XIII.—ON THE LETTER *R*. BY R. F. WEYMOUTH, ESQ., M. A.

Though a great deal has been written on the subject of the present paper, there yet remain several particulars which seem to deserve fuller discussion, and to which, without further preface, I propose now to direct attention.

The first point to be noticed is that as in Tamul there are three *rs*, as in Hindostani, Armenian, and several Slavonic dialects, there are two, so also we have two in English. Any one who pronounces the word *rear*, will recognize the fact that the *r* before a vowel is more forcibly sounded than the *r* following a vowel; and when we pronounce *courier* or *prove*, we perceive that the *r* between two vowels, or following a mute has a sound which an Englishman rarely or never gives it at the end of a syllable. In these words we "roll the *r*". The existence of these two sounds in English is recognized by Ben Jonson in his *English Grammar*, where he says, "*R* is the *dogs* letter, and hurreth in the sound; the tongue striking the inner palate with a trembling about the teeth."

But there is yet a third sound with which our ears cannot be altogether unfamiliar, that of the *r* as pronounced by the Parisians and in many other parts of France. Here the tongue does not vibrate, but the sound proceeds, at least chiefly, from the throat. Indeed so decided a guttural is this French *r*, that Mons. De la Villemarqué uses it with the addition of 'h to represent the Celtic *ch*. In his *Breton Poems* he gives the names *Tudvoulch* and *Kevoulch* in his translation as *Tudvoulr'h* and *Kevoulr'h*, and *Unhweh* as *Unour'h*. (*Bardes Bretons*, pp. 269, and 39.) It is apparently of the same sound that Mr. Garnet is speaking, when he says that "in Northumberland and some parts of Germany, the sound meant for *r* has no lingual vibration at all, but becomes a deep guttural, neither very easy to describe nor to imitate, but almost exactly corresponding to the Arabic *ghain*¹."

¹ Phil. Soc. Proc., Vol. III, p. 111.

The following observations however concern almost exclusively the two sounds which we have in English, and which in this paper will be distinguished as the *vibrant r* and the *non-vibrant r*.

In considering what place *r* ought to occupy in a well-classified alphabet, we must not lose sight of this distinction between the vibrant and the non-vibrant *r*. It is doubtless of the latter that one of our most advanced English scholars has said that he knows not how to distinguish it as other than a vowel. Let us briefly examine this point.

We all know there are certain sounds which grammarians recognize as vowels, others which are called consonants, though definitions of these terms are rarely met with. According to the distinction implied in the words themselves, a vowel can be sounded by itself, while a consonant can only be "sounded with" a vowel. But *s*, *sh*, *th* surd, *th* sonant, *r* &c. can be perfectly sounded without any vowel; and if on these definitions *r* becomes a vowel, so must all these others.

Or shall we, with Dr. Latham, define a vowel as a sound in the formation of which "the passage of the breath is uninterrupted"? Again the non-vibrant *r* becomes a vowel; but so does *l*, in the formation of which the passage of the breath is not interrupted though it is restricted, and *m*, in which the breath passes uninterruptedly through the nose, though restricted to that exit. Nor can we escape this difficulty by varying the above definition and substituting "unrestricted" for "uninterrupted", as no sounds whatever pass from the human mouth without some restriction or limit: even the most open vowels are denied egress through the nasal cavity, which as I have shown elsewhere¹, is open only to *m*, *n*, *ng*.

The definitions which I venture to propose, are the following. A vowel is a simple sound produced by the passage of the breath through the mouth, its character depending on the position of the tongue and lips, which organs remain

¹ See Transactions of the Philological Society for 1856, p. 21.

passive during the utterance of the vowel; and such sound, if prolonged is capable of independent use as a word. A consonant is a simple sound emitted from the mouth alone or the mouth and nose, and resulting from some *pressure* or other *action* of the vocal organs; such sound always preceding or following a vowel, and being incapable of being used as a word by itself. If these definitions are accepted, it will follow that *r*, whether *vibrant* or *non-vibrant*, is not a vowel, but must remain where it has been placed by, I believe, every grammarian who has ever written, among the consonants. The vocal organs are rather active than passive during the utterance of the *r*; and it is always used either before or after a vowel, never as a word by itself.

The non-vibrant *r*, however, like two other letters which we are accustomed to regard as consonants, the *w* and *y*, though it possesses most of the characteristics of a consonant, does not, as prolonged, result from any very distinct action of the vocal organs. In sounding the *y*, there is an approximation of the back part or body of the tongue to the back part of the palate, but scarcely more than in sounding the vowel *e*. In sounding the non-vibrant *r*, there is a precisely similar approximation of the tip of the tongue to the centre of the palate. In sounding the *w*, there is an approximation of the lips to each other, but hardly more than in sounding the vowel *oo*. Yet in all these cases at the moment of transition to a following vowel, there is a more decided pressure, and a distinct action, of the organs. We can easily recognize such action even where the *y* is followed by its cognate vowel, as in *year* (compare *ear*), or the *w*, as in *wooes* (compare *ooze*); and precisely similar action takes place in *ray* and *robe*, provided the *r* is not rolled. Now suppose these three sounds respectively to follow their vowels instead of preceding them. Then we find them pronounced so feebly that one can hardly affirm there is any distinct action of the vocal organs. At present we make no distinction in the pronunciation of the diphthong in *boy* and *noise*, or between the *ow* of *how* and the *ou* of *house*; yet it is possible that when the fashion was first

established of writing a final *y* or *w* in these diphthongs rather than *i* or *u*, there may have been a quasi-consonantal force in the closing sounds, which is now lost. The *r*, however, though feebly sounded, yet maintains its existence even in this position; for Dr. Guest's statement, unless he refers to the vicious pronunciation of uneducated Londoners, is certainly not accurate, when he says, "In his ordinary conversation the southern Englishman never pronounces a final *r*, unless it is followed by a vowel," while he acknowledges that even a Londoner would do so "if his attention were alive upon the matter."¹

There are however so many points of similarity between the *non-vibrant r* and the *w* and *y*, and they all three so closely approach the nature of vowels, resembling these in formation, while they resemble consonants in their use, that they seem to have a better claim than any other letters to the name of *semivowels*, by which I shall speak of them henceforth. Their proper order, as arranged on the principle of beginning from the throat and advancing along the palate to the lips, will be *y, r, w*.

But *r* is commonly spoken of as a *liquid*, a name which it, in common with three or four other simple sounds, bears to indicate the facility with which it may be pronounced with other consonants. We have in English 21 such combinations of *r* with other simple consonants; and certain others, though difficult to an English mouth, are yet not impossible. We cannot readily pronounce *mr* in one syllable, nor could the ancient Greeks pronounce these letters together even in two syllables, and so the Hebrew נִמְרוֹד (Nimrod) becomes Νεβρωδ in the Septuagint, and מַמְרֵא (Mamre) becomes Μαμβρη; but in Sanskrit we meet with *mri*, to die, *mrig*, to seek, *mrî*, to injure, &c. So we have *nr* in *nrît*, to dance; *jr*, in *jrî*, to grow old; *chr*, in *chrit*, to hurt; *sr*, in *srî*, to injure.

Nor is the combination of *r* with the aspirate to be forgotten, though in modern English we entirely disregard the

¹ Phil. Soc. Proc., Vol. III, p. 7.

h in *rheumatism*, *rhinoceros*, &c. The mere spelling of Latin words derived from the Greek is sufficient evidence that something like an aspirate followed the initial *ρ* in Greek; and in Welsh this is the case with all radicals. But while in the Welsh schools great pains are taken in instructing children to insert this *h*, and to pronounce it in the proper place, viz. after the *r* and not before it; our Anglo-Saxon forefathers always put the aspirate before the *r*. Whether in Greek words beginning with *ρ* the aspirate preceded or followed the *r*, will admit of doubt. If we may trust the Roman ear—which was accurate enough in the case of *rheda* from the Welsh *rhedeg*—the aspirate followed; but there is perhaps some force in the argument of Dr. De Lagarde: “Lingua Græca cum Armenica id habet commune, ut initio vocabulorum literam caninam non ferat. Ea igitur vocabula quæ apud Indos literam *r* habent primam, apud Græcos aut vocalem aliquam præmittunt (velut *rudhira* ῥυθρός) aut *r* in *l* mutant (velut *ric* linquere λιπ, *ruc* lucere λευκός). Ea autem quæ apud lexicographos Græcos ante *σ* in unum agmen coacta habentur, non *r* habent primum, sed spiritum asperum, eumque aut pro *w* aut pro *s* positum.” (Tit. Bost. contra Man., præf. pp. 6, 7.)

In proceeding to consider the use of the letter *r*, we may notice first the tendency to insert it after the short *a* when another vowel follows; as in Rosar Evans. Now this paragogic *r* is found most frequently when the next word begins with a vowel, and this perhaps will help us to account for it. Displeasing as this *r* is to an educated ear, it is only so by virtue of its associations; it is as true a euphonic insertion as any that exists. A person is intending to say, “One window of the house”. He mispronounces *window*, as uneducated persons often do, as *winda*. *Of* follows, pronounced *wv*. Two precisely similar vowel sounds come together, and a pause or hiatus between them offends the ear: for it is offensive to the ear, though in what we call “correct” speaking such an hiatus is not merely tolerated but carefully observed. Our speaker however knows little of Nares, Sheridan, or Walker, and he lifts the tip of his

tongue ever so little and the inconvenient gap between the vowels is at once occupied by an obliging *r*: "one winder of the house". Perhaps he even vibrates the tongue, and we have Ben Jonson's "dogs letter" in full force; but this so far as my observation goes, is the exception rather than the rule, and the euphonic *r* is almost always the semi-vowel or non-vibrant letter.

I believe however that we shall find phenomena precisely analogous to this in the employment of the other semi-vowels—phenomena less noticeable, but not the less actual.

The pure vowel sounds of our language being the twelve which are exhibited in the following series of words—*cheap, chip, pate, pet, Sam, psalm, nought, not, nut, note, pull, pool*—the insertion of the euphonic *r* occurs most frequently by far when a word beginning with a vowel follows one ending in the ninth of these sounds, viz. the *ă* of *Rosă, Musă, &c.*, which is in pronunciation identical with the *ũ* of *nut*. The *r* is also occasionally added after each of the middle pair of long vowels, as: "Is your *papar* upstairs?" "I am going to *drawr* on card." This addition sometimes takes place where the long vowel is followed by a consonant, as when the A.S. *lacan*, to play, gives origin to our word *lark* = sport, and when *St. Ann's Chapel* in the neighbourhood of Plymouth changes its name to *Turnchapel*; but in both of these cases the word seems to have been erroneously identified with another totally different.¹

Returning therefore to the purely euphonic insertion of the *r*, we may notice that we have no words in the language which end in the *i* of *pit*, the *ẽ* of *met*, the *ă* of *mat*, the *õ* of *not*, or the *ũ* of *pull*, so we may pass these by. But turning to the long vowels we find again that no words end in the *pure* sound of *ā*, which we have only (if

¹ I must leave it to those who are better versed than I am in the Semitic languages to deal with those Syriac and Samaritan words which contain an *r* that is wanting in the cognate Hebrew forms. To such scholars I would suggest the enquiry whether in such cases the earlier form is the one without the *r* (as seems probable) or the other, and on what principle the insertion (or omission) can be accounted for.

we have it at all) before *r*, as in *mare*. The sound of the long *ā* as a final (in which case we write it *ay*), or before any other consonant than *r*, is really diphthongal, as we close in the sound towards the end into *ē*. (This peculiarity of the English pronunciation has been nowhere more clearly stated than by Sophocles in his *Romaic Grammar*, where he represents our *fate* in Greek letters as *φῆιτ*, though doubtless he exaggerates somewhat in so doing.)

Now let us observe what happens when an hiatus follows a word ending in the pure sound of *ē*, like *decree*, or in the diphthongal *ā-ē*, like *day*. Such an hiatus will exist whenever another *ē* or the *ī* follows such words; and in such cases I think we shall find as strong a tendency to insert the semivowel *y*, as in "Maria Andrews" to insert the semivowel *r*.

Let us take first the simplest case of such hiatus. Ask a young child to spell *get*, and he will perhaps pronounce the three letters with the hiatus, *gee ee tee*, but it is much more likely that he will say *gee hee tee*, or *gee yee tee*. In like manner in forming the present participle of to *see*, to *pity*, there is a tendency unconsciously in speaking and especially in singing to compound *see* and *ing* into *see-ying*, *pity* and *ing* into *pity-ying*, and so on.

Let us now turn to the other end of the vowel system. Again we have no words ending in the pure sound of *ō*, which (if we have it at all) is found only before *r*, as in *roar*. The final *ō*, or *ō* followed by any other consonant than *r*, closes into *oo* as *ā* does into *ē*. (Sophocles writes our *note* as *νόουτ*.) If then we take words that end in the labial vowel *ōō*, as *accrue*, or in the diphthongal *ō-ōō*, like *lo*, *bow* (almost all of which are written with *ow*), and let another vowel follow, then we find the euphonic insertion—or at least the tendency to the insertion—of the third or labial semivowel *w* between these vowels. For instance *go out*, *go over*, are sometimes unconsciously pronounced by emphatic speakers as *gowout*, *gowover*; and in such a sentence as "the true ousel is the blackbird", there is as strong a tendency to say "true wousel" as there is with some

people to say Maria^r Andrews. In like manner I have known a young lady who frequently corrected her young friends for calling her Lou-wisa, with one letter more than was agreeable to her ears.

An instance of the addition of this euphonic *r* has been suggested to me by a friend as found in the pronoun *her* when used for *she*. The A. S. feminine pronoun was *heo*, which was probably pronounced with the *e* as in *me* and the *o* as in *move* (*hee-oo*). Of this dissyllabic form sometimes one vowel was dropped, and sometimes the other, so that we find in Old English sometimes *ho* (or *hoo*) and sometimes *he* used in the sense of *she*. But when a word ends in *ō* unaccented, or in *ō* (as has been remarked above), careless speakers are apt to shorten this into the *ă* as sounded in *Americă*. This kind of change *hoo* (= *she*) appears to me to undergo, and after its metamorphose into *hă*, the adscititious *r* soon makes itself heard.

But by the side of the fact that it is this sound of *ă* (or *ü*) to which the *r* chiefly attaches itself, comes the peculiar power which *r* seems to possess in English of changing other vowel sounds into this one, especially in unaccented syllables. Compare for instance the final syllables of *beggar*, *father*, *Nadir*, *author*, *mürmur*, *satyr*. Nor is this the case only in final syllables. While I notice in boys a tendency to pronounce *conditional* as *kinditional*, *procuring* as *präcur-ing*, or *präcuring*, this change does not take place if the short vowel is followed by an *r*, as in *prorogue*, where it either retains its proper sound, or takes that of *ü*. Every one knows also that in such words as *particular*, *correction*, where the second syllable is accented, the first syllable is habitually pronounced by careless speakers as in *pertinent* or *curtailment*. (I do not speak of such words as *sardonic*, *largesse*, *tornado*, which are as yet hardly ever used but by educated persons.) But even in fully accented syllables *r* exercises to a considerable extent the same influence on a preceding vowel. Few speakers among us—not being Scotch or Irish—make any distinction between *fir* and *fur*, *earn* and *urn*, &c. Can any further account be given of this fact?

This at least may be stated. If we attempt to sound either the vibrant or the non-vibrant *r* without a vowel, we can scarcely, if at all, do so. We almost unavoidably prefix a dull short vowel sound much like the French *e muet*, or the Sanskrit *ä*¹. The mouth is already in just the position for this sound. If we sound *ear* or *Erith* the tongue is more extended for the vowel than for the consonant and must be drawn back. If we sound *oar* or *oration*, the lips are somewhat more protruded for the vowel than the consonant demands. In sounding *are*, the mouth is opened wider for the vowel than it is for the *r*. When however we sound *err*, *earnest*, *urge*, the only change requisite in passing from the vowel to the *r* is to raise the tip of the tongue a little, and in some instances, to vibrate it. There is thus shown to exist a natural affinity between the vowel sound in question and the *r*.

We have above discussed the insertion of *r* in certain cases: it should also be noted that in some few instances it has disappeared. Thus in Devonshire we hear at times *pretty* mutilated into *pootty*, which is apparently thus to be accounted for,—it being premised that Bosworth (s. v. *præte*) gives sufficient evidence that the *r* here is radical. Now there is a strong tendency in the Devonshire dialect to change the places of an *r* and its following vowel—of which more anon. Thus we get *purty*. This metathesis effected, the *r* is dropped, simply I suppose because it is easier to pronounce a single consonant than two together; just as we omit the *l* in *calm*. *Pretty* is the only word, so far as I remember, in which the Devonshire dialect drops the vibrant *r*, but the non-vibrant *r* is omitted in many more; as *vust*, *bust*, for first, burst, *cuss*, *wuss*, for curse, worse, *vuz* for furze, *hoce*, *foce*, *scace*, *cooce*, for hoarse, force, scarce, course, *Thesday* for Thursday, *aith* and *weth* for earth and worth &c.

¹ In thus alluding to these foreign sounds, I do not mean to imply that they are the precise equivalents of our *ä* in *Rosä* and *Altär*: the *e* of the French *lë renard venait verges* rather (though very slightly) towards our *oo*, and the *ä* of *dhärmä* towards our *ah*.

But again we have the vibrant *r* omitted in *Fay-vvμ* = *fra(n)g-o*, *break*, *brech-en*, &c., *speech* = A.S. *spræc*, Germ. *Sprache*, &c. And so Livy and other Roman writers speak of the *Ῥασέβα* by the name of *Etrusci* or *Tusci*, using these forms without distinction. That the latter of these has lost a radical *r* is shown by the Greek equivalents *Τυρῆῆνοι*, *Τυρσηνοί*, and yet more distinctly by the variety—and apparently the oldest form of the name—*Turscus*, as it is found in the Eugubine Tables. And *Bomilcar* we are told is equivalent to *Bar-milcar* = A.S. *Ætheling*.

Lastly in the Platt-deutsch and in Old Saxon we find *we* for *wer* and *de* for *der*, both as an article and a relative; as in *Reineke de Vos*,

De koning sprak: we is so sot

De Reinken dôr bringen dat dridde bod?

So akin to this *de* we have in A.S. both *se* and *pe*, and our *he* is the *her* of Tat. and *er* of modern German; but all these are merely instances of that abrasion which all terminations in the Indo-Germanic languages are constantly undergoing.

One characteristic of this consonant which has been frequently noticed is its tendency to change places with its attendant vowel. In the Devonshire dialect there are many instances of this, as *urn* for *run*, *urd* for *red*, *urc* for *rich*, *burches* for *breeches*, *curst* for *crust*, *Kursmis* for *Christmas*, *irt* for *right*, *girt* for *great*, *apern* for *apron*, *urdgment* for *regiment*, *frint* for *front*, *purceed*, *pursarve*, *purvent*, *purmote*, *purtect*, for *proceed*, *preserve*, &c. So I suspect that the noun *rod* in its various senses, with its by-form *rood*, also used in a variety of meanings, and the German *ruthe*, are all akin to the A.S. *gyrd*, *geard*, &c. = *rod* or *staff*, Germ. *gerte*, Dut. *gaard*, Friesic *gerd*, Early English *yerd*, Modern English *yard* (this being probably quite distinct from *yard* as akin to *garden*, *hortus*, *court*, &c.); and that in *yard* as compared with *rod* we have another instance of the metathesis now under consideration. The loss of the semivowel *y* before the *r* is to be explained by the simple impossi-

bility of pronouncing it, unless indeed it were vocalized into *i*; but in all the cases we are now considering, the change of pronunciation involves no change in the number of syllables. Or if the *g* of *gyrd* was pronounced as we now sound it in the verb to *gird*, the loss of the mute in *rod* is but analogous to the disappearance of the *c* in *repo* as compared with the English *creep*.

The fact of this metathesis is not incapable of explanation, if at least we suppose that it is in every case the vibrant *r* that we are dealing with (and we have no evidence that a thousand or even five hundred years ago the non-vibrant *r* existed in our language); for if we pronounce the rough vibrant *r* in *yrnan*, *cirspan* or *crisp*, *gars* or *grass*, &c., and pronounce it strongly, we at once find that this *r* will not admit of any other consonant so closely adhering to it, either before or after it, that there shall not be a brief vowel sound intervening. Sometimes (as in *run*, *i-ron*) this is the vowel which has been above shown to be nearest akin to the *r*. More commonly it is the vowel of the root which seems to prolong itself beyond the vibration. Thus we have a short vowel on each side of the *r*, but of these one or the other was commonly dropped, and at a certain stage of the language speakers and writers had in many cases the option of two forms.

An instance of this metathesis which, I believe, has not been hitherto noticed, is perhaps furnished by the common provincial *childer* as plural of *child*. One form of the Anglo-Saxon plural was *cildru*, the final vowel of which—however it was pronounced—seems to have undergone the same change as that of *hoo* when passing into *her* = *she*. Thus the word comes to be written *childre*, as in *Lafamons Brut* (or *chilldre*, as in the *Ormulum*), next *childere*, as also in *Lafamon*, and then *childer*. Lastly by the addition of *n* for O.E. *-en* or A.S. *-an* we get the two forms of the double plural *children* and *childern* (in *Laf. childerne*). In Dutch *kinderen* both vowels are retained. There are three other such double plurals found in *Wiclif* and *Caxton*—*calveren* (compare Dutch *kalveren*), *eyren*, and *lambren*, and it is

worth noting that the Anglo-Saxon *cealf* and *æg* both exhibit the unusual plural in *-ru*, as *cealfru* and *ægru* (or *ægeru*), and it is not improbable that a similar plural of *lamb*, though unknown to Bosworth, may yet have existed, since we have in the Ormulum

"To stanndenn jæn þe laþe gast
To werenn hise *lammbre*." (v. 13329.)

In passing on to the interchanges of *r* with other letters, we must first observe how readily of the two *rs* themselves one passes into the other. If we had once no non-vibrant *r* in the language, there can hardly be shown to be any instances of the non-vibrant *r* changing into the other. Of transition in the opposite direction, as when *iron* is pronounced *iurn*, instances are innumerable. And mere facility of pronunciation is sufficient to account for this. Whenever a vowel follows the *r*, the tongue must extend itself further than if no vowel follows; and a yet more arduous duty devolves upon that organ, if the rough *r* is to be pronounced. From this labour the English tongue is wont to shrink, as indeed even the initial *r* in ordinary conversation is commonly sounded by us without any vibration.

But let us now notice the substitution which we sometimes meet with of *w* for *r*. We may thus account for it. Through some organic defect, or from some other cause, the tongue is unable to effect that contraction of the vocal orifice by pressure of the tip of the tongue towards the palate, which is essential for the non-vibrant *r*, and still less is it able to maintain nearly the same position and vibrate the tip at the same time. But in the very effort to do this the lips approach each other, a *w* being thus formed, and this semivowel is then accepted in place of the one that was intended, as an approximation to it.

Of greater interest on many grounds is the interchange of *r* and *l*. This too is easy to account for. The only difference in the formation of these sounds is that in the *r* the breath passes continuously, or with numerous momentary interruptions, over the tip of the tongue, and in

the *l* it passes by the tongue on each side, the tip touching the palate.

This difference, though slight in itself, we can with perfect readiness both make with the tongue, and apprehend with the ear. But it is not so with all the members of the human family. Some of the South Sea islanders for instance are unable to distinguish these letters either in speaking or by the ear. A lady of my acquaintance, who lived for several years at Tahiti, had two little girls, one named Mary and the other Emily. These names were a source of great embarrassment to the natives, who in pronouncing them made them both *Āmālā*; with which we may compare the *τραυλισμός* ascribed to Alcibiades by Aristophanes (*Vespæ*, 45), *ὀλῆς* for *ὀρεῖς*, and so on. We may also notice that in the early Welsh poetry a final *l* will very often rhyme with a final *r*; while in some parts of Spain, especially in Andalusia, these two liquids are pronounced so much alike as to be not unfrequently confounded by uneducated persons; thus they will write *terrol* or *tellor* for *terror*, *hollol* for *horror*.

The actual change of one of these letters into the other takes place frequently in immediate juxtaposition with that other; as the Sanskrit *tārā* shows that the *r* is radical in the English *star*, Gr. *αστηρ*, &c.; but when to this root the Latin diminutive termination *-la* is added, it is not *ster-la* or *ster-ula* that results, but *stella*. Sometimes the *l* is changed into *r* on account of the vicinity of another *l*, as in *familiaris* for *familialis*. But the presence of another *l* is not essential. We have no diminutive termination *-ly* in English, and Molly, Dolly, Sally, are formed by a direct change of the consonant from Mary, Dora, Sarah.

The Hebrew שרשר (sar'sh'rāh), a chain, Chaldee שרשר (shal'sh'lāh); ארמנות (ar'mānōth), palaces, later Hebrew ארמנות (al'mānōth),—and many more examples might be cited from the Semitic languages; the Grk. *ἀργός*, Lat. *albus*; *φραγέλλιον* as the New Test. form of the Lat. *flagellum*; the coexistent Latin forms *celeber* and *creber*, *linealis* and *linearis*; the Romance *citola* from Lat. *cithara*; *alblast*,

an Old English corruption of *arbalast*, a crossbow (*arcu-balista*); *palfrey*, Fr. *palefroi*, in medieval Latin *parafredus*; the Walachian *poporu* from the Latin *populus*, people; *Salisbury* as the modern form of *Sarisbury*;—all of these exhibit the same direct interchange of *r* and *l*.

The affinity of *r* and *l* being allowed as a well established fact, and being also easily accounted for physiologically, it is not difficult to see that *r* and *d* will also interchange. The latter consonant differs from *l* only in the lateral expansion of the tongue to intercept the breath which in the *l* is allowed exit on each side of the tongue. The rest of the vocal organs are in precisely the same position in *d* as in *l*. Instances of this interchange have been found in *reed*, Germ. *rohr*; *goad* and *gore*; *audio* and *auris*; *adbiter* as the original form of *arbiter*; &c.

We pass on to the interchange of *r* with *n*, of which there are many instances. One worth noting is that of the name of the great king of Babylon, whom the Hebrews, as in their books of the Kings and Chronicles, commonly called Nebuchadnezzar, but the prophets Jeremiah and Ezekiel generally Nebuchadrezzar. The latter is said to be the Aramaic form, though this seems very doubtful, as in those parts of the book of Daniel which are written in Chaldee, Nebuchadnezzar is alone used. The form with *r* is however proved to be the original by the recent discoveries in Babylon, where every brick of this king's palace bears a name read by Sir Henry Rawlinson as Nabu-kuduri-uzur.

The change from *r* to *n* (or the contrary) is greater than from *r* to *d* in one respect, namely, in *n* the velum palati is lowered. But the lips are still open, the vocal chords vibrate, and the tongue remains still in precisely the same position in contact with the palate. Hence there is not only a ready substitution of *r* for *n* (or the contrary), but an equally ready transition from the *r* to the *n*, so that occasionally words ending in *r* assume an *n*. Examples of this accretion are the modern Greek *δέρω*, to beat, from the ancient *δέρω*; and the O.English *cittern* or *zithern* from

Grk. *κίθαρς*, Lat. *cithara*, Span. *citara* and *guitarra*, Ital. *citara* and *chitarra*, &c.

The next interchange to be noted is that of *r* and *s* or *z*. And here I would note at the outset that in numerous instances, where an *r* has become *s*, or the contrary, the *s* has the sound of *z*: it is the sonant, not the surd sibilant. So the *r* in *broom*, Dutch *brem*, is represented to the eye by an *s* in *besom*, but to the ear it is a *z*, and nearly so in the German *besen*: in Dutch also there is the form *bezem*. The *r* in *hare*, Dan. *hare*, is a *z* in the Dutch compounds *hazejagt*, hare-hunting, and *hazekop*, head of a hare; and such almost is the pronunciation of the Ger. *hase*. So it is *z* that is interchanged with *r* in *teaze* and *teazle* as compared with *tear*; *sneeze* with *sneer*; *glaze* with *glare* and *glaire*, Lat. *clarus*, Engl. *clear*; *blare*, with the Dutch *blazen*, Germ. *blasen*, and the Engl. *blazon* and *blazonry*; *froze* with *frozen*, Germ. *gefroren*; and the Lat. *ar-idus* with the Greek *αῖ-αλεος* (and *αῖ-ηχης*?¹) in which there is apparently the same root, though we need not suppose the ancient Greeks, like their modern descendants, to have pronounced their *ζ* exactly like our *z*. And again it is the sound of *z* in *nose* which is represented by the *r* of the Lat. *nares*; in *raise*, of which *rear* is but another form, as *araise* of *arear* in early English; in *lose*, of which *verlieren* is the German equivalent, and from which we have in English the compound participle *forlorn*, utterly lost, Germ. *verloren*; in the verb *is* (where the *s* is not a termination as in *he loves*, but a radical), plural *arne* and *are*; in *was*, O.E. *wes*, plural *ware(n)* or more commonly *weren* or *were*, though we not unfrequently in provincial dialects have the *r* even in the singular, as always in the subjunctive. Nor is it only in English (and German) that *s* often stands for the sound of *z*: it is always so in French, and most frequently in Italian, if the *s* comes between two vowels; and in all probability this was also the case in Latin and Greek. Hence in those early Latin forms in which an *s* stands for a later *r*, the

¹ Compare II. 13. 409. with 17. 741.

single *s*—pronounced as a sonant—seems to have been used almost exclusively. Such forms are *Fusius* = *Furius*, *Maso* = *Maro* (= mason?), *læbesum* = *liberum*, *plorasit* = *plorarit* = *ploraverit*, *ocisit* = *occirit* = *occiderit*, *verbesit* = *verberit* = *verberarit*, *plusimus* = *plurimus*, &c.¹

Now any one who chooses to sound the vibrant *r* and then the *z*, or vice versa, will readily perceive that the transition involves no very considerable change in the position of the vocal organs. But a curious illustration of the affinity of these two sounds has come under my notice in the case of a former pupil of mine, who, when a little boy, was quite incapable of distinguishing them in his pronunciation. I have frequently, when he was about eleven years old, made him stand by my side and pronounce words containing these sounds; and as he tried word after word, I have found myself quite unable to determine whether the singular sound he produced was more like *rose* or *roar*, *Cæsar* or *Cærar*.

The surd sibilant *s* is one step more remote from the *r* than the *z* is, inasmuch as in the *s* the vocal chords of the larynx apparently cease to vibrate. But as it is impossible always to decide in ancient languages whether the sibilant with which we may be dealing was pronounced as a surd or as a sonant, we may disregard the distinction in quoting a few other instances. Such are the *σ* in *αἰσχρονα* as representing² the *r* of *ærumna*; the corruption of the classical *Busta Gallica* into *Portogallo*; the use of *r* as a nominative termination in Old Norse, the corresponding termination in

¹ A very different mode from the one here suggested, of accounting for the consonantal change now under notice is implied in the supposition that "*r* was perhaps originally like English *th* in *those*" (see *Elementary Lat. Grammar*, by Mr. Roby of St. John's Cambridge, p. 2). The point is not argued; but to establish so remarkable an hypothesis, it would seem to be necessary to show at least one nation employing this same Hebrew-derived symbol *R* to stand for the sound of *th* in *those*, and equally necessary to find numerous cases in which *r* has been changed into this *th*, or vice versa. Such evidence will be very hard to adduce.

² So Mr. Paley conjectures: see his note on *Eur. Med.* 19.

Latin and Greek being *s* (e. g. blindr = *cæcus*); the use of *r* in Irish as the termination of the second person singular of verbs, corresponding to the *s* of the pronominal suffix in Sanskrit, Greek, Latin, Old German, &c.; the formation of certain genitives in *r*, the usual genitive termination in the Indo-Germanic languages being *s* (e. g. Germ. des, *der*, des; A.S. his, *hire*, his; our, your, their, *aller*); and the formation of plurals in *r* in German, and yet more commonly in the Scandinavian languages, and in some cases in Anglo-Saxon, from which there survives one instance (*childer*) in provincial English, as compared with the ordinary formation in Anglo-Saxon, (Gothic), English, French, Latin, Greek, &c. of plurals in *s*.

But there is one word that claims special attention. In the late Mr. H. Coleridge's "Glossarial Index" occurs the word *chere*. It is from Rob. Glouc, p. 166, that he quotes the expression "the *chere* men of the land", which, with Hearne, he explains as = "the *high* men of the land": I believe the true meaning is "the *chosen* men". Of the rejection of the participial termination *-n* many examples will be found in a paper by Dr. Guest in the Proceedings of our Society, Vol. II, p. 197. Nor is there much difficulty in accounting for the *e* instead of the *o* which we have in *chosen*, so numerous are the double forms which we find in various stages of English such as *clothe* and *clethe*, *broad* and *brede*. And so where, as in *chere*, an *r* follows; as *bor* = *beer* (Owl and Nightingale), *more* (Westmoreland) = *mere*, *þorne* = *þerne*, *swore* = *swere* (= neck), *lere* = *loss*. None of these is indeed a participle, though the last quoted closely approaches one in sense; but the *o* would perhaps so much the more readily become an *e* in the past participle of this verb as the preterite tense is always *ches* (like *les* from *lose*). As to *s* for *r* in this case, we may compare the German *erkiesen*, part. *erkoren*, and A. S. *cebsan*, part. *gecoren*. The usual Early English form is *i-coren*, as in the Castle of Love (Vernon MS.):—

Carfuliche he hap *i-coren*.

(*R* and *v*.) Now let us revert to the condition of those

unhappy Frenchmen who virtually have no *r* in their language. Is it possible to throw any light on their case? I am not prepared to discuss this subject fully, but will just throw out one suggestion based on the following passage in Palsgrave's *Lesclarcissement*. "R in the frenche tonge, shalbe sounded as he is in latyn without any exception, so that, where as they of Parys sounde somtyme *r* like *z*, sayeng *pazys* for *parys*, *pazisien* for *parisien*, *chaize* for *chayre*, *mazy* for *mary* and suche lyke, in that thyng I wolde nat have them folowed, albeit that in all this worke I moost folowe the Parisyens and the countreys that be conteygned betwene the ryver of Seyne and the ryver of Loyrre." (*Lesclarc.* p. 34.) (I shall take for granted that in speaking of *z* here, Palsgrave sounded that letter as a sonant as we now do, though snch forms as *plaintz*, *spiritz*, *maundementz*, in 14th century writers, and *porz* = *ports* in *La. Br.*, make it highly probable—to say the least—that at an earlier period our ancestors sounded this letter like *ts*, as the Germans do now). So here we have this change of *r* into *z* taking place on a large scale: a considerable portion of the French nation by common consent effecting this change. And our observant countryman detects them in the act: they do this "somtyme". May it not be that this "somtyme" gradually expanded into "all way", and then from this *z* the sound passed—by a sufficiently easy transition—into that deep guttural which the Parisians pronounce now whenever they name their native city? Of course it may be objected that Palsgrave described the same sound which we now hear from a Parisian as a kind of *z*; but he does not say "a kind of *z*", or use any such qualifying phrase; and he was a man accustomed to note pronunciation very closely. Moreover there is at least one word in the language which testifies in his favour. From the Greek and Latin *cathedra* comes the French *chaier*, *chayere*, *chaire*. This in Palsgrave's time appears to have been the form of the word, and from this our *chair* is derived; but one pronunciation of the word was—so it would seem—*chaize*, and this form has now driven the earlier one altogether out of the French language. Itself only used in

the sense of *pulpit* in the latter part of the 17th century (see Cotgrave), it has now altogether supplanted the older *chaire*. The existence of the word in its present form increases the probability of the accuracy of Palsgrave's observation. But if he can be shown to be in error, and no *z* ever existed as a stepping-stone between the true sound of *r* and the present guttural; the Hebrew language will at least furnish a parallel instance in such a pair of words as מִרַּט (m'rat) and מָגַחַט (māghat) = he polished, there not being—so far as I am aware—any intermediate form with *z* as the second radical and claiming kindred with these two.

Nor must it be forgotten that this Parisian "burr" is nearly identical with, or at least closely akin to, the gutturals still existing in German (as in *noch, nicht, Tag*), and some one or more of which once existed in our own tongue. This we know from the orthography itself; for doubtless *some* sound is represented by the *h, hh, ȝ, or gh*, in *riht, rihht, rȝt, right*, since, when the orthography of a language is unsettled, it is inconceivable that unpronounced letters should habitually be written; and it is notable that in the rhymes of Chaucer and of Early English poems generally, these letters play an important part, it being a rare exception if a word containing *gh* rhymes with one without *gh*. *Some* sound therefore is represented by the *gh* in these words, and it was doubtless a guttural; and it is this sound which is turned into an *r* in many words in the Devonshire dialect. Nothing can be more erroneous than to suppose that we have simply an *r inserted* in such cases, witness the following:—

Caught, Laȝ. Br. *cahte*, *cæhte*, *ikahte*, Dev. *kort*. *Daughter*, A.S. *dohtor*, Germ. *tochter*, Dev. *darter*. *Night*, Germ. *nacht*, Orm. *nihht*, A.S. *niht*, *næht*, *neaht*, Dev. *neart*. *Thought*, A.S. *pohte*, Dev. *thort*. *Might*, Germ. *macht*, Orm. *mihht*, A.S. *miht*, *mæht*, *meaht*, Dev. *meart*. *Aught* and *naught*, A.S. *aht* and *naht*, Orm. *ohht* and *nohht*, Dev. *ort* and *nort*. And the verb *ought*, A.S. *aht*, *ahte*, *cæhte*, is in Dev. *ort*.

Finally and briefly: we are now in a position to explain the apparent, and apparently inexplicable, interchange of *r*

and *f*, which we find at least in two words *zart* (Dev.) = soft, and *arter* = after. The fact is that *f* is not turned into *r* in these words.

Soft, A. S. *seft*, besides exhibiting the guttural in Germ. *sacht*, Dan. *sagte* (soft, gentle), Dutch *zacht*, Old Dutch (ap. Kilian) *saecht* and *sacht*, Sw. *sakta* (gentle, slow), has in Early English also the form *saught*; and *after* appears with a guttural in the Old Saxon *agter* and the Early Dutch *agter* and *achter*. These therefore are the forms which, slightly corrupted, survive in *zart* and *arter*.

XIV.—ON CONNECTING VOWELS IN GREEK. BY HENRY MALDEN, M.A., PROFESSOR OF GREEK IN UNIVERSITY COLLEGE, LONDON.

In some formations in Greek, a vowel is found interposed between the stem of the word and the suffix, which is a part neither of the stem nor of the suffix, but merely a link used to connect the two. To vowels so interposed the name 'connecting vowel' may be given. In some existing languages, I believe, one syllable is not allowed to end in a consonant, and the next syllable to begin with a consonant, without the intervention of a vowel; or rather, the people who speak them find it impossible, or difficult, to articulate two consonants without a vowel between them. In other languages we find indications that such has been their original construction, although in their progress the organs of speech have been disciplined, and have become capable of expressing the composition or juxta-position of consonants. In Greek many combinations of consonants are excluded and rejected, which present no difficulty to our pronunciation; but within certain limits, and under certain laws, and with certain euphonic changes, combinations of two consonants are sufficiently frequent. But the Greek rarely brings together three consonants. Indeed it may be