 769 O.
sesto: Cluny 1823, l. 11: 990, XI./XII.
Craiencsi (l. 8), cf. Cluniacensi (1. 16): Cluny 2802: 10278 O.
maxmilem: T. 259, p. 163, col. 1, l. 8 f. b.: 1029 O, Chelles. Cf. masnilibus: T. 260, 1. 11: 1030 O; Poissy.
estiterit (= extiterit): Cluny 3106, l. 10: 1049-1109, XI./ XII.
remanxerat: Dauphiné 4, p. 15, l. 10 f. b.: 1327, '"papier du temps."

## 2. Final X.

We have no reason to believe that the final sound-group $k s$ was handed down by learned tradition after the gradual development of final $x$ into is in the vernacular. In Carolingian times the $x$ must have been sounded as $s$. The restoration of the ancient $k$ should perhaps be attributed to the scholars of the Renaissance. A. Eiselein, R. F. X., p. 562, cites a number of forms and rimes which go to show that final $x$ in Old French learned words was sounded as $s$, though Eiselein himself hesitates to draw this conclusion. The spelling rex which occurs twice in the Eulatia should be noted, likewise the spellings of the Old French loan-word crucifix (crucefis), and the following phrase quoted by M. F. Mann, Der Physiologus des Philipp von Thaün und seine Quellen, p. 9, from a manuscript of the beginning of the fourteenth century: Et quia laux dicitur a philippo laudatur.

## 3. Intervocalic X.

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distrasxerat: T. 15.6: c. 658 O.
direxsissint: T. 22.10 and 19: 679-80 O; Lusarches.
sexsus (8), Uxxima (9): T. 24: 682-3 O; Pressagny.
sexsus: T. 25.8: 688-9 O; Compiè̀gne.
exsemplare: T. 26.79: c. 690 O; Arthies.
abstraxsissent: T. 38.10: 697 O; Compiègne.
exsercemus (2), ausiliante (10): T. 49: 716 O ; Compiègne.
Saxsones: T. 55, col. 1, l. 6 f. b:: 753 O.
recsededit: T. 75, p. 60, col. 1, 1. 14: 775 O; Duren.' Mabil-
    lon (p. 499) read resededit in this place, and the passage
    is given in this form by DuCange. The group cs here
    evidently means \(s\).
iximus ( \(=\) scimus): Mabillon 65, 1. 10, and D, 1. 6: 821 O:
    probably Caunes.
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construcxit (etc.): Musé 5, p. 11, 1. 21: 834 O; Fontjoncouse, Aude, arrondissement de Narbonne?
dicxit, tracxi: Mabillon 89, C: 853 O; probably Caunes.
juximus: T. 180, p. 114, col. 1, l. 9 f. b., and col. 2, 1. 1:
861 O ; Compiègne.
ussor: Cluny 37, l. 1: 889 C.
ucsorique: T. 232, l. 17: 943 O.
escrixit: Cluny 2544, l. 13: 1001 C.
percuxerit (p. 9, § 34), cf. percusserit (p. 10, §44): Dombes I.: 1269.

It is clear enough that in Central France intervocalic $x$ was sounded as $s$ from the seventh to the ninth century at least, and that in Burgundy this pronunciation still existed after the middle of the thirteenth century. ${ }^{1}$ It is also extremely probable that the scribe who wrote the Oxford Psalter in the first third of the twelfth century pronounced this $x$ in Latin as $s$; for he wrote in French exalcier, exardre, exillier, exoür, etc., apparently sounding ex- as es (cf. Berger, p. 135, note 1). I have no evidence at hand tending to show that the ancient $k s$ was restored before the time of the Renaissance. Old French visquét, vesquit should not be taken as pointing to an ecclesiastical vixit, in which $x$ was pronounced as $k s$ or $s k$ (cf. Berger, p. 272). In some period previous to, or in the sixteenth century, Latin intervocalic $x$ was probably sounded as $z$; it is on this basis that I am inclined to explain the French pronunciations perplexité ( $x=z$ ), euzemple, euzecuter, attested by Palsgrave in 1530, and ezemple, ezercer, attested by H. Estienne in 1582 (Thurot, Prononciation, II., pp. 336 f.). The meaning of the following testimonies of grammarians is by no means beyond dispute, but I am inclined to think that they represent Italian rather than Gallic phonetic conditions: ${ }^{2}$ Thurot, Extraits, p. 79, ll. 10 ff . (a fragment

[^53]of a tenth-century treatise on reading). $X$ in simplicibus sonat dictionibus duplex, ut exorcizo, exodus, uxor. In compositis vero duplex non profertur, ut exaro, exortor, exoro, exanimis, exacerbat, exarsit, exordiri, exordium, exosus. Excipiuntur ob differentiam exeo et exalto. Notandum vero quoniam, si ex prepositio corrumpat verba vel nomina, exprimuntur x in illis, ut exiguus, eximius, eximo, exigo, exhibeo, exerceo. Et quia per corruptionem exprimatur in illis ostendunt quedam ipsorum preterita vel supina, que prepositio non corrumpit, et in quibis $X$ duplex non sonat, ut exemi, exegi, exactum, exemtum.- Thurot, Extraits, p. 145 (from a grammarian of the twelfth century): $X$ in simplicibus duplex sonat et ex utraque parte exprimitur, ut dixi, vexi, duxi, exemplum, exodus. In compositis autem ex parte ex prepositionis sonat, manente vocali, ut exaro, exhortor, exordior, exordium, exoro. Quod si ex prepositio vocalem post se mutaverit, tune expresse, hoc est ex utraque parte, sonat in corruptis, ut eximius, exiguus, exhibeo, exigo, exerceo, eximo. Et quod propter corruptionem exprimatur $x$ in ipsis ostendunt eorum quedam preterita vel supina, que prepositio non corrumpit, et in quibis $x$ duplex non sonat, ut exemi, exemplum, exegi, exactum. In omnibus illis in quibus alterum componentium ab $s$ incipit, $x$ expresse sonat, ut exurgo, exupero, exulto, exolvo, exuo et cetera. Sciendum quoque quod si ex prepositio et verbum simile ablativo componantur, propter differentiam duplex $x$ sonat, ut exalto, exeo, exacerbo, examino. In hoc nomine examen, quoniam vocalis non corripitur, sed de medio consonans aufertur, $x$ tamen ex parte prepositionis sonat et in verbo suo similiter, ut examino.

## Kt.

On the development of this group in the vernacular, see MeyerLübke, Einführung in das Studium der romanischen Sprachwissenschaft, pp. 177 f. J. E. Matzke, Publications of the Modern Language Association of America, XIII. (1898), p. 39, assumes that the stage $i t^{\prime}$ was reached by the sixth century, and this view is supported by the spellings given below from the years 653 and 716 . The form exagetare from the year 716 is particularly striking. The still more important spelling delictit, occurring in an original document dated in the year 696, is discussed on page 35 . From the
fact that $c t$ was not much confused with $t$ or $t t$ in seventh-century writing we may infer that the $t$ was still palatal in that period. There seems to be no evidence tending to show that the ancient $k$ was sounded in this group, either in Merovingian or in Carolingian times. The Friench form platique < практькү, cited by Körting (number 7358) from Commines, shows that Latin ct was doubtless sounded as $t$ when the word was borrowed. Moreover A. Eiselein, R.F. X., p. 555, shows conclusively that the graphic group ct was regularly sounded as $t$ in Old French learned words. The introduction of the phonetic group $k t$ in Latin and in French learned words was accomplished by the scholars of the Renaissance. The correction of the earlier pronunciation of $c t$ as $t$ was still going on in the second half of the sixteenth century, as may be inferred from the following: Thurot, Prononciation, II., p. 336: "Tabourot [1587] indique les rimes infecte-coifette, obiecte-vergette, collecteCollette, humecte - promette, respecte - trompette, secte - disette, architecte - tete, dicte - ditte, vindicte - visite. Mais Lanoue [1596] atteste formellement que le $c$ se prononce dans tous ces mots, et met ces rimes à part." F. Talbert, in his review of Thurot's first volume, remarks (p. 13): "Pourquoi prétendre (Introd. XLII.) que Tabourot s'est plus occupé de l'abondance des rimes que de leur exactitude? Il n'est pas une seule de ses assertions qui ne se trouve confirmée par les poètes contemporains."

The following spellings may be registered here:
autoretatis, autoretatem: T. 11.6: $\mathbf{6 5 3} \mathrm{O}$; Clichy.
auturetate: T. 13.4: c. 657 O.
dictho: T. 43.8, 12 and 16: 709 O; Quiersi.
adtractho: ibid, 21.
exagetare ${ }^{1}$ ( $19,=$ exactare), cf. exactati (3) and exigiatur (11): T. 47.19: 716 O ; Compiègne.
ditavi (= dictavi): Vienne 8, p. 10, l. 5: 977, XII. 15, p. 16, l. 14: 985, XII.
acquictaturos: Blois 25, 1. 12: 1044.
quictum: Mâcon 559, l. 5: 1111 C . Cf. quitam: Couture 201, p. 175, 1. 4: 1209, copied early in the thirteenth century.

[^54]dimicterent: Mâcon 590, 1. 15: 1126-43 C.
legictime (p. 8, § 17), debicti (p. 8, § 25), debictori, cf. debitor (p.9, § 26), debictum (p. 9, §32): Dombes I: 1269.
actendat: Montélimar 22, p. 44, l. 9: 1275, "Vidimus" of 1354. This spelling is quite common in the cartulary of Mortelimar: it occurs also in numbers $23,24,31,56$ (this last document dated 1354 O , Montélimar).
inmictere . ...vel imiti: Montélimar 24, l. 16: 1280, "Vidimus" of 1354 "en origin.;" Montilii.
colletas (l. 6 f. b.), cf. collecta (l. 4 f. b., etc.): Montélimar 28, p. 63: $\mathbf{1 2 8 5} \mathrm{O}$; Montilii.
legictime (p. 73, §§ 19, 37), licteris (p. 76, 1. 20): Dombes I: 1308, 1408.
contramictimus: Lettres de Rémission, ed. Douët-D'Arcq, Bibliothèque des Chartes, $4^{\mathrm{e}}$ série, II. (1861), p. 73, l. 13 f. b.: 1320.
mictimus: ibid., p. 72, l. 13 f. b.: 1323: Paris.
remictere (p. 95, l. 4, p. 96, l. 14, etc., etc.): Dombes I.: 1325.
licteris: Dauphiné 4, ll. 14, 22, etc.: 1327 O.
actentent, actentari: Dombes II., number 180, l. 4 f. b.: 1355.
licteris: Dombes II., number 186, 1. 5, and p. 256, ll. 4, 10: 1365, XV.
actendentes: Couture 463, p. 351, 1. 11: 1408, "Vidimus" of 1415 .
remictant (p. 400, l. 3), licteras (p. 401, l. 10): Mâcon: 1451 C; Chatillon.
inmictere: Mâcon, p. 408, l. 18: 1504 C.

## Kty.

benedicionis ${ }^{1}$ : T. 36.8: 696 O; Chatou.
in fisce diccionebus (8), cf. in fisce dicionebus (4): ${ }^{2}$ T. 49:
716 O; Compiègne.
vindictione (= venditione): Cluny 24, p. 29, 11. 14, 18, 21, etc.: 881 C.
vindiccione (=venditione): Cluny 27, p. 33, 1. 5: 885 C.

[^55]protexione: Montélimar 25, p. 52, l. 13: 1280, "Vidimus" of 1354, "en orig."
protexione, contradixione: Montélimar 28, p. 65, 1. 18: 1285 O.
ectiam: Dombes I., p. 101, VII., l. 17: 1325.
The graphic group $c t i$ was perhaps pronounced as $t s$ in the clerical language of the Merovingian period; cf. the spellings given above, and the O. F. loan-words benëicion, malëigon, which were popularized after the fall of the protonic non-initial vowel in the vulgar tongue, but before the pronunciation of Latin intervocalic $d$ as a stop was introduced. ${ }^{1}$ In the Carolingian period the value of $c t i$ was charged to tsï, as is proved by Old French forms like cuntrediciun beside cuntredictium, destrucion, delection beside delicion, equinoce, etc. (cf. Berger s. $v v$.): The $t$ in this group was of course lost in the Old French period. The pronunciation of Latin cti as $k s i$ or $k s y$ was doubtless introduced by the scholars of the Renaissance.
$$
\mathbf{K w}(\mathbf{Q u}) .
$$

## I. The $k$ in qu.

The $k$ in $q u$ must have tended to become $g$ in the period when the popular sound-shift $c>g$ occurred: The restoration of the ancient $k$ should doubtless be assigned to the same early period as the restoration of intervocalic $k$ (cf. pp. 70 f .), although the spellings given below, which are strictly cases of $c u$, not $q u$, might seem to point toward a later period.
complaguit: T. 67, 1. 10: 769 O.
convicuit: T. 57, p. 60, col. 1, l. 18 f. b.: 775 O; Duren.
evaguo (B, l. 11), cf. evacuationem (1.3): Mabillon 61, p. 506:
803 O; Carcassonne.
conticuam: T. 197, l. 6: 867 O; Compiègne.

$$
{ }^{1} \text { Cf. p. } 62 .
$$

II. The win qu.
a. Before i.
secuit: Vita Hludowici, Mon. Germ. Hist. II., p. 611, 1. 34: after 840, IX./ or X.
b. Before a.
indiquat: Redon 23, 1. 1: 859, XI; aula Clis: "Est in Guerrandia, et est hodie [in the sixteenth century] monasterii de Precibus."
evangeliqua: Cluny 2781, p. 806, l. 9: 1023 O.

## c. Before o, u.

ad alecus: T. 5.4: c. 627 O; Etrepagny.
quoepiscopis: T. 11.6: 653 O; Clichy.
aquolabus (=accolis): T. 13.8: с. 657 O.
locuntur: T. 22.17: 679-80 O; Lusarches.
relinco (12, 24), cf. relinquo (51): T. 26: c. 690 O; Arthies.
quoactus: 'T. 29.15: c. 691 O.
condam: T. 31.2,8: 692 O; St.-Cloud.
alico (= aliquo): T. 56, p. 47, vol. 2, 1. 11: 755 O; Compiègne.
alico: T. 101, p. 75, col. 1, l. 21: 811 O; Bonneuil.
cos: Musée 5, 1. 5: 834 O; Fontjoncouse, Aude, arrondissement de Narbonne?
quoram: Redon 145, 1. 16: 867, XI.
condam: Montélimar 28, p. 64, 1. 14 f. b.: 1285 O; Montilii.
The testimony of grammarians.-Albini Magistri Orthographia, Keil VII., p. 299, ll. 23 f.: Coquus coqui prima syllaba per c , secunda per $q$ scribendum; non enim dicimus quoquere, sed coquere. Thurot, Extraits, p. 143 (from Pierre Hélie,, a grammarian of the twelfth century): Nos vero dicimus quod $u$ ibi [in quis] est littera et vocalis plane. Sed quod non retinet ibi vim litterae propter metrum dicitur, quoniam in metro nichil operatur, nec sonum plenum habet, sed collisim, ita tamer ut non omnino debeat taceri, sed cum quodam sibilo proferri. Thurot, op. cit., p. 143 (from the celebrated grammarian Alexander de Villa-Dei, of the thirteenth century):

Vocali preiungitur $u$ non consona vimque
Perdit et hoc suavis, queror, aut aqua, lingua probabunt.
Nam diphtongus ab $u$ nostro non inchoat usu.
Mosque modernus habet quod, $s$ preeunte,
Sillaba dividitur; tunc $u$ vocalis habetur.
Thurot, op. cit., p. 143 (from a fourteenth-century MS - cited by Thurot to prove that $q u=k$ ): Si clames quantum poteris, dices male cantum;

Incipitur primum per $q$, sed per $c$ secundum.
The pun on the name of Alexander Neckam (born in 1155) should be mentioned here. In reply to his application for admission to the monastery of St. Albans, the abbot of that institution wrote: "Si bonus es, venias; si nequam, nequaquam" (cf. Thos. Wright's edition of Neckam, p. XI.). On the present pronunciations of $q u$ see M.-A. Lesaint, Prononciation française, p. 464, and on the innovations made by Renaissance scholars, see Thurot, Prononciation, I., pp. 554 ff . It seems very likely that the group was sounded during the middle ages as in the vernacular. On the Old French pronunciations of $q u$, which are not yet entirely understood, I may refer to F. M. Auler, Der Dialekt der Provinzen Orléanais und Perche im 13. Jahrhundert, pp. 113 f.; D. Behrens, Französische Studien V., 2 (1886), pp. 205 ff.; E. Busch, Laut- und Formenlehre der anglonormannischen Sprache des 14. Jahrhunderts, p. 50; K. Buscherbruck, Die altfranzösischen Predigten, etc. (R. F. IX.), p. 703; F. Diez, Grammatik I. ${ }^{3}$, p. 459; H. Flaschel, Die gelehrten Wörter in der Chanson de Roland, p. 31; E. Goerlich, Der burgundische Dialekt (Fr. St. VII.), p. 115, and Die südwestlichen Dialekte (Fr. St. III.), p. 92; K. Huber, A.S. N.S., 1886, p. 331; E. Koschwitz, Voyage de Charlemagne, p. 73; E. Mall, Compot, p. 93; G. Paris, Alexis, pp. 88 f., and Orson de Beauvais, p. XIII.; and Hofmann and Volmöller, Brut, p. 39.

Ky: see Ty (pp. 81 f.).

## 2. G-GROUPS.

Gg.
iggitur: T: 19.2: 670-1 O; La Morlaye. sogesserunt: T. 45.3: 710 O; Montmacq.
iggitur: T. 56, p. 47, col. 2, l. 7: 755 O; Compiègne.
siggillare: T. 65, p. 54, col. 1, 1. 7: 769 O; Samoussy.
exagerationis: Cluny 3140, l. 6: 1049-1109, XI./XII.
Orthographia Albini Magistri, Keil VII., p. 297, l. 17:
Agger per duo $g$ scribendum est, quando stratam significat; si autem campum, ubi seminari potest, per unum g. Thurot, Extraits, p. 520 (from a MS of the tenth century): Aggestus per gg.
The confusion of $g$ and $g g$ in Merovingian times was perhaps merely graphic, since the popular developments were distinct. But in later Carolingian times, although there is practically no graphic confusion, $g$ and $g g(+e, i)$ probably had the same value ( $=d_{z}^{\breve{z}}$ ).

## Gm.

augimentum: 'T. 34.6, 16, etc.: 695 O ; Compiègne.
augementum: T.49.3, etc.: 716 O ; Compiègne.
augimentis: T. 50.19: 717 O ; Compiègne.
lagmentare ( $\S 12$, l. 2), cf. laimentantes ( $\S 12$, p. 34, 1. 4), laimentabant (1. 11): Vie de Sainte Euphrosyne, ed.
Boucherie: copied at the beginning of the ninth century.
acmanuensis: Cluny 81, p. 92, 1. 11; 903 O.
aucmentatores: Cluny 2712, l. 9: 1017-25, XI./XII.
exagmine (v. l. examine): Cluny 3880, p. 223, 1. 18: 110917 O.
hogmagiis: Dauphiné 1, p. 4, l. 12: 1248 O.
In the Merovingian period, gm must have been pronounced as $y m$. Later the $g$ was evidently silent, the group being sounded as $m$.

## Gn.

dinatus: Pénêtentiel, ed. P. Meyer, Recueil d'anciens textes, I., p. 15, last line.
renavit (§ 24), conovet (§ 32): Joca Monachorum, ed. P. Meyer, I., p. 487: VI. ?, VIII.
impinnoravimus: Cluny 22, 1. 3: 878 ?, C.
renante: Cluny 73, p. 83, 1. 7: 901 C.
rengnante: Cluny 530, p. 516, 1. 2: 941 C. 643, 1. 18: 943 O.
rennante: Cluny 1808, p. 60, l. 11: 989 C.
pro mannis parva: T. 3.3: 566, X.; Paris. This form was probably not in the original, but is due to the copyist.
resnante: Cluny 2587, l. 12: 1004 C.
rennante: Cluny 2669, p. 701, l. 11: 1008 C.
pugniendus (and other forms of punire): Dombes I., p. 9, § 30: 1269. I., p. 96, section II., l. 9: 1325. Other examples: p. 97, III., l. 3, 1. 8, l. 14; p. 108, 1. 1; etc.'
In the earlier Merovingian period $g n$ was certainly pronounced as $n^{\prime}$. In the sixteenth century the group was still sounded by come eeclesiastics as $n$ (Thurot, Prononciation, II., p. 345) - a pronunciation which must go back to the Carolingian period. Whether or not it was known in the Merovingian period is not quite clear. Old French regne, renne may well have been borrowed in Carolingian times, but senefier (cf. Berger's discussion of this word) seems to bear the marks of antiquity. O. Haag, R. F. X., p. 868, § 47, cites Burgundian spellings like raenante, renumque from the seventh century, but such forms appear not to exist in diplonas from the Center, and perhaps represent a local peculiarity of pronunciation.

## Gw.

## a. Before E.

deguerunt: T. 108, l. 10: 816 O; Aix-la-Chapelle. traguediamque: I'ita Hludowici, Mon. Germ. Hist. II., p. 636, l. 39: after 840, IX./ or X.

## b. Before A.

longua: Thurot, Extraits, p. 13, 1. 3 f. b. (from a grammatical work): probably X., XIV.
roguatus: Montélimar 22, p. 39, l. 2 f. b.: 1272 O.
lingam: Montélimar 22, p. 43, l. 17 f. b.: 1275, "Vidimus" of 135 t "en origin."
Bedae de Orthographia, Keil VII., p. 275, 1. 23: Indigus et prodigus per unum u scribenda, indiga et prodiga sine $u$.

## Gy.

exagetare (19,= exactare), exigiatur (11): T. 49: 716 O; Compiègne.
inquiegetare: Cluny 899 bis, Vol. II., p. 754, l. 11: 854993 O.
pegiorare: Cluny 30, p. 36, 1. 8: 887 C.
redigebatur (= redibatur): Vita Hludowici, Mon. Germ.
Hist. II., p. 610, l. 34: after 840, IX./ or X.
monagiis (= monachis): Cluny 1798, l. 2: 989, XI./ XII.
magius ( $=$ maius): Cluny 2681, l. 12: 1011 C.
magio: Cluny 2704, l. 12: 1016 C.
In the eighth century, and doubtless likewise in the seventh, clerks pronounced intervocalic $g i$ as $y$. How soon this pronunciation was abandoned for $d z \check{z} i$ in Central France is not clear. The later spellings cited from the cartulary of Cluny are equivocal, though they seem to prove that in the Burgundian region, the $i$ in $g i$ did not yet have a syllabic value in the eleventh century. The spellings regiel, pagiens in the Eulalia may be noted.

## IV. Groups begiñing with a nasal.

## 1. M-Groups

## Mby.

concamio (9), cf. concambio (4): T. 20.9: 677-8 O; La Morlaye.
concammiasset (11), concammio (15): T. 38: 697 O; Compiè̀ne.
camviationis (p. 506, 1. 7), procàmiationis (B, 1. 3), procaminationes (B, l. 6), procambiationis (B, l. 7): Mabillon 61: 803 O; Carcassonne.
excamiavimus: T. 101, p. 74, col. 2, l. 5 f. b.: 811 O; Bonneuil.

## Mm.

praesummatis:' T. 21.17: 677-8 O: La Morlaye.
emunetatis: T. 25.11: 688-9 O; Compiègne. This spelling occurs frequently in the seventh and eighth centuries.
jobemmus: T. 30.21: 692 O; St.-Cloud.
dommebus: T. 34.10: 695 O ; Compiègne.
presummat: T. 37.9: 696 O; St.-Cloud.
jobimmus: T. 38.21: 697 O; Compiègne.
conservammus (2), mancaepammus (3): T. 49: 716 O ; Compiègne.
diberimmus: T. 46.7: 716 O ; Compiègne.
excommunus: T. 68, p. 58, col. 1, 1. 16: 770 O.

## Mn .

dommus (5), ${ }^{1}$ cf. domno (4): T. 13: c. 627 O.
domicato: T. 101, l. 24: 811 O; Bonneuil.
donni, donna, donno (nine cases): T. 3.4, etc.: 566, X; Paris.
These forms were evidently not in the original, but are due to the copyist.
amnos (= annos): Cluny 2515, l. 7: c. 1000 C.
calunniare: Cluny 2872, l. 7: 1031-60 C.
donnus: Cluny 2987, l. 3, and Cluny 2988, l. 1: 1040-60, XI. / XII.

Until after the fall of the final vowel in the vulgar tongue, the group $m n$ was sounded as $m n$ in the clerical language of Gaul, as in the vernacular (Rydberg, Zur Geschichte des französischen a, p. 44). An exception is presented by dominus, which lost its $n$ before the seventh century, perhaps because of its use as a proclitic, and became in Old French dam, dom, don (cf. Schwan-Behrens, § 182, p. 99). It should be assumed that the group was pronounced as $m$ in Latin after the assimilation occurred in the vernacular. ${ }^{2}$ Carolingian school-masters evidently restored the phonetic group $m n$; ${ }^{3}$ for if they had pronounced the graphic group as $n$ simply, we should perhaps not have expected the Old French forms colonne, autonne (cf. Schwan-Behrens, l. c.) but rather *colünne, *autünne (cf. hümele). ${ }^{4}$ But later on, in Latin as well as in French, this new $m n$ was reduced to $n$. The spellings given above show that

[^56]the reduction look place in Burgundy, ${ }^{1}$ at least, before the eleventh century. This pronunciation of $m n$ as $n$ still existed in the sixteenth century (A. Eiselein, R.F. X., p. 566, and Thurot, Prononciation, II., p. 459), but seemed ridiculous to the scholars of the Renaissance, who introduced the phonetic group $m n$ once more. From that time down to the present day, the unfortunate combination has met with no further accident.

## Mpn.

calumpniare: T. 101, p. 75, col. 1, l. 11 f. b.: 811 O; Bonneuil.
dampnatio: T. 124, p. 87, col. 1, 1. 3 f. b.: 832 O; St.-Denis. sollempniter: T. 186, p. 118, col. 2, l. 18 f. b.: 862 O; Compiè̀ne.
dampnationi: T. 240, p. 151, col. 1, l. 18: 997 O; Paris. calumpnia: T. 246, l. 16: 1005 O.
calumpnia: T. 273, p. 170, col. 1, l. 4 f. b.: 1058 O; Paris. calumpniari: T. 306, l. 12: 1083-92 O. Cf. calumnia: T. 307, l. 19: c. 1093 O.

Thurot, Extraits, p. 535 (from a writer of the fourteenth century): Sine $p$ debent scribi ista autumnus, alumnus, calumnior, columna, damnum, erumna, ymnus, sagitta, solemnis, somnus et tento, quando est frequentativum huius verbi teneo (sed pro temptando cum $p$ scribitur), licet in quibusdam predictorum usus cum $p$ scribit....

The graphic group $m p n$ for $m n$ appears to have been introduced into Northern Gaul for the first time by Carolingian scholars. It thus furnishes additional evidence that $m$ in the graphic group $m n$ was actually pronounced by Latinists in the ninth century. Spellings like perempni (T. 189, p. 124, col. 2, 1. 19, 863 O) do not bear witness to the contrary; for the document in which this form occurs was written in Italy, and it may be seriously doubted whether spellings of this type, showing $m p n$ for original $n n$, can be cited from original manuscripts written in Northern Gaul in the ninth century. It seems probable, although it cannot be rigorously demonstrated, that the Carolingian group mpn was sounded with silent $p$.

[^57]
## mpt.

This group may have been pronounced as $m t$ still in the seventh century. From the second half of the eighth century until the time of the Renaissance it appears to have been sounded regularly as $n t$; although it should be added that the $n$, strictly speaking, was not pronounced in the later periods, the group being really reduced to $t$, preceded by a nasal vowel. It may be inferred from the treatment of French learned words that the $p$ of the combination was raised from the dead by the school-masters of the sixteenth century (cf. Thurot, Prononciation II., pp. 363 ff.).
eximtis: T. 31.3: 692 O; St.-Cloud. T. 34.7: 695 O; Compiègne.
volomptarie: T. 75, p. 59, col. 2, 1. 3 f. b.: 775 O; Duren.
entores (1. 1), emtore (1. 6): Cluny 76, 1. 1: 902 C.
prontiores (1. 4), prontiore (l.14): Cluny 237: 923, XI./XII. emtores: Vienne 129, l. 2: 925, XII.
prumta (etc.): Vienne 128, p. 92, l. 1: 927-8, XII.
emtoribus: T. 231, l. 4: 939 O.
entores: Vienne 2, 1. 2: 975-92, XII. Cf. emtores: Vienne 6, l. 2: 986, XII.
entores: Cluny 1875, 1. 1: 991 C.
mpty.
presumsione (C), presumtione (D): Mabillon 89: 853 O; probably Caunes.

## 2. N-groups.

nct. ${ }^{1}$
accintus: T. 46.8: 716 O ; Compiègne.
cuntorum: Cluny 81, l. 17: 903 O.
defontorum: Cluny 2934, p. 136, 1. 19: 1040 O.
Cf. Thurot, Prononciation, II, p. 549.
Nn.
cannonis: T. 21.3: 677-8 O; La Morlaye.
anum: T. 67, p. 55, col. 1, 1. 2 f. b.: 769 O.
${ }^{1}$ Note also the spelling conjuncio (T. 11.2: 653 O; Clichy).

## Ns.

Dioninsis (genitive): T. 4.1 and 4: 625 O; Etrepagny.
Dioninsio: T. 5.3, 4 and 6: c. 627 O; Etrepagny.
Dioninsis (genitive): T. 13.2 and 3: c. 657 O.
Dioninse (genitive): T. 14.1: 658 O.
Dioninse (2), cf. Dionense (3): T. 15: c. 658 O.
Dioninsiae (3), Dioninsi (10): T. 23: c. 681 O.
Diunense: T. 35.4: 695 O; Compiègne.
Diuninsio (1. 19), Dioninsiae (l. 20), cf. Dionisiae (1. 9),
Dionisie (p. 48, col. 1, l. 18): T. 56: 755 O; Compiègne. occansionibus: T.62, p. 52, col. 2, 1. 2: 768 O; St.-Denis.
Vienensse: Cluny 23, 1. 8: 880?, O.
esponfalicio: Cluny 229, l. 4: 992 C .
manssio: Cluny 2503, l. 4: c. 1000 O.
It is very hard to generalize regarding the pronunciation of $n s$ in Merovingian times on the basis of the spellings given above. The seventh-century forms Dioninse, Dionense, Dioninsis (genitive) seem to prove that the intrusive $n$ was actually sounded, and that the accented vowel was not $\dot{i}$, but $e$, on account of confusion with the termination -ensis, in which the $n$ was also presumably sounded in this period. But the actual pronunciation of the eighth-century scribe who certainly wrote Dioninsio and Dionisiae in the same document, is not easy to determine. We shall doubtless have to admit that several clerical pronunciations of this name existed. It seems fairly probable, on the whole, that the $n$ in $n s$ was regularly pronounced in the seventh century. At any rate the learned forms of pensare in French, Italian and Spanish, especially the Spanish form (pienso, piensas), as well as the peculiar semasiological development of the word, ${ }^{1}$ go a long way towards proving that the $n$ was restored early in the Merovingian period.

## ACCENT.

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adagunt: T. 2.5: 558, X./
crededit: T.12.2: c. }656\mathrm{ O.
fuaerunt (proparoxytone): T. 15.5: c. 658 O.
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[^58]diaebus (proparoxytone): T. 21.4: 677-8 O; La Morlaye. aedठcet (paroxytone): T. 26.60: c. 690 O; Arthies.
pertenit: T. 37.2: 696 O; St.-Cloud.
constedit: T.43.14: 709 O; Quiersi.
detullit: T. 66, p. 54, col. 2, 1. 6: 769 O; Attigny.
tradedit: T. 76, l. 9: 775 O; Thionville.
During the Merovingian period, the Vulgar Latin rules of accentuation (cf. Lindsay, § 11) were regularly followed in clerical pronunciation, as is shown by spellings like the above, as well as by the loan-word teniebres, which became popular before the Carolingian period. Isidore ( $\dagger 460$ ), informs us that it is incorrect to accent the antepenult of words with common penult: Barbarismus est verbum corrupta littera, vel sono enuntiatum: littera, ut floriet, dum florebit dicere oporteat; sono, si pro media syllaba prima producatur, ut latebrae, tenebrae (Origines I. 51, cap. 31, I.). The peculiar distinctions made by Virgilius Maro, a grammarian of the sixth or seventh century, between forms like sédes ${ }^{1}$ (noun) and sedés (verb) must be purely imaginary (cf. however Gröber, A. L. L. I., p. 58).

As to the accentuation of Latin used in Northern France after the Merovingian period, a theory has been advanced by Paris (Rôle de l'accent, pp. 22 f .), who calls attention to the occurrence in rime of Pater Nóster. in the Alexius (strophe 125), of Nicodémus riming with soens in the Resurrection (prologue), and of Sathanas (in caesura) in the St. Thomas (1825). These words seemed to him to indicate that the original Latin accent was still followed in the second half of the twelfth century; though he admits, on the evidence of the spelling of the phrase En ipse verbe ( $=$ in ipso verbo) in the Alexius (l.c.), that the Latin accent was scarcely in use even when the latter poem was written (about 1040). He also gives two rimes from the twelfth century showing that in that period Latin words were accented on the ultima. It may accordingly be assumed that in 1862 Paris thought that the period of transition from the ancient to the modern method of accentuation lay in the eleventh and twelfth centuries. The evidence advanced to prove the retention of the ancient accent in this period is of uncertain character.

[^59]Thus the Pater Noster of the Alexius, being written in abbreviated form in the MS, might just as well have been printed paternostre a form which appears in the Voyage de Charlemagne (cf. Berger s. v.); while the names Sathanas and Nicodémus may have been French words with the vowel $a$ in the last syllable, the spelling being due to the influence of the corresponding Latin words (cf. A. Eiselein, R.F. X., p. 511). On the other hand the occurrence of Nazarenüm, pontiféx, crucifigé in the Passion seems to indicate that the Latin accent had gone out of use already in the tenth century. If we add the loan-words perfide, purpure, exercite of the same monument (cf. Eiselein; l. c.), which look decidedly like paroxytones, we are inclined to think that this was actually the case. It is true that loan-words like humele, preserving the Latin accent, were adopted as late as the ninth century, as is shown by the vowel. But it seems clear that such words owe their antepenultimate accent to the analogy of similar forms which had been borrowed in the Merovingian period, or which had come down from antiquity; on the general principle, cf. Paris, J. S. 1900, p. 362. A. Eiselein, R.F. X., p. 512, is surprised to find that words in -tudinem, e. g. multitudine, which occur for the first time in monuments of the twelfth century, preserve the Latin accent. The explanation is not far to seek: such words must have existed in French long before the twelfth century, and their absence from the scanty literature which has come down to us from the tenth and eleventh centuries is purely accidental. The fact that Paris himself has become uncertain in his view of the chronology, of the accent-shift is shown clearly by his question (J. S. 1900, p. 361): "A quelle epoque l'accentuation latine, qui s'était maintenue, a-t-elle cedé à l'accentuation uniformément oxytonique du français?" On the basis of the evidence discussed above, it seems probable that the Latin accent was transferred to the ultima in the course of the ninth century. This probability is confirmed by a consideration of the state of the French and Latin languages of that period. Before the beginning of the ninth century all posttonic vowels had been reduced in the vernacular to the sound $a$. That this reduction took place in the clerical Latin of the later Merovingian period is indicated by the spelling of the Strassburg Oaths. Now the aim of the Carolingian reformers of the Latin pronunciation was to establish a single sound
for each letter, in order to prevent mistakes in spelling. It is very evident that they would not have tolerated a pronunciation of all posttonic vowels as $a$; for such a pronunciation would have given rise to many errors in orthography. But on the other hand, would French clerks in that period have pronounced any posttonic vowel except a? This question must be answered in the negative. Facility in uttering posttonic vowels not occurring in the vernacular is an accomplishment which ninth-century clerks cannot have taken the trouble to acquire, especially since there was no real necessity for doing so. Equivalent linguistic feats are performed but rarely by Latinists, even in our advanced age. ${ }^{1}$ The shift of the accent to the ultima must have occurred just as soon as a distinct articulation of the originality posttonic vowels was secured. We accordingly conclude that the Latin accent was transferred to the ultima in the first half of the ninth century; and that this change was one of the most striking features of the Carolingian reform.

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R 20 (s)
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[^0]:    ${ }^{1}$ A review of H. Berger's book, "Die Lehnwörter in der französischen Sprache ältester Zeit."
    ${ }^{2}$ I have slightly modified a few phonological statements, and have added a few references.

[^1]:    ${ }^{1}$ A. S. Wilde, Les Écoles du palais aux temps merovingiens.
    ${ }^{2}$ Wattenbach, Geschichtsquellen, p. 146.

[^2]:    ${ }^{1}$ Bresslau, Urkundenlehre, p. 571.

[^3]:    ${ }^{1}$ This document is also to be found in Birch's Cartularium Saxonicum (number 1057), where it may be compared with other diplomas written by English scribes in the same period.

[^4]:    ${ }^{1}$ Einführung, p. 83. "Im allgemeinen liegt die Sache so, dass die gesprochene Sprache sich langsam veränderte, während die Schriftsprache festblieb oder nur im Sprachgebrauch, kaum in den Formen, gar nicht in den Lauten diesen Veränderungen folgte."

[^5]:    ${ }^{1}$ Pedere, elidigare should be termed pseudo-learned words. In the study' of clerical Latin we have constantly to reckon with types, significant of the ignorance of the period, which are neither classic nor popular.

[^6]:    ${ }^{1}$ For words the source of which is not mentioned, and which are not discussed by Berger, see the index to Schwan-Behrens' Grammatik des Altfranzösischen.

[^7]:    ${ }^{1}$ Alexis, p. 41; Rom. VII., p. 134. Cf. Koschwitz, Commentar, pp. 3238, who considers the dialect as doubtful.
    ${ }^{2}$ Paris always maintained that the spelling of the Oaths must be Merovingian: cf. especially Rom. VII., p. 121. The Merovingian basis itself, however, has hardly been studied at all.

[^8]:    ${ }^{1}$ Cf. Neumann, Z. R. Ph. XIV. (1891), pp. 559 ff.

[^9]:    ${ }^{1}$ Cf. also the tenth-century Burgundian forms eigitur, siro, sero (p. 23).

[^10]:    ${ }^{1}$ On the obscure clerical development $i e i>i$, cf. p. 23.
    ${ }^{2}$ Down to the year 700 these forms have already been catalogued by Schuchardt. I aim at fulness only in the last quarter of the eighth and in the following centuries, when such spellings become rare.

[^11]:    ${ }^{1}$ The sound seems to be $\underset{i}{ }$ rather than $e$; the words may, therefore, be out of place in this section.
    ${ }^{2}$ Cf. H. Schuchardt, Z. R. Ph. 1901, pp. 344 f.; G. Paris, Rom. XXX. (1901), p. 446 and J. S. 1900, p. 367, n. 2. The word is strictly out of place in this column, since the $i$ was pronounced as $i$ (see pp. 35 f.).
    ${ }^{3}$ The vowel seems to be $i$; cf. p. 35 .
    ${ }^{1}$ Of course $i$ may have been pronounced.

[^12]:    ${ }^{1}$ On the vowel, see p. 35.
    ${ }^{2}$ The vowel of ficit seems to be $i$.
    ${ }^{3}$ The vowel seems to be $i$.
    ${ }^{4}$ The vowel seems to be $\underset{i}{ }$, not $e$.

[^13]:    ${ }^{1}$ This word is extremely common in the Cartulary of Cluny: it is spelled with $i$ or $e$ indifferently. Siro: 410, p. 401, 1. 5 (933-7 0); 1833, I. 5 (990, XI. / XII.); 2411, l. 6 ( $997-1031$ C); 2628, 1. 6, 1. 8, ( 1006 C); 2679, l, 9 (1010, XI./ XII.); etc. Sero: 62, 1. 5 (898, XI. / XII.); 1797, p. 52, l. 6 ( $988-9$, XI. / XII.); 1799, 1. 5 (989?, XI. / XII.); etc., etc. These forms may perhaps be taken as evidence for a local coalescence of $\bar{\imath}$ and $\bar{e}$; they should not be interpreted as indicating that the reformed pronunciation of $\tau_{\text {was }}$ unknown at Cluny as late as the eleventh century (cf. pp. 18 f.).

[^14]:    ${ }^{1}$ The last two examples are of little importance.
    ${ }^{2}$ The grammar of this document is unreformed (Merovingian).

[^15]:    ${ }^{1}$ The suffix -ensis is quite often, though not usually, spelled -insis in the eighth and ninth centuries; among others, in the following documents (those from Tardif are mainly from Ile-de-France and vicinity): T. 76, 78, $83,97,103,107,132,144,145,151,166,167,172,173,177,179,186,196$, 208, 210; Mabillon 81, 94 ; Redon 42; Yonne 48; Musée 11.

[^16]:    ${ }^{1}$ Words with this stem are very often spelled with $i$ in the ninth-century documents from Cluny: see, for example, numbers $27,28,32,71$.

[^17]:    ${ }^{1}$ Cf. the ninth-century and later form subnixa beside subnexa (p. 32).
    ${ }^{2}$ I do not find the corresponding passage in Isidore.

[^18]:    ${ }^{1}$ Cf. p. 48.
    ${ }^{2}$ So Paris: but perhaps we have here rather an indication of the difficulty experienced by ninth-century Frenchmen in articulating $i$ 's in positions in which they were accustomed to pronouncing $e$ 's. Readiness in articulating several $\hat{l}$ 's in succession in words like possibilité can have been acquired only with effort. Cf. the regular American pronunciation of possibility with two $\partial$ 's. American public speakers who attempt to pronounce an $i$ in such cases often fail to do so consistently. Sometimes the theory of dissimilation is certainly inadequate, as, for instance, in the case of the Carolingian loan-word chardenal.

[^19]:    ${ }^{1}$ For discussions of these forms by Storm, Gröber, Paris, Meyer, Cornu, Lücking, Suchier, see Koschwitz, Commentar, pp. 14-25.
    ${ }^{2}$ Was not $m n$ in popular words reduced to $m$ before 881 ? Cf. p. 99.
    ${ }^{3}$ Cf. however Cohn, Suffixwandlungen, p. 60, and Berger, p. 30. At any rate the word is Merovingian, and so cannot properly be called a book-word. It is also quite certain that the word shows a change of suffix.

[^20]:    ${ }^{1}$ I owe this reference to Professor Sheldon.

[^21]:    ${ }^{1}$ Professor Grandgent, in his lectures on Italian phonology, takes words of this type as an indication that Latin accented $\check{\imath}$ in some regions was pronounced as $e$ in a rather late period - perhaps during the seventh and eighth centuries.

[^22]:    ${ }^{1}$...et ad ipsa congrigacione delictit pro stabi [lit] ate rigni nostri jugiter deprecare.
    ${ }^{2}$ Cf. the distinction made by Alcuin between obnixus and obnexus, noted above, p. 27.
    ${ }^{3}$ On this peculiar form, cf. above, p. 6.

[^23]:    ${ }^{1}$ Cf. Meyer-Lübke, Einführung in das Studium der romanischen Sprachwissenschaft, § 187.
    ${ }^{2}$ For a very different view, see Marchot, Petite Phonétique, pp. 26-29, who attempts to show that the diphthong ie did not exist in 842. He unfortunately bases his opinion on spelling only.

[^24]:    ${ }^{1}$ The interpretation proposed by Koschwitz (Commentar, p. 64), which has been generally adopted, but which rests on false premises, may be noted: "Es ergibt sich daraus die Folgerung, dass [die Umwandlung von c'l zu $\left.l^{\prime}\right]$ älter ist, als die Entwicklung von $\check{y}$ zu $i e$, weil sonst kein $i e . .$. mehr hätte entstehen können."
    ${ }^{2}$ Cf. p. 30.

[^25]:    ${ }^{1}$ Cohn (Siffixwandlungen, p. 382) distinctly intimates that matiere is found in OId French; and Littré cites the form from the twelfth, thirteenth and fourteenth centuries.
    ${ }^{2}$ Cf. Godefroy. For the etymologies, see Tobler, Rom. II., pp. 241-4, who also mentions miere.

[^26]:    ${ }^{1}$ Such spellings are scarcely to be found at all in documents from the Central region after the end of the eighth century.

[^27]:    ${ }^{1}$.....qualiter et datoris mercis permaniat, et nus, pro pristitum beneficium, opinio bonis et premium sempiternum aderiscat.
    ${ }^{2}$ Si quis viro, quod fieri minime credimus, si aliquis de nos, aut de heridibus vel sucessoribus [nostris] contra hanc epistola conmutacionis abolare voluerit, non hoc valiat. The construction of contra is not quite apparent, but it seems clear that abolare is for abolere. Whether or not a genuine change of conjugation occurred, is scarcely material. Cf. the obscure abolere cited by Charpentier (Du Cange, s. v.), from which he derives O. F. abole $=$ enflammé.

[^28]:    ${ }^{1}$ For discussions of these forms, see Koschwitz, Commentar, pp. 11 ff ., and Marchot, Petite Phonétique, p. 29. The latter scholar overrates the importance of the symbol $a$.
    ${ }^{2}$ Cf. the form ficirint (=fecerunt): T. 39.4: 697 O; Bougival. This exceptional spelling may indicate that final $o$ and $i$ were identical as early as the seventh century.

[^29]:    ${ }^{1}$ It is true that later scribes occasionally use the letter $a$ for a (cf. the word buona in the Eulalia); but they seem always to be influenced by the Latin spelling of the word - a claim which cannot be made for the fradra, sendra of the Oaths.

[^30]:    ${ }^{1}$ The spelling putius, cited by Ernault, De Virgilio Marone grammatico Tolosano, p. 45 , from this author of the sixth or seventh century, seems to point in the same direction. Cf. Orthographia Albini Magistri, Keil VII., p. 306, 1. 11: Potius per $o$ scribendum est, quia a potis venit.

[^31]:    ${ }^{1}$ Those who assign the Oaths to a Western dialect will dispute this point. At any rate we may rest assured that eighth-century Central clerks pronounced florem with a diphthong in the first syllable.
    ${ }^{2}$ Cf. Grandgent, Vulgar Latin, p. 9.

[^32]:    ${ }^{1}$ Here the $u$ evidently belongs to the original, and is not to be charged to the copyist.
    ${ }^{2}$ On this document, cf. p. 6.
    ${ }^{3}$ Cf. also the references for the spellings Janoarius, Febroarius, given on p. 46.
    ${ }^{4}$ This word may have two syllables only: in that case it does not belong here.

[^33]:    ${ }^{1}$ Evidence of this character is scarcely serviceable unless the nationality of the author can be determined with certainty.
    ${ }^{2}$ The vowel must have been nasal at the beginning of the ninth century: otherwise this exception would not have been made - all $\breve{u}$ 's would have been treated alike.

[^34]:    ${ }^{1}$ Cf. p. 46.
    ${ }^{2}$ T. 234: cf. p. 6.

[^35]:    ${ }^{1}$ The diphthong was once more reduced to $o$ in the sixteenth century when French $a u$ became $o$ (cf. A. Eiselein, R. F. X., p. 533).

[^36]:    ${ }^{1}$ I owe this reference, and the two following ones, to my friend Dr. Donald Cameron.

[^37]:    ${ }^{1}$ Forms like this cannot have been originally written at Paris in the ninth century. The Codex Parisinus must be of foreign origin.

[^38]:    ${ }^{1}$ This form appears to be due to a German scribe.
    ${ }^{2}$ Cf. F. Lot, Rom. XXX. (1901), pp. 481-8.

[^39]:    ${ }^{1}$ They both seem to say that final $t$ was voiced. But this is quite incredible, for obvious reasons.
    ${ }^{2}$ The two forms are apparently due to different scribes; cf. Letronne's facsimile of the MS.

[^40]:    ${ }^{1}$ The heading is not in the facsimile of the MS (Letronne, plate XXXVII.) and so is probably by a different scribe.

[^41]:    ${ }^{1}$ Cf. F. Lot, Rom. 1900, p. 485.

[^42]:    ${ }^{1}$ Professor Grandgent, in his lectures on Italian phonology, notes that Romans nowadays regularly sound intervocalic $s$ as $z$, and that the development is probably modern and due to the influence of neighboring dialects.

[^43]:    ${ }^{1}$ But Schuchardt, Vokalismus I. 73 calls attention to the spellings chespetaticos (Marini LXI., 25,- a Frankish diploma dated 629) and chingxit (Le Blant, Inscriptions chretiennes de la Gaule 91 - near Valognes, 676).

[^44]:    ${ }^{1}$ Cf. Schuchardt, Vokalismus I., p. 128.
    ${ }^{2}$ Reading certain. Cf. Letronne XIX. For precesse ?

[^45]:    ${ }^{1}$ Note the ninth-century Burgundian forms roitus, roytus $=$ rogatus (p. 38).

[^46]:    ${ }^{1}$ The word aspiratio here evidently refers to the letter $h$, not to its sound.
    ${ }^{3}$ A few other examples might be cited from the royal diplomas.

[^47]:    ${ }^{1}$ Reference to the facsimile of the diploma (Letronne XXXI.) shows that this surprising form is due to a paleographical error or a misprint. I read devotissimum.

[^48]:    1. . dupplet tantum quantum..
    ${ }^{2}$ Gregory, to be sure, was born in Auvergne, and so perhaps did not pronounce intervocalic $p r$ as $v r$ in his vernacular.
[^49]:    ${ }^{1}$ Horning, Die ostfranzösischen Grenzdialekte, p. 79, cites a few forms showing the development $b l>l, p l>l$.

[^50]:    ${ }^{1}$ Cf. also $\theta$ eios $>$ Italian zio (on which see Meyer-Lübke, Einführung, p. 95). See also Grandgent, Vulgar Latin, p. 139.
    ${ }^{2}$ Cf. Grandgent, Vulgar Latin, p. 117; also p. 118, where a clerical pronunciation of $t y$ as sy is suggested to explain Italian palagio beside palazzo, etc.
    ${ }^{3}$ Read adjecenciis, which is quite plain in the facsimile of the diploma (Letronne XX.).

[^51]:    ${ }^{1}$ On these spellings, see Paris, Les faits épigraphiques, etc., p. 14.

[^52]:    ${ }^{1}$ Here the facsimile of the MS shows possiessio (Letronne XXXVI.).

[^53]:    ${ }^{1}$ Cf. the common Burgundian spelling auxi ( $=$ aussi) cited by E. Goerlich, Der burgundishe Dialekt im 18. und 14. Jahrhundert, p. 114. The spelling protexione, cited on p. 93 from the cartulary of Montelimar, is equally significant for that locality, showing that $x$ was sounded as $s$ until after the thirteenth century.
    ${ }^{2}$ It seems possible that the $x$ duplex was $z$, while the other $x$ was $s$. If so, we here have evidence that the pronunciation of Latin intervocalic $x$ as $z$ was introduced in some quarters in an early period.

[^54]:    ${ }^{1}$. . .nullo telleneu... .nec reliquas redebucionis, nee vos. . . nee quislibet de parte fisce nostri requireri nec exagetare penitus non presumatis.

[^55]:    ${ }^{1}$ Reading certain: cf. Letronne XXXI.
    ${ }^{2}$ Here I read diccionebus; cf. Letronne, XLII.

[^56]:    ${ }^{1}$ This interesting form is a misprint or a paleographical error. The MS has domnus (Letronne X.).
    ${ }^{2}$ Lindsay, § 68 says: "In the fifth century Pompeius (p. 383. 11K.) mentions as a barbarism columa (cf. the diminutive columella) for columna, which looks very like the pronunciation mentioned by Quintilian as normal in his day." Quintilian's pronunciation was, of course, not Gallic.
    ${ }^{3}$ Note the spelling $m p n$ for $m n$, apparently introduced for the first time in this period (cf. p. 100).
    ${ }^{4}$ It is here assumed that $n n$ became $n$ before the end of the eighth century (cf. p. 101).

[^57]:    ${ }^{1}$ In this region, $m n$ in popular words became $m$, as in the Centre (Goerlich, Fr. St. VII., p. 110).

[^58]:    ${ }^{1}$ Cf. Berger, s. v.

[^59]:    ${ }^{1}$ P. 16, ed. Huemer.

[^60]:    ${ }^{1}$ The shift of the Latin accent in obedience to natural tendencies is not unknown outside of France. Professor Leo Wiener calls my attention to the familiar Hungarian saying, Nos Hungari non cúramus quántitatem syllabarum. (In Hungarian, all words are accented on the first syllable).
    ${ }^{2}$ This list is meant to include only those collections of documents which have been cited in the text. Acknowledgments are here due to the Directors of the Harvard University Library for providing, by a special appropriation of funds, for the purchase of a number of cartularies for the purposes of this research.

[^61]:    ${ }^{1}$ I have not examined this important text in detail. Cf. O. Haag, R.F. X., pp. 835-92.

[^62]:    ${ }^{1}$ This cartulary was written in Celtic territory.

[^63]:    ${ }^{1}$ This bibliography includes only works which have been cited in the text, together with some others which have been found directly useful.

