

takes the form *τύχωμι*, and the third singular is *ἐθέλησι*. (Thiersch, p. 300.) The commonest words make their infinitives like *τιθέναι*, as *εἰδέναι*, *φάναι*, *ίέναι*, and all the perfects, as *τετυφέναι*. Homer also writes *φορῆναι*=*φορεῖν*: so likewise in the passive *τυφθῆναι*, *τυπηῆναι*. The participle is not different, *τιθείς*=*τιθὲς* and *τύπτων*=*τύπτονς*. Hence the original form of the imperative *τύπτε* was *τύπτεθι*, and we have by synkoptation *ἀνώγεθι*, *ἄνωχθι*; *ἀνωγέτω*, *ἀνώχθω*.

Probably Thiersch was anxious to explain *ἐγρηγόρθε* by the passive, because he saw a parallel form *ἐγρηγόρθαι*, which wore a strongly passive aspect. But it more likely was *ἐγρηγορέναι*, *ἐγρηγόρναι*, *ἐγρηγόρθαι*. To this is to be added a participle (Od. v. 6) *ἐγρηγορόων*, and the parallel *κεκληγόντες* (as Il. II. 430, etc.). These are only collateral modes of uttering *ἐγρηγορώς*, *κεκληγότες*, retaining the N which originally belonged to them. Thiersch (p. 289) has called *ἐγρηγορόων* a present, and has classed it with reduplicated presents.

The second Paper was then read.

“On Metathesis;” by T. HEWITT KEY, Esq.

Few obstacles have been more efficacious in impeding the onward course of linguistic science than the inconsiderate use of the so-called figures of grammar or rhetoric. It would not be correct to pronounce judgment against the Greek words employed upon this service as being unqualified nuisances. So long as they are regarded as mere labels to give name to a collection of similar facts, they perform an ignoble, perhaps, but still useful part; but the evil grows into one of serious magnitude when they are accepted as philosophical explanations, and so close the path of inquiry. Still worse is it when, as not unfrequently happens, they give a false statement of the facts which are grouped under them. Thus the ugly word *paragoge* is perhaps never used but to reverse the genuine explanation. We are told for example that *mirarier* is deduced from *mirari* by the addition of a paragodic syllable, just as though the archaic form—for such is *mirarier*—had been formed from

that which succeeded it. Similarly, we often hear of *ν paragogicum*, whereas the grammatical forms to which it is said to be attached were originally entitled to the letter so called, and thus the reversed term *apocope* should be called in aid to define the change of circumstances. A similar error prevails in the explanation of the Homeric phraseology. Proceeding from the pages of a grammar adapted for the peculiarities of the Attic writers, we are tempted to talk of *tnesis**, when we find a preposition in the Iliad standing apart from the verb; and thus, in careless forgetfulness of the direction in which the stream of time runs, we lose sight of the truth that the preposition and verb had not coalesced in the vocabulary of Homer as closely as was afterwards the case in the Greek of Xenophon. Hence *tnesis* is substituted for the very different term *synthesis*.

But while we would utterly banish from grammatical writings the unfortunate words *tnesis* and *paragoge*, we should be willing to tolerate the term *metathesis*, provided the use of it were restrained within reasonable limits. Yet in the practice of philologists it is probably a party to more misdoings than any one of the hard words of which we are speaking. In works on etymology we constantly come across the use of this term to justify some inadmissible doctrine. To quote examples with the names of the writers would be invidious and unnecessary; but it is desirable to nail to the counter a few instances of derivations which offend under this head.

One writer would connect *nitor* and *τεινομαι*, where, over and above our present objection, there is the grave error that the guttural, which is proved to have belonged to *nitor* by its derivatives *nixus* and *pernix*, is left out of view.

Of *forma*, again, it is thought enough to say that it is formed by *metathesis* from the Greek *μορφη*, a word which in its own language stands without any satisfactory explanation, whereas the Latin *forma* may well be deduced from the Latin verb *fer-* by the addition of the familiar suffix *ma*, of which we

* See Hermann 'de Emendanda Graeca Grammatica.'

have well-known examples in *fa-ma*, *sru-ma*, *squa(l)ma*, *fla(g)ma*; as also in *τιμη*, *τολμη*, *ακμη*. At the same time the signification of 'bearing,' 'carriage,' which our derivation implies, is in tolerable harmony with the idea of 'form.' Compare the word *habit* from *habeo*.

Another example is in the not unfrequent comparison of *vinco* and *νικαω*, or, as one of these etymologists would write it, *νικαϜω*. By tossing the several letters of this latter form in a bag, we might by good luck throw them out in the order **F I N K A Ω**, and then if we had courage to disregard the A, which would give a verb of the first conjugation, we should have the desired form *vinco*. Unfortunately for the theory, the initial *ν* of the Greek verb is a very essential part of it, whereas the Latin readily dispenses with this liquid in the derived forms *vici*, *victus*, *victor*.

Writers of no ordinary repute speak of the Latin *et* as a metathetic variety of the Greek *τε*, to which there is the fatal objection that this enclitic of the Greek language has for its Latin representative a word which is also an enclitic, the particle *que*. A comparison between *τις* and *quis* will remove all scruple on this head.

We will not dwell upon such extreme cases as the derivation of the Latin *alapa*, 'a box on the ear,' from the Greek adjective *απαλη*, 'soft to the touch,' 'tender,' when *κολαφος*, both by form and meaning, makes out a better claim to our attention, especially backed as it is by the Latin *culpare*, which may well have denoted originally some physical form of reproof. But if the etymologies already quoted are unworthy of our assent, still less acceptable will be that which would make the Latin verb *vaco* an equivalent for a theoretic Greek verb *Ϝαχω*, formed by transposition from *χαϜω*, by which is meant, it would seem, some earlier variety of *χαινω*.

Sober etymology will not hesitate we think to reject such strained applications of the term *metathesis*. But it will not be enough to protest against extreme instances of misapplication of the doctrine. Let us rather attempt to define with such strictness as we may, the limits within which it may be safely applied.

1. There can be little doubt that the combinations *ps* and *sp*, *ks* and *sk*, are often, indeed almost systematically, interchangeable. Of these varieties no language supplies more certain or more abundant examples than the Anglo-Saxon, Thus Grimm (D. G. i. pp. 251 & 267) gives us,—

väps	väsp	vespa	wasp.
äpse	äspe	tremulus	aspen-tree.
häpse	häspe	sera	hasp.
vlips	vllisp	blaesus	lisp-ing.
cops	cosp	compes	fetter.
asce	axe	cinis	ashes.
âscjan	âxjan	poscere	ask (ax).
frosc	frox	rana	frog.
fiscas	fixas	piscis	fish.
tusc	tux	dens maxillaris	tusk.

So we have still ‘a *whips* of straw’ in Kent, where the ordinary term is ‘a *whisp*.’ Again, *Esk* and *Exe*, as the names of rivers, represent no doubt the same word; while the classical languages supply several pairs, as *Fiξος* and *viscus*, ‘the misletoe’; *misceo* and *mixtus*, ‘mix’; *εξ* and *εσχρατος*.

With this class we might include the interchange of *σδ* and *ζ* in so many Greek verbs, if we could depend on the ordinary doctrine that the Greek *ζ* had the pronunciation of *δσ*.

2. There are occasional examples of the liquid *r* and perhaps *l* changing their places. Thus we can scarcely separate the French *tremper* from the Latin *temperare*, or *frange* (our *fringe*) from *fimbria* (i. e. *frimbria*); for *bia* would readily pass into *ge*, as in *rabies*, *rage*; *Vidubia* (not *Vidugia* with D’Anville), *Vouge*; *rubea*, *rouge*; *Dibio*, *Dijon*; *gobio*, *goujon*. Again, the ancient Greek *ταφρος*, ‘a ditch,’ appears to have for its modern equivalent in the same country *τραφος*; so also the same town of Italy appears at one time as *Crotona* or *Cortona*, at another as *Cotrone*. For *l* we with much hesitation quote the received example of *οχλος*, *volgus*, and our own *folk*. If the alleged Aeolic *ολχος* and Cretan *πολχος* really existed, the doctrine seems certain. Yet even then the Greek word is without a satisfactory origin at home, while the Latin *volg-us* may safely be regarded as a derivative from *volv-ere* (Ital.

volg-ere); for the notion of something promiscuous, such as is produced by the process of thorough stirring, is exactly what the Latin substantive denotes.

3. There are cases of what we may perhaps be allowed to call simulated metathesis. What we mean will be best explained by examples. It is well known that the sounds *p* and *k* are often interchangeable both between kindred languages and in the different dialects of the same language; thus we have the familiar examples *έπομαι* and *sequor*, *πεμπτος* and *quintus* (anc. *quinctus*), *ίππος* and *equus*, *πεπτος* and *coctus*, and *vice versá*, *λυκος* and *lupus*. So also in Latin we find *coquus* and *popina*, *columba* and *palumbes*, *ipse* and *ixe* (Suet. Aug. c. 88), *spatula* (from *spatha*) and *scapula* (a blade).

Again, *r* and *l* being perhaps above all other letters liable to interchange, it was no very strange matter that the Latin *miraculum* should commence in Spanish with the syllable *mil*; but as the Latin noun in its final portion already possessed an *l*, the change of the *r* of *miraculum* to an *l* in Spanish received an easy compensation in the change of the second liquid in the other direction from *l* to *r*, and hence *milagro*.

Under these circumstances there is nothing to shock the mind when it finds that *σκεπτομαι* and *σκοπεω* have for their Latin equivalent such a form as *specio*, where the interchange of a *κ* and *p* in the beginning is balanced by an interchange of *π* and *c* after the vowel. Yet it would be wrong to call this a metathesis*.

A similar case occurs in a pair of words already considered. An initial *μ* in Greek may well correspond to an initial *f* in Latin, both being labials, as seen in the words *μυρμηκ-* and *formica*. Hence we may assent to the doctrine that the initial syllables of *μορ-φη* and *for-ma* are substantially identical. On

* The writer was once present when a child of some two or three years of age was surprised to see on a drawing-room table the to him unusual sight of two teapots, one for making green, the other for black tea. In his attempt to exclaim, 'what, two teapots!' his tongue passed through all the permutations of the consonants *t* and *p*, taken four together, *poo peapots*, *too peatops*, &c. The errors of children in their early attempts at speech might be usefully recorded for philological science.

the same principle the suffixes *φη* and *μα* may also be the representatives each of the other; yet admitting this, we do not admit that there has been a metathesis between the two words. At the same time it is true that the exchange of *μ* and *φ* in the first part facilitated, or rather rendered necessary, the converse change of *φ* and *μ* in the second part. Another instance of a similar variety occurs in the Greek *Καρχηδων* and the Latin *Karthago*, the exchange of the aspirates *χ* and *θ* in the first part having led to the counterbalancing exchange of the medials *δ* and *γ* in the next syllable.

4. There is some approach to a metathesis in the cases where an aspirate oscillates between two parts of a word, as *θριξ τριχος*, *θαπτω ταφος*, *εχω* and *έξω*, *Χαλκηδων* and *Καλχηδων*.

Thus we would limit the strict metathesis to the four cases of *s*, *h*, rarely *r*, and still more rarely *l*, of which letters it may be observed that *s* has the most intimate relations with both *h* and *r*, while *r* again is no less closely connected with *l*.

It may appear strange that we have spoken of metathesis as rarely occurring with the two liquids *r* and *l*; whereas it is commonly taught, that of all the letters in the alphabet these are the two most subject to the influence of the principle. The explanation of this discrepancy lies in the distinction we would draw between true and apparent metathesis. In the numerous instances that could be quoted to disprove our assertion, we should contend that compression had taken place, and that in different directions. When *θαρσος*, for example, and *θρασος* are brought forward as instances of metathesis, our reply would be that they both represent an older trisyllabic form, *θαρασος*, where we have three elements united; first a stem *θαρ*, corresponding to our own verb *dare*, in obedience to the usual law of letter-change which subsists between the two languages, as seen in *θυγατερ*- and *daughter*, *θηρ*- and *deer*; secondly, in the letters *ασ* we have a suffix attached to verbs, much as in *ταρασσω*, or *θρασσω*, *αιθ-υσσ-ω*, *ορ-υσσω*; lastly, the familiar neuter suffix of nouns, seen also in *γενος*, *νεμος*, &c.

Burn, *bright*, *brand* again are from a simple *bur*, seen in

the Latin *com-bur-o* and substantive *bustum*, so that *burn* is a compression from a fuller *bur-en* or *bur-on*, in which we have a suffix which virtually exists in *op-en*, *reck-on*, *μανθαν-*, *λαμβαν-*, *stern-*, *cern-*, *spern-* and *pōn-* (i. e. *posn-*). On the other hand, *bright* and *brand* have lost the vowel which preceded the liquid.

Among the verbs just quoted we have an example which will be found perhaps well adapted to throw light on the inquiry. *Sterno* has been classed by the grammarians with a perfect *stravi*, participle *stratum*. Now these two words seem to us to have been formed, not from *stern-*, nor from our assumed base *ster-*, but from a secondary verb *strag-* for *ster-ag*. From such verb we would deduce the feminine substantive *strag-e-s*, with the same suffix which enters into *fid-e-s*, *speci-e-s*, *faci-e-s*. The *g* which we claim for the alleged verb *strag*, has disappeared it is true from the noun *stramentum*, but precisely in the same way has the same consonant disappeared from *examen*, *examinare*, *contaminare*, *flama* (i. e. *flagma*), all of which have the same combination of consonants. We ourselves take the same liberty in pronouncing the word *phlegm*, and it was probably in this way that the Greek words *πρᾶγμα* (Ionic *πρῆγμα**) acquired a circumflex accent, which is scarcely entitled to a place where more than one (pro-

* It is said sometimes that the circumflex is required for these words, because the stem vowel of *πρασσω* was in its own nature long. This latter assertion is questionable. The same would probably be said of the stem vowel of *πλησσω*; and yet the aorist *επλαγην* shows that the original vowel was short. What has been said above of the combination *γμ* representing in this spoken language but a single consonant has its parallel perhaps in *πλησσω*, and other words which present *σσ*. Alphabets are confessedly very imperfect; and we cannot help thinking that this combination *σσ* is a clumsy mode of denoting what we, with equal clumsiness, write *sh*, and the Poles *sz*. In this way *πλησσω* may have terminated its first syllable with the *η*. A connection of sound between *sh* and the *γ* of *πληγη* is very intelligible, and indeed not unlike the double power of our own *g*. In *μάλλον* the double *λ* had probably the sound of a *y*, as in French, and indeed theory would have given us *μαλα*, *μαλιον*, *μαλισσα*. Comp. also the Spanish name *Mallorca*, as standing beside the ordinary form *Majorca*.

nounced) consonant follows the vowel*. We find an additional argument for claiming a *g* as due to *strag*, in the mode of writing our own words *strew* and *straw*, for a final *w* in English generally, if not invariably, corresponds to a *g* or *k* in other languages.

Let us next take a word of our own language which has a common termination with *strew*, viz. the verb *brew*. This may be held to be the equivalent of the Latin *ferv-* 'boil,' so that the older forms may be set down as *ber-ew*, *fer-ev*. As the Latin *f* is very commonly represented by a *θ* in Greek, we find the simple verb in the *θερ-*, whence *θερ-μo-* 'hot,' *θερ-εσ-* 'summer.' *Ferv-* again may be compared, as regards its last letter, with the Latin *vol-v-*, which has for its English representative the uncompressed disyllabic *wall-ow*.

Nay we would contend that the suffix *ow* of *wallow* and *ew* of *brew* are in origin identical, and would account for the difference of vowel on that principle of assimilation by which vowels in adjoining syllables are brought more or less to a common type*. Probably this very fact has had its influence in establishing the doctrine of metathesis in such words. When it is commonly found that in the alleged cases of metathetic forms the liquid is attended by the same vowel, now before it, now after it, there is some excuse for the theory that the vowel and liquid have been amusing themselves with a game of leap-frog. Thus *gars* and *grass* are varieties of the same word in the old and modern English, and seem to suggest such a change; but to us they imply a disyllabic *gar-ass*, where the identity of the vowels may be explained by adaptation, no matter for our present object whether it be the initial or the second vowel that has been modified for the purpose. The Latin also has *germen* and *gramen*. Of these we would deduce *germen* from a simple verb *ger-*, the latter *gramen* from a secondary verb *grag-* or *grac-* for *ger-ag-* or *ger-ac-*, corresponding to our English verb *grow*, itself from *ger-ow* or *gar-ow*. The existence of a secondary Latin verb *grag-* or *grac-* is confirmed by the derived adjective *grac-ilis* 'growing fast,' 'lanky,' for the adjective can claim for its

* See Paper on the Assimilation of Vowels.—Proceedings, vol. vi.

suffix only the letters *ili-*, as may be seen in the comparison of *ut-ili-*, *frag-ili-*, *doc-ili-*. In the Latin *tollo* we would put down for the verbal stem only the three letters *tol*, but the adjective *ταλ-ας* has modified the vowel to suit the suffix; and the forms *τλημι*, *τλητος*, as also the Latin *latus* (for *tlatus*), also imply the existence of a disyllabic verb *ταλ-α-*. In the Latin *pro* and Greek *προ* we have probably a compression of the disyllabic *por-ro*, which still exists in the Latin language, while the simple *por* enters into *porrigere*, *polliceri*, &c. So we too have both the syllable *for* (= *por*) and the derivative *from* (= *for-om*), afterwards reduced to *fro* *.

We have spoken above of the inaccuracy which prevails in treating *stravi* as the perfect of *sterno*. We have a parallel case in *tero*, *trivi*, *tritum*, where the present has the true root, and the other forms are deduced, we think, from a form *trib-* for *ter-ib*, the *b* of which has passed away from the perfect and participle, much as in *jubeo*, *jussi*, *jussum*. The Greek, it may be observed, has preserved the correct form of the secondary verb in the stem *τριβ-*, whence in the imperfect tenses *τριβ-*.

Here it may be useful to note certain statements, which are far from unfrequent, in speaking of these alleged cases of metathesis. We are told, for example, that *στρωννυμι* has a long vowel because of the transposition from the other form *στορνυμι*, as though the removal of the first vowel led to a lengthening of the second, which is in some measure to invert cause and effect; for the correct version, as it seems to us, is, not that the suppression of the first vowel leads to the length of the second, but that the length of the second causes the suppression of the first. Indeed in the present instance it seems wrong to treat *στορ-νυμι* and *στρωννυμι* as identical, for the latter contains a suffix which is foreign to the other. In *στορ-νυ-μι* we have three elements combined; in *στρωννυμι*, *i.e.* *στορ-ον-νυμι*, there are four. In the form *στρωννυμι* we

* One of the most instructive words we can find is the English *through* beside the German *durch*, which the lovers of metathesis would be disposed to put forward triumphantly; yet our own *thorough* and *thoroughfare* present the full form, and in Grimm (D.G. iii. p. 261) it will be seen that there once existed a monosyllabic preposition *dur*.

would explain the ω as implying that the first ν was not pronounced, and in saying this we mean to apply the same explanation to $\rho\omega\nu$ - $\nu\mu$, $\chi\rho\omega\nu$ - $\nu\mu$, &c., as also to the silent ν in $\text{Κωνσταντινος, κηνσωρ, consul, totiens, infans}$.

That such compression as we are speaking of is especially apt to take place in the neighbourhood of liquids*, we are of course fully prepared to admit; and in estimating the tendency it is well to keep in view the natural order of the liquids, viz. r, l, n, m , as proceeding from the throat towards the lips, for this order affords a measure of the tendency, which is the strongest with r , and becomes weaker and weaker till with m it is of great rarity, yet not without example, as in $\tau\mu\eta\sigma\iota\varsigma$ and $\delta\mu\omega\varsigma$. It is perhaps on account of this ready habit of compression that some languages at times omit all symbol of a vowel in connection with the liquids r and l . By writing brd we employ an orthography equally adapted for the designation of *bird* and *brid*, and so well suited for the purposes of varying dialects. Thus in Bohemian the eye comes across many words which appear to have no vowel, but the presence of an r or l in such words involves a vowel.

Something similar occurs in the written Sanscrit language, and has led to the strange doctrine that r in that alphabet is a vowel. Thus मृ is said to be a root, which it is the habit to pronounce $mr\ddot{i}$, for which, however, it would perhaps be more correct to substitute *mir* or *mor*.

If the views put forth in this paper be correct, philologists may be stimulated to a more careful analysis of words, and they will perhaps not very rarely find what they have accepted as primitives, to be of secondary formation. Thus *bring*, Germ.

* Thus in Polish and Russian we have the following varieties of form. (See Dombrowsky.)

POLISH.	RUSSIAN.	
glod	golod	<i>hunger.</i>
glos	golos	<i>voice.</i>
klos	kolos	<i>ear of corn.</i>
sloma	soloma	<i>straw.</i>
grod	gorod	<i>city.</i>
prog	porog	<i>threshold.</i>
broda	boroda	<i>beard.</i>

bring-en, is but a derivative of *ber* (*bear*), with a suffix, such as *ag*, added to it; whence the German perfect *brach-te*; and the Latin participle *fretus* 'borne up,' 'supported by,' 'relying on,' is probably deduced from a secondary Latin verb, *fer-eg-* = our theoretic *ber-ag-*. To the verb *know* (Lat. *gno-*) we have already drawn attention, as a corruption of *kon-ow* or *ken-ow*, from our simple verb *con* or *ken*. Hence, while the Latin (*g*)*no-men* and the German *na-men* flow from the secondary verb, the Greek *νοματ-* is perhaps for *γον-ο-ματ*, so that the interposed vowel serves only the purpose of a connecting element to unite the verbal base *gon-* (= our *con*) and the well-known suffix *mat*. *Agnitus* again, and *cognitus*, as we have before observed, stand for *ad-gon-i-tus* and *co-gon-i-tus*, and so are incorrectly stated to be participles to *agnosco* and *cognosco*, which would have been *agnotus* and *cognotus*.

It may be as well, before laying down the pen, to make a few remarks in defence of the theory so often repeated in this paper, that secondary verbs were formed with some such suffix as *ag*. We have put forward *strag* from *ster* 'strew,' *grag* from a supposed *ger* 'grow,' *brag* (whence *bring*) from a simple *ber* or *bear*, *genag* or *genog* from *gen* = our *ken*. Now in the Manx variety of the Celtic every verb is assumed to have what is called a *modus consuetudinalis*, formed from the simple verb by the addition of the syllable *agh*. Thus from *moyll* 'praise,' *moyllagh mee* 'I habitually praise'; so *vaik-agh mee* 'I habitually see.' It was from observing the Manx verb *be-agh* 'habitually be,'—hence 'live,'—that the writer in a former paper explained the form *vi-v*, *vixsi*, and substantive *victus* of the Latin. The verbs *fruor*, *struo*, like the Greek *αιβυσσω*, *ορυσσω*, *βρυχω*, &c., seem also to contain the same suffix virtually in the form *ug*, *uc*, or *vχ*. Again, the Latin *fug-* has in all probability lost an *l*, the presence of which would bring it into keeping with our own *fly*, *flee*, *flight*, and the German *fliehen*, *flucht*; and then the *fl* might be regarded as a compression of *vol-*, as seen in *vol-u-cris*, *volare*. The Latin *trah-o*, *traxi*, is also open to suspicion; and we have our eye on many other suspected words, but we stop, as this is a digression from the main object of the Paper.