the position for (j) tight up against the extreme back of the hard palate so as to produce a complete stop. The most important of the palatalized letters are (lj, nj), the Italian *gli, gn* in *miglior, ognor* (mìljò·r, ònjò·r), where the palatal­ization brings the Italian advanced (l, n) to the position of the English (l, n). The (lj) has degenerated to (ĭ) or (j) in France during the 19th century. It exists in Spanish *ll,* Portuguese *lh.* The (nj) exists as *gn* in French, ñ in Spanish, and *nh* in Portuguese.

Parallel to the palatal are the labial forms, of which English *queen, guano* (kwiin, gwaa·no) are examples. They seem to exist in abundance in French, as in toi, doigt (t*w*a, d*w*a). The palato-labial form (*w*j), as in *juin* (zh*w*jeΛ), is much disputed, and a diphthong (zhyéΛ) is usually assumed.

13. *Syllables.—*A group of speech-sounds increasing in volume from a mute, sonant, hiss, buzz, or flap to a full vowel and decreasing again to one of the former constitutes the ideal syllable *(συλλαβή,* collection). The initial and final parts may sink to clear glottids, and the middle part to a simple vowel. The type of a syllable is then < >, crescendo followed by diminuendo, as in (,aa, ĭaaĭ, tĭaaĭt‘, stĭaaĭts), theoretical, and (dɟǝdɟd, streqkth, t*w*elfths), actual syllables. The hisses or recoil before or after a stop are not felt as belonging to fresh syllables, because they have no vowel, which is the soul of the syllable. Monosyllables present no difficulty, but the division of syllables in poly­syllables is not easy to understand. In (pii + p + *i*q) the middle (p) ends one set of glides and begins another. One syllable ends and the other begins with the assump­tion of the (p) position which is absolutely mute, so that the end of the first and the beginning of the second syllable are simultaneous, as the end of one hour and the beginning of the next. In this case (p) is said to be “medial.” But there may be and often is a sensible pause between the two syl­lables, and then (p) is said to be “ double,” as (pii + pp + *i*q, piipp*i*q), in which case no recoil can be used, as (piip'p*i*q). In “ syllabizing,” a totally artificial process, doubling is necessary, and very frequently the recoil is used, but it never is in speech. In (sii + s + *i*q) ceasing, there is a sens­ible hiss between the glides which end the first syllable and those which begin the second, and the syllable divides during that hiss. If we wished to produce the effect of doubling, we must break the hiss into two either by a silence or a diminution of force, as (m*i*ssent). The same remarks hold for sonants, buzzes, and flaps, where we have a sensible voice sound during wτhich the syllable divides. Syllables may even divide during a vowel, as French *payen, fayence, vaillant* (paĭeΛ, faĭaΛS, vaĭaΛ), where the syllable divides during (ï), which may even be lengthened to show the two syllables ; but, if the syllables have to be sung to notes with a pause between them, we must double the (ĭ), thus (paĭ ĭeA, faĭ ĭaΛs), as either (paĭ eΛ, faĭ aΛs) or (pa ĭeΛ, fa ĭaΛs) would be unintelligible. The sensation of separate syllables is always easy. It is the essence of versification, the oldest form of literature.

14. *Accent and Emphasis.—*Generally several syllables form a single word, and in many languages—by no means all languages—one syllable in a word is rendered conspicu­ous. Several plans have been adopted for this purpose.

(1) Quantity or length of syllables, which seems to be all that is known to modern Indians, Arabs, and Persians.

(2) Heightened or lowered or descending gliding pitch *(con portamento)* of one syllable, which were the acute, grave, and circumflexed syllables of Sanskrit, Latin, and Greek, the position of these syllables in a word there depending partly on the quantity of the syllables and partly on sense ; this pitch difference remains in a more complicated form in Norwegian and Swedish. (3) Greater force given to one syllable ; this is the English, German, and Italian “ stress,” and from the end of the 3d century a.d., when the feeling

for quantity faded, was used instead of high pitch in Latin and Greek. The modern Italian and modern Greek as a general rule preserve the memory of the syllable which had the high pitch by giving it greater force, with but few exceptions, as Italian *cade·re ri·dere,* to fall, to laugh. (4) By a peculiar pronunciation, as the “catch” of the Danes. In French none of these methods seem to be consciously adopted. Some declare that the last syllable (not counting mute *e) always* has the stress, others that it *never* has the stress ; others, again, consider the stress to be intentionally even, and when altered to depend mainly on grammatical construction, while there is certainly a raised pitch, fre­quently towards the close of a phrase or sentence, but sometimes on a penultimate syllable. Turks and Japanese have also even stress. All these modes of rendering a syllable conspicuous are apt to be called “accent,” the Latin translation of *πpοσῳδία,* the song added to the word, which properly applied to class (2) only. Where pitch accent prevailed there may have been also stress, but that stress was probably as little subject to strict rule as altera­tion of pitch is in English speech, where it undoubtedly exists, without properly affecting signification. Hence we may say roughly that in Latin and Greek pitch was fixed and stress free, but in English and German stress is fixed and pitch free.

What accent is to a word, emphasis is to a sentence. But there is this difference. Accent always falls on a fixed syllable of a word. Emphasis varies with the word to be made conspicuous. Emphasis does not consist merely in making the stressed syllable of a word louder. It depends upon a number of most subtle varieties of qualities of tone, length, and pitch of utterance,—in short, of those tricks and wiles of speech which form the stock-in-trade of actors and orators. The same words will mean totally different things according to the place and nature of the emphasis used. Different nations emphasize differently. To an Englishman French emphasis is apt to seem placed on the wrong word.

15. *Intonation.—*Although musical accent does not exist in English, almost every county has its peculiar sing-song mode of utterance. And even among educated men the sing-song may frequently be heard in public speaking, or in declaiming poetry, or recitation, or reading aloud generally. For these things no invariable rule exists. But in England questions require the pitch of the voice to be raised, and affirmations to be lowered, towards the end of a clause. In Scotland the pitch is raised in both cases, so that to an Englishman a Scotchman seems to be always asking questions.

16. *Analysis of Speech-Sounds.—*What is heard are sentences consisting of various fixed sounds cemented by gliding sounds, which act one on the other, and thus become greatly modified. To construct an alphabet it is necessary from this mass to separate the fixed elements and the changing glides, to crystallize them into symbols, and finally to make the value of those symbols known to the reader. The last cannot be done satisfactorily except by *viva voce* instruction, but much can be accomplished by a review of the relations of sounds, made dependent on the relations of the motions of the organs of speech by which they are produced. There is a preliminary difficulty in defining an element. Perhaps position, flatus, whisper, and voice are the only ultimate elements. But it is usual to be very lax. Thus (p, t, k) have position only, (f, s, sh, kh) position and flatus, (i, a, u, w, z, zh, gh) position and voice. The analysis is therefore only into “proximate” and not “ ultimate ” elements. Again, when a new mass of sound is presented to the ear, a long time passes before the ear becomes sufficiently accustomed to the sound to distinguish the proximate elements and their combinations,