III. — INITIAL MUTATIONS IN THE LIVING
 CELTIC, BASQUE, SARDINIAN, AND ITALIAN
 DIALECTS. By H.I.H. PRINCE LOUIS-LUCIEN
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THE principal Celtic dialects, comprising Irish, Gaelic, and Manx amongst the Gaelic, and Welsh, Cornish, Breton, and Breton of Vannes amongst the Cambrian, are undoubtedly those which present more than any other the interesting property of regular initial mutations, suppressions, or additions at the beginning of words, determined by the forms or meanings of preceding words. Other dialects, however, as I showed for the first time in my "*Osservazioni sulla pronunzia del dialetto sassarese*" (prefixed to the translation of the Gospel according to Saint Matthew into this dialect by the late Canon Spano, London, 1866), possess regular initial mutations similar to those of the middle form of the Celtic, and also others not to be found in Celtic, but yet taking place in a similar manner under the influence of a preceding word. In the several Basque dialects, initial mutations, corresponding to those of the advanced form (the "provection" of Zeuss), peculiar to Cornish, Breton, and Breton of Vannes, are also to be observed, but only under the influence of *bai* (when meaning 'because' and not 'yes'), and of *ez* 'not.' Amongst the four principal dialects of the Island of Sardinia, Logudorese and Cagliariitan, both belonging to the Sardinian language (but, as I think, Non-Italian, although Neo-Latin), show initial mutations belonging to the middle form of the Celtic languages, without reckoning those they have in common with standard Italian or Tuscan. And this observation applies also to the third dialect of Sardinia, Sassarese, which is decidedly Italian, although not to the fourth, Tempiese, which, being even more Italian than the Sassarese, possesses hardly any initial mutation not to be found in Italian. Regular initial mutations influenced by a preceding

word as in Celtic, do certainly exist in Italian, but they do not belong to any of the four Celtic forms, middle, nasal, aspirated, or advanced ("provection"). I place them under a new form, which I call "weak," taking into consideration this very important fact, *viz.* that in Tuscan Italian, as well as in the majority of the real Italian dialects (such as Roman, the two Corsican, Tempiese, Sassarese, Sicilian, the two Calabrian, Neapolitan) initial consonants, although written single, are generally pronounced as they would be if written double. This strong pronunciation of consonants occurs not only at the beginning of any isolated word, or of any word beginning a sentence however short it may be, but also every time the consonant is not preceded by a word capable of determining the mutations constituting the "weak" form. It is, then, necessary to remember that, in Italian at least, the sounds which I represent in my tables by the symbols (bb, dd, ff, etc.), are the natural forms of consonants beginning their names in the Italian alphabet, and constituting their first or radical form (see note 5, p. 179). The sounds represented by the symbols (d, b, f, etc.), are, on the contrary, mere mutations of (bb, dd, ff, etc.), and are determined, as in Celtic, by a preceding word.

Before entering into further details on the initial mutations of Celtic, Basque, Sardinian, and Italian, it will be as well to remark first that they may be determined by two very different causes, according to the nature of the dialects. The first, or purely syntactic, depends on the meaning of the word and obtains in Celtic and Basque, while the second, not only syntactic but phonetic as well, belongs to Sardinian and Italian. As an instance, take the word "heart," as in all the Celtic, Sardinian, and Italian dialects here treated: 1°. Irish, *croidhe*, the Connaught pronunciation of which would be expressed phonetically and with the consonant and vowel symbols I have adopted and explained in the first table, by (krə'ie); 2°. Gaelic, *cridhe*, pronounced according to the Inverness pronunciation (krîə); 3°. Manx, *cree*, pron. (kri); 4°. Welsh, *calon*, pr. (kállon); 5°. Cornish, *colon* (kólon); 6°. Breton of Léon, or simply "Breton," *caloun* (kálun);

7°. Breton of Vannes, or simply "Vannes," *kalon* (kalón); 8°. Logudorese, *coro* (kkóro); 9°. Cagliaritan, *coru* (kkóru); 10°. Sassarese, 11°. Tempiese, and 12°. Southern Corsican, *cori* (kkóri); 13°. Southern Calabrian and 14°. Sicilian, *cori* (kkóri); 15°. Northern Corsican, 16°. vulgar Florentine or rather Florentine "Cianesco," 17°. Pisan with Livornese, and 18°. Roman or rather "Romanesco Trasteverino;" 20°. Northern Calabrian, *core* (kkóre); 19°. Neapolitan, *core* (kkóre); 21°. Lucchese, *core* (kóre);¹ 22°. Standard Italian, *cuore* (kkuóre). All these words being isolated, occur under the radical form and begin with the voiceless sound expressed by (k), as in Celtic and vulgar Lucchese, or with its strong modification expressed by (kk), as in Sardinian and generally in Italian. Let us however prefix to them any of those words capable of determining an initial mutation, and we shall perceive, as in the following examples, that (k) has been mutated either into voiced (g), as in Celtic generally, Sardinian, and Sassarese, or has remained unaltered, as in Scottish Gaelic, or been entirely suppressed, as in vulgar Lucchese, while the strong modification (kk) has been mutated into the simple (k), as in standard Italian and the majority of its dialects, or into (h), as in vulgar Florentine, or otherwise suppressed, as in vulgar Pisan or Livornese. Thus: 1°. Irish, *bhur gcroidhe* (wər grə'ie) *your heart*, instead of (wər krə'ie); 2°. Gaelic, *bhur cridhe* (vür kriə), *id.*; 3°. Manx, *nyn gree* (nhəŋg grî), *id.*, instead of (nhəŋg krî); 4°. Welsh, *dy galon* (də gállon), *thy heart*, inst. of (də kállon); 5°. Cornish, *de golon* (de gólon), *id.*, inst. of (de kólon); 6°. Breton, *da galoun* (da gálun), *id.*, inst. of (da kálun); 7°. Vannes, *ha galon* (ha galón), *id.*, inst. of (ha kalón); 8°. Logudorese, *su coro tou* (ssu góro dóu), literally, *the heart thy*, inst. of (ssu kkóro dóu); 9°. Cagliaritan, *su coru tuu* (ssu góru dúu), *id.*, inst. of (ssu kkóru dúu); 10°. Sassarese, *lu to cori* (llu do góri), literally, *the thy heart*, inst. of (llu do kkóri); 11°. Tempiese, *lu to cori* (llu to kóri), *id.*, inst. of (llu to kkóri); 14°. Sicilian, *lu to cori* (llu to kóri), *id.*, inst. of (llu

¹ As a general rule, Lucchese substitutes the weak for the radical Italian form.

to *kkóri*); 12°. Southern Corsican, *u to cori* (*u to kóri*), *id.*, inst. of (*u to kkori*); 13°. Southern Calabrian, *u to cori* (*u to kori*), *id.*, inst. of (*u to kkori*); 15°. Northern Corsican, *u to core* (*u to kóre*), *id.*, inst. of (*u to kkore*); 16°. Florentine, *ittò core* (*ittó hóre*), *id.*, inst. of (*ittó kkóre*); 17°. Pisan, *er tu 'ore* (*er ttu óre*), *id.*, inst. of (*er ttu kkóre*); 18°. Roman, *er tu core* (*er ttu kóre*), *id.*, inst. of (*er ttu kkóre*); 20°. Northern Calabrian, *lu core tue* (*llu kóre túe*), *the heart thy*, inst. of (*llu kkóre túe*); 19. Neapolitan, *lo core tuyo* (*u kóre túyø*), *id.*, inst. of (*u kkóre túyø*); 21°. Lucchese, *il tu 'ore* (*il tu óre*), *the thy heart*, inst. of (*il tu kóre*); 22°. Standard Italian, *il tuo cuore* (*il ttúo kuóre*), *id.*, inst. of (*il ttúo kkuóre*).

However numerous may be the instances quoted, they will fail however to show the purely syntactic nature of the Celtic and the few Basque mutations, and the phonetic Sardinian and Italian. I shall speak of the Basque in my explanation of Table XII., which relates to the causative *bai* (*bháí*) and negative *ez* (*es*) in this language. The purely syntactic nature of the mutation in the Celtic languages (whatever the ancient original cause may or may not have been), is shown by the fact that the very same word, spelled and pronounced in the same way, may bring about two different forms of mutation in the initial sound of the word that immediately follows, as, for instance, by reason of its grammatical gender, independently of the nature of its final sound. In Irish, Gaelic, Manx, Welsh, Cornish, Breton of Léon,² the possessive adjective expressed in English either by *his* or by *her*, is in both cases rendered by the same word: *a, a, e, ei, y, hé* (*a, ø, e, éi, ø, e*), respectively. Now, in Irish, Gaelic, and Manx, *a, a, e*, meaning *his*, governs the fourth or aspirated form of mutation, and meaning *her*, almost always, the first or radical; while in Welsh, Cornish, and Breton, *ei, y, hé*, meaning *his*, governs the second or middle form, and, meaning *her*, the fourth or aspirated. The two Celtic branches differ very widely in that respect in the application of the same principle.

² In Vannes *é* (*i*) means *his*, and *hé* (*hi*) means *her*. Ex. *é galon* (*i galón*), *his heart*; and *hé halon* (*hi halón*), *her heart*.

The following are instances: 1°. Irish, *a chroidhe* (a khrə'ie), *his heart*, and *a croidhe* (a krə'ie), *her heart*; 2°. Gaelic, *a chridhe* (ə khrîə), *his heart*, and *a cridhe* (ə krîə), *her heart*; 3°. Manx, *e chree* (e khrî), *his heart*, and *e cree* (e krî), *her heart*; 4°. Welsh, *ei galon* (ēi gállon), *his heart*, and *ei chalon* (ēi khállon), *her heart*; 5°. Cornish, *y golon* (ə gólon), *his heart*, and *y holon* (ə hólon), *her heart*; 6°. Breton, *hé galoun* (e gálun), *his heart*, and *hé c'haloun* (e khálun), *her heart*.

The Sardinian and Italian mutations are phonetic and independent of the grammatical character of the preceding word. The initial mutation of the second word is due solely to the original nature of the final sound of the first word, and not at all to the meaning of the whole word by which it is preceded (see my "Osservazioni sulla pronunziadel dialetto sassarese"); whatever may have been said to the contrary by Schuchardt (see "Romania," vol. iii. p. 13, note 1), who, as I think, must have not clearly understood my little Italian pamphlet, from which, however, he has derived a knowledge of a great number of facts previously unknown to him. The phonetic cause of the Non-Celtic or Non-Basque initial mutations is clear not only in the Italian dialects generally, but also in the two Sardinian and Sassarese. These three dialects make no exception, notwithstanding that they go so far in a purely morphological imitation of the Celtic mutations, as to simulate the second or middle form perfectly. In this respect they are, so to say, even more Celtic than the Scottish Gaelic, which has no middle form of mutation. In fact, (krîə) can only be aspirated in (khrîə), in this dialect, in which the middle form (grîə) does not exist. In Irish, Manx, Welsh, Cornish, Breton, Vannes, Logudorese, Cagliaritan, and Sassarese, on the contrary, besides the aspirated, nasal, advanced, and weak forms, which appear now in one, now in another, although never all in the same dialect, the middle form constantly obtains in all, as in (grə'ie, grî, gállon, gólon, gálun, golón, góro, góru, góri), respectively.

OBSERVATIONS ON THE FIFTEEN TABLES.

TABLE I.

It is only by the adoption of phonetic symbols that the comparison of languages becomes possible. Words, in fact, ought to be studied as they are or as they have been heard, and not as they are seen on paper. It is necessary, however, that the usual spelling should constantly accompany the phonetic symbols, because words, unfortunately, are not known to the despotic public at large as they ought reasonably to be written, but only as they are absurdly spelled. This I have done in my quotations and examples, either by writing in the text the entire words in both orthographies, or by printing in the tables in italics only those letters, digraphs, trigraphs, etc., of the usual spelling, which represent, whether logically or not, the phonetic symbols. With regard to this last, I only regret not having been able to make use of my own symbols, consisting of single signs for each sound, and to have been obliged to adopt digraphs, trigraphs, etc., which, however, always represent the same simple sounds, no matter in what dialect they occur. I remind my readers, therefore, that they should give their principal attention to the strict phonetic value of these symbols, and, as regards the common orthographies now in general use, that they should not forget that in Irish, Gaelic, Logudorese, Cagliaritan, and Sassarese, the spelling is intentionally etymological and antiphonetic; that in Manx it is in every respect absurd, pretending without any foundation to be phonetic, without being at the same time in the least etymological; that in Welsh, Cornish, Breton, Vannes, Basque, Italian, vulgar Florentine, Pisan with Livornese, Lucchese, Roman, Corsican, Tempiese, Sicilian, Calabrian, and Neapolitan, the spelling, without being strictly phonetic, is based, more or less, on phonetic principles, particularly in the Neapolitan, where the initial strong sounds are in a great number of modern books represented by double letters, con-

trary to the antiphonetic custom of all the other Italian dialects.

As the examples of the sounds given by means of Irish and dialectal words, which are not generally known, are hardly enough to guide the general reader, I add a brief explanation of some of the most difficult, referring, at the same time, to the numbers preceding the sounds, as they occur in my printed "Lists of vowels and consonants," occupying pp. 1293-1307 and pp. 1352-1357 of Alexander J. Ellis's "Early English Pronunciation." These numbers, for distinction's sake, are inclosed in [].

9. dy [135] is the voiced, explosive, and palatalized *dental*, differing both from [172], the Russian voiced, explosive, and palatalized *alveolar*, and from [246], the Hungarian voiced, explosive, and palatalized *palatal*.

12. dh [134], the voiced and *explosive dental*, differing both from 4 d [168], the common voiced and *explosive alveolar* 'd,' and from [240], the English voiced and *explosive palatal* 'd,' as well as from 8 dh [138], the voiced and *continuous dental* 'th' in 'thee.'

17. ggj [303], the voiced and *continuous guttural* *whisk* in its strong modification, differing both from 18 ggy [336], the Italian voiced, *explosive*, and palatalized *guttural* in its strong modification, and from 7 ddzh [232], the Italian voiced and *continuous palatal* *whisk* in its strong modification.

20. gj [302], the voiced and *continuous guttural* *whisk* in its weak modification, differing both from 21 gy [335], the Italian voiced, *explosive*, and palatalized *guttural* in its weak modification, and from 11 dzh [231], the Italian voiced and *continuous palatal* *whisk* in its weak modification, or from the English 'j' in 'jelly.'

25. hw [328], the voiceless, explosive, aspirated, and labialized *guttural*, only approaching to [81], the English aspirated and labial semi-vowel, according to those who still decline to pronounce 'wh' in 'which' as a simple 'w,' or 70 w [89], the labial semi-vowel.

30. kj [299], the voiceless and *continuous guttural* *whisk* in

its weak modification, differing both from 36 ky [324], the Italian voiceless, *explosive*, and palatalized *guttural* in its weak modification, and from 61 tsh [224], the Italian voiceless and *continuous palatal whish* in its weak modification, or from the English 'ch' in 'child.'

32. kj [300], the voiceless and *continuous guttural whish* in its strong modification, differing both from 34 kky [325], the Italian voiceless, *explosive*, and palatalized *guttural* in its strong modification, and from 64 ttsh [225], the Italian voiceless and *continuous palatal whish* in its strong modification.

41. l [141], the *voiced* and liquid *dental*, differing from

42. lh [131], the *voiced* and liquid *labio-lingual*. The Manx, 41 l [141], and the Irish, 42 lh [131], differ also from 38 lh [358], the Welsh *voiceless* and liquid *guttural*; [361], the Polish *voiced* and liquid *guttural*; [258], the English *voiced* and liquid *palatal*, and 37 l [197], the common *voiced* and liquid *alveolar* 'l.' Sassarese possesses the sounds 41, 38, and 37.

47. nh [178], the *voiced*, *explosive*, and *nasalized alveolar*, differing both from 45 n [175], the common *nasal alveolar*, and from [248], the English *nasal palatal*. The sound, 47 nh, may be very roughly and not exactly represented by 'dn.'

54. ry [269], the *voiced*, *trilled*, and *palatalized palatal*, differing from 52 r [266], the common *voiced*, *trilled*, and *non-palatalized palatal* 'r.'

65. ty [133], the *voiceless*, *explosive*, and *palatalized dental*, differing both from [165], the Russian *voiceless*, *explosive*, and *palatalized alveolar*, and from [238], the Hungarian *voiceless*, *explosive*, and *palatalized palatal*.

66. th [132], the *voiceless* and *explosive dental*, differing both from 58 t [159], the common *voiceless* and *explosive alveolar* 't,' and from [235], the English *voiceless* and *explosive palatal* 't,' as well as from 59 th [136], the *voiceless* and *continuous dental* 'th' in 'thin.'

69. v [127], the *nasal continuous labio-dental*, bearing the same relation to 67 v [118], the *voiced continuous labio-*

dental, or English 'v,' as 43 m [93], the nasal *labial*, or English 'm,' bears to 1 b [85], the voiced and explosive *labial*, or English 'b.'

71. *w* [98], the nasal and labial semi-vowel, bearing the same relation to 70 *w* [89], the labial semi-vowel, or English 'w,' as a nasal vowel bears to a non-nasal.

98. *s* [254], the voiceless, continuous, and *palatal* Spanish Basque 's,' differing both from 55 *s* [182], the voiceless, continuous, and rather *alveolar* English 's,' as well as from

99. *ʃ* [310], the voiceless, continuous, and *velar* [*gutturo-palatal*] French Basque 's.'

100. *ts* [234], the voiceless, continuous, and *double palatal* Spanish Basque 'ts,' differing from 60 *ts* [146], the voiceless, continuous, and *double alveolar* Italian 'z.' These sounds I call "double," because, in fact, they may be roughly and not exactly represented so: the latter, by 58 *t* [159], the voiceless and explosive *alveolar* immediately followed by 55 *s* [182], the voiceless and continuous *alveolar*; and the former, by [235], the voiceless and explosive *palatal* immediately followed by 99 *ʃ* [254], the voiceless and continuous *palatal*.

101. *tf*, the voiceless, continuous, and *double velar* French Basque 'ts' or 'x,' differing from the preceding Spanish Basque *ts* by the former being produced in the soft instead of the hard palate. This sound 'tf' is not to be found in my "List of Vowels and Consonants," where it should form [303"].

The first part of this table treats only of such consonants as are concerned in mutation. The second part gives the vowels and consonants not concerned in mutation, which are necessary to complete the phonetic representation of the words cited. No very great accuracy is here aimed at, for ex., 82 (ə) is used for the English sound represented by 'u' in 'cuff' and the French 'eu' or 'œu' in 'veuf' or 'cœur,' and generally any other related obscure vowels, although the French 'eu' in 'peu,' if it occurred in the words cited, would, as being too different from 'eu' in 'veuf,' be represented by (ə). In the same way 91 (ü) is used not only for French 'u,' but for any other sound nearly related to it. The use of the acute, as in (á), to mark tonic accent, and also

diphthongal emphasis, on short vowels, has been supplemented by that of the circumflex, as in (â=á), to represent the tonic accent, and also *diphthongal emphasis*, on long vowels.

TABLE II.

This table shows all the initial mutations of which the Celtic, Basque, Sardinian, and Italian radical sounds are capable. The first column shows the radical sound, and the second the sounds into which it is mutated, both expressed phonetically, according to the symbols given in the first table. No distinction of dialects is made in the second table, but the following tables, III., IV., V., VI., VII., VIII., IX., XII., XIII., XIV., show the mutations proper to each dialect. I have not comprised amongst initial mutations those changes in words of the Basque and Sassarese dialects, which are not merely initial, but are due to the coalescence of the final sound of the preceding with the initial sound of the following word. Examples: 1°. Guipuscoan Basque, *onak dira, onak balira* (onatíra, onapalíra), *they are good, if they were good*, and in the Labourdin dialect, *onak dire, onak balire* (onatíre, onapalíre). 2°. Sassarese, *pal cadì, pal chistu* (ppakkadí, ppakkillhu), *to fall, for this*; *pal quattru* (ppakklhwáttu), *for four*; *pal gudì, pal ghettu* (ppagghudì, ppagghétu), *to enjoy, for jewelry*; *pal quantu* (ppagghwánttu), *for glove*; *pal te* (ppallhé), *for thee*; *pal dà* (ppallá), *to give*.

TABLE III. IRISH.

The Irish language presents three forms of initial mutations: the middle, the nasal, and the aspirated. This is also the case with Manx and Welsh. These three dialects have two forms more than the Gaelic: the middle and the nasal, and also one form more (the nasal) and one form less (the advanced) than the Cornish and the two Breton dialects. The form called "eclipsis" by Irish grammarians comprises, under a single name, both the middle and nasal forms, and, accordingly, they express them by fixing to the radical consonant, which becomes silent, the consonant into which it has been mutated and which is therefore the only one pronounced.

In fact, the sounds (g, *dh*, dy, b, w, v), belonging to the middle, and (*nh*, ny, m), belonging to the nasal form, are etymologically, although antiphonetically, expressed in Irish by *gc*, *dt*, *bp*, *bhf*, *nd*, *mb*. The sound (ng), however, is not represented by *ngg*, but simply by *ng*, as in *bhur ngabhar* (wər ngówər) ‘your goat,’ instead of *bhur nggabhar*.

In the aspirated form in Irish, (*th*, *ty*) mutate into (h) and (s, sh) into (h, *th*, *ty*), but (f) is suppressed. Nothing of the sort occurs in Welsh, Cornish, and the two Breton dialects. In Welsh neither (f) nor (s) are subject to mutation at all, although (t) can be aspirated into (th). In Cornish and the two Breton dialects, although (t) is subject to be aspirated into (th) in the former and into (z) in the two latter, (s) possesses no aspirated form, being only capable of being mutated into (z) also in the middle form; while (f) is not subject to mutation in the two Breton dialects, and in Cornish, instead of being suppressed, (f) is mutated into (h).

TABLE IV. GAELIC.

Gaelic possesses only the aspirated form of mutation, and replaces the middle and nasal forms of Irish (see Table XI.), by the radical. Thus, the Irish *bhur dtonn*, *bhur nduine* (wər dhə́nh, wər nhína), *your wave*, *your man*, are in their Gaelic counterparts, *bhur tonn*, *bhur duine* (vür thónh, vür dhüínə).

Gaelic differs also from Irish in the pronunciation of *t*, *d* slender. Thus, *tír*, *Dia* (tyíry, Dyíə), *country*, *Gođ*, in Irish, are *tír*, *Dia* (tshíry, Dzhia) in Gaelic.

TABLE V. MANX.

Although the Manx dialect is the least known amongst the Celtic, I have studied it with more care than any others of the Gaelic branch, on account of certain peculiarities which it presents. About thirty years ago I went to the pretty little island of Man, and there I remained some weeks, taking up my abode partly in Douglas, partly in Ballaugh, from whence I paid frequent visits to the late Rev. J. E. Harrison,

Vicar of Jurby, who, with the late Rev. Th. Howard, Rector of Ballaugh, Rev. W. Drury, Vicar of Kirk Braddan, and other native gentlemen, but particularly with the assistance, at my request, of the countrymen throughout the island, decided some doubtful points concerning the phonetism and initial mutation of this dialect. My best thanks to the living and my best wishes for the departed! It is only in this small island, and the very small adjoining island of Calf of Man, belonging to the parish of Rushen, that Manx still exists, although, unfortunately, *in articulo mortis*. It is rarely heard, and only a minority of the natives can speak it. According to Mr. Jenner (see "Transactions of the Philological Society, 1875-6," p. 193), Kirk Arbory was in 1875 the only church in which Manx was used once a month. In 1852, however, it was used more or less in every parish church, although at present it is not heard even at Kirk Arbory.

The Manx dialect, as the Scottish Gaelic, replaces Irish (ty, dy), by (tsk, dzh). *Cheer*, *Jee* (tshîr, Dzhî), *country*, *God*, correspond in fact to Irish *tír*, *Dia* (tyîry, Dyîe) and to Gaelic *tír*, *Dia* (tshîry, Dzhîa).

With regard to the nasal form (see Table XI.), there is a difference between Manx and Irish. This form does not exist in Gaelic, as I have stated already, but in Manx the sound (b) exclusively is susceptible of it. In Irish, on the contrary, not only (b), but also (g, dh, dy) are liable to the nasal mutation, while Manx adopts the aspirated form for its own (g, d, dh, dzh), represented by *g, d, d, j*. Let us take the word *God* in the three Gaelic dialects: 1°. Irish, *Dia* (Dyîe); *ár Ndia* (ār Nyîe), *our God*; 2°. Gaelic, *Dia* (Dzhîa); *ar Dia* (ar Dzhîa), *id.*; 3°. Manx, *Jee* (Dzhî); *nyn Yee* (nhên Yî), *id.* These instances clearly show that the government of the forms is not always the same in the three Gaelic dialects.

Although Manx is the most corrupted of the three in a general point of view, it possesses such striking initial mutations, not to be found in the other two, that they require some mention. I leave to others the task of explaining

in a satisfactory manner, either by the most ancient Irish, or by the two other modern dialects, the existence in Manx (see Table V.) of such initial mutations as the following: 1°. *(k) into (gh); 2°. *(k) into (dh); 3°. (k) into (h); 4°. (g) into (nh); 5°. (g) into (ny); 6°. *(g) into (v); 7°. (g) suppressed; 8°. (h) into (dh); 9°. (h) into (dzh); 10°. (dh) suppressed; 11°. (nh) suppressed; 12°. (b) suppressed; 13°. (m) suppressed; 14°. (f) into (dh); 15°. (f) into (nh); 16°. (f) into (ny); 17°. (v) into (w); 18°. (s) into (dh); 19°. (s) into (k); 20°. (s) into (g); 21°. (s) into (nh); 22°. (s) into (b); 23°. (s) suppressed; 24°. *(sh) into (gh); 25°. (sh) into (ny); 26°. (sh) into (b). These mutations are sometimes very irregular, and the existence of a few of them, which I have marked *, may or may not be doubtful, as I have not been able to hear them from a Manxman's own mouth, but the majority of them do certainly exist in the spoken language, and all are confirmed either by the Manx Bible or by Cregeen's excellent Manx dictionary.

TABLE VI. WELSH.

The Welsh language is the only one in which three regular initial mutations in the same word are possible. In fact the sounds (k, t, p), written *c, t, p*, become (g, d, b) *g, d, b*, in the middle form; (ngh, nh, mh) *ngħ, nh, mh*, in the nasal, and (kh, th, f) *ch, th, ph*, in the aspirated. Neither in Irish, nor in Manx, are (k; *th, ty, tsh*; p) *c; t; p*, subject to nasality, because words capable of determining this mutation either in the Irish sounds (g; *dh, dy*; b) *g, d, b*, or in the Manx sound (b) *b*, are only capable of determining the middle form mutations in (k; *th, ty, tsh*; p). Examples: 1°. Welsh, *tad* (tâd), *father*; (və nhâd) *fy nhad*, 'my father'; 2°. Irish, *tál* (thól), *adze*; (ār dhól) *ár dtál*, 'our adze'; 3°. Manx, *thaal* (thâl), *id*; (nhæn dhâl) *nyn dhaal*, 'id.' If, on the contrary, a word beginning with (b) be chosen for example, then the nasal mutation will appear in the three dialects: 1°. Welsh, *brawd* (brâud), *brother*; (və mrâud) *fy mrawd*, 'my brother'; 2°. Irish, *bráthair* (brôhíry), *brother*,

friar; (ār mrôhiry) *ār mbráthair*, 'our brother, friar'; 3°. Manx, *braar* (brêr), *brother*; (nhən mrêr) *nyn mraar*, 'our brother.'

TABLE VII. CORNISH.

Cornish, in the majority of those initial mutations which are not common to the whole Cambrian branch, follows the two Breton dialects (see Tables VIII. and IX.) and but rarely the Welsh, but in a few cases it follows its own peculiar course. It follows Breton in rejecting the Welsh nasal form, for which it substitutes the aspirated, as in *ow holon* (ō hólón), *my heart*, and corresponding to Breton *va c'haloun* (va khálun); to Vannes *me halon* (mæ halón), but differing from Welsh *fy nghalon* (væ nghállon), and not (væ khállon), which would have to be written *fy chalon*, if it were in existence. The analogy of Cornish with Vannes is striking in the substitution of (h) for (kh) in the aspirated form of (k).

Cornish, Breton, and Basque possess the advanced form which is wanting, at least as a regular mutation, in all the other Celtic and Non-Celtic dialects, although it does not appear by the Cornish remains that the possessive adjective *your* is capable of governing this fifth Celtic form, as is always the case in the two Breton dialects with words beginning with (g, d, b). Examples: *bara* (bára), at Léon, and (bará), at Vannes, *bread*; and *hō para*; *hou para* (ō para; hu pará), *your bread*, are not in Cornish, *bara*; *agas para* (bára; ágas pára), but *bara*; *agas bara* (bára; ágas bára), or rather (gus bára). On the other hand, the advanced form mutations sometimes take place in Cornish with the particle *ow* (ō), *in*, but not (as far, at least, as I have been able to discover) in the same way as in Breton; for the sound (d) is the only one in this language which admits of such a mutation, either under the influence of the particle *ō* (ō), and corresponding to Cornish *ow* (ō), or under that of the conjunctions *é*, *ma* (e, ma), *that*. In Vannes, *é* (i) represents both the particle *ow* and the conjunctions *é*, *ma*, of the

Breton of Léon. In Cornish, the particle *ow* not only mutates (d) into (t), but also the initial (g) into (k), (b) into (p), and, in a single instance only, so far as I know of, (gw) into (f). These last mutations do not occur in the Breton dialects, in which the aforesaid particles always determine the middle form or mutations of (g) into (kh) or (h) and of (gw, b, m) into (v). The following are examples: I. Cornish, 1°. *guerthe* (gwértha), 'to sell'; *ow guerthe* (ō kwértha), *selling*; 2°. *guyskel* (gwískel), 'to strike'; *ow fysky* (ō físki), *striking*; 3°. *dos* (dôz), 'to come'; *ow tos* (ō tôz), *coming*; 4°. *bew* (béu), 'to live'; *ow pew* (ō péu), *living*: II. Breton, 1°. *gwerza* (gwérza), 'id.'; *ô c'hwerza* (ô khwérza), *id.*; 3°. *doñt* (dôt), 'id.'; *ô toñt* (ô tôt), *id.*; 4°. *béva* (béva), 'id.'; *ô véva* (ô véva), *id.*; 5°. *miret* (míret), 'to keep'; *ô viret* (ô víret), *keeping*: III. Vannes, 1°. *guerhein* (gwerhéin), 'id.'; *é huerhein* (i hwerhéin), *id.*; 3°. *dont* (dónt), 'id.'; *é tont* (i tónt), *id.*; 4°. *bihuein* (bihüéin), 'id.'; *é vihuein* (i vihüéin), *id.*; 5°. *mirein* (miréin), 'id.'; *é virein* (i viréin), *id.*

Cornish, in a single case quoted by Mr. E. Norris, follows Breton and not Welsh in admitting the middle form mutation of (s) into (z): *sendzhyn* (séndzhin), 'we consider'; *ny sendzhyn* (na zéndzhin), *we do not consider*. This sound in fact receives no initial mutation in Welsh, while in the two Breton dialects, under the influence of various preceding words, besides the negative conjunction, it is regularly mutated into (z): *sac'h*; *señtomp* (sákh; sétomp), 'bag; we obey'; *hé sac'h*; *né señtomp* (e zákh; ne zétomp), *his bag; we do not obey*, and in Vannes, *sah*; *señtamb* (sákh; sétámb); *é zah*; *ne señtamb* (i zákh; ne zétámb).

The sound (g), which in its middle form can only be suppressed in Welsh, may in Cornish not only be suppressed, as is generally the case, but also occasionally mutated into (w) or even (h). In Breton, (g), not being followed by (w), is regularly mutated into (kh), but in the Tréguier sub-dialect (g) of (gw) is suppressed as it is in Welsh in every case, while in ordinary Léon Breton, the whole (gw) is mutated into a single (v). In Vannes, finally, (g) is constantly mutated into (h), but this is only very rarely the case in

Cornish. Examples: I. Cornish, 1°. *gavar* (gávar), 'goat;' *y avar* (e ávar), *his goat*; 2°. *golow* (gólō), 'light;' *y wolow* (e wólō), *his light*; (this mutation, which is peculiar to Cornish, occurs, according to Mr. R. Williams, in words beginning with 'go' or 'gu.') 3°. *guydn* (gwídn), 'white'; *byuh whydn*, *wydn* (bíuh hwídn, wídn), literally, *cow white*; II. Welsh, 1°. *gafr* (gávr), 'id.'; *ei afr* (éi ávr), *id.*; 2°. *goleu* (gólēü) 'id.'; *ei oleu* (éi ólēü), *id.*; 3°. *gwyn* (gwŷn), 'id.'; *buwch wyn* (büukh wŷn), *id.* III. Breton, 1°. *gaour* (gáur), 'id.'; *hé c'haour* (e kháur), *id.*; 2°. *goulou* (gúlu), 'id.'; *hé c'houlou* (e khulu), *id.*; 3°. *gwenn* (gwén), 'id.'; *bioc'h wenn*, or *wenn* at Tréguier (bíok vén, wén), *id.* IV. Vannes, 1°. *gavr* (gávr), 'id.'; *é havr* (i hávr), *id.*; 2°. *goleu* (golé'), 'id.'; *é holeu* (i holé'), *id.*; 3°. *guen* (güén), 'id.'; *buoh huen* (büokh hüén), *id.*

Neither Cornish nor Breton possess the two mutations of Welsh (lh) and (rh), these being constantly replaced by (l, r): 1°. Welsh, *lloer*; *rhew* (lhôür; rhêu), 'moon; frost'; *ei loer*; *ei rew* (éi lôür; éi rêu), *his moon*; *his frost*; 2°. Cornish, *lur*; *rew* (lûr; réu), 'id.'; *y lur*; *y rew* (e lûr; e réu), *id.*; 3°. Breton, *loar*; *réo* (lóar; réó), 'id.'; *hé loar*; *hé réo* (e lóar; e réó), *id.*; 4°. Vannes, *luer*; *réo* (lüér; réó), 'id.'; *é luer*; *é réo* (i lüér; i réó), *id.*

Cornish and Welsh entirely agree in the aspirated mutation of (t), as well as in the middle mutation of (d), but in the two Breton dialects, on the contrary, both (t) and (d), in the same cases, mutate into (z): Welsh, *tad* (tâd), *father*, is *tas* (tâz), in Cornish; *tâd* (tâd), in Breton; *tat* (tát), in Vannes; and *her father* is rendered in the same dialects respectively, by *ei thad* (éi thâd), *y thas* (e thâz), *hé zad* (e zâd), *hé zat* (hi zát); while Welsh *dyn* (dŷn), *man*, is *dean* (déan), in Cornish; *dén* (dén), in Breton; *dén* (dín), in Vannes; and *his man* is rendered respectively, by *ei ddyn* (éi dhŷn), *y dhean* (e dhéan), *hé zén* (e zén), *é zén* (i zín).

The middle mutations of (tsh) and (d) into (dzh), of which the first exists also in Manx, belong exclusively to the Cornish dialect, the only one of the Cambrian branch which possesses the sounds (tsh, dzh). These sounds are replaced

by (t, d, dh) in Welsh, and by (t, d, z) in the two Breton dialects: 1°. Cornish, *tshi* (tshéi), 'house'; *y dzhi* (e dzhéi), 'his house'; *dydh* (dídih), 'day'; *y dzhydh* and also *y dhydh* (e dzhídih, e dhídih), *his day*; 2°. Welsh, *ty*, *ei dy*; *dydd*, *ei ddydd* (tû, éi dû; dûdh, éi dhûdh), *id*; 3°. Breton, *tî*, *hé di*; *deiz*, *hé zeiz* (tî, e di; déiz, e zéiz), *id*; 3°. Vannes, *tî*, *é di*; *dé*, *é zé* (tî, i di; di, i, zi), *id*.

But the strangest Cornish mutation, which is not to be found in any of the Celtic languages, is the change of (f) into (h) after the definite article, as in *floh* (flóh), 'child'; *an hloh* (an hlóh), *the child*.

TABLE VIII. AND TABLE IX. BRETON DIALECTS.

The following mutations are proper to the Breton language, besides those of the advanced form belonging also, although imperfectly, to Cornish, and even, although rarely, to Basque: 1°. (g) mutated into (kh), and 2°. (gw) into (v), both in the Léon dialect or ordinary Breton, and 3°. (g) mutated into (h), and 4°. (h) into (g), both in Vannes Breton. They belong to the second or middle form; and, as all three have been mentioned in the last six lines of p. 169, I proceed at once to

TABLE X. AND TABLE XI.

Table X. gives the possessive adjectives, as well as the definite and indefinite articles, in all the Celtic languages, while Table XI. shows the influence of the possessive adjectives on the initial mutations. The Arabic figures indicate the form of mutation of which the symbols that follow them are capable. The study of this table is highly important, on account of its showing the difference which exists amongst the Celtic dialects (even sometimes amongst those belonging to the same branch) in the government of the forms by the possessive adjectives, in the number of the forms, and in the sounds admitting of mutation.

TABLE XII. BASQUE.³

The only Basque words capable of producing regular, initial, and syntactic or grammatical mutations as in Celtic, are *bai* (bhái), *yes*, or, according to the Souletin dialect, *bei* (bhéi), and *ez* (és), *no*, *not*. The sounds which undergo mutation are (g, d, bh, s, sh), written *g, d, b, z, ch*, and the mutates themselves are (k, t, p, ts, tsh), written *k, t, p, tz, tch*. These mutations occur almost exclusively in the verb, and, according to the nature of the Basque dialects, some of them are obligatory, some optional, or even rejected. The Basque mutations all belong to the fifth or advanced form, proper to Breton and Cornish. The particle *ez* (és) always keeps its negative meaning, both when it is isolated and when it acts as a mutator, but the particle *bai, bei* (bhái, bhéi), as a mutator, loses its affirmative sense, and either assumes a causative signification answering to the conjunction *because*, or else it merely represents the obligatory government, called by Inchauspe "incidental," and by me "causative." Examples from the Labourdin dialect: I. BAI, 1°. *bai, ona da* (bhái, oná dá), *yes, he is good*; 2°. *ona baita* (oná bhaitá), replacing *ona bai da* (oná bhái dá), *because he is good*; 3°. *zein ona baita* (séin oná bhaitá), *who is good*, literally, *who because is good*, which, though simply impossible in English, is nevertheless imperatively required by the relative pronoun *zein* (séin), *who*—one of those words which in Labourdin govern the incidental or causative *baita* (bhaitá), and not the single *da* (dá), *is*—; contrary to what happens with the English *who*.

³ Here I cannot help mentioning the following very interesting remark of my friend, Capt. Duvoisin, the translator of the Bible into the Labourdin Basque dialect, and one of the best philologists of the *Euskalerrria*: "Voici une formation plus singulière, mais aussi plus rare; elle consiste à remplacer par un *m* et quelquefois par un *b* la première lettre du mot répété: *handi-mandiak* 'les grands de la terre,' *hautsi-mautsiak* 'les transactions ou accommodements,' *duda-mudak* 'les doutes ou perplexités,' *nahas-mahas* 'pêle et mêle,' *itsu-mitsuka* 'à l'aveuglette' (here the initial *m* constitutes an addition and not a mutation), *tira-biraka* 'par tiraillement,' *zurru-burru* 'mélange d'objets de peu de valeur.' Larramendi, Prol. du Dict., 2^e édition, p. 192, dit dans ce dernier sens: *Lapiko bat zaduraz baduraz betea* 'marmite pleine de toute sorte d'ingrédients.' Cette citation est l'une des mille qu'on pourrait faire pour démontrer que le même esprit préside toujours au langage aux deux versants des Pyrénées." ('De la formation des noms dans la langue basque,' Paris, 1874, p. 8).

II. EZ, 1°. *ezta ona* (está oná), *he is not good*, replacing *ez da ona* (és dá oná); 2°. *ona espaita* (oná espaitá), replacing *ona ez bai da* (oná és bhái dá), *because he is not good*; 3°. *zein ona espaita* (séin oná espaitá), *who is not good*.

These instances show that the Basque initial mutations are purely syntactic like the Celtic, and not phonetic as the Sardinian and the Italian. If they were due merely to the diphthong *ai* of *bai* and to the *z* of *ez*, other words ended in *ai* or *z* ought to produce the same mutations; but this mutative power resides in the non-affirmative *bai* and in the negative *ez* as such, and not because of their ending in *ai* or *z*. In fact, *negarrez gaude*, 'we are weeping'; *negarrez daude*, 'they are weeping'; *negarrez baitaude*, 'because they are weeping'; *negarrez zaude*, 'thou art weeping'; *etsai gogorra*, 'the hard enemy'; *etsai damutua*, 'the repented enemy'; *ahaidea*, 'the relation' or 'kinsman, kinswoman'; *etsai bat*, 'an enemy'; *etsai zauritua*, 'the wounded enemy'; *aizea*, 'the wind,' etc., are not pronounced (negárres káude, táude, paitáude, tsáude; etfái kogorrá, tamutúa; ahaiteá; etfái pát, tsauritúa; aitseá), but (negárres gáude, dáude, bhaitáude, sáude; etfái gogorrá, damutúa; ahaideá; etfái bhát, sauritúa; aiseá). With the negative *ez* and the non-affirmative *bai*, on the contrary, the mutations of (g, d, bh, s, ts) into (k, t, p, ts, tsh) will, may, or may not take place, as I stated before, according to the nature of the dialects. (See the Table.)

TABLE XIII. SARDINIAN AND ITALIAN DIALECTS.

These dialects, like the Celtic and Basque, are subject to regular initial mutations determined by a preceding word, but the cause of these changes is phonetic, and not purely syntactic as in the two last-named languages. When, for instance, the Sassarese Italian dialect of Sardinia mutates (kk) of (é kkárri), written *è carri*, 'it is flesh,' into (g) of (lla gárri), written unphonetically *la carri*, 'the flesh,' it does so on account of the original final sounds of the Latin words *est* and *illa*, the first ended in a consonant and the second in

an atonic vowel, although each of their Sassarese successors, *è*, *la*, ends in a vowel. The meaning and grammatical nature of these words are not taken into consideration, but only the phonetic nature of the original final sounds in Latin, which determines or does not determine, as the case may be, not only the mutations of the Sassarese, but also those of the other Italian dialects in most cases, and of the Sardinian without exception.

The Sardinian language, which ought not to be confounded with the two other dialects of the Island of Sardinia—Sassarese and Tempiese,—is divided into two dialects: 1°. Logudorese or central, the representative of the Sardinian language; 2°. Cagliaritan or southern Sardinian, the dialect of the capital of the island. As the Sassarese mutations, in spite of the very decided Italian character of the dialect to which they belong, are nearer to the Sardinian than to the Italian, I shall speak first of Logudorese, Cagliaritan, and Sassarese, and secondly of Tempiese, Southern Corsican, Florentine, Pisan with Livornese, Lucchese, Roman, and Neapolitan, these being the Sardinian and Italian dialects from which the Table XIII. gives some instances of mutation.

And beginning with Logudorese, Cagliaritan, and Sassarese, I am very glad to repeat in English what I stated in Italian in 1866, that these three very important Neo-Latin dialects are the only ones in Europe, and very likely in the world, that are in possession of the second or middle form of mutation of the sounds (kk, tt, pp) into (g, d, bh), exactly as in all the Celtic dialects excepting Scottish Gaelic; for the minute difference between (kk; tt; pp; d; bh) and (k; t, th; p; dh; b), according to the dialects, is quite evanescent in this particular case. (See Tables III., V., VI., VII., VIII., IX.) Examples: 1°. Irish *croidhe*, *tonn*, *port* (kró'ie, ths'nh, p'arth), mutated into *geroidhe*, *dtonn*, *bport* (gró'ie, dhs'nh, b'arth); II°. Manx, *cree*, *tonn*, *purt* (krí, thónh, p'rt), into *gree*, *donn*, *burt* (grí, dhónh, b'rt); III°. Welsh, *calon*, *tad*, *pen* (kállon, tâd, pén), into *galon*, *dad*, *ben* (khállon, dâd, bén); IV°. Cornish, *colon*, *tas*, *pedn* (kólon, tâz, pédn), into *golon*, *das*, *bedn* (gólon, dâz, bédn); V°. Breton, *kaloun*, *tâd*, *penn*

(kálun, tād, pén), into *galoun, dād, benn* (gálun, dād, bén) ; VI°. Vannes, *kalon, tat, pen* (kalón, tát, pén), into *galon, dat, ben* (galón, dát, bén) ; VII°. Logudorese, *coro, terra* 'earth,' *pane* 'bread' (kkóro, ttérta, ppáne), into (góro, dérra, bane), although antiphonetically written *coro, terra, pane* ; VIII°. *coru, terra, pani* (kkóru, ttérta, ppáni), into (góru, dérra, báni), antiphonetically written *coru, terra, pani* ; IX°. Sassarese, *cori, terra, pani* (kkóri, ttérta, ppáni), antiphonetically written *cori, terra, pani*. For the meaning and mutators of the preceding and following words, see the Tables.

The mutations of (kk, *kkw*, tt, tts, pp, ff, vv, ss) into (g, gw, d, dz, bh, bh, bh, z) ⁴ belong to Logudorese, Cagliaritan, and Sassarese ; and, although only three of them are to be found in all the Celtic dialects, except the Scottish Gaelic, of the other five, two exist in one or more of them, and three are undoubtedly moulded on the law of initial mutations ; as every strong voiceless sound is mutated into its corresponding weak voiced form : 1°. Logudorese, *quadros, cibi, fusos, velenos, sapados*, pronounced, according as they are radical or mutated, (*kkwádro*s, *ttsíbh*u, *ffúz*os, *vvelén*os, *ssáp*ados), or (*gwádro*s, *dzíbh*u, *bhúz*os, *bhelén*os, *záp*ados) : 2°. Cagliaritan, *quarras, cittadi, fillus, vizius, serras* (*kkwárr*as, *gwárr*as ; *ttsit*-tádi, *dzittá*di ; *ffill*us, *bhíll*us ; *vvítsi*us, *bhítsi*us ; *ssérr*as, *zérr*as) ; 3°. Sassarese, *quaranta, zelu, figghi, reni, sordu* (*kkwaránt*ta, *gwaránt*ta ; *ttsélu*, *dzélu* ; *ffígg*i, *bhígg*i ; *vvéni*, *bhéni* : *ssóllu*, *zóllu*).

The mutation of (kky) into (gy) belongs also to the middle form and may occur in Logudorese and Cagliaritan : 1°. Logudorese, *chietu* (*kkhyétu*, *gyétu*) ; 2°. Cagliaritan, *chiete* (*kkyéte*, *gyéte*).

The mutation of (bb) into (bh), belonging to Cagliaritan and Sassarese, may be compared to that of (b) into (v)

⁴ It will be observed that the strong sounds (ff, bb, vv) are all mutated into (bh) in their weak form. This astonishes Mr. Schuchardt (see "Romania," vol. iii. p. 12, l. 31), but his astonishment will cease, if he consider that in Logudorese, Cagliaritan, and Sassarese the sound (bh) is always given to the letters *b* and *v* occurring between two vowels ; a circumstance explaining in a very satisfactory way why (bh) may be the weak mutation not only of (bb), but also of (vr) and (ff), and even of (pp). See the Table.

occurring in the middle form of all the Cambrian, and in the aspirated form of all the Gaelic dialects, as well as in the weak of southern Corsican: 1°. Cagliariitan, *baccas* (bbákkas, bhákkas); 2°. Sassarese, *bozi* (bbódzi, bhódzi); 3°. Welsh, *bara, fara* (bára, vára); 4°. Cornish, 5°. Breton, *bara, vara* (bára, vára); 6°. Vannes, *bara, vara* (bará, vará); 7°. Irish, *biadh, bhiadh* (biə, viə); 8°. Gaelic, *biadh, bhiadh* (biəgh, viəgh); 9°. Manx, *beaghey, veaghey* (biaghe, viaghe), 'food'; 10°. Southern Corsican, *bonu* (bbónu, vónu).

The initial suppression of Logudorese (bb) and (dd) is quite analogous to that of (g) in the Welsh, Cornish, and Tréguier Breton middle form; of (s) in the Manx middle form; of (f) in the aspirated form of all the Gaelic dialects; of (g, dh, nh, b, m, s) in the Manx aspirated form; of (vv) in Tempiese and vulgar Florentine; and finally, of (kk) in Pisan, and (k) in Lucchese; 1°. Logudorese, *boes*; *dinari* (bbóes, óes; ddinári, inari); 2°. Welsh, *gafr, afr* (gávr, ávr); 3°. Cornish, *gavar, avar* (gávar, ávar); 4°. Tréguier, *gwenn, wenn* (gwén, wén); 5°. Manx, *sliack, liack* (slyák, lyák); 6°. Irish, *fear, fhear* (fár, ár); 7°. Gaelic, *fear, fhear* (fér, ér); 8°. Manx, *fer, er* (fér, ér); *gweeder, weeder* (gwídhər, wídhər); *dwoaie, uoaie* (dhói, ói); *noi, oi* (nhói, ói); *bwoaillee, woaillee* (bóile, óile); *mwannal, wannal* (mwánal, wánal); *sleih, leih* (sléi, léi); 9°. Tempiese, *vinu* (vvínu, ínu); 10°. Florentine, *verità* (vveritá, eritá); 11°. Pisan, *carca* (kkárkka, árkka); Lucchese, *cani* (káni, áni).

The curious mutation of Cagliariitan (ttsh) into (zh) is certainly not wanting in analogy with the middle form changes in general, (dzh), which is not far from (zh), being the voiced sound indicated by theory as the middle mutation of (ttsh): *cenas* (ttshénas, zhénas).

The mutation of Sassarese (ddzh) into (y) is, so to speak, identical with that of Gaelic and Manx (dzh) into (y), belonging to the aspirated form: 1°. Sassarese, *gianni* (ddzhánni, yánni); 2°. Gaelic, *Dia, Dhia* (Dzhîa, Yîa); 3°. Manx, *Jee, Yee* (Dzhî, Yî).

Tempiese and Southern Corsican mutate (kkj) and (ggj) into (kj) and (y), the first mutation belonging to the weak

form of standard Italian (Table XIV.), and the second being similar to the mutation I have just mentioned of Sassarese (ddzh) and Gaelic and Manx (dzh) into (y): 1°. Tempiese, *chiai*; *ghianda* (kkjái, kjái; ggjándda, yándda); 2°. Southern Corsican, *chiusa*; *ghialli* (kkjúsa, kjúsa; ggjállì, yállì).

The vulgar Florentine, particularly the so-called “parlare delle Ciane di Camaldoli,” mutates (kk, kky, *kkw*, ttsh, ddzh) into (h, hy, *hw*, sh, zh). The first three mutations recall to my mind those of Irish, Gaelic, and Manx (*th*, *s*, *sh*); Irish (*ty*); Gaelic and Manx (*tsh*); and Cornish (*f*), all into (h), and belonging to the aspirated form: 1°. Florentine, *cosa*, *chiama*; *quando*; *ciabattini*; *gente* (kkósa, hósa; kkyáma, hyáma; *kkwánddo*, *hwánddo*; ttshabattini, shabattini; ddzhéntte, zhéntte); 2°. Irish, *tonn*, *thonn*; *tír*, *thír*; *sùil*, *shùil*; *sìth*, *shìth* (*thónh*, *hónh*; *tyíry*, *híry*; *súly*, *húly*; *shí*, *hí*); 3°. Gaelic, *tonn*, *thonn*; *tír*, *thír*; *sùil*, *shùil*; *sìth*, *shìth* (*thónh*, *hónh*; *tshíry*, *híry*; *súly*, *húly*; *shíh*, *híh*); 4°. Manx, *tonn*, *honn*; *cheer*, *heer*; *sooill*, *hooill*; *shee*, *hee* (*thónh*, *hónh*; *tshír*, *hír*; *súly*, *húly*; *shí*, *hí*); 5°. Cornish, *floh*, *hloh* (*flóh*, *hlóh*).

Pisan with Livornese changes (kky) into (y), and (*kkw*) into (v), while Lucchese mutates its initial and exceptionally “weak” (ky) and (*kw*) into (y) and (w), or also (vu). See note 1, p. 157. Examples: 1°. Pisan, *chiacchieroni* (kkyakkyeróni, yakkyeróni); *quello* (*kkwéllo*, *véllo*); 2°. Lucchese, *chiesta* (kyésta, yésta); *guaresima* (*kwarézima*, *warézima*), *questo* (*kwésto*, *vuésto*).

The Roman dialect, particularly the “romanesco traste-verino,” shares with the vulgar Florentine the mutation of (ttsh) into (sh), and (which the Florentine does not) mutates (ss) into (tts) after a preceding word that ends in (l), (n) or (r). This happens also in the middle of the word; but it is not my intention to speak of middle mutations. The Roman dialect, moreover, is fond of giving to (dzh) and (b) the strong sounds of (ddzh) and (bb), even when the preceding word requires the weak form in standard Italian. Examples: 1°. *cercà* (ttsherkká, sherkká); 2°. *sale* (ssále, ttsále); 3°. *che giova?* *mi giova* (kké ddzhóva? mmi ddzhóva), instead of

(mmi dzhóva), 'what avails it? it does me good'; 4°. *che botte! la botte* (kke bbótte! lla bbótte), instead of (lla bótte), 'what a tun! the tun.'

The Neapolitan dialect presents a very curious mutation of (vv), which sometimes, as in standard Italian, may be weakened into (v), and sometimes mutated into (b) or even (bb). Examples: 1°. *roglio* (vvólyə), 'I will'; *varca* (vvárkka), 'boat'; 2°. *lo roglio vedè* (u vólyə vedé), 'I wish to see him'; *la varca* (a várkka), 'the boat'; 3°. *lo vvoglio vedè* (u bólyə vedé), 'I wish to see that'; *le vvarche* (e bbárkkə), 'the boats.'

What can be the cause of the mutation of (u vólyə) of the second quotation into (u bólyə) of the third, the mutator being phonetically the same in both instances? In the second quotation, (u) represents Latin *illum*, but in the third, Latin *illud*; and, although Schuchardt admits (see *Romania*, vol. iii. p. 25, l. 19) that (d) acts as a mutator, he does not say why (m) does not act as such. By those, however, who admit, as I do, that final Latin *m* (and I do not go so far as to say that it is entirely null, even in its effects), is only good, more *Lusitanico*, for nasalizing the vowel by which it is preceded; *illum* (illū), ought to be considered as a word ended in an atonic vowel, and, as such, capable of determining the sixth or weak initial mutation in the succeeding word, according to the general laws of standard Italian; although, it must be admitted, that these laws are not without their exceptions, especially on account of some differences existing between the Italian dialects in the quantity and quality of the mutators.

In conclusion, I wish to draw attention to the fact that in this Table XIII. I have not given those weak form mutations which are common both to these dialects and to standard Italian.

TABLE XIV. STANDARD ITALIAN.

This far-famed classical language, which, after all, in spite of whatever may be said to the contrary, is nothing but the Tuscan dialect, in its Florentine variety, literarily fixed in

the thirteenth century by the three great Tuscan luminaries of the Italian language, the Florentine Dante, the Aretine Petrarca, and the Certaldese Boccaccio; although (confessedly or not) adopted by all the Italians, is not to be heard equally well pronounced throughout the Peninsula. The strong radical sounds (recalling to mind the Hebrew letters with *dāghêsh*) are, generally speaking, either neglected or not pronounced in their proper places, except in Tuscany and Rome, although the south of Italy makes a great use of them. The north, on the contrary, and even Lucca, as an exception, neglect them sadly, so far as to pronounce, for instance, *a casa*, 'home,' adverbially, not (*akkása*), as it ought to be, but (*akása*), as if they were Spaniards, Portuguese, Frenchmen, or modern Greeks; while others are not ashamed to say (*akáza*) with voiced (*z*)! I have followed the Tuscan Florentine custom, which, with very few exceptions, is also the Roman in this particular, in giving the strong sounds exhibited by this Table XIV.

With regard to the name "weak form," I shall only observe that, although in my opinion, at least from the Italian point of view, the strong sounds expressed in the common orthography by a single consonant⁵ constitute the

⁵ The statement that the initial single consonants at the beginning of the isolated Italian words, or even of initial or medial syllables preceded by a consonant, are pronounced as if they were written double, is exact only by approximation, although quite sufficient for every practical purpose. It is impossible, in fact, for a Tuscan to perceive any difference, for instance, between the sound given to the initial single *p* of *pappa*, 'pap' (a soft food for infants), or of *il pane*, 'the bread,' or of *talpa*, 'mole,' and the, strictly speaking, really double sound expressed by *pp* of the same word *pappa*, which is pronounced (*ppáppa*) and not (*páppa*). A physiological difference exists nevertheless between the two, if we admit Mr. Havet's very interesting analysis of the sometimes double, sometimes triple, sound expressed by two similar consonants occurring in the middle of a word. (See "Mémoires de la Société Linguistique de Paris," vol. ii. p. 76). Of the sound of the initial consonants Havet does not speak, but I am quite convinced by the arguments of this distinguished philologist of the correctness of the analysis of the medial double consonants; and this in spite of the contrary opinion of Mr. Schuchardt (see "Romania," vol. iii. p. 7, note 2), who gives no other reason against Mr. Havet's physiological explanations, than the mere assertion of his not being at all convinced by them. The double voiceless and explosive consonant between two vowels expresses in fact, as Havet says, two sounds slightly different from each other and separated by a stop which I would phonetically express by (*·*). If the two explosive consonants are voiced, the stop is replaced by a resonance capable of being continued only for a very short time, while the two voiced consonants remain perfectly explosive, and it is only to the voiced resonance that continuity is due. The same applies to the two explosive liquid and nasal consonants, so that between them a liquid or nasal resonance takes place,

radical form, very much in the same way as the Hebrew grammarians considered radical their letters with *dāghēsh*; it will be very easy for any one disagreeing with me in my appreciation of this matter, to consider my weak as his radical and my radical as his strong form.

of which the duration is indefinite and to which alone continuity is due. The sounds (b, d, g, l, m, n), therefore, are not capable, contrary to what Schuchardt suggests, of any quantity, and his reasons do not convince me in the least. These resonances, voiced, liquid, and nasal, constitute as many independent vowels as there are voiced, liquid, or nasal consonantal pairs, and may be pronounced isolated and, when liquid or nasal, even sung. These last differ entirely from the ordinary simple sounds called "nasal vowels," which are rather nasalized than nasal. If it were desirable to express them in a strictly phonetic way (which is altogether out of question at present), I would indicate the voiced resonance by (˘); the liquid, by (˙); and the nasal, by (˚), while the strong initial simple sound I would continue to express by a double consonant without (˙). Examples: I°. 1°. *poppa* (ppóp-ppa), 'woman's breast'; *tetto* (ttét-tto), 'roof'; *coccola* (kkók-kkòla), 'berry'; 2°. *babbo* (bbáb-bo), 'papa'; *daddolo* (ddád-dòlo, 'insipid jest'; *leggo* (lég-go), 'I read'; 3°. *lulla* (llúf-la), 'side boards of the bottom of a cask'; 4°. *nonno* (nnón-no), 'grand-father'; *mamma* (mmám-ma), 'mamma.' II°. 1°. *campo* (kkámpo), 'field'; *monte* (mmónte), 'mountain'; *solco* (ssólko), 'furrow'; *corpo* (kkórpo), 'body'; 2°. *gamba* (ggámmba), 'leg'; *mondo* (mmónddo), 'world'; *verga* (vvér-gga), 'rod'; 3°. *torlo* (ttórllo), 'yolk'; 4°. *olmo* (ólmmo), 'elm-tree'; *urna* (úrma), 'urn.' III°. 1°. *il padre* (il ppádre), 'the father'; *il tiglio* (il ttilyo), 'the linden-tree'; *il cane* (il kkáne), 'the dog'; *per caso* (pper kkázo), 'by chance'; 2°. *per battere* (per bbát-ttere), 'to beat'; *uom dabbene* (uom ddab-béne), 'honest man'; *il gozzo* (il ggóttso), 'the ggoitre'; 3°. *con lui* (kkon llúi), 'with him'; 4°. *al nocce* (al nnótshe), 'at the walnut-tree'; *per mare* (pper mmáre), 'by sea.' It will be observed that the strong sound occurs after the stop, but not after the resonances. This is easily accounted for in admitting their vowel nature. In fact, in (ppóp-ppa), the sound following the stop is strong only on account of the weak (p) by which it is preceded at the end of the first syllable of the word before the stop. According to these phonetic appreciations, in all the words of the Florentine "cianesca" variety, in which the article *il*, after having lost its final *t*, coalesces with the following noun, the strong sound of the correct language ceases to be initial and becomes medial; and, as such, it will be pronounced (only in a strictly phonetic and rather theoretical sense) in one of the following ways: 1°. as a simple strong sound, if the Italian initial sound is continuous and voiceless; 2°. as a double sound, the first being weak and ending the syllable before the stop, while the second beginning a new syllable after the stop is pronounced strong; if the initial consonant is explosive and voiceless in Italian; 3°. as two weak sounds separated by a resonance, if the Italian explosive initial consonant is voiced, liquid, or nasal. Examples: *il bastone* (il bbastóne, *ital.*; ib-bastóne, *flor.*), 'the stick'; *il cavallo* (il kkavál-lo; ik-kkavál-lo), 'the horse'; *il chiasso* (il kkyásso; iky-kkyásso), 'the noise'; *il ciglio* (il ttshilyo; ittshilyo), 'the eye-brow'; *il dente* (il ddénte; id-dénte), 'the tooth'; *il filo* (il ffillo; iffillo), 'the thread'; *il gallo* (il ggál-lo; ig-gál-lo), 'the cock'; *il ghiaccio* (il ggyáttsho; igy-gyáttsho), 'the ice'; *il guanto* (il ggwántto; igw-gwántto), 'the glove'; *il giglio* (il ddzhilyo; iddzhilyo), 'the lily'; *il mare* (il mmáre; im-máre), 'the sea'; *il nodo* (il nnódo; in-nódo), 'the knot'; *il petto* (il ppét-tto; ip-ppét-tto), 'the breast'; *il quadro* (il kkwádro; ikw-kkwádro), 'the picture'; *il re* (il rré; irré), 'the king'; *il sole* (il ssóle; issóle), 'the sun'; *il tripto* (il tttríplo; itttríplo), 'the triple'; *il vino* (il vvíno; iv-víno), 'the wine'; *il zio* (il ttzio; ittzio), 'the uncle'; *il zero* (il ddzéro; iddzéro), 'the zero.'

It is only amongst the Caucasian languages and in Italian that the initial strong sound occurs; at least so far as I know. Schiefner, with whom I had in London a long conversation about the Caucasian sounds, assured me, in hearing from

TABLE XV.

The generally admitted classification of the Celtic dialects differs from that which I propose in this Table: 1°. In not giving an independent place, as separate languages, to the ancient Gaelic, Welsh, Cornish, and Breton languages so well studied by Zeuss, in spite of their differing from the living or only lately dead languages about as much as ancient differs from modern French. 2°. In considering Irish and Scotch Gaelic as two distinct dialects, while I think that the four principal forms of speech used in Ireland—Munster, Leinster, Connaught, and Ulster—with the three principal forms of speech used in Scotland—Southern, Interior, and Northern—mingle one with the other without solution of dialectal continuity. The Munster sub-dialect, for instance, differs more from that of Ulster than this does from Southern Scotch Gaelic. These seven sub-dialects, in my opinion, constitute one single dialect, which I call “Hiberno-Scotch.” 3°. In not giving to Manx all the linguistical importance it deserves. If this true second dialect of the “Gaelic language in its much wider sense” were in reality what it appears to be in its absurd orthography, it would be even more entitled to be regarded as an independent language of the Gaelic branch than Cornish is of the Cambrian. The difference of Manx from Irish and even Scottish Gaelic, however, is great, and not all attributable to Manx orthography, and any one willing to compare these three forms of speech in a scientific manner will not fail to be convinced that if Manx be not entitled to be called a language, it is certainly more than a sub-dialect, although no one would be justified in denying its nearer relation to Scottish than to Irish Gaelic. It must, moreover, be well understood that it does not follow in the least from this nearer degree of affinity that Irish and Scotch Gaelic

my mouth the sounds (kk; k·kk) of the Italian word *cucco*, ‘favourite child,’ that they are the same as those of the Kasikumuk *kkukku* (kkuk·kku), ‘nipple,’ and quite distinct from the Upper German dialectal initial k, followed either by aspiration or any sort of stop. In his “Kasikumükische Studien,” St. Petersburg, 1866, p. 2, he expresses himself so about the nature of the Kasikumuk double sounds: “Diese Laute bloss als Verdoppelungen anzusehen hat in sofern seine Schwierigkeiten, als dieselben nicht nur im Inlaute, sondern auch im Anlaute vorkommen.”

are not much nearer one to the other than either of them is to Manx. 4°. In admitting two Welsh dialects instead of three sub-dialects as they really are, according to inquiries throughout Wales made by myself in company with the much-regretted Mr. Robert Jones, the well-known Welsh scholar. These sub-dialects were considered by the ancient Welsh grammarians as three distinct dialects, but they do not differ enough to be called more than sub-dialects. 5°. In admitting four instead of two Breton dialects. The forms of speech of Léon, Tréguier, and Cornouaille, without speaking of their varieties, constitute, in fact, three sub-dialects of one single dialect, while the Vannes dialect is the second of the Breton language. 6°. In not recognizing in the Vannes dialect the Lower and Upper sub-dialects in the same manner that I admit three sub-dialects in the Breton dialect properly so called. The two Vannes sub-dialects, it must be admitted, differ enough to be regarded as more than simple varieties, and the whole Vannes dialect is not nearer to the first Breton dialect than Manx is to Scotch Gaelic.

The word "Gaelic," unfortunately, is employed in four different senses. It is applied to the "Gaelic" (1) branch, comprising one single language, which is also called the "Gaelic" (2) language. This is subdivided into the "Gaelic" (3) (my "Hiberno-Scotch" Gaelic) dialect, comprising the four Irish and the three Scottish sub-dialects, and the Manx dialect. The name of "Gaelic" (4) finally, is very improperly given to the collection of the three Scottish sub-dialects, which are no more particularly Gaelic than the four Irish and the Manx. In the first sense "Gaelic" means very properly "Non-Cambrian"; in the second, not improperly, the sole language of the Gaelic branch; in the third, improperly, "Non-Manx"; and in the fourth, very improperly, "Non-Irish."

Before I conclude my paper, I must not fail to acknowledge the obligation I am under to Mr. A. J. Ellis, for the great trouble he has so kindly taken, both in the revision of my English and for some valuable suggestions in the arrangement of the sounds.

I.—SOUNDS REPRESENTED BY SYMBOLS AND COMPARED WITH THOSE OF OTHER LANGUAGES.

See note at end of Part II. of this Table.

PART I.—Consonants occurring in *Initial Mutations*.

1. b. E. bee.	20. gj. T. la <i>ghiesgia</i> , the church.	39. ll. I. stella, star.	58. t. F. tas, heap.
2. bb. I. gobba, hump.	21. gy. I. la <i>ghanda</i> , the acorn.	40. ly. I. figlio, son.	59. th. E. thin.
3. bh. S. haba, bean.	22. ggw. I. agguanto, I seize.	41. l. M. laue, hand.	60. ts. I. la zia, the aunt.
4. d. F. doux, sweet.	23. gw. I. di guanto, of glove.	42. lh. Ir. lámh, hand.	61. tsh. E. leech.
5. dd. I. Iddio, God.	24. h. E. hand.	43. m. E. mad.	62. tt. I. matto, mad.
6. ddz. I. rozzo, coarse.	25. hw. Fl. di quando, of when.	44. mm. I. fiamma, flame.	63. tts. I. pazzo, mad.
7. ddzh. I. Maggio, May.	26. hy. Fl. si chiama, he is called.	45. n. F. nez, nose.	64. tsh. I. caccia, hunting.
8. dh. E. thee.	27. k. E. calf.	46. ng. E. singer.	65. ty. Ir. firm, dry.
9. dy. Ir. Dia, God.	28. kh. G. dach, roof.	47. nh. Ir. bean, woman.	66. th. Ir. talamb, earth.
10. dz. I. la zanzara, the gnat.	29. khy. G. mich, me.	48. nn. I. canna, reed.	67. v. E. vine.
11. dzh. E. rage.	30. kj. T. la chiai, the key.	49. ny. F. digne, worthy.	68. vv. I. avventura, adventure.
12. dh. Ir. doim, brown.	31. kk. I. bocca, mouth.	50. p. E. pea.	69. v. Ir. féinik, mild.
13. f. E. foc.	32. kkj. T. vecchiu, old.	51. pp. I. coppa, cup.	70. w. E. wine.
14. ff. I. staffa, stirrup.	33. kkw. I. acqua, water.	52. r. E. ray.	71. w. Ir. samhrad, summer.
15. g. E. go.	34. kky. I. occhio, eye.	53. rr. I. terra, earth.	72. y. E. yet.
16. gg. I. veggio, I see.	35. kw. I. la quaglia, the quail.	54. ry. Ir. gear, tallow.	73. z. E. zeal.
17. ggi. T. oggi, to-day.	36. ky. I. lachiacchiera, the bubble.	55. s. E. so.	74. zh. E. pleasure.
18. ggy. I. ragghiare, to bray.	37. l. F. lait, milk.	56. sh. E. she.	75. ' (suppression).
19. gh. D. good, good.	38. lh. W. llaw, hand.	57. ss. I. cassa, case.	76. + (addition).

PART II. *Vowels and Consonants necessary to complete the phonetic representation of the words cited.*

77. a. F. chat, cat. ā. E. father. 78. a. E. man. 79. e. E. bad. ē. F. mètre, metre. ē. E. where. F. tête, head. 80. ē. F. vin, wine. 81. e. F. bonté, goodness. 82. o. E. cuff. ō. F. veuf, widower. ō. E. fur.	F. cœur, heart. 83. i. E. milk. 84. i. E. believe. ī. E. believe. 85. o. E. not. ō. F. botte, boot. ō. E. all. F. or, gold. ē. more. 86. ō. F. bon, good. 87. o. F. pot, pot. ô. F. dôme, dome.	88. u. E. book. 89. u. F. tout, all. ū. E. fool. 90. ū. P. um, one. 91. ü. F. sur, upon. ū. F. sûr, certain. 92. ggh. Sa. pal gudi, to enjoy. 93. gghw. Sa. pal quantu, for glove. 94. kkh. Sa. pal cadi, to fail. 95. kkhw. Sa. pal quattru, for four. 96. llh. Sa. pal te, for thee. 97. ll. Sa. pal da, to give.	98. ^a . B. en, fore (Spain). 99. f. B. su, fire (France). 100. ts. B. olso, wolf (Spain). 101. tf. B. olso, wolf (France). 102. ' (long quantity) 103. ' (tonic accent, and also diphthongal emphasis, on short vowel). 104. ^ (tonic accent, and also diphthongal emphasis, on long vowel). For the signs . ' ^ ~ see Note 5.
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N.B.—B. Basque; D. Dutch; E. English; F. French; Fl. Florentine; G. German; I. Italian; Ir. Irish; M. Manx;
P. Portuguese; S. Spanish; Sa. Sassarese; T. Templese; W. Welsh.

II.—INITIAL MUTATIONS IN CELTIC, BASQUE, SARDINIAN, AND ITALIAN.

RADICAL SOUNDS.	MUTATIONS.	RAD. S.	MUTATIONS.	RAD. S.	MUTATIONS.
1. b	m, p, v, w, ' b, bh, v, dh, dzh, gh, h, n, t, z	19. k 20. kk 21. kkj 22. kkw 23. kky 24. kw 25. ky 26. lh 27. ll 28. ly 29. l	dh, g, gh, h, kh, khy, ngh, ' g, h, k, kj gw, hw, kw, v gy, hy, ky, y w, yu y l l ly l, ly mh, v, w, w, ' m mm n nh n, ny, ' n n	37. p 38. pp 39. r 40. rr 41. rh 42. s 43. sh 44. ss 45. t 46. tsh 47. tt 48. tfs. 49. ttsh 50. ty 51. th 52. v 53. vv 54. + ¹	b, f, mh bh, p ry r r b, dh, g, h, k, nh, th, ts, z, ' b, gh, h, ny, tsh, ty s, tfs. z d, nh, th, z dzh, h, th, y d, t dz, ts sh, tsh, zh dy, h dh, h w b, bh, bh, v, ' g, dzh, dh, h, nh, ny, t, tsh, ty, th, y

¹ Additions to an initial vowel, determined by a preceding word, occur in Irish, Gaelic, Manx, Welsh, Cornish, and archaic Basque. The Irish additions belong either to the nasal or to the aspirated form; the Manx, either to the middle or to the aspirated; the Gaelic, Welsh, and Cornish, to the aspirated; the archaic Basque, to the advanced. (See Tables III., IV., V., VI., VII., XII.)

IV.—GAELIC.

SYMBOLS.	I. RADICAL FORM.	S.	IV. ASPIRATED FORM.	SYMBOLS.	I. RADICAL FORM.	S.	IV. ASPIRATED FORM.
1. k	<i>cridhe, heart</i>	kh	<i>a càridhe, his heart</i>	11. m	<i>màthair, mother</i>	v	<i>a mhàthair, his mother</i>
2. k	<i>ciall, sense</i>	khy	<i>a chiall, his sense</i>	12. f	<i>fear, man</i>	h	<i>a fhear, his man</i>
2. g	<i>gabhar, goat</i>	gh	<i>a gabhar, his goat</i>	13. s	<i>sùil, eye</i>	h	<i>a shùil, his eye</i>
3. th	<i>gille, boy</i>	y	<i>a gille, his boy</i>	s	<i>sùil, eye</i>	th	<i>an t-sùil, the eye</i>
3. th	<i>tonn, wave</i>	h	<i>a thonn, his wave</i>	14. sh	<i>sith, peace</i>	h	<i>a shith, his peace</i>
4. tsh	<i>tìr, country</i>	h	<i>a tìr, his country</i>	sh	<i>sith, peace</i>	tsh	<i>an t-sith, the peace</i>
5. dh	<i>dùine, man</i>	gh	<i>a dhùine, his man</i>	15. th	<i>làmh, hand</i>	l	<i>a làmh, her hand</i>
6. dh	<i>Dia, God</i>	y	<i>a Dhia, his God</i>	16. ly	<i>ànn, age</i>	l	<i>a linn, her age</i>
7. nh	<i>nàmhaid, enemy</i>	n	<i>a nàmhaid, her enemy</i>	17. r	<i>ruith, run</i>	ry	<i>a ruith, her run</i>
8. ny	<i>nìmh, poison</i>	n	<i>a nìmh, her poison</i>	athair, father	<i>athair, father</i>	+ h	<i>a h-athair, her father</i>
9. p	<i>port, port</i>	f	<i>a phort, his port</i>	inneach, woof	<i>athair, father</i>	+ th	<i>an t-athair, the father</i>
10. b	<i>bàrr, top</i>	v	<i>a bhàrr, his top</i>		<i>inneach, woof</i>	+ tsh	<i>an t-inneach, the woof</i>

V.—MANX.

SYMBOLS.	I. RADICAL FORM.	S.	II. MIDDLE FORM, OR IRREGULAR MUTATIONS REPLACING IT.	S.	III. NASAL FORM.	S.	IV. ASPIRATED FORM, OR IRREGULAR MUTATIONS REPLACING IT.
1. k	<i>cree, heart</i>	g	<i>nyn gree, your heart</i>	....	....	kh	<i>e chree, his heart</i>
k	<i>keeyyll, sense</i>	g	<i>nyn geeayll, your sense</i>	....	....	kh	<i>e cheeyyll, his sense</i>
k	<i>king, heads</i>	gu	<i>nyn g'ing, your heads</i>	....	....	kh	<i>e ching, his heads</i>
k	<i>keaghtil, change thou</i>	....	<i>nyn g'ing, your yoke</i>	....	....	dh	<i>cha deaghtil, did not change</i>
2. g	<i>quing, yoke</i>	g	<i>nyn guing, your yoke</i>	....	....	h	<i>e whing, his yoke</i>
g	<i>goayr, goat</i>	....	....	....	....	gh	<i>nyn ghoayr, your goat</i>
g	<i>guilley, boy</i>	....	....	....	....	y	<i>nyn yuiley, your boy</i>
g	<i>garrish, to jeer</i>	....	....	....	....	nh	<i>er n'arrish, have jeered</i>
g	<i>giall, to promise</i>	ny	<i>cha nygiall, do not promise</i>	....	....	y	<i>cha g'iall, did not promise</i>
g	<i>gow, to get</i>	v	<i>cha v'ow, not get</i>	....	....	gh	<i>cha gh'ow, did not get</i>
g	<i>gweeder, curser</i>	....	....	....	....	dh	<i>e weeder, his curser</i>
3. h	<i>hooar, got</i>	....	....	....	....	....	<i>cha dooar, got not</i>
h	<i>hig, will come</i>	....	....	....	....	h	<i>e hooun, his wave</i>
4. th	<i>toan, wave</i>	dzh	<i>cha j'ig, will not come</i>	....	....	h	<i>e heer, his country</i>
5. tsh	<i>cheer, country</i>	dzh	<i>nyn doon, your wave</i>	....	....	h	<i>e hiamble, his temple</i>
tsh	<i>chiamble, temple</i>	y	<i>nyn jeer, your country</i>	....	....	gh	<i>nyn ghellal, your dealing</i>
6. d	<i>dellal, dealing</i>	....	<i>nyn ghiamble, your temple</i>	....	....	gh	<i>nyn ghoomney, your man</i>
7. dh	<i>dooinney, man</i>	....	....	....	....	g	<i>e woale, his hatred</i>
dh	<i>dwoale, hatred</i>	....	....	....	....	y	<i>nyn Yee, your God</i>
8. dzh	<i>Jee, God</i>	....	....	....	....	ny	<i>e noid, her enemy</i>
9. nh	<i>noid, enemy</i>	....	....	....	....	ny	<i>oi, against</i>
nh	<i>noi, against him</i>	....	....	....	....	f	<i>e phurt, his port</i>
10. p	<i>purt, port</i>	b	<i>nyn burt, your port</i>	m	<i>nyn maare, your top</i>	v	<i>e raare, his top</i>
11. b	<i>baare, top</i>	m	....	m	<i>nyn muighey, your jaundice</i>	w	<i>e muighey, his jaundice</i>
b	<i>buiighey, jaundice</i>	m	....	m	<i>nyn mwoalle, your fold</i>	,	<i>e woallee, his fold</i>
b	<i>bwoalle, fold</i>	....	....	....	....		

[illegible]

VI.—WELSH.

SYMBOLS.	I. RADICAL FORM.	S.	II. MIDDLE FORM.	S.	III. NASAL FORM.	S.	IV. ASPIRATED FORM.
1. k	calon, heart	g	ei galon, his heart	ngh	fy nghalon, my heart	kh	ei chalon, her heart
2. g	gafr, goat	f	ei afr, his goat	ng	fy gafr, my goat	th	ei thad, her father
3. t	tad, father	d	ei dad, his father	nh	fy nhad, my father	.....	.....
4. d	dyn, man	dh	ei dlyn, his man	n	fy nyn, my man	nh	ei nheges, ¹ her errand
5. n	neges, errand	.....	.....	.....	.....	f	ei phen, her head
6. p	pen, head	b	ei ben, his head	mh	fy mhen, my head	.....	.....
7. b	bara, bread	v	ei fara, his bread	m	fy mara, my bread	mh	ei mham, ¹ her mother
8. m	mam, mother	v	dy fam, thy mother	.....	.....	.....	.....
9. lh	llaw, hand	l	ei law, his hand	.....	.....	.....	.....
10. rh	rhed, run	r	ei red, his run	.....	.....	.....	.....
11. (vo.)	anser, time	.....	.....	.....	.....	+h	ei hamser, her time

¹ "Some respectable writers put the letter *h* after *m* and *n* at the beginning of words preceded by *ei* (feminine) or *eu*, as *Ei mham* 'Her mother, *Eu mhab* 'Their son,' *Eu nheges* 'Their errand.' The practice is, however, discontinued. The aspiration is frequently, perhaps not generally, heard in the spoken words." (These words are quoted from "A Grammar of the Welsh Language," by William Spurrell. Second Edition. Carmarthen, 1863, pp. 138.)

VII.—CORNISH.

SYMBOLS.	I. RADICAL FORM.	S.	II. MIDDLE FORM.	S.	IV. ASPIRATED FORM.	S.	V. ADVANCED FORM.
1. k	colon, heart	g	y golon, his heart	h	y holon, her heart	k	.....
2. g	gavar, goat	w	y avar, his goat	.....	.....	k	.....
g	golow, light	h	y wolow, his light	.....	.....	k	.....
g	gwydn, white	,	byuh whidn, cow white	.....	.....	k	.....
3. gw	guerthe, to sell	d	.....	.....	.....	f	ow guerthe, selling
4. t	guyskel, to strike	d	y dās, his father	th	y thas, her father	f	ow fysky, striking
5. tsh	tash, father	dzh	y āzāh, his house	th	y thi, her house	.....	.....
6. d	dean, man	dh	y dhean, his man	.....	.....	t	.....
d	dydh, day	dzh	y dāhydh, his day	.....	.....	t	.....
d	dorn, hand	dh	y dhorn, his hand	.....	.....	.....	.....
d	dos, to come	.....	.....	.....	.....	t	ow fos, coming
7. p	pedn, head	b	y bedn, his head	f	y fedn, her head	.....	.....
8. b	bara, bread	v	y vara, his bread	.....	.....	.....	ow pew, ow pewe, living
b	bew, to live	v	.....	.....	.....	.....	.....
9. m	mam, mother	v	y vam, his mother	h	.....	.....	.....
10. f	fordh, way	v	y wordh, his way	h	an hloh, the child	.....	.....
f	floh, child	v	y eloh, his child	.....	.....	.....	.....
11. s	sendzhyn, we consider	z	ni zendzhyn, we do not consider	.....	.....	.....	.....
12. (vo.)	emlodh, to fight	.....	.....	+ h	dho hemlodh, to fight	.....	.....

VIII.—BRETON.

SYMBOLS.	I. RADICAL FORM.	S.	II. MIDDLE FORM.	S.	IV. ASPIRATED FORM.	S.	V. ADVANCED FORM.
1. k	<i>kaloun, heart</i>	g	<i>hé galoun, his heart</i>	kh	<i>hé c'haloun, her heart</i>	.....	.....
2. g	<i>gaour, goat</i>	kh	<i>hé c'haour, his goat</i>	.....	.....	k	<i>hō kaour, your goat</i>
3. gw	<i>gwenn, white</i>	v ¹	<i>bioc'h wenn, cow white</i>	.....	.....	k	<i>hō kwenn, your white</i>
4. t	<i>tad, father</i>	d	<i>hé dād, his father</i>	z	<i>hé zād, her father</i>	t	<i>hō tén, your man</i>
5. d	<i>dén, man</i>	z	<i>hé sèn, his man</i>	f	<i>hé fenn, her head</i>	.....	.....
6. p	<i>pen, head</i>	b	<i>hé benn, his head</i>	.....	.....	p	<i>hō pare, your bread</i>
7. b	<i>bara, bread</i>	v	<i>hé vara, his bread</i>	.....	.....	.....	.....
8. m	<i>mamm, mother</i>	v	<i>hé vamm, his mother</i>	.....	.....	.....	.....
9. s	<i>sac'h, bag</i>	z	<i>hé zac'h, his bag</i>	.....	.....	.....	.....

¹ In the dialect of Tréguier, “w” is used in this case instead of “v,” and in ordinary Léon Breton “gw” is replaced by “v,” as in *gwenn*.

IX.—BRETON OF VANNES.

SYMBOLS.	I. RADICAL FORM.	S.	II. MIDDLE FORM.	S.	IV. ASPIRATED FORM.	S.	V. ADVANCED FORM.
1. k	<i>kalon heart</i>	g	<i>é galon, his heart</i>	h	<i>hé halon, her heart</i>	.....	.....
2. h ¹	<i>hoet, wood (forest)</i>	g	<i>é goet, his wood</i>	.....	.....	k	.....
3. g	<i>gavi, goat</i>	h	<i>é havi, his goat</i>	.....	.....	t	<i>hou kavi, your goat</i>
4. t	<i>tat, father</i>	d	<i>é dat, his father</i>	z	<i>hé zat, her father</i>	.....	.....
5. d	<i>dén, man</i>	z	<i>é zén, his man</i>	.....	.....	p	<i>hou tén, your man</i>
6. p	<i>pen head</i>	b	<i>é ben, his head</i>	f	<i>hé fen, her head</i>	.....	.....
7. b	<i>bars, bread</i>	v	<i>é vara, his bread</i>	.....	.....	.....	<i>hou para, your bread</i>
8. m	<i>man, mother</i>	v	<i>é eam, his mother</i>	.....	.....	.....	.....
9. s	<i>sah, bag</i>	z	<i>é zah, his bag</i>	.....	.....	.....	.....

¹ Words beginning with "h" in their radical form sometimes improperly replace "k" by "h." Such words as *hoet*, a synonym of *kœt*, have a middle form, which is not the case when initial "h" represents "kh" (written *c'h*) in ordinary Breton.

X.—CELTIC POSSESSIVE PRONOUNS; DEFINITE, AND INDEFINITE ARTICLES.

	IRISH.	GAELIC.	MANX.	WELSH.	CORNISH.	BRETON.	BRETON OF VANES.
<i>My</i>	mó, m'	mó, m'; am	my, m'	fý, f'	ow, a, ma	va, ma ¹ ; am	me, mem, men
<i>Thy</i>	do, d', t', h'	do, d'; ad	dtý, dt'	dy	de, da	da, ta ² ; az ³	ha, té ¹
<i>His</i>	a, na	a, a	e	ei; 'w	y, a, e	he, hi ⁴ , hec'h ⁵	é
<i>Her</i>	á	a	e	ei; 'w	y, a, hy	hé	hé
<i>Our</i>	ár	ar	nyn, ny	ein	agan, gan, an	hon, hor, hol ⁶	hun, hur, hul
<i>Your</i>	bhur	bhur	nyn, ny	eich	gen, agyn, gyn	hó, hoc'h	hou
<i>Their</i>	a	an, am	nyn, ny	eu, ill; 'w	agas, gas, as, ages ges, es, 'z agys, gys, ys, agus, gus aga, a, agei gei, ge, y	hó	ou
<i>The m.</i>	an; 'n	an, am; n	y, yn, 'n	y, yr, 'r	an, en, 'n	ann, ar, al	en, er, el
<i>gen.</i>	an	an, a'	y, yn	.....	an, en	.....	.....
<i>The f.</i>	an, 'n	an, a', 'n	y, yn, 'n	y, yr, 'r	an, en, 'n	ann, ar, al	en, er, el
<i>gen.</i>	na	na	ny	.....	an, en	.....	.....
<i>The pl.</i>	na	na	ny	y, yr, 'r	an, en, 'n	ann, ar, al	en, er, el
<i>gen.</i>	na	nan, nam	ny	.....	an, en	.....	.....
<i>A, An</i>	.....	.....	ny	.....	un	eunn, eur, eul	un, ur, ul

¹ Used in the Tréguier and Cornouaille sub-dialects.² Used in the Tréguier and Cornouaille sub-dialects.³ See Note 2 to Table XI.⁴ Used in the Tréguier sub-dialect.⁵ Used in the Tréguier sub-dialect.⁶ Used in the Lower sub-dialect.⁷ Obsolete.

XI.—INFLUENCE OF THE POSSESSIVE PRONOUNS ON THE INITIALS.¹

IRISH.	GAELIC.	MANX.	WELSH.	CORNISH.	BRETON.	BRETON OF VANNES.
<i>My</i>	4. <i>k, g, th, tsh, dh, dzh, p, b, m, f, s, sh</i>	4. <i>k, g, th, tsh, dh, dzh, p, b, m, f, v, s, sh</i>	3. <i>k, g, t, d, p, b</i>	4. <i>k, t, tsh, p</i>	4. <i>k, t, p</i>	4. <i>k, t, p</i>
<i>Thy</i>	4. <i>k, g, th, tsh, dh, dzh, p, b, m, f, s, sh</i>	4. <i>k, g, th, tsh, dh, dzh, p, b, m, f, v, s, sh</i>	2. <i>k, g, t, d, p, b, m, lh, rh</i>	2. <i>k, g, t, tsh, d, p, b, m, f</i>	2 ³ . <i>k, g, gw, t, d, p, b, m, s</i>	2. <i>k, h, g, t, d, p, b, m, s</i>
<i>His</i>	4. <i>k, g, th, tsh, dh, dzh, p, b, m, f, s, sh</i>	4. <i>k, g, th, tsh, dh, dzh, p, b, m, f, v, s, sh</i>	2. <i>k, g, t, d, p, b, m, lh, rh</i>	2. <i>k, g, t, tsh, d, p, b, m, f</i>	2. <i>k, g, t, d, p, b, m, s</i>	2. <i>k, h, g, t, d, p, b, m, s</i>
<i>Her</i>	4. <i>nh, ny, lh, ly, r, (vowel)</i>	4. <i>nh, l, rh, (vow.)</i>	4. <i>k, t, n, p, m, (vowel)</i>	4. <i>k, t, tsh, p</i>	4. <i>k, t, p</i>	4. <i>k, t, p</i>
<i>Our</i>	2. <i>k, th, ty, p, f</i> 3. <i>g, dh, dy, b, (vow.)</i>	2. <i>k, th, tsh, p, f, s, sh</i> 3. <i>b</i> 4. <i>g, d, dh, dzh</i>	 4. (vowel)	..... ..... ..... .....	..... ..... 4. <i>k, t, p</i>	 4. <i>k, t, p</i> 5. <i>g, d, b</i>
<i>Your</i>	2. <i>k, th, ty, p, f</i> 3. <i>g, dh, dy, b, (vow.)</i>	2. <i>k, th, tsh, p, f, s, sh</i> 3. <i>b</i> 4. <i>g, d, dh, dzh</i>	..... ..... ..... .....	..... ..... ..... .....	..... ..... 5. <i>g, d, b</i> .....	..... ..... ..... .....
<i>Their</i>	2. <i>k, th, ty, p, f</i> 3. <i>g, dh, dy, b, (vow.)</i>	2. <i>k, th, tsh, p, f, s, sh</i> 3. <i>b</i> 4. <i>g, d, dh, dzh</i>	 4. (vowel)	 4. <i>k, t, tsh, p</i>	 4. <i>k, t, p</i>	 4. <i>k, t, p</i>

¹ The Arabic figures indicate the form of mutation to which the succeeding sounds are liable, 1 radical, 2 middle, 3 nasal, 4 aspirate, 5 advanced.

XII.—BASQUE CAUSATIVE "BAI" AND NEGATIVE "EZ."

SYMBOLS.	I. RADICAL FORM.	S.	V. ADVANCED FORM.	SYMBOLS.	I. RADICAL FORM.	S.	V. ADVANCED FORM.
1) Spanish Basque Guipuscoan Dialect.				2) Spanish Basque Biscayan Dialect.			
1. g	genduen	k	ezkenduén, ez genduen	1. g	genduban	k	ez genduban, ezkenduban
2. d	diozute	t	eztiozute, ez diozute	2. d	deutsazube	t	ez deutsazube, ezkautsazube
3. b	bedi	p	ezpedi, ez bedi	3. b	bedi	p	ez bedi, ezkedi
4. s	zera	ts	eizera, ez zera	4. s	zara	ts	ez zara, eizara
3) Spanish Basque Northern High Navarrese Dialect of Lizaso in "Valle de Ulzama."				4) Spanish Basque Southern High Navarrese Dialect of Elcano in "Valle de Egües."			
1. g	giñuen	....	baigiñuen	1. g	giñdue	k	baikindue
2. d	diozie	t	ezgiñue	2. d	dioze	t	ezkindue
3. b	bedi	p	baiozie	3. b	bedi	p	baioze
4. s	zara	ts	eztiozie	4. s	zara	ts	eztioze
5) French Basque Labourdin Dialect.				6) French Basque Souletin Dialect.			
1. g	giñuen	k	baikinuen	1. g	giñuan	k	baikünian
2. d	diozue	t	ezkiñuen	2. d	dëyozie	t	ezkünian
3. b	bedi	p	baiozue	3. b	bedi	p	beieyozie
4. s	zare	ts	eztiozue	4. s	zara	ts	ezkedi
7. (vowel)	aiz	+ t	baizare	6. (vowel)	iz	+ h	beizara
		....	baifaz ¹				beiz
			ez aiz				ehiz

7) French Basque Western Low Navarrese Dialect of Saint-Etienne-de-Baigorry.				8) French Basque Eastern Low Navarrese Dialect of Saint-Jean-Pied-de-Port.			
1. g	giniin	k	baiginiin, bai'kiniin ez giniin, ez'kiniin	1. g	gindien	k	baigindien ez gindien
2. d	dakozii	t	bai'akozii, baidakozii eztakozii, ez dakozii	2. d	dakozie	t	bai'akozie, baidakozie eztakozie, ez dakozie
3. b	bedi	p	ez bedi, ezpedi	3. b	bedi	p	ez bedi, ezpedi
4. s	zira	ts	baizira, baizira	4. s	zira	ts	baizira, baizira
.....			ez zira, ez'zira	5. sh	chira	tsh	ez zira, ez'zira baichira, baichira ez chira, ez'chira
.....							
English Translation of 1, 2, 3, 4, 5, 6, 7, preceded, or not, by the Causative or by the Negative.							
1. g	<i>we had it</i>	k	<i>because we had it</i>	5. sh	<i>thou art (infant.)</i>	tsh	<i>because thou art</i>
2. d	<i>you have it to him</i>	t	<i>we had not it</i> <i>because you have it to him</i>	6. (vow.)	<i>thou art (m. f.)</i>	+h	<i>thou art not</i>
3. b	<i>let him be</i>	p	<i>you have not it to him</i>	7. (vow.)	<i>thou art (m. f.)</i>	+t	<i>thou art not</i>
4. s	<i>thou art (respect.)</i>	ts	<i>let him not be</i> <i>because thou art</i> <i>thou art not</i>				<i>thou art not</i>

XIII.—SARDINIAN AND ITALIAN DIALECTS.

SYMBOLS.	DIAL. See note at end.	I. RADICAL FORM.	S.	OTHER FORMS DIFFERING FROM THE STANDARD ITALIAN.
1. kk	L.	caddos, <i>horses</i> ;	g	quimbe caddos, <i>five horses</i>
kk	L.	chelu, <i>sky</i> ;	g	su chelu, <i>the sky</i>
kk	L.	quantu, <i>how much</i> ;	g	de quantu, <i>of how much</i>
kk	O.	carrus, <i>cars</i> ;	g	cincu carrus, <i>five cars</i>
kk	C.	cherubinus, <i>cherubs</i> ;	g	cincu cherubinus, <i>five cherubs</i>
kk	C.	querou, <i>oak</i> ;	g	su querou, <i>the oak</i>
kk	S.	carri, <i>flesh</i> ;	g	la carri, <i>the flesh</i>
kk	S.	cheddi, <i>weeks</i> ;	g	li cheddi, <i>the weeks</i>
kk	F.	cosa, <i>thing</i> ;	h	la cosa, <i>the thing</i>
kk	F.	chesto, <i>this</i> ;	h	di chesto, <i>of this</i>
kk	P.	carca, <i>crowd</i> ;	,	la carca, <i>the crowd</i>
kk	P.	che, <i>what</i> ;	,	di che, <i>of what</i>
1". k	P.	che, <i>what</i> ;	,	i cani, <i>the dogs</i>
Lu.	Lu.	cani, <i>dogs</i> ;	,	la chimia, <i>the chemistry</i>
Lu.	Lu.	chimia, <i>chemistry</i> ;	gy	homine chietu, <i>quiet man</i>
2. kk	L.	chietu, <i>quiet</i> ;	gy	sa chiete, <i>the quiet</i>
kk	C.	chiete, <i>quiet</i> ;	ly	si chiama, <i>he is called</i>
kk	F.	chama, <i>he calls</i> ;	y	e' chiacchieroni, <i>the prattlers</i>
kk	P.	chiacchieroni, <i>prattlers</i> ;	y	cosa 'esta, <i>thing asked</i>
2". ky	Lu.	chiesta, <i>asked</i> ;	y	li chia, <i>the keys</i>
2". kkj	T.	chiai, <i>keys</i> ;	kj	porta chiusa, <i>door shut</i>
kkj	Co.	chiusa, <i>shut</i> ;	kw	quimbe quadros, <i>five pictures</i>
3. kkw	L.	quadros, <i>pictures</i> ;	kw	cincu quaras, <i>five bushels</i>
kkw	C.	quaras, <i>bushels</i> ;	kw	di quaranta, <i>of forty</i>
kkw	C.	quaranta, <i>forty</i> ;	hw	di quando, <i>of when</i>
kkw	F.	quando, <i>when</i> ;	v	di quello, <i>of that</i>
kkw	P.	quello, <i>that</i> ;		

3". <i>kw</i>	Iu.	<i>quaresima, lent; è quaresima, it is lent</i>	w	<i>la quaresima, the lent</i>
5. <i>gg</i>	Iu.	<i>questo, this; a questo, to this</i>	vu	<i>di questo, of this</i>
<i>gg</i>	T.	<i>ghilusia, jealousy; è ghilusia, it is jealousy</i>	y	<i>la ghilusia, the jealousy</i>
<i>gg</i>	T.	<i>ghanda, acorn; è ghanda, it is acorn</i>	y	<i>la ghanda, the acorn</i>
<i>gg</i>	T.	<i>ginarà, to beget; a ginarà, to beget</i>	y	<i>di ginarà, of begetting</i>
<i>gg</i>	Co.	<i>giustu, just; è giustu, it is just</i>	y	<i>lu giustu, the just</i>
<i>gg</i>	Co.	<i>ghità, to throw; a ghità, to throw</i>	y	<i>di ghità, of throwing</i>
<i>gg</i>	Co.	<i>ghiali, cocks; tre ghiali, three cocks</i>	y	<i>i ghiali, the cocks</i>
<i>gg</i>	Co.	<i>giri, turns; tre giri, three turns</i>	y	<i>i giri, the turns</i>
<i>gg</i>	Co.	<i>giudiziu, judgment; un giudiziu, a judgment</i>	y	<i>u giudiziu, the judgment</i>
7. <i>tt</i>	L.	<i>taulas, tables; sas taulas, the tables</i>	d	<i>quimbe taulas, five tables</i>
<i>tt</i>	S.	<i>tempus, time; est tempus, it is time</i>	d	<i>li torri, the towers</i>
<i>tt</i>	S.	<i>tori, towers; tre torri, three towers</i>	d	<i>su tempus, the time</i>
8. <i>tt</i>	L.	<i>cibu, food; est cibu, it is food</i>	dz	<i>su cibu, the food</i>
<i>tt</i>	L.	<i>zinulus, gnats; sas zinulus, the gnats</i>	dz	<i>quimbe zinulus, five gnats</i>
<i>tt</i>	C.	<i>ciadi, town; est ciadi, it is a town</i>	dz	<i>sa ciadi, the town</i>
<i>tt</i>	C.	<i>zingonis, dew-worms; is zingonis, the dew-worms</i>	dz	<i>cineu zingonis, five dew-worms</i>
<i>tt</i>	S.	<i>(celu, sky; in celu, in heaven</i>	dz	<i>(lu celu, the sky</i>
9. <i>tth</i>	S.	<i>celu, heaven; in celu, in the sky</i>	dz	<i>(lu celu, heaven</i>
<i>tth</i>	C.	<i>enas, suppers; is enas, the suppers</i>	zh	<i>setti enas, seven suppers</i>
<i>tth</i>	C.	<i>ciamberlanus, chamberlains; is ciamberlanus, the chamberlains</i>	zh	<i>setti ciamberlanus, seven chamberlains</i>
<i>tth</i>	F.	<i>enci, rags; tre enci, three rags</i>	sh	<i>e' enci, the rags</i>
<i>tth</i>	F.	<i>ciabattini, cobblers; tre ciabattini, three cobblers</i>	sh	<i>e' ciabattini, the cobblers</i>
<i>tth</i>	R.	<i>cercà, to search; a cercà, to search</i>	sh	<i>de cercà, of searching</i>
<i>tth</i>	R.	<i>ciannelle, cakes so called; tre ciannelle, three of these cakes so called</i>	sh	<i>le ciannelle, the cakes so called</i>
10. <i>dd</i>	L.	<i>dinari, money; leat dinari, he takes money</i>	,	<i>leo dinari, I take money</i>
12. <i>ddh</i>	S.	<i>ginestri, brooms; tre ginestri, three brooms</i>	y	<i>li ginestri, the brooms</i>
<i>ddh</i>	S.	<i>gianni, doors; tre gianni, three doors</i>	y	<i>li gianni, the doors</i>
<i>ddh</i>	F.	<i>gente, people; v'è gente, there is somebody</i>	zh	<i>la gente, men</i>
<i>ddh</i>	F.	<i>gioco, play; 'un gioco, I don't play</i>	zh	<i>i' gioco, I play</i>
14. <i>pp</i>	L.	<i>panes, leaves; sos panes, the leaves</i>	bh	<i>sette panes, seven leaves</i>
<i>pp</i>	C.	<i>porcus, hogs; is porcus, the hogs</i>	bh	<i>setti porcus, seven hogs</i>
<i>pp</i>	S.	<i>pettini, combs; tre pettini, three combs</i>	bh	<i>li pettini, the combs</i>

(Continued in next page.)

XIII.—SARDINIAN AND ITALIAN DIALECTS (*continued from last page*).

SYMBOLS.	DIAL. See note at end.	I. RADICAL FORM.	S.	OTHER FORMS DIFFERING FROM THE STANDARD ITALIAN.
15. bb	L.	boes, <i>oxen</i> ; sos boes, <i>the oxen</i>	,	deghe boes, <i>ten oxen</i>
bb	C.	baccas, <i>cows</i> ; is baccas, <i>the cows</i>	bh	dexi baccas, <i>ten cows</i>
bb	S.	bozi, <i>voices</i> ; tre bozi, <i>three voices</i>	bh	li bozi, <i>the voices</i>
bb	Co.	bonu, <i>good</i> ; è bonu, <i>he is good</i>	v	u bonu, <i>the good</i>
bb	Co.	vecchiu, <i>old</i> ; è vecchiu, <i>he is old</i>	v	u vecchiu, <i>the old</i>
16. ff	L.	fusos, <i>spindles</i> ; sos fusos, <i>the spindles</i>	bh	octo fusos, <i>eight spindles</i>
ff	C.	fillus, <i>sons</i> ; is fillus, <i>the sons</i>	bh	ottn fillus, <i>eight sons</i>
17. vv	S.	figghi, <i>figs</i> ; tre figghi, <i>three figs</i>	bh	li figghi, <i>the figs</i>
vv	L.	velenos, <i>poisons</i> ; sos velenos, <i>the poisons</i>	bh	de velenos, <i>of poisons</i>
vv	C.	vizius, <i>vices</i> ; is vizius, <i>the vices</i>	bh	de vizius, <i>of vices</i>
vv	S.	veni, <i>veins</i> ; tre veni, <i>three veins</i>	bh	li veni, <i>the veins</i>
vv	T.	vinu, <i>wine</i> ; è vinu, <i>it is wine</i>	,	lu vinu, <i>the wine</i>
vv	F.	verità, <i>truth</i> ; in verità, <i>in truth</i>	,	le verità, <i>the truth</i>
vv	N.	voglio, <i>I will</i> ; lo voglio vedè, <i>I will see him</i> (pron. voglio, not vvoglio)	b	lo voggio vedè, <i>I will see that</i>
vv	N.	varca, <i>boat</i> ; la varca, <i>the boat</i> (pron. varca, not vvarca)	bb	le vvarche, <i>the boats</i>
18. ss	L.	sapados, <i>Saturdays</i> ; sos sapados, <i>the Saturdays</i>	z	septe sapados, <i>seven Saturdays</i>
ss	C.	serras, <i>saus</i> ; is serras, <i>the saus</i>	z	setti serras, <i>seven saus</i>
ss	S.	sordu, <i>deaf</i> ; è sordu, <i>he is deaf</i>	z	lu sordu, <i>the deaf</i>
ss	R.	sale, <i>salt</i> ; è sale, <i>it is salt</i>	tts	er sale, <i>the salt</i>

N.B.—C. means *Cagliarian* ; Co., *Southern Corsican* ; F., *vulgar Florentine* ; Lu., *vulgar Lucchese* ; N., *Neapolitan* ; P., *Pisan with Livornese* ; R., *Roman* ; S., *Sassarese* ; T., *Tempiese*.

XIV.—STANDARD ITALIAN.

SYMBOLS.	I. RADICAL FORM.	S.	VI. WEAK FORM.
1. kk	cani, dogs; uomini e cani, men and dogs	k	i cani, the dogs
kk	chiocchiere, small cups; bicchieri e chiocchiere, glasses and small cups	k	le chiocchiere, the small cups
2. kky	chiavi, keys; uscì e chiavi, doors and keys	ky	le chiavi, the keys
3. kkw	quaglie, quails; tordi e quaglie, thrushes and quails	kw	le quaglie, the quails
4. gg	gambe, legs; braccia e gambe, arms and legs	g	le gambe, the legs
gg	ghiri, dormouses; talpe e ghiri, moles and dormouses	gy	i ghiri, the dormouses
5. ggy	ghiande, acorns; castagne, o ghiande, chestnuts, or acorns	gy	le ghiande, the acorns
6. gww	guerra, war; o guerra, o pace, either war, or peace	gw	la guerra, the war
7. tt	terra, earth; gettare a terra, to throw upon the ground	t	vaso di terra, earthen vessel
8. tts	zia, aunt; zia e nepote, aunt and niece	ts	la zia, the aunt
9. tsh	cera, wax; mele e cera, honey and wax	tsh	la cera, the wax
ttsh	ciabattini, cobblers; calzolari e ciabattini, shoe-makers and cobblers	tsh	i ciabattini, the cobblers
10. dd	donna, woman; o uomo, o donna, either man, or woman	d	la donna, the woman
11. ddz	zanzare, gnats; nè mosche, nè zanzare, neither flies, nor gnats	dz	le zanzare, the gnats
12. ddzh	gigli, lilies; rose e gigli, roses and lilies	dzh	i gigli, the lilies
ddzh	giuggiole, jujubes; nocciuole e giuggiole, hazel-nuts and jujubes	dzh	le giuggiole, the jujubes
13. nn	notte, night; dì e notte, day and night	n	di notte, by night
14. pp	pièdi, feet; tre piedi, three feet	p	i piedi, the feet
15. bb	bocca, apples; a bocca, by word of mouth	b	la bocca, the mouth
16. mm	mele, apples; tre mele, three apples	m	le mele, the apples
17. ff	figlia, daughter; t'è figlia, she is thy daughter	f	una figlia, a daughter
18. vv	vinò, wine; è vino, it is wine	v	un certo vino, a certain wine
19. ss	sale, salt; è sale, it is salt	s	il mio sale, my salt
20. ll	luna, moon; sole e luna, sun and moon	l	questa luna, this moon
21. rr	rapa, turnip; nè rapa, nè cavolo, neither turnip, nor cabbage	r	una rapa, a turnip

N.B.—The sounds kk, kky, kkw, ggy, ggw, tt, tts, tsh, dd, ddz, ddzh, nn, pp, bb, mm, ff, vv, ss, ll, rr, when they occur between two vowels, are expressed, in common orthography, by cc or cch, cchi, qqu or equ, gg or ggh, gggh, gggu, tt, zz, cc or cci, dd, zz, gg or ggi, nn, pp, bb, mm, ff, vv, ss, ll, rr, respectively.

XV.—CLASSIFICATION OF THE CELTIC DIALECTS.

CELTIC FAMILY.	
A. GAELIC BRANCH.	CAMBRIAN BRANCH.
<p>I. Ancient Gaelic Language (extinct). II. Gaelic Language. a. Hiberno-Scotch Gaelic Dialect. 1. Munster Sub-dialect. 2. Leinster Sub-dialect. } Irish Gaelic. 3. <i>Connacht Sub-dialect</i>. 4. Ulster Sub-dialect.¹ 5. Southern Sub-dialect. } 6. Interior Sub-dialect. } Scotch Gaelic. 7. Northern Sub-dialect. b. Manx Dialect. 8. (no independent sub-dialect).</p>	<p>III. Ancient Welsh Language (extinct). IV. Welsh Language. c. (no independent dialect). 9. Northern Sub-dialect. 10. South-eastern Sub-dialect. 11. South-western Sub-dialect. V. Ancient Cornish Language (extinct). VI. Cornish Language (lately extinct). d. (no independent dialect). 12. (no independent sub-dialect). VII. Ancient Breton Language (extinct). VIII. Breton Language. e. Breton Dialect. 13. <i>Léon Sub-dialect</i>. 14. Tréguier Sub-dialect. 15. Cornouaille Sub-dialect. f. Vannes Dialect. 16. Lower Sub-dialect. 17. Upper Sub-dialect.</p>

¹ According to Mr. Ravenstein ("Journal of the Statistical Society," vol. xli. p. 682), in the Baronies of Lower Glenarm and Cary, in north-western Antrim, Province of Ulster, a Scotch Gaelic dialect identical with that of Kintyre, in Argyleshire, is still spoken by a small number of Irishmen, but it is very nearly extinct.

N.B.—The names of the sub-dialects printed in italics are those of the representatives of the whole language.