(6) The treatment of I.-Eur. s was precisely parallel to that of the voiceless spirants *f, p, χ* arising from I.-Eur. p, *t, k* (see above). It was preserved (i) initially, (ii) in combination with voiceless sounds, (iii) immediately after the (original) accent. In all other cases it became voiced (s). This voiced spirant subsequently became r in all Teutonic languages except Gothic, where however the distinction between voiced and voiceless spirants is not well preserved; *e.g.* Ä.S. *ceosan,* pp. *coren {giuso- guséno):* Gk. *yέboμa,ι* (cf. Lat. *gustus)∙,* Ä.S. *snoru,* O.H.G. *snura* (daughter-in-law): Sanscr. *snuid,* Gk. *vvos.*

Most of the other consonantal changes are in the nature of assimilation.

(7) ⅛w, *dn, in* before the accent became *pp, tt, kk* (probably through the intermediate stage *bb, dd,* gg); *e.g.* Ä.S. *liccian,* O.H.G. *leckon* (from *Hind-):* Gk. λιχpe6ω (cf. Goth, *bi-laigon).*

(8) *In* became *ll; e.g. .∖.S.full,* Goth, *fulls·.* Lith. *pilnas.*

(9) *nw* became *nn; e.g.* Ä.S. *pynne, O.N. bunnr:* Lat. *tenuis.*

(10) *dl* became *ll; e.g.* A.S. *st{e)all,* O.Ñ. *stallr:* Lat. *stabulum* (from *stadhlom).*

(11) In some combinations consonants are lost or new con­sonants developed; e.g. Goth, *sunja* (truth): Lat. *praesentia (-sntja)∙,* O.H.G. *hunno* (centurion) from *hundn-,* cf. Goth, *hund∙.* Lat. *centum·,* Ä.S. *stream,* O.N. *straumr* from *sroum-,* cf. Gk. *ρ<ιμa,* Old Irish *sruaim.*

The following changes are found in all Teutonic languages, but took place apparently later than those enumerated above :—

(i) *n* was lost before χ (Ä), with compensatory lengthening of the vowel; e.g. Ä.S. *põhte,* Goth, *pãhta* beside A.S. *pencean,* Goth. *pagkjan.*

(ii) Final explosives and nasals were lost; e.g. A.S. *wile,* Goth. *wilt:* Lat. *uelit∙,* A.S. *ëa,* Goth, *ahwa:* Lat. *aquam∙,* Goth, *kustu:* Lat. *gustum.*

In its vowel-system the earliest known form of Teutonic did not differ greatly from the other I.-Eur. languages. Its chief peculiarities seem to have been as follows :—

(1) It had one vowel (a) corresponding to the two vowels a, *o* found in the other I.-Eur. languages; *e.g.* Goth, *akrs,* O.N. *akr:* Lat. *ager,* Gk. *iypbs∖* Goth, *ahtau,* O.H.G. *ahto:* Lat. *octo,* Gk. όκτώ.

(2) It had also one vowel (õ) corresponding to the two vowels *ã, 5,* found in the other I.-Eur. languages, e.g. A.S. *broζ>or,* Goth. *bro par:* Lat. *frater,* Gk. *φpaτηp∙,* Ä.S. *row* (rest), O.H.G. *ruowa:* Gk. ipω(f)⅞.

The other I.-Eur. vowels, *~e, ï, u,* were preserved in the earliest Teutonic. Soon after the beginning of our era, however, *e* began to change to » before a nasal followed by a consonant, *e.g.* Ptol. Φiwoι (Ä.S. *Finnas,* O.N. *Finnar)* against Tac. *Fenni.* The diphthong *ei* became *i; e.g.* A.S., O.H.G. *stîgan,* O.N. *stíga:* Gk. *στdχω* (the *ei* of Goth, *steigan* is merely graphic).

The reduced nasal sounds generally written ». *φ,* arising from *en, ne, em, me,* &c., in unaccented syllables, became *un, um.* (rarely *nu, mu), e.g.* Ä.S., Goth., &c. *un-* (negative prefix): Lat. *in-,* Gk. *i-, tv-∙,* A.S., Goth, *hund:* Lat. *centum,* Gk. *l-κaτt>v.* Similarly the reduced liquid sounds *r, {* became *ur, ul* (rarely *ru, lu) ; e.g.* A.S. *furh:* Lat. *porca∙,* Goth, *pulan:* J.at. *tollo,* Gk. τeτλ<⅛e>'.

*Acccnl.—*In the I.-Eur. languages the position of the accent was originally free—*i.e.,* any syllable in the word could hear the chief accent—variation occurring very frequently, *e.g.* between different cases of the same noun. This freedom of position must have heen retained in Teutonic at the time when voiceless spirants (∕, *p, χ, s)* became voiced (see above). Eventually, however, as in Gaelic (Irish) and at one time also in the Italic languages, the first syllable of every word came to bear the chief accent, the only noteworthy exceptions being certain compound words, more especially verbs compounded with prepositions, which were probably long regarded as more or less independent words. This system of accentuation was inti­mately connected with the principle of alliteration, the essen­tial characteristic of early Teutonic poetry and the dominant factor in family nomenclature. Alliteration in family names certainly dates from the very beginning of the Christian era, *e.g.* the S-names in one of the princely families of the Cher- usci frequently mentioned by Tacitus, and there is also some evidence that Teutonic poetry was alliterative by this time. It is probable, therefore, that the change in the system of accen­tuation took place not later than the ist century b.c.

The description of the phonetic characteristics given above applies in general to the Teutonic group of languages as a whole. So far as one can judge from the proper names, &c., which occur in Latin works, the description would probably be true for the time about the beginning of the Christian era. Dialectical differences no doubt already existed, but few of them were so clearly marked that they can now be traced with anything like certainty. The language of the earliest Runic inscriptions does not differ very markedly from this type. The principal changes which we can now detect are as follows:—

(1) e became *i,* (i) in the unaccented syllable of dissyllabic and in the least accented syllables of polysyllabic words; *e.g. dohtriz* (inscr.), O.N. *doetr:* Gk. *θvyaτtpes∙,* (ii) in accented syllables when the following syllable contained *i, j,* or *u; e.g.* A.S. *mid{d),* O.N. *miñr:* Lat. *médius.*

(2) *i* became *e* when the following syllable contained *a, ë, õ; e.g.* A.S., O.H.G. *wer,* O.N. *τerr* (stem *wera-)* : Lat. *uir.*

(3) *u* became *0* when the following syllable contained *a, e, õ; e.g.* (1 sing, prêt.) *worahtõ* (inscr.), A.S. *wor{o)hte,* O.H.G. *wor{a)hta∙.* A.S. *wyrcean,* O.H.G. *wurchen.*

(4) *ë* became *ã* always; *e.g. -mãriz* (inscr.): Goth. *-mers.*

(5) final *a, e,* were lost; *e.g.* (1, 3 sing, prêt.) *was* (inscr.); cf. Gk. λeλon-α, -e.

(6) final long vowels were (in general) shortened (ïsu, *o^u)∙, e.g. liuõu* (inscr.). N. sing. fem. (cf. Gk. iχ0pd).

(7) final nasals and explosives were lost; *e.g. worahtõ,* I sing, prêt. (cf. Gk. *ίτΐβην).*

These changes äppear to have operated in all the northern and western Teutonic languages during the first four centuries of our era, except the change *e≥÷a,* which in the extreme west (Frankish) seems not to have taken place until the latter part of the 6th century. Several of them can be traced more or less clearly in Latin writings of the ist century. The Gothic language, however, seems to have developed on quite different fines. The more important of its changes are as follows:—

(1) *e* became *i* always; *e.g. wigs* (road): A.S. *weg.* But í later became *e* (written *ai* in Ulfilas’ orthography) before *r, h; e.g. hairdeis* (herdsman): O.H.G. *hirti.*

(2) *u* became *o* (written *au)* before *r, h; e.g. baurgs:* A.S. *burg.* (In Ulfilas’ orthography the letters transcribed *e, o* are used for long vowels only.)

(3) *ai, au* became ë, *õ;* but the digraphs were still written.

(4) short vowels (except *u)* in final syllables were lost; *e.g. dags, gasts:* (N. inscr.) *daiaz, -ιastiz.*

(5) final nasals and explosives were lost; *e.g. sunu* (Acc. sing.): Sanscr. *sünum.*

(6) final long vowels (including those which had become final through the last change) were (in general) shortened (t==-ι, 0=≈∙α, ë=-a); *e.g. waurhta* (1 sing, prêt.): (N. inscr.) *worahtõ; liuba* (N. sing, fem.) : (N. inscr.) *liuθu.*

(7) voiced spirants when final (also before j) became voiceless; *e.g. bap* (3 sing. prêt, of *bidjan).*

All these changes appear to have taken place before or during the 4th century. The effect of them must have been to render the Gothic language hardly intelligible to a person who spoke a northern or western language, whereas during the same period there is little evidence for differences among the latter languages themselves. At a later date Gothic underwent further changes which do not appear in Ulfilas’ version, or only to a slight extent.

(1) *i* became a close *e-* sound; *e.g. Venethae* (Jordanes), for *Winid-.*

(2) *u* became a close *0* sound: *e.g. ~Pσyoι* (Procopius): *Rugii∙,* later *0* became *a* in unaccented syllables; *e.g. üraz* (for *-us).*

*{j,)* ë became *ï; e.g. ìeikeis* for *lekeis* (not unfrequently in the MSS.).

(4) *õ* became *û; e.g. sunjus* for *sunjos.*

The chief sound-changes in the northern and western languages seem to have taken place in the 6th and 7th centuries. Some of these changes were common to all the languages in question, some to English and Scandinavian, some to English and German, while others again occurred in only one of these languages or a portion of it.

I. Among the chief changes common to English, Scandinavian and German we may reckon (1) the loss of final *a* (in Scand. also before final consonants); *e.g.* A.S., O.N., O.H.G. *horn* (N. inscr. *horna)* ; (2) the loss of unaccented *i,* « after long syllables, *e.g.* A.S. *hond,* O.N. *hõnd,* O.H.G. *hant:* Goth, *handus:* (3) the change *z^r* before vowels or *g; e.g.* A.S. *dëor,* O.N. *dfr,* O.H.G. *tior:* Goth, (ρlur.) *diuza.*

II. Among the most important of the changes common to English and Scandinavian must be classed (1) the affection *{umlaut)* of vowels by the vowels (generally *i, u)* of following syllables ; *e.g.* A.S. *cyn{n),* Ó.N. *kyn∙.* O.H.G. *kunni:* A.S. *geofu,* O.N. *giof:* O.H.G. *geba.* In early German the only case of this kind was the affection of a by a following » and even this seems to have taken place much later. To the same category we must reckon (2) the early loss of *h*