TRANSACTIONS

OF THE

PHILOLOGICAL SOCIETY,

1888-90.

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I.—NOTES ON ENGLISH ETYMOLOGY. By the Rev. Prof. Skeat.

[*Read at a Meeting of the Philological Society, November* 4, 1887.]

Bat, a thick stick. Dr. Murray cites an A.S. *bat* as a purely theoretical form, given by Somner and others, but unauthorised. But Prof. Napier has just discovered it, in the form *batt*. Among the glosses of the eleventh century printed by him in Engl. Studien, xi. 65, we find: "*Claua*, batt." The Lat. *claua* means a thick staff, cudgel, or club (Lewis and Short).

Courser; see **Horse-courser**.

Cozier, (perhaps) a cobler. This word occurs in Tw. Nt. ii. 3. 97, where Malvolio reproves the company for squeaking out their "*coziers'* catches." It is said by some to mean a tailor, but the earliest authority, Minsheu, says it means a cobbler. His Dictionary has: "A *Cosier*, or sowter, from the Span. *coser*, to sew; *vide* Botcher, Souter, or Cobler." It is not at all likely that the word is of Span. origin. It is far more likely to be French. The nearest form I can find in Godefroy is the O.F. *cousere*, for which he gives a quotation, but puts it under the form *couseor*, for which he adduces no authority. He explains *cousere* by *couturier*, and Cotgrave has: "*Cousturier*, a Tailor, or Botcher, a Seamster." The O.F. *cousere* is evidently derived from the stem *cous-*, which appears in *cous-u* (Lat. *consutus*), the pp. of *coudre*, to sew. From Lat. *con*, together, and *suere*, to sew. Godefroy also gives an O.F. *chosier*, which he does not attempt to explain. His quotation is: "Un charpentier, un cercelier, un *chosier*, un peletier." These are all names of tradesmen; and as *peletier* means 'a furrier,' it seems just possible that *chosier* may mean 'a cozier.'

Cut. I have given this word as of Celtic origin. If this should turn out to be incorrect, perhaps it may be Scandinavian. It appears first in Layamon, as I have said. Ihre gives O. Swed. *kotta*, to cut or carve wood with a knife; but gives no reference. The Swed. dialects have *kåta*, *kuta*, to cut or chip with a knife; *kåta ur*, to hollow out; *kuta* or *kytti*, a knife; *kutts*, a piece or bit cut off, chip. Haldorsson gives an O.N. *kuta*, to cut with a small knife (quoted by Mätzner); also *kuti*, a knife (quoted by Aasen, s.v. *kytel*). Vigfusson has *kuti*, a little blunt knife, without a reference. Aasen gives Norw. *kytel*, *kjutul*, most often *kyttel*, a pointed slip of wood, with which bark is stripped off trees. The Norw. form *kyttel* reminds us of the M.E. form *kitten*. It is curious that the traces of the word should be so slight.

Decoy. On this difficult word there is an excellent article by C. Stoffel, of Amsterdam, in Engl. Studien, x. 181. He shews that we may fairly conclude that the word *coy* is simply borrowed from the Du. *kooi*, a cage. We find *coy-ducks* in Burton's Anatomy of Melancholy, i. 205 (London, 1827). In the word *de-coy*, he suggests that *de* may be simply the Du. definite article, so that it would answer to Du. *de kooi*, the cage. This is a new light, and may be correct; if not, we must take *de-* to be the usual E. prefix of Lat. origin. He further shews that *kooi* is a genuine Du. word, with a variant form *kouwe*, given by Kiliaen. The whole article is valuable, and full of useful quotations. To these I add one from N. & Q. 5 S. xi. 7, where it is said that Spelman (Eng. Works, ed. 1727 [Posthumous Works], p. 153) says that Sir Wm. Woodhouse "primum apud nos instituit Decipulum Anatorium, peregrine nomine *a Koye*." And I have further to add that the word is given in Skinner's Dict., 1671, where he has: "*Coy*, Belg. *Voghel Koye*, à nom. *Koye*, cavea, septum aviarium, item avis pellax, illex," etc.

Dismal. Attempts have been made to connect this difficult word with the Lat. *dies malus*, and Trench shows, in his

Select Glossary, that the phrase *dismal days*, i.e. unlucky days, was once common. It was Minsheu who started this etymology, and he tried to illustrate it by explaining about the unlucky days called the *dies mali* or *dies Ægyptiaci*. See Brand's Antiquities, ed. Ellis, ii. 48, where Brand cites from Bp. Hall, "If his journey began unawares on the *dismal day*, he feares a mischief." Chaucer first uses the phrase "in the *dismalle*," Book of the Duchess, 1205, where he immediately goes on to speak of "the woundes [i.e. plagues] of Egipte," thus again connecting the word with the *dies Ægyptiaci*. Though we cannot derive *dismal* from *dies malus*, I believe Minsheu is, practically, right after all. By turning the Lat. plural *dies mali* into Old French, it becomes precisely *dis mal*. The O.F. word for *day* was *di*, as in mod. F. *Lun-di*, *Mar-di*, etc., and the plural *dis* (with the *s* distinctly sounded) is sufficiently common. See examples in Godefroy and Bartsch. It seems to me that *dismal* meant precisely 'unlucky days'; and that the phrase *in the dismalle* meant 'at an unlucky time.' When the sense of *dis* was lost, the word *days* was added, thus producing the phrase *dismal days*, which meant no more than had been formerly expressed by the word *dismal* alone. And this is why Chaucer uses it *by itself*. If this is right, it definitely and finally solves a puzzle to which no answer has ever yet been found. Trench tells us that Minsheu's is 'one of those plausible etymologies to which one learns after a time to give no credit.' But it may be quite right, if we will but go to the *Old French* instead of *Latin* for the explanation of the actual form of the word. See also *Dies Ægyptiaci* in Ducange; Chambers, *Book of Days*, i. 41; Cockayne's *Leechdoms*, iii. 77.

Dog. Traces of this word in A.S. are so extremely scarce that I note the word *doggiþorn*, probably meaning *Dogthorn*, in the boundaries in an A.S. charter, dated just before A.D. 960. See Birch, *Cartularium Anglo-Saxonicum*, iii. 113.

Dowle. Ariel uses the expression: "one *dowle* that's in my plume;" Tempest, iii. 3. 65. The various passages in which the word occurs are given in Mr. Wright's note on the line. A wool-bearing tree, or cotton-tree, is said to have "wool or *dowl* on it." Again, "young *dowle*" is explained by Lat. *lanugo*. And "the plumage of young goslings before they have feathers is called *dowle*." But the word probably means what is now called "a down-feather," as distinct from the larger or "quill-feather" of a bird. Two points have hitherto been missed. One is, the occurrence of the word in Middle-English; and the other is the etymology. First, the word occurs in Middle English in the Plowman's Tale, in the 14th stanza from the end, where the Griffin threatens the Pelican that "he wolde him teren, every *doule*," i.e. every smallest feather of him. It rimes with *oule* and *foule*, and was therefore pronounced as glossic [ool] or [oo·lu'], according as the final *e* was mute or not. Secondly, as to the etymology. To say that it is much the same as *down*, as some do, is mere trifling; we have no business to assume anything of the kind. The word *down* was a perfectly well-known word, of Scandinavian origin, and there was no more sense in turning it into the unmeaning form *doule* than there would be in calling a *clown* a *clowl*, or a *gown* a *goule*, which is obviously ridiculous. I have no doubt that the word was a term in falconry, and necessarily of French origin. I find in Hamilton's French Dictionary the adj. *douillet*, meaning 'soft, downy.' Littré says, and the remark is important, that it can be used as a substantive; it then means 'soft stuff'; Cotgrave even explains it by 'a milksop.' This adj. is an extended form of the O.F. *doille*, or *douille*, soft, tender; given by Godefroy with several examples. Of these the most important is one where the word is used as a substantive, to mean 'that which is soft'; as in: "Apres le dur revient le *doille*," i.e. after hardship tenderness returns. I submit, then, that the M.E. *dowle*, soft plumage, is precisely the O.F. *doulle*, given by Godefroy as an occasional spelling of *doille*, with the sense of 'that which is soft'; the very sense required. There is no further trouble; for the O.F. *doille* results from the Lat. acc. *ductilem*, i.e. easily bent, pliable; from the verb *ducere*. Hence *dowle* is the soft, pliable, down-feather of a bird, as distinct from the feathers having a hard central quill. If naturalists would like to revive a good old word which has no simple equivalent, they might advantageously revive the word *dowle* (which might be spelt *dowl*), to replace the clumsy compound *down-feather*, and thus restrict the term *feather* to express the true feather only, without the prefix *quill-*. I believe that *dowl* and *down* are not quite equivalent terms. Shakespeare correctly says "one dowle," where "one down" would be absurd. A *dowl* is the individual down-feather, whereas *down* is the collective term for the whole of the softer part of the plumage. I would also note that *plume* in this passage clearly means *plumage*. It is singular that Dr. Schmidt should be in doubt about it; he suggests that it may mean 'wing,' or that Ariel might be supposed to wear a plume on his head. But Shakespeare has taken pains to tell us about it. The stage-direction says that 'Ariel enters like a harpy, and claps his wings upon the table.' He is therefore supposed to be at least partially covered with plumage.

Earnest, *sb.*, a pledge, security. The M.E. form is *ernes*, the *t* having been added by confusion with the adj. *earnest*. I have unfortunately supposed it to be of Celtic origin; as the W. form is *ernes*, and the Gaelic is *earlas*. But the W. *ernes* must have been borrowed from Mid. English, and the Gael. *earlas* from the Northern Eng. *arles*. *Ernes*, *erles*, and *arles* are all found, and of these *arles* and *erles* are the more correct. For the etymology, see *arles* in Murray's Dictionary. *Arles* answers to a Low Lat. **arrhulas*, dimin. of Lat. *arrha* or *arra*, from Gk. *ἀρραβών*. See *Arrhes* in Littré, who gives the O.F. forms *arres* and *erres*.

Mr. F. W. Maitland sends me an example of the word *ernes* as early as 1221:—"Preterea si dicti homines emerint bladum aut aliam merchandisam ubi *ernes* dederint, nullus inde eos perturbabit nec a merchandisa sua eos elongabit;" Assize Roll, M. 6. 31, 1: membrane 11, back (Worcester Eyre of 1221).

Entice. I have not given the origin of the French word from which our *entice* is borrowed. It is certainly of Latin, not of Teutonic origin. I translate a remark which I find in an edition of a Norman Poem which the editor calls

Reimpredigt, ed. Suchier, Halle, 1879. In the 7th line of the Poem the word *enticement* occurs, and a note at p. 66 says: "*enticier* (E. *entice*) is wrongly derived from German by Burguy; it is Lat. **in-titiare*, formed from the nom. *titio*, like *chacier* (Lat. **captiare*) from *chace* (Lat. *captio*), or like *tracier* (Lat. **tractiare*) from *trace* (Lat. *tractio*). Another treatment of the sibilant is seen in O.F. *atisier* (mod. F. *attiser*), Lat. **ad-titiare*, which is also found, however, in O.F. with the sharp *c*, as *atice* (riming with *malice*, Ben. Chron. 12122; riming with *herice*, Roman de Renart 1 S. 47); *attice*, Joinville 33, cf. Chastel d'Amur 337); as well as in the form *atise*, cited by Littré." Hence *entice* is from O.F. *enticer*, *enticier*, representing Lat. **in-titiare*, from *titio*, a fire-brand; and the original sense was 'to set on fire.' See also *Attice* in Murray's Dictionary.

Feon, Pheon, the heraldic name for the barbed iron head of a dart. Ogilvie adds—"it is still used as a royal mark, and is called *the broad arrow*." It is conspicuous on the coat of arms of Sidney Sussex College, Cambridge. The usual spelling of this word, with *ph*, is a late affectation. It occurs in the fifteenth century as *feon*. Thus in the Book of St. Alban's, in the last portion which treats of heraldry, fol. b 5, we find: "*Feons* be calde in armys brode arow hedys." The context shews that *be calde* refers to the *feons*; in modern English construction, we should say, conversely, that "broad arrow-heads are called *feons*." No one can doubt that the word is French; this is clear from the form of it, and from the fact that so much of our heraldry is derived from French. But I cannot find that any origin has been suggested for it. Even the usual guesses are absent. This being so, I am going to give a guess of my own. This is, that I really believe the form to be corrupt. I suppose it to be corrupted from the O.F. *foene*, a form given in Godefroy's F. Dict. The change from *foëne* to *feön* is not a particularly violent one in a word which, to an English ear, gave no sense whatever. If this change in form be admissible, there is no difficulty about the sense, for the two words may have precisely the same meaning. Godefroy's quotation is: "Une *foene* doist estre enhantee en une lance comme la hante d'un glaive," which I take to mean—"a broad barbed head ought to be fitted to a handle to form a lance just as the handle of a sword (is fitted)." The spelling *foene* is rare, and so is the variant form *fouane*. The usual forms are *foine*, *foyne*, or *fuyne*. Cotgrave has: "*fouine*, a kind of instrument like an eele-speare, to strike fish with." The Latin word is *fuscina*, a three-pronged spear, or trident, used by Cicero. Ducange gives several examples of the F. word under the heading *fuscina*. Such variant forms as *fouane* and *foene* are not easy to account for; but the fact that the pronunciation of the word was so variable in O. French makes it still more likely that it appears under a further disguise in English. In fact, we know that the verb *to foine* also appears in E. with the spellings *fewn* and *fune*; see my Specimens of English, Part III. (Glossary), and Halliwell's Dict. p. 385. From *fewn* to *feon* is a very short step. Perhaps I ought to add that the O.F. word is also once spelt *foisne*, which is important as retaining the *s* of the Lat. *fuscina*. (See also **Foin**.)

Foin, to thrust with a sword. I have already given the etymology of this word in my Dictionary, where I derive it from the French word which Cotgrave gives as *fouine*, "a kind of instrument in ships like an eele-speare, to strike fish withal." This is open to the objection that the two words are not sufficiently alike, the one being spelt with *oi*, and the other with *oui*. But I can remove this objection, and at the same time clench the etymology, by remarking that the usual O.F. form of Cotgrave's *fouine* was precisely *foine*, as shewn in Godefroy. Curiously enough, there were two distinct O.F. words both spelt *foine*, and they both passed into English in the same form *foine*. Thus the O.F. *foine*, a fish-spear, gave the E. verb *foinen*, to thrust, with the action of one who uses a fish-spear; and the O.F. *foine*, a beech-marten, gave the E. sb. *foine*, with the same sense. I would draw particular attention to Mätzner's remark on *foinen*. He says, he would like to derive it from the Burgundian French verb *foindre*, a peculiar spelling of O.F. *feindre*, to feign, or make a feint, if it were not that the sense will not suit; for the E. verb *foinen* invariably means 'to thrust,' as all his examples shew. Some have been misled by a line in Chaucer, which is the only one in which the sense is at all ambiguous. I mean the line in the Knightes Tale, 1692—"*Foyne*, if him list, on foot, himself to were;" but Chaucer himself uses the word quite clearly in the very same tale, l. 796—"And after that with scharpe speres stronge They *foinen* ech at other wonder longe." Of course it would be more satisfactory if we could produce an example of an O.F. *foiner*, but we must remember how extremely imperfect are the records of Old French. I think there is no great difficulty in deriving a verb signifying 'to thrust' from the name of a weapon-like instrument which could only be used for thrusting. (See also **Feon.**)

Flotsam. I find I have mistaken the nature of the suffix in the words *flotsam* and *jetsam*. The form of the suffix, viz. *-sam*, is a corrupt one; it was formerly spelt *-son*, or rather *-eson*, *-ison*. The right book to consult is the Black Book of the Admiralty, ed. Sir T. Twiss, 1871, vol. i. At p. 82, the Anglo-F. form appears as *floteson*; and at p. 170, it is *flotesone*, with the variant reading *flotesyn*. Hence the E. *flotson*, in Blount's Law Dict., ed. 1691; also spelt *flotsen*, *flotzam*, in Cotgrave, s.v. *flo*. Minsheu, ed. 1627, has *flotsen*, *flotzon*, *flotzam*. The A.F. form *floteson* is quite regular; it is formed from the O.F. verb *floter* (Mod. F. *flotter*) with the suffix *-eson*, *-ison*, as seen in A.F. *ven-eson*, *ven-esoun*, *ven-ison*, Mod. E. *ven-ison*; see examples in my Handlist of English Words found in Anglo-French. This F. suffix represents the Lat. suffix *-ationem*, as in Lat. *uen-ationem*. The verb *floter* does not represent the Lat. *fluctuare* exactly, but was merely formed from the sb. *flot*, from Lat. *fluctum*. Hence *floteson* is equivalent to a Lat. form **fluct-ationem*, and the word is fully accounted for. We find *fluctare* for *fluctuare* in Low Latin. See **Jetsam**.

Gorce, a pool of water to keep fish in, a weir. (F.—L.) This is an obsolete law-term; see the quotation in Blount's Nomolexicon. I have not collected the Anglo-French forms, so that I cannot say if *gors* is sing. or plural; but the occurrence of the pl. form *gorgs* in Britton (i. 81) suggests that *gors* or *gorce* is really plural. Blount also gives the F. spelling *gort*, which retains the *t* of the Lat. acc. *gurgitem*. See Littré, s.v. *gour*, which is the Mod. F. word. Tha derivation is verified by a quotation given by Blount, who says, "I find in the Black Book of Hereford, fol. 20—*Quod tres* gurgites *in aqua de Monew attachiantur*." Blount adds the remark—"where *gurgites* is used (though improperly) as a Latin word for *gorces* or wears." But my point is, that the Latin word is used properly. The *aqua de Monew* is clearly the river Monnow, whence the name of Monmouth. I suspect that *gorces* is a double plural.

Horse-courser, also **Horse-scorcer**, a dealer in horses. Examples of this word may be found in Nares, under the headings *Horse-courser* and *Scorse* or *Scorce*. The spelling is very variable, as the etymology was not understood. Much turns upon the various forms which the word assumes. Wedgwood derives it from an O.F. *couracier*, for which he adduces no authority, and which I can nowhere find. Wherever found, it cannot be the origin of the E. word; for it can hardly be other than a purely *graphic* error (by the common miswriting of *c* for *t*) for the O.F. *couratier*, the true original of the mod. F. *courtier*, which Cotgrave explains by 'a broaker, horse-scourser, messenger.' It will thus be seen that the F. *courtier* gives precisely the right sense, but I hold it to be impossible that either the form *courtier*, or any of the numerous variants of it (such as *courratier*, *couratier*, *coretier*) given by Littré, can ever have produced the E. word. Nor do I see how, if the form *couracier* were genuine, it could be twisted into *courser* without considerable violence. I may add that Littré gives the etymology of *couratier* quite correctly; it answers to a late Lat. form *curatarius*, from the verb *curare*. I believe that the etymology lies in a very different direction, and was long ago pointed out by Junius quite correctly. We ought to account for the verb *to cose*, or *coss*, because this is the earliest English form, as far as I can discover. For this verb see Jamieson's Dictionary; he gives examples of *cose*, *coss*, or *coiss*, to barter, exchange, from Blind Harry's Wallace, x. 470, and Douglas's tr. of Vergil. From this verb *to cose* was formed the sb. *coser*, one who barters; in fact, we find "*Hic mango*, a cosyr," in Wright's Vocab., ed. Wülcker, col. 684, l. 40; and *coseri*, barter, in the Mort Arthure, l. 1582. This word was frequently used in the compound *horse-coser* or *horse-cosser*, and acquired an initial *s* by confusion with the last sound in *horse*; thus producing the forms *horse-skoser*, *horse-scosser*, and (by insertion of *r* before *s* precisely as in the mod. E. adj. *hoarse*) the ultimate form *horse-scorser*, and not unfrequently *horse-courser*. The verb to *scorce* was evolved from the sb.; it is impossible to find any other origin for it. It would require a great deal of space and a complete set of "Dictionary quotations" to establish this result; but I believe it will be found to be correct. Dr. Murray will soon, I hope, be coming to the word *courser*, and the truth will then certainly appear. Meanwhile, I quote two significant facts. A quotation which speaks of "hakeneymen and *skocers*" occurs in Croft's edition of Sir T. Elyot's Governor, where the text follows that of the first edition. There is an excellent note on the word in the Glossary, vol. ii. p. 602; but the editor begs the whole question when he says that "this word should undoubtedly be printed *skorcers*, as it appears in the *later* editions;" a principle of criticism from which I wholly dissent. Again, it is not a little remarkable that the form without a medial *r* occurs as late as in the Exmoor Scolding, where we meet with the pp. *scoast*, i.e. exchanged, at p. 78, l. 330, of Mr. Elworthy's edition. In this case, Mr. Elworthy remarks that the word is spelt *scorst* in *earlier* editions, and that *scorst* comes nearer to the pronunciation; but let us observe that he does not mark the *r* as being trilled; and the change of spelling only proves that the *o* was sometimes pronounced as *o* in *more*, and sometimes as *o* in *boat*. It seems to me that, if once we start from the old verb *coss* or *cose*, all the numerous forms which I have mentioned result from it easily and, in fact, inevitably. I suggest, further, that the *r* was only inserted in order to define more closely the occasional sound of the preceding *o*, precisely as in the adj. *hoarse* already mentioned, which is derived from the A.S. *hás*, and is cognate with G. *heiser*. In any case, we ought to try to find an original for the Lowland Scotch verb *to coss* or *cose*, meaning to barter. My suggestion is that it was borrowed, as is the case with so many Scotch words, from French. And here I have to admit that the traces of such a verb in O.F. are very slight, but I think it may easily have been evolved out of the O.F. *coss-on* or *coss-our* (see p. 12), which meant precisely 'a dealer.' From the quotations in Godefroy, we see that a *cosson* dealt in game, fowl, eggs, fruit, and such wares. The equivalent in Italian is *cozzone*, which Florio explains by 'a horse-courser, a horse-breaker, a crafty knave,' thus giving us the very sense we want. He also gives the verb *cozzonare*, 'to break horses, to plaie the horse-courser.' The corresponding Latin word is *cocio*, a broker, or factor, given in Lewis and Short, and in Ducange (with several quotations). Roquefort's Old French Dict. has: "*cossous*, courtier, maquignon," where I submit that *cossous* is an error for *cossons*, really a plural form; observe that he gives the sense as *courtier*, which shews that the *cocio* dealt in horses in France as well as in Italy. But further, Lewis and Short give another form *cociator*, a broker, and Ducange gives *cociatura*, brokerage. These forms imply a verb **cociare*, which would precisely give us an O.F. verb **cosser* and the Scotch *coss*. The etymology of Lat. *cocio* is not known, though there is a note upon it by Festus. I offer this investigation for what it is worth; I believe that further search will definitely confirm or refute it. At present, I would sooner connect *horse-courser* with the Ital. *cozzone*, which is precisely identical with it in meaning, than with an O.F. *couracier*, which I cannot believe to be other than a miswritten form of *couratier*, and therefore incapable of giving us the E. word; nor can I, as yet, find any example of *couracier* at all. It is worth notice that, under the word *horse-courser*, Nares definitely refuses to recognize any connection with the verb *to cose*; but, under *scorse*, i.e. in a later article, he thinks that the suggested connection is probably right after all. Second thoughts are best.

After some further investigation, I have found that *skoase* is still in use in Kent; as, "I'll *skoase* horses with you." And it is sometimes pronounced [skoa·us], shewing how the *r* came to be introduced. This will appear in the new Kent Glossary for the E.D.S. I also find, further, that the Anglo-F. word *cossour* actually occurs as early as 1310, being the precise form due to the Latin *cociator*. Riley, in his Memorials of London, pref. p. xxii, says—"the trade of a *Cossour* [is] mentioned in 1310, perhaps for *Corsour*, a Courser, or Horse-dealer." It never occurred to him that *corsour* was the later and corrupted form; and, consequently, when the word appears again 62 years later, in 1372, at p. 366 of the same volume, his note turns the whole matter topsy-turvy. He says, accordingly—"a *courser* (from the French, no doubt) was a dealer in horses. Grose (*Clas. Dict. of the Vulgar Tongue*) ignorantly says that it is properly *horse-coser*, vulgarly and corruptly pronounced *courser*, and assigns to it a Scottish origin." Yet this ignorant Grose is here perfectly right. In consequence of this misapprehension, Riley goes on to make a still greater blunder at p. 66, where he quotes an entry of the date of 1308, about a certain "John de Merlawe, quilter." Here "quilter" is, as he tells us, his translation of the A.F. *cozoun*, which, in my view, means nothing of the kind; but is precisely the O.F. *cossoun*, a dealer, already mentioned. Thus Riley's own dates and examples prove the case against him; for we find *cozoun* in 1308, and *cossour* in 1310, but *corsour* in 1372. The early existence of this A.F. form *cossour* is highly important for the etymology, since *cosser* or *coser* might have been formed from it immediately, precisely as *barbour* became *barber*, and *brocour* became *broker*.

Hutch. I have given the etymology from O.F. *huche*, which is from the Late Lat. *hutica*, with the same sense. There can be no doubt about this; but the note upon the word *hutche* in the Promptorium Parvulorum shews that the M.E. *hutche* (better *hucche* or *huche*) was strangely confused with the M.E. *whyche*, which had a somewhat similar sense. Mr. Way does not distinguish between the words, and offers us both a French original, in Palsgrave's *huche*, and an A.S. original, which he spells *hwæcca*. Putting aside the M.E. *huche* or *hucche* as being obviously of F. origin, let us look for a minute at the word *whyche*. Mätzner gives us the forms *whyche*, *whichche*, and *whucche* in his Dictionary, p. 550 of part 2, and gives as the original the A.S. *hwecca*. But no such form as *hwecca* is known, and the form *hwæcca* rests only on an entry in Lye's Dictionary, where he gives *corn-hwæcca*, a corn-chest. Fortunately, Prof. Napier has just printed some A.S. Glosses in Engl. Studien, xi. 65, from a Bodley MS., and one of these gives us: "*Clustella*, hwicce." Hence the A.S. form, at any rate in the 11th century, was precisely *hwicce*, answering exactly to the M.E. *whicche*. The M.E. *whucche* is a mere variant, which may have arisen from confusion with *hutch*, or may have arisen quite independently, from the action of the *w* upon the *i*, as in E. *woman* from A.S. *wifman*. The gain is, that we can now definitely separate the A.S. *hwicce*, M.E. *whicche*, from the O.F. *huche*, mod. E. *hutch*.

Jetsam. This word is spelt *jetsen*, *jetzon*, in Blount's Law Dict., ed. 1671; *jetson*, in Minsheu, ed. 1623. But the full form is the Anglo-F. *getesone* or *gettesone*, in the Black Book of the Admiralty, ed. Sir T. Twiss, vol. i. pp. 96, 170. This represents, quite regularly, the classical Lat. *iactationem*, from the verb *iactare*, to cast out. See **Flotsam**. I do not find that the Dictionaries explain the suffix; and, in fact, it is only the Anglo-F. forms that make it clear. They also account for the occasional form *jettison*.

Larboard. I shall not say much about this difficult word. I only throw out a new suggestion. Nares thinks that the phrase *leer* side, as used by Ben Jonson, means the left side; and Hackluyt has the spelling *leereboard* for larboard; Voyages, i. 4. I wish to draw attention to the curious Mid. High German word *lerc*, *lirc*, *lurc*, left, also appearing as *lerz*. Examples are given in Lexer's Mid. High German Dict.; we find *lirke hand*, the left hand, *zuo der lirken siten*, to the left side. Schade's Old High G. Dict. also gives *lirc*, *lerc*, *lurc*, with the sense of left. Schade further gives another word *lerz*, *lurz*, with the same sense, which he supposes to be related to the former. This is the word which Kilian gives as Mid. Du. *lurts*, and which appears in Bavarian as *lurz*; Schmeller gives *die lurz Hend*, i.e. the left hand. Diez suggests that it is just this form which gave rise to the curious F. *ourse*, the *l* being dropped because it was thought to be the def. article. Cotgrave explains *ourse* as 'the sheat or cable whereby the mainsaile is fastened to the *Larbord*, or left side, of a ship.' Littré gives the mod. F. *orse* as meaning simply 'larboard,' and says it is in use on the Mediterranean. Torriano explains Ital. *orza* by 'a rope in a ship, called of Mariners the larboard-sheet; which, a man standing at the poop of a ship, with his face towards the prow, is ever on the left hand; therefore is *orza* taken for the left hand or side.' If *larboard* is in any way connected with this Mid. High Germ. *lerc*, left, the chief difficulty is to discover by what channel it reached us.

Mr. Wedgwood, in his Etym. Dict., suggests that *lar-* may represent a contraction of the Mid. Du. *laager*, lower, since *laager hand*, lit. lower hand, also meant 'the *left* hand.' He kindly refers me to the Grand Dict. Holl. et Fr. par P. Marin, Dord, 1730, which gives '*laag*, bas; *laager*, plus bas,' and '*de laager hand*, la gauche'; also to Halma's Dict., 2nd ed., Amsterdam, 1729, which gives the same information.

I will venture to add yet another guess. Perhaps Hackluyt's *leere* represents the M.E. *lere*, empty, already used by Rob. of Gloucester (ed. Hearne, p. 81, l. 1). For the helmsman stood on the *starboard* side; the other side was empty.

Numbles, the entrails of a deer. (F.—L.) M.E. *nombles*, Cath. Anglicum, p. 256, and note.—F. *nombles (d'vn cerf)*, 'the numbles of a stag'; Cotgrave.—Low Lat. *numbulus*, used for *lumbulus*, dimin. of *lumbus*, loin. See *nombles* in Littré. (Suggested by Mr. Mayhew.)

Obsidian, a kind of vitreous lava. (L.) It is, perhaps, worth while to point out that this name may have originated in a mistake. The usual account, correct as far as it goes, is founded on a statement in Pliny, bk. 36, ch. 26, which in Holland's translation runs as follows:—"There may be ranged among the kinds of glasses, those which they call *Obsidiana*, for that they carry some resemblance of that stone, which one *Obsidius* found in Æthyopia;" vol. ii. p. 598. But Lewis and Short point out that the right readings in this passage are *Obsiana* and *Obsius*, and add the remark that "the older editions of Pliny read *Obsidiana* and *Obsidius*; hence the name of *obsidian* as the name of the stone." See also Holland's Pliny, ii. 629 a.

Pail. This word is not of F. origin, as I have stated, but is a genuine E. word. The gloss which appears in Wright's Vocabularies, ed. Wülcker, col. 124, l. 2, as "*Gillo*, wægel," is misprinted. The correct reading is "*Gillo*, pægel." This correction is due to Kluge; see Anglia, viii. 450; and see his further remarks upon the word in Engl. Studien, x. 180. Hence the E. *pail* is from A.S. *pægel*, just as E. *nail* is from A.S. *nægel*. Cf. Low G. *pegel*, a measure for liquids, in the Bremen Wörterbuch. Hexham gives Mid. Du. *pegel*, 'the concavity or the capacity of a vessel or of a pot'; cf. also Dan. *pægel*, half a pint. The W. *paeol*, a pail, is, I suppose, merely borrowed from Mid. English.

Pamphlet. I have already expressed my belief that this difficult word is derived from the name *Pamphilus* or *Pamphila*. The only difficulty is to know who the person was from whom the form arose. In any case, I wish to draw attention to the following facts. One of the first persons to use the word is Hoccleve. He not only writes it *pamfilet*, but he pronounces it with three syllables. In Hoccleve's Poems, ed. Mason (1796), there is a poem addressed to Richard, Duke of York, father of Edward IV. It begins with the line—"Go, litel *pamfilet*, and streight thee dresse." Secondly, the Knave of Clubs is sometimes called *Pam*. This is because he was called *Pamphile* in French; and Littré tells us that this is the proper name *Pamphilus*, but he does not know who is meant. My guess is this. The knave at cards was sometimes called *valet*; both *valet* and *knave* mean 'servant'; so the person referred to was a servant. Why may he not be the *Panfilo* (i.e. *Pamphilus*) of Boccaccio's Teseide? He was the servant of the celebrated Palemone, and helped him out of prison. See Tyrwhitt's analysis of the Teseide, books 4 and 5. Tyrwhitt calls him *Pamphilo*. The editor of the Teseide, printed at Milan in 1819, calls him *Panfilo*. If ever a writer of fiction had the power to make a name widely known in Italy and France, surely Boccaccio was the man.

Thirdly, the E. word is also spelt *panflet* or *paunflet*, with *n*. But, as I have just observed, the Italian name is also spelt *Panfilo*, with *n*. This is another link.

Parget, to plaister a wall. Guided by the fact that this word also appears as *sparget* in M.E., I have supposed it to be a derivative of Lat. *spargere*. But the *s* may have been added afterwards, since we have in E. an intensive prefix *s*-, borrowed from the O.F. *es*-, from Lat. *ex*-. If so, the etymology may lie in another direction. A correspondent has kindly sent me the following. "In T. Bond's *Corfe Castle*, Stanford, 1883, p. 107, an old account is quoted in which *pargeted* is Latinised by *perjactacit*." I have since observed that, in Wright's Vocabularies, ed. Wülcker, col. 602, l. 7, is the entry: "*Perjacio*, Anglice, to perjette." This certainly suggests that our word was originally *perjette*, and represents an O.F. **parjeter* and a Low Lat. **perjactare*. Of this O.F. form, and of this Low Lat. form, I can find no very clear traces; yet I have just given an example of *perjactare*, and of the Low Lat. *perjacio*, which is equally unknown, except from this solitary gloss. At the same time, the component parts of the word, viz. the F. prefix *par*- or *per*-, and the F. verb *jeter* (=Lat. *jactare*) are extremely common, and the new compound *par-jeter* may easily have been struck out at any moment, or the E. word may have been simply coined by compounding the verb *to jet* with the prefix *per*- or *par*-, without any authority from O.F. or Latin at all. When we consider how exactly *perjette* or *parget* answers to a F. **par-jeter*, and how precisely such a compound would express all that is meant by *pargetting*, viz. a thorough sprinkling, the above suggestion becomes highly probable. Moreover, the gloss above quoted, as well as the quotation above given, are in evidence; and in any other direction there is no evidence at all. We are bound to consider it as the best solution, till some further evidence is found. I may add that in the Chanson de Roland, l. 2634, it is said of some lanterns, that they "*pargetent* tel luiserne," i.e. spread abroad such a light; but it is thought that, in this instance, the O.F. *pargeter* answers to a Low Lat. *proiectare*, with the prefix *pro-*, not *per-*.

Pheon; see **Feon**.

Pot, to go to. I have adopted Mr. Wright's note to Coriolanus, i. 4. 47, to the effect that "the figure is taken from the melting-pot." I now believe that the figure was taken from the much more common *cooking-pot*. Whoever looks at the word *pot* in Littré will see how many F. phrases refer to the cooking-pot, and Dr. Schmidt, in his Shakespeare Lexicon, seems to take the same view; for he quotes the G. parallel phrase which Flügel gives as "*in die Pfanne hauen*, to put to the sword," lit. to hew into the pan. The reference is here to the shredding of vegetables before they are thrown into the pot to be cooked. I venture to think this expression is far more graphic, when we refer to it, in the natural way, to the ordinary cooking-pot. Without arguing the point further, I add one unmistakable example from King's Art of Cookery, first printed in 1708.

"In days of old, our fathers went to war,
Expecting sundry blows and hardy fare;
Their beef they often in their murrions stew'd,
And in their basket-hilts their beverage brew'd.
Some officer perhaps might give consent
To a large cover'd pipkin in his tent,
Where everything that every soldier got,
Fowl, bacon, cabbage, mutton, and what not,
Was all thrown into bank, and *went to pot*."

With this graphic and simple explanation I can rest satisfied. Hence, when the soldiers remark that Coriolanus has gone "to the pot," they mean that he will be cut in pieces. "The weaker goeth to the pot" occurs in Heywood's Proverbs (1562). And still more clearly, in Udall's translation of the Apophthegmes of Erasmus (1564), bk. i. Diogenes, § 108—"by the said tyranne *Dionisius*, the ryche and welthy of his subiectes *went* daily *to the potte* and were chopped vp."

See further under *Hodge-podge* in my Dictionary. The form *hochepot* occurs even in Chaucer. "Ye han cast alle hir words in an *hochepot*"; Tale of Melibeus, Six-text, Group B, l. 2447.

Purse. I have given this word, as is customary, as being one of F. origin. But it already occurs as *purs* in the eleventh century, and must have been taken immediately from the Lat. *bursa*. See Prof. Napier's list of glosses in Eng. Studien, xi. 65, where we find the entry: "*Fiscus*, purs, oððe seod." The A.S. *seod* means 'a little bag.' The change from initial *b* to *p* still remains puzzling. I wonder whether it represents a Celtic pronunciation of the Latin word.

Rivelled, wrinkled. I have given this word as being of A.S. origin. Further light is thrown on it by the gloss: "*Rugosus*, rifelede," contributed to Eng. Studien, xi. 66, by Prof. Napier, who refers, for the mode of formation of the word, to an article by Sievers in Paul und Braune's Beiträge, ix. 257, and to Kluge's Nominale stammbildungslehre, § 234. He also notes A.S. *gerifod*, wrinkled; Ælf. Homilies, ed. Thorpe, i. 614, l. 14.

Shatter. This is merely a variant of *scatter*. I note here that it is still in use in Kent in the old sense; as, "the wind *shatters* the leaves;" which is just Milton's phrase in *Lycidas*, l. 5.

Souse, Sowse, to plunge down upon suddenly. I find I have made a mistake in connecting this word with the sb. *souse*, meaning 'pickle,' which is a mere doublet of *sauce*, and which I explain, I believe, correctly. It is probable that the words were sometimes confused, but they are of totally different origin. When Pope says (Second Satire of the Second Book of Horace, l. 60) that certain folks "*Souse* the cabbage with a bounteous heart," he employs a verb which is a mere derivative from the sb. *souse*, pickle. But in another passage (Epilogue to Satires, Dial. ii. 15) he says—

"Come on, then, Satire! general, unconfined,
Spread thy broad wing, and *souse* on all mankind;"

and here he employs the same word as Shakespeare does in King John, v. 2. 150—

"And, like an eagle o'er his aery, towers
To *souse* annoyance that comes near his nest."

Mr. Wright correctly says, with respect to this verb—"to swoop upon or strike, is a term of falconry," and he illustrates it by an apt quotation from Spenser, F. Q. i. 5. 8. But he does not give the etymology. Webster, E. Müller, and others correctly separate the two words, but all they can think of is to ask us to compare the German *sausen*, to rush or bluster as the wind does, with which the verb to *souse* has nothing whatever to do. We did not borrow our terms of falconry from High German, but from French. The true 'source' is, without a pun, the very word *source* itself, strange as this may appear, and past all guessing. Our word *source* is the F. *source*, O.F. *sorse*, the fem. pp. of the verb which arose from the Lat. *surgere*. As applied to a river, it means the 'rise' or 'spring' of it; but as applied in falconry, it meant the upward spring or swoop of a bird of prey, and is so used by Chaucer, C.T. 7520, and House of Fame, ii. 36:

"Therefore, right as an hawke upon a *sours*
Upspringeth into th' aire;"

and again—

"Me fleeing, at a swappe he [the eagle] hente,
And with his *sours* again up wente."

The original sense of '*upward* spring' or '*upward* swoop' was easily lost, whilst the notion of 'swoop' remained; hence, the sense of direction being lost sight of, the word easily took the more useful sense of '*downward* swoop,' simply because the *downward* swoop of a hawk was of more consequence and was more closely watched than his *upward* swoop, which was of no special consequence to the hawker. At least, such is my belief, but I want more evidence. Besides this, the *r* was dropped; and this point I can prove. For, in the Book of St. Albans, fol. d1, back, we find: "Iff your hawke nym the fowle a-lofte, ye shall say, she toke it *at the mount* or *at the souce*." From this it is an easy step to the use of the word in Drayton's Polyolbion, Song 20, where birds are described as trying to dive to escape from the hawks, but the fowlers make them leave the water, and then the hawks secure them:

"But when the falconers take their hawking-poles in hand,
And, crossing of the brook, do put it [*the prey*] over land,
The hawk gives it a *souse*, that makes it to rebound
Well near the height of man, or more, above the ground."

To work out the word thoroughly would require a large number of quotations, but I think I have adduced enough to shew how the M.E. *sours* took a new form and a new sense. I should like to add that this view is entirely new, as far as I know at present; but I suppose the same thing will be said to me as was said when I discovered the etymology of the verb *to surround*, viz. that, in the first place, it's not true; and secondly, as shewn by our Dictionary-slips, though it is quite right, we knew it before.

Staniel, a kind of hawk. (E.) It is the same bird as the kestrel or wind-hover, the *Falco tinnunculus* of Linnæus. Nares quotes it from *Lady Alimony*, an old play dated 1659; see Hazlitt's Dodsley, xiv. 284. It does not really occur in Twelfth Night, ii. 5, but is probably the right word; the first folio has *stallion*. In Wright's Vocabularies we find: "*Aluctus*, Anglice a stamel"; where *stamel* is a misprint for *staniel*; for Halliwell quotes the same MS. correctly. Tracing the word still further back, we find: "Pellicanus, *stangella*," in an A.S. vocabulary of the eleventh century; in Wright's Vocab., ed. Wülcker, col. 287, l. 10. In Spelman's edition of the A.S. Psalter, Ps. ci. 7 (Ps. cii. 6 in the E. version), we find *pellicano* glossed by *stangillan* in two MSS.; this is the dat. case from a nom. *stangilla*. Our ancestors did not clearly know what a pelican was like. In the Vespasian Psalter, the same word appears with the older spelling *stanegella*, the sense of which is obvious, viz. 'the yeller from the rock.' Professor Newton kindly tells me that the *staniel* has "the same kind of metallic ringing voice as other hawks; it also frequents rocks where there are such, and makes its nest in or on them." The phonological changes are perfectly regular. The syllable *stān* is shortened by stress, precisely as in *Stan-ford*, *Stan-ton*, *Stan-ley* (all from A.S. *stân*). *Gella* or *gilla* is the agential substantive from the verb *gellan* or *gillan*, the mod. E. *yell*; hence *stangella* became *stan-yell*, or, with a slight weakening of the latter syllable (due to lack of accentual stress), precisely *staniel*. At a later time it was further shortened to *stannel*, just as *Daniel* is sometimes *Dan'el*. Even this is not the end, for sometimes the former syllable was translated by the form *stone*, and thus the bird was called the *stone-gall*. Both *stannel* and *stonegall* occur in Merrett's *Pinax Rerum*, 1667, p. 170. In Swainson's Provincial Names of British Birds, E.D.S. p. 140, we find the bird called *stannel*, *stannel-hawk*, *stanchel*, and even *stand-hawk*. Another name was the *wind-hover*, from its hovering in the wind, a habit (Prof. Newton tells me) possessed by no other common English bird. Taking advantage of this name, the guessing etymologists resolved the word into *stand-in-gale* or *stand-gale*, which they pretended to be the original of *staniel*; but this clumsy fiction is easily detected by observing that *gale* has a hard *g* (before *a*) which will not pass into the sound of *y*. Fortunately also there is a cognate G. word *stein-gall*, answering to the A.S. form all the way through; for the G. *stein* is the A.S. *stān*; and the G. suffix *-gall* is the same as the suffix in *nachtigall*, a nightingale. This G. *gall* is the O.H.G. *gala*, a singer, from the stem of the past tense of the strong verb *gellan*, and therefore having precisely the same sense as the A.S. suffix *-gella*, though differing in the vowel according to the ordinary stem-gradation. The A.S. *gellan* was applied particularly to hawks; as in [*ic*] *gielle swá hafoc*, I yell like a hawk; Riddle 25, l. 3 (Exeter Book). It is also used of the chirping of crickets, as being a shrill sound. How the G. *steingall* is to be derived from *stand-in-gale*, when German does not possess the word *gale* at all, we are not likely to be informed. I may add that, in the form *stone-gall*, the suffix is not quite the same as before, but is the same as the *-gale* in *nightingale*. The M.E. *galen*, to sing, is a secondary weak verb derived from the stem *gal*, which is the past singular stem of the strong verb *gellan*.

Steward. I have given **stigweard* as the theoretical A.S. form. But I have now found it, viz. in Birch's *Cartularium Saxonicum*, iii. 75. In the Middle Eng. translation of the same charter, iii. 77, the form is *styward*.

Vagrant. I add to my former note on this word the remark that the original O.F. form of the verb which I cite as *wakrer* or *waucrer* was *walcrer*, answering to M.H.G. *welkern*, a frequentative of the verb which appears in A.S. *wealcan*, E. *walk*. See Suchier's edition of the *Reimpredigt*, 1879, p. 78.

Whicche. See **Hutch** (above).

Whimbrel, a bird, a sort of curlew; *Numenius phæopus*. (E.) Willughby says the bird was described to him under this name by Mr. Johnson of Brignal (N. Riding of Yorkshire). See also Swainson's Provincial Bird-names, E.D.S., p. 199. It is easily analysed as being for *whim-b-r-el*; where *b* is excrescent after *m*, *r* is frequentative, *-el* is the suffix of the agent, and *whim* (allied to *whine*) is imitative. It is therefore the bird that keeps on uttering a cry imitated by *whim*; cf. Lowl. Sc. *whimmer*, E. *whimper* and *whine*, G. *wimmern*. See also my note on *whinyard* in Phil. Soc. Trans. 1885–7, p. 331.

II.—FIFTEENTH ADDRESS OF THE PRESIDENT, TO THE PHILOLOGICAL SOCIETY, DELIVERED AT THE ANNIVERSARY MEETING, FRIDAY, 18TH MAY, 1888. By the Rev. Prof. SAYCE, M.A., President.

I AM aware that in conferring upon me the honour of the Presidential Chair, the Philological Society has departed from a tradition of considerable standing. My immediate predecessors have been distinguished by their researches into the living languages of to-day, by the contributions they have made to the science of phonetics, and by their study of the fountain-head of all our philology in England, the English tongue itself. I can claim only to be a representative of what Mr. Sweet has expressively termed "antiquarian philology," of that side of linguistic science which deals with letters and symbols rather than with sounds, and essays to trace the history of language in the past rather than to observe its varying phases in the modern world. I have, in fact, lived more among inscriptions and ancient texts than among phonographs and the symbols of "visible speech."

But "antiquarian philology" does not exclude the study of phonetics and the observation of living speech. From the outset of my philological career, at a time when the comparative philologists of Germany and their followers in other countries were inclined to regard words as so many conglomerations of variable letters, I preached the doctrine that sounds and not letters are what the philologist has to examine, and that if we are to arrive at any solid results in our study of extinct forms of speech, it must be through the medium of living languages. In science, as in nature, we can reach the truth only by proceeding from the known to the unknown, by working backwards from what lies before us to that which belongs to the dead past. Had scholars been content to observe and analyse language as it actually exists, instead of forming theories about it as it once was, we should have been spared the numerous *idola* and false assumptions which have impeded the progress of scientific philology. We should have heard less about Sanskrit or Latin grammar, and more about the usages of our own tongue. Above all, we should have been spared explanations of phonetic change which a very little observation of existing speech would have shown to be impossible.

The science of language has often been compared with the science of geology, and the student of language may well take a lesson from the geologist. Geology traces the past history of the globe, explains the mode in which the rocks have been built up and the forms of life they contain have followed one another. But it does so by first observing the phenomena that affect and alter the surface of the earth to-day, phenomena that are in some measure themselves the results of former changes, the records of which lie hidden in the rocks below. The geologist, therefore, who would explain the phenomena of the present must have studied the phenomena of the past, while the student who would decipher the records of the past must be thoroughly acquainted with the phenomena of to-day. It is the same, or ought to be the same, in the case of the scientific student of language. Here, too, neither the history of the past nor the facts of the present can be neglected; they are but the two faces of the same shield, the necessary complements one of the other. Linguistic science is neither antiquarian philology nor the study of phonetics, but a combination of both.

Prof. Skeat, in the Presidential Address, which he delivered two years ago, describes himself as looking about for a subject which was not "already extremely familiar to most of" his hearers. My own difficulty is of quite the opposite character. I have a hobby, which, like every man who has a hobby, I am very willing to discourse upon. But I am not at all sure that you will be equally ready to listen to me. My special studies have lain in a direction in which I have but few fellow-labourers, and I am therefore doubtful whether anything that I can say about them can be of interest to you. The extinct languages of Western Asia, which are being painfully recovered from its long-buried monuments, offer but little attractions to those whose time and interest have been occupied with the burning questions of modern philology. Nevertheless, I believe that even these languages, fragmentary and extinct as they are, will help to throw light upon some of the problems and difficulties of our own modern science. If it is true that the scientific philologist cannot afford to neglect the most barbarous dialect of the smallest and most barbarous tribe, it must be still more true that he cannot disregard languages which stand to the living languages of the East in the same relation that the institutions of the Roman world stand to the world of to-day.

Students of civil and constitutional history tell us that we cannot understand the laws and customs, the culture and policy of the present, without the help of the past. The history of modern Europe, the social life in which we participate, would have been altogether different had the Roman Empire never existed; and though the Roman Empire seems widely removed from ourselves and our surroundings, the scientific historian must take account of its influence upon the course of future events if he would read aright the tale of European history. What holds good of history holds good also of philology. In so far as philological science is historical, the problems it presents must be solved by an appeal to history. In order to know thoroughly what a language is now, we must know what it has been in the past. Language, like all else in nature, is an example of perpetual development, and the key to this development is the study of the phases it has undergone in the past.

I will try, therefore, to indicate some of the ways in which the decipherment of the Cuneiform Inscriptions has thrown light, not only on the historical philology of Western Asia, but also upon the general questions raised by the science of language. But let me first point out what a wide linguistic field is covered by the phrase "Cuneiform Inscriptions."

We have, to begin with, the Persian texts of Darius and his successors composed in the Indo-European language of ancient Iran. It represents the dialect of Western Persia in the Akhæmenian era, and is consequently invaluable for the purposes of comparison with the ancient Iranian dialect preserved in the Avestan literature. Whether the latter were spoken in Baktria or, as is now maintained, in Media Atropatene, is of little consequence from a philological point of view; though it is possible that light may be cast even on this question by the Cuneiform monuments. The Median princes with whom Sargon came into contact in B.C. 713, eastward of the Kurdish range, have unmistakeably Indo-Aryan names of an Iranian stamp. In Parna and Satar-parna we have the *-phernês* of the Greek transcribers, the *franâ* of Old Persian (in a name like Viñdafranâ, Intaphernês), Satar-parna, like the district of Sidir-pattian, probably containing the same element *chitra* 'a leopard,' as Chitra-takhma, the Greek Sitratakhmês. The name of Ariya, the chief of Bustu, needs no commentary, any more than that of Arbaku or Arbakês, or of Aspabara 'the horse-bringer.'

The decipherment of the Old Persian Cuneiform texts led the way to the decipherment of other texts written in more than one Cuneiform system of writing. Step by step the Semitic language of the valleys of the Tigris and Euphrates was made out, with its two dialects of Assyrian and Babylonian, and with its records extending over about three thousand years, the latest dated record being contemporary with Domitian. Through Assyrian we have been made acquainted with the earliest form of agglutinative speech that has left memorials of itself. This is the Accado-Sumerian of primitive Chaldæa, whose speakers preceded the Semites in their possession of the country, and which was subdivided into two main dialects, the Accadian of the north and the Sumerian of the south, together with several sub-dialects. As in the case of Assyrian, so too in the case of Accadian, the monuments enable us to trace the history and gradual development of the language through the course of several centuries.

Accado-Sumerian, however, was not the only form of agglutinative speech whose existence has been revealed to us by Cuneiform research. The Persian and Assyro-Babylonian texts of the monuments of Darius and Xerxes are accompanied by a third text, the miscalled Median or Proto-medic. It really represented, as I have essayed to show,[1] the language of South-Eastern Susiana, an earlier form of which has been preserved to us in the inscriptions copied by Sir A. H. Layard in the plain of Mal-Amir, and was but the sister-dialect of the language of Susa, memorials of which have been discovered, not only among the ruins of Susa itself, but as far south as the Persian Gulf. If we turn from the extreme south of the ancient civilised world of Western Asia to the extreme north, we find among the mountains of Armenia, and more especially on the shores of Lake Van and the banks of the Araxes, Cuneiform inscriptions in yet another form of language. These are the Vannic inscriptions which I succeeded in deciphering a few years ago,[2] and which have already yielded us not only startling historical facts, but startling linguistic results as well.

Not even yet, however, is our survey completed of the area covered by the Cuneiform system of writing. We owe to Mr. Pinches the discovery of Cuneiform texts in the language of ancient Kappadokia. Several clay tablets inscribed in this still undeciphered language are now in

[1] "The Inscriptions of Mal-Amir and the Language of the Second Column of the Akhæmenian Inscriptions," in the Transactions of the Sixth Oriental Congress at Leiden, vol. ii. (1885).

[2] "The Cuneiform Inscriptions of Van, deciphered and translated," in the *Journal of the Royal Asiatic Society*, vol. xiv. parts 3 and 4 (1882). I have published a Supplementary Paper in the same *Journal*, vol. xx. part 1 (1888), partly based on the researches and discoveries of Guyard and D. H. Müller.

Europe, which have come from the ruins of some old library in the neighbourhood of the modern Kaisarîyeh. The ideographs occurring upon them show that the library was established in a temple of the Sun-god.

Besides these extinct languages, relics of which, more or less numerous, we now possess, thanks to the spread of the Cuneiform system of writing, we occasionally come across isolated examples of other languages, also embodied in Cuneiform characters. Thus I possess a hæmatite cylinder found in Asia Minor, which carries an inscription in an unknown form of speech, and Dr. Oppert has pointed out in De Clercq's collection (pl. xxx. No. 321) a seal bearing a Phœnician text, but written in Cuneiform, while in 1842 a hæmatite cylinder was discovered on the hills near Herat inscribed with Cuneiform signs, which disclose a language of unknown type.[1]

The Assyrians themselves, moreover, or rather the Babylonians of the south, have made us acquainted with some of the words and phrases used by the neighbouring populations. The mountains bordering on the eastern side of the Chaldean plain were occupied by wild tribes known as Kassi or Kossæans, some of whom once overran Babylonia, and established there a dynasty of kings. A tablet gives us the equivalents of such words as 'sky' (*dagigi*), 'earth' (*miriyas*), 'wind' (*turukhna*) in their language, and another tablet explains the meanings of their royal names. In other cases words are interpreted which belonged to the language of Elam, or to the Śuti, a nomad Semitic population in the eastern part of Babylonia, or again to the inhabitants of the island of Dilvun in the Persian Gulf. The constant necessity the educated classes were under of learning the extinct Accadian gave them an interest in foreign languages, and

[1] *Journal of the Asiatic Society of Bengal*, vol. xi. pp. 316 *sq.* The cylinder was bought by Major Pottinger, but was afterwards unfortunately lost. The characters, so far as I can make them out from the copy, read as follows: (1) 'god' *Nin(?)-zi-in*; (2) *Su-lukh(?)-me-am-el*; (3) *Khi-ti-sa* 'servant' *na*. The usual formula on a cylinder of the kind is "To the god *x*, A the son of B, his servant." In the second line the places of the third and fourth characters apparently require to be reversed.

in what we may term comparative philology. Hence we need not be surprised that an Assyrian king goes out of his way in a historical inscription to inform us that a particular object was called by a particular name in Syria,[1] or that Semitic words were subjected to the same kind of etymologising as the words of English or Latin in the dictionaries of the last century. Just as Junius derives *soul* from *ζάω* and the Teutonic *wala* 'a well,' or *merry* from the Greek *μυρίζειν*, so the Babylonian scribe derived the Semitic words of the language he spoke from the extinct vocabulary of primæval Sumer.[2]

Two facts, among others, of interest to the general philologist have resulted from the decipherment of the Assyrian texts. We possess in them contemporaneous documents of Assyro-Babylonian, which mount back to a period between 3000 and 2000 B.C. Nevertheless, throughout the greater part of the period during which we can trace the history of the language, it already exhibits extensive marks of decay. The final *m*, which once characterized the case-endings, is frequently lost, and the case-endings themselves tend more and more to be confused together. Analogy plays a conspicuous part in the formation of the verbal tenses, and the construct genitive of the Semitic parent-speech is constantly replaced by a construction of which the genitival relation is expressed by the pronoun *sa* 'which.' But it is in its phonology that Assyro-Babylonian shows the greatest signs of decay, even on the oldest monuments. It is true that its sounds were represented by a syllabary which had been the invention of the speakers of an agglutinative language, and was ill adapted to express the peculiar sounds of a Semitic idiom. But with every allowance for the imperfections of the instrument by means of which the

[1] "I built a portico like a Syrian palace, which in the language of Phœnicia they call a *Bit-khilani*" (Sargon's Bull-inscription, 67–69).

[2] Thus the word *sabattu* 'a Sabbath' from *sabatu* 'to complete,' is derived in the lexical tablets (W.A.I. vol. ii. p. 32, 16) from the Accadian *sa* 'heart,' and *bat* 'to complete,' and accordingly interpreted as 'a day of rest for the heart.' and *śaparu* 'a snare,' is derived from the Accadian *śa* 'a cord,' and *para* 'to spread.'

sounds of the language were represented, it remains that these sounds had degenerated widely from those of the Parent-speech. Like the Mandaite it had lost the gutturals, so distinctive of Semitic utterance; *hha* (ح) had disappeared more completely than in Phœniko-Hebrew, where it was merged in *kheth*; there is no trace of *ghain* (غ), and even *ain* had passed into the diphthong *ê*. The semi-vowels *w* and *y* are seldom represented in writing before *u* and *i*, and the sibilants have undergone much the same fate as the gutturals. As in Hebrew, *dhâl* (ذ), *dhâd* (ض), and *ẓâ* (ظ) have all been confounded with other sounds. In another respect, also, the characteristic sounds of the Semitic languages have undergone transformation. *Teth* has been assimilated to *d*, and was probably pronounced like the dental in the English *then*, and though *qoph* has not been altogether lost, it is frequently softened into *kaph* in the Assyrian dialect of the north, while it regularly becomes *gimel* in the Babylonian of the south, just as it does in the Arabic of modern Egypt.

Here then we find that a language which was spoken over a wide tract of country, and was stereotyped in literature at an early period, had already passed into what may be described as a very modern stage of linguistic growth, at all events so far as its phonology was concerned. More than 4000 years ago Assyrian had undergone more phonetic change than the Arabic that is spoken to-day in the streets of Cairo.

And yet this Arabic is considered to have departed very widely from the original purity of the language brought into Egypt by its Arab conquerors. If we turn to the lawless nomad tribes of north-eastern and central Arabia, we find the Arabic of the Korán still spoken as it was in the days of Mohammed. According to Palgrave, the three case-endings are still correctly used in Central Arabia, and the Bedouin throughout the Peninsula distinguish in pronunciation the gutturals and sibilants peculiar to the Semitic tongues, and preserve the primitive pronunciation of *teth* (*ṭâ*), and *qoph* (*ḳaf*). It is only in the case of *p*, which has become *f*, that the Arabic of the Bedouin stands on a lower level of phonetic decay than the Assyro-Babylonian.

Now the fact that, from a linguistic point of view, the Arabic of the Modern Bedouin is more archaic than the Assyro-Babylonian of 4000 years ago, settles a question which has sometimes been asked by the students of language. It proves that two members of the same family of speech can exist side by side, though in two wholly different stages of linguistic development. The Semitic languages are connected together by peculiarly close ties, while Assyro-Babylonian was not separated from Arabic by any wide geographical interval; nevertheless, the latter is still in a stage of growth which must have been left by the former long before the earliest Assyrian monuments known to us were inscribed.

What makes the fact still more interesting is the further fact that the Semitic language which has shown itself so conservative is not a language which was committed to writing at an early epoch, but one which is still spoken by wild Bedouin tribes. It is the cultured languages of the Semitic group which exhibit signs of transformation and decay, while the language of the illiterate "desert-ranger" remains unchanged from generation to generation. This runs counter to the usual doctrine according to which the languages of savage and barbarous tribes are in a constant state of flux. But it is thoroughly in harmony with the stationary character and remarkable uniformity observed to exist in the various languages or dialects of the Eskimaux, more particularly of the east,[1] as well as with the relatively primitive nature of that least literary of European tongues, the Lithuanian.

[1] See my "Principles of Comparative Philology," p. 86. In *The American Antiquarian*, vol. x. p. 1 (1888), p. 40, Mr. F. Boaz says: "The languages of all tribes from Greenland to the Coast of Behring Straits differ only very slightly. . . . In Greenland and North-Eastern America the Angaskut use in their conjurations a great number of words which do not occur in the common language. Part of them are symbolical; the greater number, however, are obsolete radicals. Some of them are still in use among the tribes of Alaska, and some are still found in Greenland. They prove the existence of a close relation of the dialects in olden times." For this sacred language of the Eskimo conjurors see again my *Principles of Comparative Philology*, p. 84, note 2.

But Assyrian phonology, degenerated as it is, has nevertheless served to show that in one respect the phonology of the Parent-Semitic and of the Parent-Aryan agreed together. Prof. Haupt has sought to prove that the Semitic *dhâl*, *ẓâ* and *tha* were originally $d+h$, $ṭ+h$, $t+h$, where the aspirate was pronounced as in the Sanskrit *dh* or *th*. At all events a comparison of Assyrian with Phœniko-Hebrew makes it clear that the Parent-speech once possessed the sounds $s+h$ and $t+h$. Both Assyrian and Hebrew, that is to say, the old language of Semitic Canaan, belong to the northern division of the Semitic family, and an intimate relation exists between them. Now we find that in certain cases where Hebrew has *h*, Assyrian has *s* and *t*. Thus the causative conjugation in Assyrian is formed by the prefix *s*, in Hebrew by *h*, and the pronouns of the third person *su'* and *si'* have become *hû'* and *hî'* in Hebrew. Similarly the suffix of the feminine *t* has in most cases passed into *h* in Hebrew. As regards the sibilant, the majority of the other Semitic languages have adopted the same mode of dealing with the original sound as Hebrew. Though traces of a causative in *s* are to be found in Hebrew, Arabic and Ethiopic, it is only in Aramaic that we meet with the same sibilated conjugation as in Assyrian, and the only other Semitic language known to us besides Assyrian which has preserved the initial *s* of the pronoun is one of the dialects of ancient Himyar, with its modern descendant the Mehri.

Now there is but one way of explaining the fact that whereas in some Semitic languages and in certain words we find *s* and *t*, in other languages and in other words we find *h*. Both alike must be derived from a primitive $s+h$, $t+h$, the initial sibilant and dental being retained in some cases, and the final aspirate in others.

I have said that there is a second fact resulting from the decipherment of the Assyrian texts which is of interest to the general philologist. This relates to the fixity of forms of speech, and the antiquity of language. We have just seen how marvellously unchanged has been the language of the Bedouin Arab; what it is to-day, we may safely say it has been substantially for the last four or five thousand years. Its speakers have lived isolated lives; they have not had that contact with other languages which brought about the early disintegration of the Assyro-Babylonian dialects. We may perhaps argue from this that when a form of speech once acquires a particular type, it needs the disintegrating influence of foreign tongues to produce alterations in it. At any rate this seems to have been the case in the Semitic family.

But even those members of the Semitic family which have departed most widely from the original type have done so to a comparatively slight extent. One of the chief difficulties of Comparative Semitic Philology consists in the close relationship of the individual members of the family one to another, while there is no extant Parent-speech, like Latin in the case of the Romanic idioms, which can offer us a starting-point for our investigations. French, Italian, and Spanish differ more from each other than do the several Semitic languages. The latter have preserved to a most remarkable extent a common phonological system, a common structure, a common grammar, and a common stock of words.

And yet the language among them, which has on the whole undergone the greatest amount of change, is just the language whose contemporaneous records can be traced back to the third millennium before the Christian era. It had already acquired all those characteristics which mark the Assyrian off from its sister tongues. Such a fact gives us some idea of the length of time that must be allowed before we arrive at the Parent-Speech, or, at all events, at that undivided community whose members afterwards carried with them the dialects that eventually became the Semitic languages. A comparison of the names of objects shared alike by the northern and southern languages of the family, tends to show that this undivided community had its home in the deserts of north-eastern Arabia, where it adjoined the cultured kingdoms of the Accado-Sumerians. A recollection of its nomad life was retained by the Assyrians, who gave the 'city' the name of *âlu*, the Hebrew *ôhêl* 'a tent.'

The Parent-Speech was distinguished from the other languages of the world, not only by its phonology and its lexicon, but also by its structure and its grammar. The majority of its words were triliteral, each consisting of a framework of three consonants, and the relations of grammar were for the most part expressed by varying the vowels within this framework. It exhibited, therefore, a more complete form of flectional speech than has been known before or since.

I will not stop to inquire whether or not this triliteral character of the words used by the primitive Semitic speaker had arisen out of something else. We have no materials for deciding or investigating the point; at the earliest epoch of Semitic speech to which we can reach back, it was distinguished by its triliteralism, even borrowed words as well as biliteral roots tending to follow the general analogy, and assume a triliteral form. The peculiarities which distinguish the Semitic idioms to-day distinguished the Parent-language of the pre-historic nomad.

And yet it is possible that this Parent-language was not such a solitary islet of human speech as it seems at first sight to be. Between it and Old Egyptian there appear to be points of similarity which cannot be accounted for by the theory of coincidences. It is true that the Egyptian vocabulary shows no clear traces of connection with that of the Semitic tongues, except in the case of borrowed words; it is also true that the triliteralism and internal vocalic change of the Semitic idioms are unrepresented in Egyptian; but it is equally true that between the Semitic and Egyptian pronouns and grammatical suffixes there exists a remarkable resemblance. I am fully aware that in certain respects, such as the indication of the causative conjugation by the suffix *s*, there is a further resemblance between Egyptian and the "Hamitic" languages of the south, such as the Haussa, but this resemblance does not extend very far. The construct genitive, for instance, which Prof. Maspero has shown to exist in Old Egyptian, is of itself a peculiarity, which claims direct connection with Semitic speech. I am no advocate of associating languages together because of one or two points of likeness in grammar or vocabulary; but when I find the Egyptian personal pronouns *anuk*, *entu-k*, *entu-s*, *anu*, *tenu*, *senu*, corresponding exactly to the Old Semitic *anôki*, *anta* (,*-ka*), *su'*, *si'*, *-(â)nû*, *antum*, *sunu*, I cannot resist the conclusion that some relationship must exist between Egyptian and Old Semitic.[1] Professor Terrien de Lacouperie, in the Presidential Address of two years ago, has shown that mixed languages, in which the elements of the structure and grammar are derived from more than one family of speech, are to be found in Eastern Asia, and Prof. von der Gabelentz has proved the same for the Melanesian islands of the Pacific.[2] In Old Egyptian, it seems to me, we must recognise the same fact. Here, too, we have a mixed grammar compounded of elements that are partly African and partly Semitic.

But the Semitic elements appear to belong to a period anterior to that in which the principle of triliteralism became fixed and stereotyped. They bear witness to a form of speech which was Semitic, and yet not of the type of that which I have termed the Semitic Parent-speech. Whether this form of speech, which for want of a better name I must call Old Egyptian, were the sister or the aunt of the Semitic Parent-speech, I cannot say; the question must be left to be decided by future research. On the ethnological side, however, it seems probable that the Egyptians were descended from the people of Pun or Punt, who lived on either shore of the southern part of the Red Sea, though a dash of African blood has given them a massiveness of jaw which the people of Pun did not possess.[3] As the people of Pun were inhabitants of the southern coast of Arabia, their settlements on the western side of the Bab-el-Mandeb being, like

[1] Mr. Le Page Renouf's arguments against this conclusion in the *Proceedings of the Society of Biblical Archæology*, March, 1888, rest upon what I must be allowed to call an obsolete theory of roots. Years ago, in my *Principles of Comparative Philology*, I fancied I had effectually disposed of the theory, and the revolution brought about in Indo-European Comparative Philology by the "Neo-Grammarians" has since deprived it of the support it was once supposed to find in the Indo-European languages.

[2] "Beiträge zur Kenntniss der Melanesischen, Mikronesischen und Papuanischen Sprachen" (1882), a treatise which ought to be carefully studied by every student of language.

[3] Such is one of the results derived from the casts, etc., of the ethnological types represented on the Egyptian monuments, taken by Mr. Flinders Petrie for the British Association in 1886-7.

those of the later Ghe'ez, of Arabic origin, it is probable that in the far-distant past they were in geographical proximity to the nomad Semites, and may therefore easily have spoken cognate languages. In any case it would appear that long before the foundation of the historical Egyptian monarchy in the fifth millennium before our era, we get a glimpse of a language or dialect which stood to the Semitic Parent-speech in the relation of sister or aunt. It takes us back beyond the earliest epoch to which the Semitic languages themselves confine our range of vision, to a period, in fact, when triliteralism had not as yet become the dominant principle of Proto-Semitic structure. When we remember the fixity and immobility of the Semitic idioms during the long period of time in which we can trace their history, when we further remember that Egyptian was already an aging language at the date to which the oldest monuments of it belong, we can form some idea of the vast antiquity to which we must refer the first beginnings of Proto-Semitic speech. We are transported to an age far behind that of the Semitic Parent-language, or the time when triliteralism first became the governing principle of Semitic structure.

The same testimony is borne by the dialects of pre-Semitic Chaldæa. We find them inscribed upon monuments, some of which mount back to about 4000 years before the Christian era. From this time onwards we can trace their history for several centuries, until at last the language of the primitive inhabitants of Babylonia became the sacred idiom of their successors, and was preserved like monkish Latin down to the days when the conquests of Alexander brought the Greeks and the Orientals face to face. The transformation undergone by Accado-Sumerian in the hands of the Semitic scribes, many of whom understood it badly, does not concern us here; it is rather the changes which it experienced while it was still a living tongue that have an interest for us. Some years ago, in 1877, a paper of mine was read before this Society upon Accadian Phonology, in which I endeavoured for the first time to trace some of the changes experienced by Accado-Sumerian through the action of phonetic decay. These changes were in many instances very considerable, and bear evidence to the length of time during which they must have been going on. Since the publication of my paper the subject has been further worked out, more especially by Haupt and Hommel, and we now have a fair idea of the extent to which the original appearance of Accado-Sumerian had been affected by phonetic change. Already in the earliest of its monuments it shows signs of decay. *Wüdün*, for instance, signifies 'wine' in the Accadian dialect of the north, the proximity of whose speakers to the Semites caused it to alter more rapidly than the Sumerian of the south. In the latter dialect, and in the oldest records of it that we possess, the word in question takes the form of *gesdin* (or *gösdin*). But *gösdin* itself was not the primæval word. This was *gwösdin*, literally 'the draught of life,' from *gwös* 'a draught,' and *din* 'life.' The wine of the ancient Chaldæan, in fact, was like the Soma of India, that which made glad the hearts of gods and men. Similarly the fire-god was called *Wubára* in Accadian, *Gubára* in Sumerian, dialectal varieties of which were *Kibira* and *Gibil*, but there is evidence to show that the original form of the name was *Gwusbára*, though it was a form that had been lost in pronunciation before the rulers of Tel-loh erected their monuments in the fourth millennium B.C.

Accado-Sumerian, however, was already a fully-formed and complete language. Its structure and grammar were already fixed; it was already as far removed from the earliest beginnings, not only of language in general, but also of the particular form of language to which it belonged, as are the Turko-Tatar languages of to-day. Whatever changes subsequently passed over it, they were phonetic changes only, affecting in no way its special type and character. Sixty centuries ago Accado-Sumerian was already very old.

I shall pass over the contributions that have been made to the comparative philology of the Semitic idioms by the Semitic language which we usually term Assyrian, though its older and purer form was spoken in Babylonia rather than in Assyria. I shall say nothing of the help it affords in settling the question of the primitive home and social condition of the undivided Semites; how instructive it is, for example, to find that whereas the Phœniko-Hebrew word for 'a city' is borrowed from Sumerian, *âlu*, which is used in Assyrian in the same signification, is identical with the Hebrew *ôhel*, 'a tent.'[1] Nor shall I point out what light it has thrown on the formation of the Semitic Perfect, proving that the third person is merely an abstract noun, while the other two persons are amalgamations of the noun with the personal pronouns. Such matters belong rather to the special province of Semitic philology, than to linguistic science in general.

But I cannot refrain from drawing your attention to the new vistas that have been opened up, not only for the student of history, of religion, and of ancient geography, but also for the student of language, by the decipherment of the inscriptions of Van. Throughout the larger part of the country now known as Armenia, and extending northwards of the Araxes into the modern Georgia, inscriptions are found, written in Cuneiform characters which were borrowed from Nineveh, but in the language of a kingdom which had its capital on the shores of Lake Van. The language is inflectional in the same sense as is the Georgian of to-day, but it does not belong to the Indo-European family of speech. In fact, down to the close of the seventh century before our era, when the monumental record forsakes us, there is no trace throughout this district of any other language than that of the Vannic kings. Wherever they led their armies, moreover, eastward, northward, or westward, the names of the princes they encountered, and of the countries they traversed, are all distinctively non-Aryan. As late, therefore, as the age which ushered in the fall of the Assyrian Empire, Armenia had not as yet been conquered by Aryan-speaking tribes.

This fact, coupled with the further fact that the vocalism

[1] The identification of *âlu* with *ôhel* was first made by myself in 1872, in the *Transactions of the Society of Biblical Archæology*, i. 2, p. 305, and like many other things has since been re-discovered by younger Assyriologists.

of Armenian is European and not Asiatic, while the Iranian element once supposed to be present in it has turned out to be due to Persian influence of comparatively late date, goes to show that the classical tradition concerning the Armenians was based on actual history. Herodotos (vii. 73) tells us that the Armenians who served in the army of Xerxes were a colony from Phrygia, and Eudoxos declared that their language was largely Phrygian,[1] the Phrygians themselves being stated by Strabo (pp. 295, 471) to have been of Thrakian origin. Such a tradition cannot have been very old at the time when Herodotos committed it to writing, and the support it has received from my decipherment of the Vannic inscriptions leads us to accept the view that in Armenian we may see the last surviving representative of Thrako-Phrygian speech. This alone would give a high importance to the scientific investigation of the Armenian language, an importance which is enhanced when we remember the close connection that seems to have existed linguistically as well as geographically between Thrako-Phrygian and the Greek dialects.

But the recovery of the old Vannic language itself ought to possess considerable interest for the comparative philologist. Considerations of geography, as well as of ethnology, would suggest that it belonged to the family of speech of which Georgian, Mingrelian, Suanian, and Lazian are the living representatives. In this case it will become possible to analyze the words and grammatical forms of Georgian, hitherto one of the greatest puzzles of linguistic science, and to trace their transformation into their present shape. But even if it shall turn out that the Vannic language is the waif of an otherwise extinct family of speech, it will still be well worth the attention of the philologist. Its grammar belongs to the same type as that of Georgian, but is infinitely more simple and transparent. There is seldom much difficulty in discovering the root of the word; the suffixes are limited in number, and are used with great regularity. The

[1] Καὶ Εὔδοξος δὲ ἐν γῆς περιόδῳ φησὶν, Ἀρμένιοι τὸ γένος ἐκ Φρυγίας, καὶ τῇ φωνῇ πολλὰ φρυγίζουσι.—Eustath. *in Dion.* v. 694.

language holds the same midway place between agglutination and inflection as does Georgian; in fact, so far as one can judge at present, it may be pronounced inflectional rather than agglutinative. The suffixes in most common use are *-ni*, *-li*, and *-di*, which, like the suffixes of the Indo-European languages, may be employed either in a flectional or a classificatory sense, or, again, without any meaning whatever. Thus, *-ni* and *-di* denote the accusative and locative of the noun, but *-ni* also forms adjectives, and *-di* nouns of place, while both are employed without any special signification to attach a root to another suffix. Similarly by the side of a phrase like *ini-li zai-li zadua-li* 'after this gate was built,' we find *pi-li* 'the place of a name,' or 'memorial,' and *qabqabru-li-ni* 'approach,' where *-li* serves to attach the suffix of the accusative to the stem of the word. Other suffixes which may be mentioned are *-ka*, which expresses the idea of race or descent, as in *Argisti-ka-s* 'the race of Argistis,' *-a*, which denotes persons, as in *tarsu-a* 'the people of strength,' that is, 'soldiers,' and *-khi*, or with the adjectival suffix *-khi-ni*, which represents the patronymic. The nominative terminated in *-s*, the genitive and dative in the vowel of the stem (*-a*, *-i*, and *-u*), and there does not seem to have been any special suffix for expressing the plural. At all events, there is usually no difference between the forms of the singular and plural, both in the noun and in the verb. The machinery of the verb is of the simplest possible description. There is only one tense, the past, the first person singular of which is represented by the suffix *-bi*, while the third person singular and plural ends in *-ni*, perhaps a contracted form of the demonstrative *i-ni* 'this.' Other forms of the verb are expressed by gerunds and participles, the most common being the dative of the gerund in *-li*, which is used as a present, a future, and an optative. *Alus tulie*, for example, 'whoever carries away,' is literally 'whoever (is) for carrying away.' I may add that composition plays a large part in the formation of the language; thus, *abili-du-bi* 'I burnt,' is properly 'I set on fire,' *śui-du-bi* 'I appropriated,' is 'I set for a possession,' and the word *tarsu-a*, quoted above, is a compound of *tar* 'strong,' and *su* 'to make.'

Though the Vannic inscriptions are numerous, and some are of considerable length, no bilingual text has as yet been discovered. It may, therefore, be asked how it was that I succeeded in deciphering them. I will answer the question as briefly as I can.

When the Cuneiform characters of Nineveh were borrowed by the people of Van, they selected from the multitudinous signs of the Assyrian syllabary only those which expressed such simple values as *a*, *ba*, *bi*, *bu*, etc., along with a few others, which represented closed syllables like *gis*. At the same time, they rejected the polyphony of the Assyrian system, assigning to each character one value only. Fortunately for us, however, they did not content themselves with these phonetic characters; they also borrowed the 'determinatives' of the Cuneiform system of writing, as well as a good many ideographs. Consequently we can always tell in an inscription whether a particular word represents the name of a man, of a woman, of a city, of a country, or such objects as oxen, sheep, metals, wood, and the like, through the help of the determinatives prefixed to it. Similarly, the ideograph of plurality indicates to us when a word is employed in the plural number, while the other ideographs, which are freely scattered through the texts, give us some idea of what the inscriptions are about. Moreover, by comparing two parallel passages together, it is often possible to arrive at the Vannic pronunciation of the ideographs, what is expressed by an ideograph in the one passage being written phonetically in the other. In this way I was enabled to construct the framework of Vannic grammar, and to determine the signification of a good many words. It then became clear that the Vannic scribes had not only borrowed the Assyrian characters in the forms found in the inscriptions of Assur-natsir-pal, the first Assyrian monarch who penetrated into their country, but had also borrowed, or rather imitated, the stereotyped phrases of his historical texts. That such was the case had already been divined by the French Semitic scholar Stanislas Guyard, whose untimely death is still deplored by science. He had observed, by an attentive study of the ideographs occurring in it, that a formula which is frequently attached to the Vannic inscriptions must correspond with the execratory formula added at the end of Assyrian monuments of the same kind. The decipherment of the language has shown that his conclusion was right.

Since the publication of my Memoir on the Vannic Inscriptions, the work of decipherment has been carried on first by Guyard, and subsequently by Prof. D. H. Müller, of Vienna. New texts have been brought to light, new words explained, and corrections introduced into the translations I put forward six years ago. Already a large part of the long-lost and forgotten Vannic language has yielded up its secrets, and a fresh field has thus been won for philological research.

It is time now to turn from an account of what I have been doing myself to what has been done by others in other fields of research. Mr. Wharton, more especially, has for some years past devoted himself to the neglected subject of Latin etymology, and the advances made by Comparative Philology, more especially in the hands of the so-called Neo-Grammarians, have enabled him to discover phonetic laws, and determine the etymology of words which have hitherto been the despair of the philologist. Most of his discoveries remain unpublished: a very important one, which throws light on the derivation of a large number of words, is placed before you this evening for the first time. I shall, I know, express the sentiment of the Society, if I thank Mr. Wharton for his kindness in allowing the results of his investigations to be made known through our means.

III.—ON THE VOCALIC LAWS OF THE LATIN LANGUAGE. By E. R. Wharton, M.A.

(*Read at the Society's Meeting, June* 1, 1888.)

Latin Vocalism. I. Short Vowels.

[Vowels not marked long are understood to be short.]

(1) Besides the recognized vowels *i*, *u*, *e*, *o*, *a*, Latin must have possessed a 'modified' *u* pronounced like French *u*, German *ü*, with a sound between *u* and *i*, and expressed sometimes by *u* sometimes by *i*. The Emperor Claudius proposed for it a peculiar sign, ├: we may use *ü*.

Thus *lubet lunter surpiculus* were later written *libet linter sirpiculus*: *cliens* goes with *cluō*, *li-tô* ('pay one's vows') with *luō*, *cilium* with κύλα, *ligô* with λυγίζω, *suf-fiō* with θύω, and apparently *miser* with μυσαρός: *stipula* answers to Old Slavonic *stŭblo* (a by-form of *stĭblo*), *stringō* to Old Slavonic *strùgati*, *tinguō* to Old High German *duncōn*. So, I would suggest,

nimis stands for **numis-um*, the old form of *numerum* (cf. Oscan *Niumsieis* 'Numerii'), and *nimis altus*=*numerum altus* 'a quantity high,' as French *trop haut*=Lat. *turbam altum* 'a crowd high':

pingō 'paint' (originally 'stipple') goes with *pungō* 'prick':

sirempse (later *siremps*, as according to Wölfflin *instar* 'weight' is from *instāre* 'to press on') stands for **surempse*, Inf. Perf. of **surimō* (whence Festus has the Perf. *surēmit*), the original form of *sūmō* (cf. Naevius' Inf. Perf. *sumpse*) 'to assume,' so that the phrase 'sirempse lex esto quasi, etc.' means properly 'let an assumption be law, as though, etc.' The first element in these words is, as Bréal has suggested, *sus* 'up' as in the phrase *susque dēque* 'up and down' and in *suspendō sustulī*.

With the same letter *ü* we may account for Augustus' spelling *simus* for *sumus*: *culullus intubus lacruma manubiae obstupescō quadrupes satura* were later spelt *culillus* etc.; *optumus* and other Superlatives gave way to *optimus* etc.: *āverr-uncus* and *long-inquus* have really the same termination: from *supô* came *dis-sipô*. Further instances will be given below.

(2) Latin vocalism was complicated by four distinct influences: intermixture of dialects, accent, adjoining letters, and analogy.

(I.) Dialect:

The most perplexing phenomenon in Latin vocalism is the occasional change of *e* in the root-syllable into *i*, and of *o* into *u*. The later Roman dialect, as we shall see, changed every *o* before a consonant in the *final* syllable into *u*: the difficulty is to account for sporadic changes of radical *o*. It may be conjectured that some dialect—whether that of the lower or of the upper class does not appear—changed *every* radical *e* into *i* (as Gothic does), and that either the same or some other dialect changed every radical *o* into *u*; and that certain words in Latin were infected by this dialectic influence. Nor are these changes confined to Latin: in Old Umbrian we have *enumek esuk vea vestiçia* and beside them *inumek isek via vistiça*, in Oscan *estud* and *ist*: New Umbrian *curnaco*=Lat. *cornīcem*, *sunitu*=Lat. *sonitū*, Faliscan *cuncaptum*=Lat. *conceptum*.

First for the change of *e* to *i* in Latin: beside *felix* ('fern') *penna speciō vea* we have the spellings *filix pinna spiciō via*, *en* and *endo* become *in* and *indu*, *trebus* becomes *tribus*, for *erus septem sex* we have in inscriptions *irus siptem six*: *sinister* seems to mean 'senior' as a term of respect, a euphemism like εὐώνυμος (for the first *i* cf. *sinātus* beside *senātus*), *vitulus* (whence Greek ἰταλός is borrowed) must mean 'a yearling' and go with *vetus* and ἔτος, while *sileō* (as I have suggested) 'settle down' is a by-form of *sedeō* (Gothic *ana-silan* 'to abate' is borrowed from Latin): *cicur* 'tame' answers to πέπων in the sense of 'gentle,' *plicô* to πλέκω, *cicer* to Prussian *keckirs*, *niteō* (I would suggest) to Old Slavonic *gnetq* 'I press' (so that *niteō* properly means to be rubbed, polished, and *nota* 'mark' is an Ablaut of the same root). In *vigeō* beside *vegeō* an un-original *e* (see sec. 3, β) becomes *i*. So the sonants *m̥* and *n̥* are represented sometimes by *em* and *en*, sometimes by *im* and *in*, we have *hemō* (in Old Latin) and *centum*, *similis* and *inter*. (The relation of *helus hemō* to the later *holus homo* is obscure.)

Secondly for the change of *o* to *u*. This is commonest before Liquids: Priscian says the oldest Romans said *humo* for *homo*, which, if true, proves that the change does not belong to the *later* Roman dialect: *humus* goes with χθών (for *χjώμ), *numerus* apparently with Irish *nōs* 'custom': cf. *puls* with πόλτος, *sulcus* with ὁλκός: βολβός becomes in Latin *bulbus*, *culpa* and *pulcer* have seemingly older forms *colpa* and *polcer*: to μορμύρω answers *murmur*, to πορφύρα *purpura* (borrowed). So the sonants *l̥* and *r̥* are represented sometimes by *ol* and *or*, sometimes by *ul* and *ur*, we have *tolerō* and *fornāx*, *tulī* and *furnus*. Before non-Liquids *o* changes to *u* in *luxus* 'dislocated' beside λοξός, in the forms *rutundus* and *ubba* mentioned by grammarians for *rotundus* and *obba*, and (I would add) in *lucūna* (a by-form of *lacūna*, see sec. 5 fin.) from *locus*, *pudet* 'it smites me' beside σποδέω 'beat,' and perhaps *cupiō* 'try to take' for **copiō* with *o* Ablaut of *e* in **cepiō* i.e. *capiō* (sec. 5, γ).—A consideration of certain forms tends to show that in these cases the change was not to a genuine but to a 'modified' *u*, representable by *i*: beside κόνις we have not **cunis* but *cinis*, beside Old Slavonic *po-klopŭ* 'a lid' both *clupeus* and *clipeus*, and see *cingō imber imbilīcus* below (sec. 8). See also sec. 6 on unaccented *o*.

(3) The later Roman dialect differed from the earlier as to short vowels chiefly in two points:[1]

(α) *o* in proclitics or enclitics, and before a consonant in the final syllable of polysyllables, invariably became *u*: *honc* and *sont* became *hunc* and *sunt*, the original form **com* 'with' (which remained in compounds, *compōnō*) became *cum*, *fīlios*

[1] The preference of *i* to *u* as representative of *ü* has been illustrated above (sec. 1).

opos trebibos pōcolom consol became *fīlius opus tribubus pōculum consul*, to γένος answers *genus*, to ἑ-κατόν *centum*, the Nom. of *rōboris* is *rōbur*. (The *o* in *amor color* etc. remained because originally it was long.) In pre-Augustan times the original *o* remained after *v* or *u*, *vīvos mortuos*; later these forms gave way to the analogy of the others.

(β) Initial *vo* became *ve*: according to Quintilian, Scipio Africanus first wrote *versus* and *vertex*. Thus *vorrō vortō voster votō* were the older forms of *verrō vertō vester vetō*; we have the older form *volō* kept for distinction beside the younger *velim*; *vellus* must have been originally **vollus* (cf. οὖλος in the sense of 'woolly'), *venia* originally **vonia* (ὀνίνημι), *vereor* originally **voreor* (ὁράω), *vegeō* originally **vogeō* (Gothic *vakan*), *verbum* originally **vorbum* (Lithuanian *wardas*), *vespa* originally **vospa* (Anglosaxon *väsp*), *vermis* originally **vormis* with *or* representing a sonant *r* (Gothic *vaurms*). So **voicos* (οἶκος) became *veicus* and later (sec. 14) *vīcus*; *vois* 'thou wilt' became **veis* and later *vīs*. Exceptions to the rule are due to analogy, on which see sec. 9: the relation of *voxor* to the later *uxor* or *oxor* is obscure. In *vescor* from **voscor*, cf. βόσκω, the *v* represents *gv*: in the same way *quercus* is from **quorcus* with a sonant (Anglosaxon *furh*), and *quisquiliae* (with *i* from *e*, sec. 2) from **quosquiliae* (κοσκυλμάτια). In some cases the law of 'pretonic' *e*, for which see section 5, takes effect: the older *vocō* became not **vecō* but *vacō*, **gvodios* (Irish *buide*: oxytone like πολιός) became not **bedius* but *badius* (an Oscan form of which the Roman equivalent, I would suggest, is *varius* with *r* for *d*), **cvonis* (cf. κύων) became not **cenis* but *canis*. The relation of *calix* to κύλιξ awaits explanation.

(4) (II.) Accent:

Every language has necessarily both a stress-accent and a pitch-accent: in every polysyllabic word we naturally emphasise one syllable, and further pronounce one syllable—whether the emphasised syllable or another—in a higher tone than the rest. In modern languages the accent, whether of stress or of pitch, is matter of tradition, in dead languages mostly of inference: Greek and Sanskrit mark the pitch-accent, but neither they nor any other language mark the stress-accent. In Latin, as in English, the stress-accent was more powerful than the pitch-accent, while in Greek the reverse was the case; hence the difference of vocalism between Lat. *abigō* and Greek ἀπάγω. We may here confine the term 'accent' to stress-accent, and give to pitch-accent the appellation 'tone.'

(5) (A.) As I pointed out three years ago, Latin *e* and *o* when 'pretonic,' *i.e.* when the pitch-accent fell on the syllable following, regularly become *a* (cf. Stokes, Neoceltic Verb Substantive, p. 31): all exceptions are due to analogy, on which see sec. 9. Thus in the case of pretonic *e*:

(*a*) Noun-stems in *-i* (except *potis ovis*, cf. πόσις ὄις) and *-u* were oxytone: *apis* goes with ἐμπίς, *ratis* with ἐ-ρετ-μόν, *vas* (for **vadis*) with ἄεθλον *i.e.* ἄ-Fεθ-λον, *gradus* with Gothic *grids* (which proves the root to be *ghredh*, cf. Lat. *gressus*); and, I would add, *ās* for *assis*, **ad-tis*, with *elementum* ('unit') for **edementum*. So *auris* (Lithuanian *ausìs*) beside οὖς is for **ouris* or **ūris*.

(β) The Noun-endings *-nos*, *-ros*, *-vos*, were oxytone: *magnus* goes with μέγας, *stagnum* possibly with στεγανός, *sacer* with *sequor* (for the sense compare the related word ὄπις 'retribution'), *aper* with Anglosaxon *efor*, *arvum* with Welsh *erw*. So also the ending *-kos*: *vacca* for **vat-cā* goes with ἔτος and means properly 'yearling' (see *vitulus* sec. 2).

(γ) The Verb-endings *-āō* (in Latin the first conjugation), *-eō*, *-iō*, were paroxytone: *amô* (as I would suggest) goes with *emō* 'take' (cf. *cupiō* sec. 2), *flagrô* with φλέγω, *maneō* with μένω, *pateō* (and, I would add, *patior* 'lie open to') with πετάννῡμι, *candeō* with Sanskrit *cand* i.e. *kvend*, *sapiō* with Anglosaxon *sefan*, while *capiō* (as the Perf. *cēpī* shows) represents **cepiō*, *faciō*=**feciō* cf. ἔθηκα, *jaciō*=**jeciō* cf. ἧκα. So the Verb-ending *-iscō* had the pitch-accent on the *i*, *paciscor* goes with *pecū* from a root *pek*.

In the same way we may explain the difference of root-vowel between *hara* and συ-φεός *i.e.* συ-φεσός, *palea* and Lithuanian *pelai*, *aries* and Lith. *éras*, *tabula* and Lith. *stëbas*.

Examples of pretonic *o* becoming *a* are *crassus* for **crat-tus* beside *κροτώνη* 'excrescence on trees,' *amārus* beside *ὠμός*, *salvus* beside *solidus* (the word answering to *οὖλος* 'whole' is *sollus* not *salvus*), *ansa* beside Umbrian *onse*. I would add *atrōx* from **atrus* (as *ferōx* from *ferus*) for **ad-rus* (Latin does not allow the combination *dr* [1]) beside *odium*; and *lacūna* 'space' (in popular etymology connected with *lacus*) from *locus*. In *valvae* beside *volvō*, and, I would add, *callis* 'hill-path' beside *collis*, and *carbō* 'carried in a basket' (the *λάρκος* of the Acharnians) beside *corbis*, the *al* or *ar* may represent a long sonant *l* or *r*.

(6) (B.) The unaccented vowel in Latin—*i.e.* any vowel but the first in the word—suffered various fortunes.

Unaccented *i* before *r* became *e*: *ānser* is for **hānsis* (Lithuanian *žąsis*), *vōmer* stands beside *vōmis* and a stem *cucumer-* beside *cucumis*, *numerus* and *umerus* were originally **numisus* and **umisus*. In all these cases the *r* represents an original *s*; but the rule applies equally to an original *r*, witness *adferō* beside *adimō*, *imperô* beside *adigō*. Accented *ir* remains, whether from *-is*, *dirimō sirempse*, or original, *circus cirrus hirūdō hirundō pirus vir vireō virga virgō*.

Unaccented *o* is preserved in the second element of all compounds, sec. 9: *sēdulō* is from the epigraphic form *dulus* for *dolus* (sec. 2), *īlicō* owes its *i* to *īlicet*. At the end of a stem it remains in *somnolentus vīnolentus* and the isolated by-forms *colober tonotrū*, but normally becomes *ŭ* (sec. 2 fin.), written *u* in *somnulentus coluber aurufex monumentum volumus*, *i* in *tonitrū aurifex monimentum agimus bonitās* etc. So in *ἀνάπτυξις*, Old Latin has *sorticolis popolum tabolam volop colomna*, later *u* in *sorticula* etc. *fīcēdula tegumen figulus*, *i* in *tegimen figilīnae lāmina fictilis* etc.; and in the Gen. Sing., in *senātuos* the *o* is preserved by Dissimilation, otherwise we have *u* in Old Latin *patrus nōminus hominus*, *i* in the later *patris* etc.

[1] Except in *quadru-* for **quatru-*, taken, I would suggest, from some Celtic dialect, cf. the Belgic town-name *Quadriburgium*; and *quad-ra* 'square' ('angular,' cf. Old Norse *hvass* 'pointed,' Anglosaxon *hvāt* 'sharp'), which owes the preservation of its *d* to a popular connexion with *quadru-*, the true Roman form appearing in *triquetrus* 'with three points.' Compounds, e.g. *adripiō*, do not come under the rule.

Unaccented *e* and *a* must be taken together; when open, *i.e.* before a single consonant, both became *ŭ*, when close, *i.e.* before two consonants, *e* remained and *a* became *e*.

Open *e* became *ŭ*, written *u* in *famulus* beside Umbrian *fameřias*, *occulō* beside Irish *celim*, *occupô mancupium recuperô* from **cepiō* i.e. *capiō* (see sec. 5); *i* in *familia accipiō mancipium reciperô adimō compitum agitis* etc.: cf. Umbrian *ařputrati* beside Lat. *arbiter*, both from a root *gret* (Gothic *qithan*). Sonant nasals mostly keep their *e*, *decem novem septem lūmen juvenis*: it becomes *i* (sec. 2) in *lūminis vīgintī*.—Close *e* remains, e.g. *legens acceptus* (see on *capiō* above).

Open *a* likewise became *ŭ*, written *u* in *contubernium concutiō abluō* (whence Silius Italicus absurdly formed a simple Verb *luō* 'wash'), *insuliō surrupuī*; *i* in *adigō adhibeō additus* etc., *insiliō surripuī*. In *aboleō adolescō* (beside *adulescens*) *exolescō indolēs subolēs*, which cannot be disconnected with *alō*, *a* became *o* apparently through a popular connexion with *olēo*.—Close *a* became *e*, *concentus* from *canō*, *ne-cesse* from *cassus*, *peregrē* from *agō*, *identidem* from *ante*, *sollemnis* beside Oscan *amnod* 'circuitu': *condumnari* in the Tabula Bantina is a mere mistake, *condemnatus* following in the same line. For limitations see sec. 8, *α*, *β*: *surruptus* is due to *surrupuī*.

Unaccented *i* differed little in pronunciation from *e*, unaccented *ŭ* from *o*; hence some isolated forms in inscriptions or grammarians show *e* for *i*, *fīleai soledās tempestātebus sōbreus*, *o* for *ŭ* as the resultant of *e*, *oppodum*.[1] Tacitus's *flamonium* must owe its *ō* (for *i*) to the analogy of *mātrimōnium*.

Final *i* and *o* alike became *e*: *ante* answers to ἀντί, *mare* and *leve* are from the stems *mari-* and *levi-*, *ille* from the stem *illo-*, *sequere* corresponds to ἕπεο. In such forms as *nisi* and *quando* the final vowel remains because it was originally long.

[1] So *ērodīta* from *rudis*. An accented *u* becomes *o* only in post-classical Latin, *sobolēs*: *cotōnia* must be from a dialectic by-form of κυδώνια, *folium* has a more original vowel than φύλλον (cf. *mola* μύλη) and (if the connexion is real) *formīca* than μύρμηξ, *foris* 'door' has a sonant *r* (Old Slavonic *dvĭrĭ*). I would add that *fore* 'to be about to be' is a by-form (cf. Hor. Sat. 1. 2. 67) of the adverb *foris* (as *mage pote* of *magis potis*), standing for *fore esse* 'to be outside, beyond' (so *ŭltra* 'beyond' is used of time as well as of space); and that Livius' *sortus* =**sur-ortus* (see on *sirempse* sec. 1), with the vowel of the simple verb. The *o* of *ancora* from ἄγκῡρα must be due to *remora* 'hindrance.'

(7) (III.) Adjoining letters:

The Roman dislike to the combination *ii*, which gives us *pi-etas* by the side of *bon-itas*, or *uu*, see above (sec. 3, *a*) on *mortuos*, is well known. So *ji* and *vu* become *je* and *vo*. The derivation of *vulgus vulpēs vultur vultus* is so obscure that we cannot tell whether these or *volgus* etc. are the more original forms, whether *vu* has become *vo* by Dissimilation or *vo* has become *vu* by the change (sec. 2) of *o* to *u*.

Original initial *sve* became *so*, *socer* cf. ἑκυρός, *sonus* cf. Anglosaxon *svin*, *sopor* cf. Anglosaxon *svefan*, *soror* cf. Gothic *svistar*. After an original initial velar *k*, *e* in a few words became *o*, beside πέλω (i.e. *kvelō*) we have Faliscan *quolundam* and Lat. *colō*, beside πέπων *coquō*; but much more often the velar subsided into a palatal and the *e* remained, *celeber celer centō cernuus cervīx cervus cernō cerrītus*, while in *corbis* (Old Norse *hrip*) *corium* (Sk. *cárman*) *cortex* (Lith. *kertù*) the *or* probably represents a sonant *r*. In Pliny's *combretum* beside Lith. *szwendrai* the *co* represents a *palatal k* + *ve*.

The Latin change of original *ev* to *ov*, and of original *ov* to *av*, is now generally admitted: *ev* becomes *ov* in *fovea* cf. χειά for *χεϝιά, *moveō* cf. ἀ-μεύομαι, *novem* cf. ἐν-νέα, *novus* cf. νέος, *ovō* cf. εὐάζω, *sovos* (later *suus* on the analogy of *tuus*) cf. ἑός, while *ov* becomes *av* in *avilla* cf. ὄις, *avis* cf. οἰωνός for *ὀϝι-ωνός, *caveō* cf. κοέω, *cavus* cf. κόοι, *lavō* cf. λούω. So *paviō* goes with ποίη, not with παίω (in which, as the Bœotian form πήω shows—cf. the Bœotian κή for καί—the αι is original, and does not represent αϝι). In words also of more obscure formation, *avēna aveō avus faveō favilla favus gravis ravim*, the *av* may represent original *ov*, though we cannot prove it; while *ovis*, like *bovem*, must be Oscan, not pure Latin. The combination *ev* occurs in Latin only in *brevis* and *levis*, and in each the *v* represents original *ghv* (cf. βραχύς and ἐλαχύς respectively).

(8) Little attention has hitherto been paid to the Latin dislike to certain apparently harmless combinations of a vowel with two consonants:

(*a*) *e* cannot stand before *nc* or *ng*: it becomes *a*, *nanciscor* beside *ἐ-νεγκεῖν*, *anguīlla* beside *ἔγχελυς*, *frangō* (*i.e.* I would suggest, **freg-nō* : *pēgī* is formed on the analogy of *frēgī*) beside Gothic *brikan*, *mangō* (quasi 'exaggerator') beside *μέγας*; or, when unaccented, *i*, e.g. *attingō* (for **attengō*, sec. 6). So the sonant *n* before *g* or *gv* is represented not by *en* but by *in*, we have *inguen* beside *ἀδήν*, *lingua* beside Gothic *tuggō*, *singulī* beside Irish *samal*, *pīnguis* beside *παχύς*, and *īgnis* (i.e. **ingnis*) beside Sk. *agnis*. *E* before *ngv* becomes *i* (sec. 2) and is lengthened, *quīnque* cf. *πέντε*.

(*β*) *e* cannot stand before *lc*, *lg*, *lt*, or *lm* : it becomes *u*, *inculcō* from *calcō* (see sec. 6), *ulcus* beside *ἕλκος* (which is known to owe its rough breathing to *ἕλκω*), *mulgeō* beside *ἀ-μέλγω*, *adulterō* from *alter*, *insultō* from *saltō*, *catapulta* borrowed from *καταπέλτης*, *ulmus* beside Anglosaxon *elm*. (Festus' *meltom meliōrem* should perhaps be *meliōsem meliōrem*.)

(*γ*) *o* cannot stand before *mb* : it becomes *ŭ*, written either *u*, *umbilīcus* cf. *ὀμφαλός*, *umbra* cf. Sk. *andhás*, or *i*, *imbilīcus* (Probi Appendix), *imber* cf. *ὄμβρος*. *Combretum* (see sec. 7) must belong to some rustic dialect.

(*δ*) *o* cannot stand before *nc*, *ng*, or *ngv*; it becomes *ŭ*, written *u* in *cunctor* beside Sk. *çank*, *uncus* beside *ὄγκος*, *ungō* beside Old High German *anco*, *unguis* beside *ὄνυξ*, *i* in *cingō* beside *κόμβος* 'a band.' I would suggest that *cunctī*, meaning 'inclusive' (cf. the relation of *frequens* to *farciō*, *saepe* to *saepiō*), is a Participle of *cingō* with the older *u* to represent *ŭ*. *Broncus* and *oncō* are loan-words, *tongeō* Praenestine; *longus*, I would suggest, is borrowed from a Greek form **λογγός* (whence *λογγάζω* 'loiter'), as in turn Gothic *laggs* is borrowed from *longus*. The proper Roman form *lungus* occurs in an inscription.

(9) (IV.) Analogy :

The law of 'pretonic A' (sec. 5) obtains in but few instances, though the form *vacō* for the older *vocō* (see sec. 3, *β*) shows that it had some influence even in classical times; in the great majority of cases the influence of analogy led to the retention of the radical *e* or *o*. Thus *crepō* (for **crapō*) must be derived from a form **crepĕre* seen in *crepitus*, *doceō* (for **daceō*) from a form **docĕre* seen in *doctus*.

In *vocō* ('to call') *volō* ('to fly') *volup volvō vomō vorō voveō* the later Roman dialect abstained from changing initial *vo* into *ve* (sec. 3, β), and followed the analogy of other Ablauts in *o*.

'Re-composition,' the feeling of the essential duality of a compound word, which leads us in English to distinguish *re-cover* ('cover again') from *recover* ('get again'), often preserves the original vowel:

e in *advehō, expetō impetus, ēlegans* ('very careful') and *neglegō* (both from the old Verb **legō* 'to care,' seen in *dīligō*), and in an inscription *oppedeis* (the root appears in ἔμπεδος). Sometimes the compound preserves the original vowel even where the simple Verb has changed it to 'pretonic' *a*, *aggredior dēpeciscor perpetior* (for these see sec. 5, α, γ on *gradus paciscor patior*) and *dēfetīgō* (of which the root is seen in *fessus*):

o in *impotens innocens insolens* etc. (see sec. 6):

a in *adamō*.

So *menceps concors congerō combūrō* show combinations which have been proved above (sec. 8, α, γ, δ) to be inadmissible in non-compound words.

The laws about unaccented open vowels, sec. 6, are sometimes disturbed by analogy: the second vowel of *celeber integer* is due to *celebris integra*, of *segetis* to *seges*, of *vegetus* to *vegeō*, of *anatis* to *anas*, of *alacer* (derivation obscure) to *ācer*.

In *comes jūdex* (for **comis *jūdix*) the second vowel is due (according to Brugmann) to the analogy of forms like *superstes* and *rēmex*, in which unaccented *a* duly (sec. 6) becomes *e* in the close syllable (**superstet-s*, **rēmeg-s*).

Forms like *scribundi* seem due to the analogy of *eundum* (in which the *u* is the result of Dissimilation).

Other instances of the action of analogy have been given above, sec. 3 and 6.

II. Long-Vowels and Diphthongs.

(10) The sixth vowel, *ü*, is even more important in its long than in its short form: it appears not only as a distinct vowel, but as a dialectic representative of the diphthongs *oi*

and *eu* and of unaccented *au*. As $\ddot{u}$ in the short form (sec. 1) is represented sometimes by *u* sometimes by *i*, so $\bar{\ddot{u}}$ is represented sometimes by *ū* sometimes by *ī*: *mūtulus* and *stūpa* are also written *mītulus* and *stīpa*, *trūgonus* (τρῡγών) also *trīgonus*, *frīgō* goes with φρῡ́γω, *gībbus* with Lithuanian *gumbas*, *limpidus* with Oscan *Diumpaís*, *sīparium* with Oscan *sūpparum*, *stīpes* with Old Norse *stúfr*. I would add

fīcus ('wasp-shaped') beside *fūcus* 'drone';

fīnis beside *fūnis*, a metaphor from the Circus, which was marked out with a rope (so a 'rape' in Sussex means 'land divided by a rope');

mīrus for **mūsus* from the root of μῡ́ω 'to close the eyes,' as one does when dazzled;

pītuīta beside *pūteō*;

scrī-nium 'place for odds and ends' beside *scrū-ta* 'frippery';

spīrō beside *spuō*.

The same interchange of *ū* and *ī* appears in several Noun-endings: compare

cadūcus with *mendīcus amīcus*, cf. *vēnūcula vēnīcula*,

aerūgō with *porrīgō*,

hirsūtus with *avītus*,

testūdō hirūdō with *cupīdō formīdō*,

opportūnus fortūna with *dīvīnus culīna*,

edūlis with *senīlis*,

corūscus mollūsca (the *u* must be long, as the *i* in *vopīscus* is known to be) with *vopīscus marīsca*; and, I would add,

**vacūvus* (whence comes *vacuus*, as *duo* from **duvō*, Old Slavonic *dŭva*) with *vacīvus*.

Further, an attempt seems to have been made to distinguish this $\bar{\ddot{u}}$ from genuine *ū* and *ī* by writing it *oi* or (later) *oe*: thus we have side by side *fūī fīō* (and *fīlius*) *foetūs*, *sūra soera*, and, I would add, *fūs-cus foedus* 'dirty' (for **foes-dus*). So in Noun-endings we have side by side *opportūnus dīvīnus amoenus* (and *amēnus*). Further instances will be given below (sec. 14) on the diphthongs *oi*, *eu*, and *au*.

In Old Umbrian (see below) *ī* became *ē*; and the same seems to apply to *ī* representing original $\bar{\ddot{u}}$, beside *fīō* we have *fētūs*, beside *dīvīnus* we have *serēnus terrēnus*, beside *avitus* we have *facētus*, beside *amīcus* we have *amēcus*, beside *senīlis* we have *crūdēlis*, beside *cupīdō* we have *cuppēdō*. See further on the diphthongs just mentioned.

(11) The influence of dialect on the Roman long vowels, and especially on the diphthongs, was much stronger than on the short vowels, as conversely that of accent was much weaker.

Old Umbrian, and what the Roman grammarians call the 'rustic' dialect, changed both *ī* and *ai* to *ē*. In Umbrian we have *klētra* beside Lat. *clītellae*, *krēstur* beside Lat *quaestor*. The 'rustic' forms of *spīca* and *vīlla* were *spēca* and *vēlla*; *arēna* stands for **arīna* cf. Old Slavonic *orĭsŭ*, and *clē-mens* possibly goes with *ac-clī-nis*. In the same way Old Umbrian occasionally changed *ei* to *ē*, *ētu* 'let him go' is from the root *ei* (which remains in *eiscurent* 'let them summon'): Latin *lēvis* stands for **līvis* or **leivis* (cf. λεῖος *i.e.* λεῖϝος), and from **quei-ve *nei-ve *sei-ve* (or *sīve*) through intermediate forms **quēve nēve *sēve* came (by eliding the final vowel, vocalising the *v* and shortening the vowel before it) *ceu neu seu*; *deivos* became **dēvus* (the Gen. Fem. *devas* is found in an inscription), and, dropping the *v* before *u*, *deus* (*dea* is due to analogy). So, I would suggest, **rīvus* beside *rīvālis* became **rēvus* and then *reus* 'party to an action,' and so *olīvum* (a popular distortion from ἔλαιον, meaning 'fragrant,' *olens*) became **olēvum* and then *oleum* (*olea* being due to analogy). In the same way final *ei* became *ē*, cf. *nei* later *nē*, and the old Latin Datives *patrei tibei* and *patrē tibē*.

Parallel with the Old-Umbrian change of *ai* to *ē* we have in Latin *aerumna aesculus caelum* 'chisel' *caementum caerimōnia caesariēs caespes caestus caeterī faelēs fraenum glaeba haerēs nae paedor paenūria paetus praehendō praelum saepēs saeta saevus taeter vae-* and the loan-words *caetra gaesum paenula raeda mūraena volaema* spelt also with *ē*: though the spellings *laevis vaenum* for *lēvis vēnum* show that the spelling with a diphthong may not always be the older.[1] The spelling with

[1] In *caepe naenia paelex scaena scaeptrum*, which are also spelt *cēpe* etc., we have *ae* to represent Greek η: *caepe*, I would suggest, meaning 'grown in a garden,' κῆπος, and *paelex*—the spelling *pellex* is only due to a popular con-

oe in *caecus caelebs caena caenum faecundus faenum faenus faeteō haedus obscaenus paene* (all spelt also with *ē*), and in *caelum* 'sky' *maerēo paenitet praelium*, is a peculiarity of post-classical Latin, which had lost the earlier *oe* except in *foedus moenia*, sec. 14. The epigraphic *Saeturni* may be a mere mistake for *Sāteurnī*: *Aesculāpius* (Ἀσκλᾱπιός) owes its diphthong, I would suggest, to the physician's *fee*, *aes*.

(12) New Umbrian reduced the diphthongs *ou* and *au* to *ō*: we have *tōta* 'civitas' beside Oscan *touto*, *ōte*=Latin *aut*, *ōht* =*auctoritate*, *plōtōs*=*plautōs*. The change of *ou* to *ō* is also Volscian, cf. *tōticu* 'publicō': it appears in Latin in *rōbīgō* from a root *roudh* (cf. Gothic *rauds*), in *cloāca* (with the *ō* shortened before a vowel) also spelt *clouāca*, and, I would add, in *lōcusta* from *lūcus* 'wood' (also spelt *loucos*, cf. Lithuanian *laukas*). Even un-original *ou* becomes *ō* in *noundinom* spelt also *nōndinum*. The reduction of *au* to *ō* is very common in Latin: we have *cauda caupō caurus claudicō claudō haustus laurētum lautus naugae paululus plaudō plaustrum raudus* spelt also *cōda* etc., *cōleus* beside *caulae*, *cōs* beside *cautēs*, *fōcāle* from *faux*, *ōlla* beside *aula* 'pot,' *ōmen* for **aux-men* 'authorisation' from the root of *auxilium*, *ōs* 'mouth' and *ōrīga* beside *ausculum* and *aurīga*, *ōstium* and *austium*, *sōdēs* for *sī audēs* ('if you are inclined'). So *ad-ōrea* 'victory' goes with ἐπ-αυρίσκω, *crōciō* with Lithuanian *kraukti*, *ōtium* with Gothic *auths*. (This change, like that of *ī* and *ai* to *ē*, is ascribed by the Roman grammarians to the 'rustic' dialect).

(13) The occasional change of *ē* to *ī* and of *ō* to *ū* in Latin must be connected with that of short *e* and *i* to *o* and *u* respectively, sec. 2. Thus (1) we have epigraphic forms *cīnsum* for *cēnsum* and (with the vowel written *ei* to show its length) *dēcreivit leigibus pleibēs* for *dēcrēvit*, etc., and in classical Latin *dēlīniō* (possibly with a reference to *līnum* 'net') beside *dēlēniō*, *subtīlis* from *tēla*: (2) *hōc* is the older form of *hūc*, *fūr* goes with φώρ, *ūlna* with ὠλένη, *datūrus* apparently with *datōr* for **datōr*, *praestōlor* is also spelt *praestūlor*, γλαύκωμα gives *glaucūma*. The converse change of *ū* to *ō* (cf. sec. 6, note)

nexion with *pelliciō*—representing *πῆλαξ, the Ionic form of πάλλαξ 'boy,' cf. προπηλακίζω.

occurs only in post-classical Latin, *jŏcundus* perhaps with a reference to *jocus*: *nōn*, I would suggest, is not from *noenum*, i.e. **ne-oinom* (sec. 14), but for **nōne* (later spelt *nonne*, as *annulus* for *ānulus*), from *nō-* (a by-form of *nē*, as *sō-* in *sōbrius* of *sē-*, *dō-* in *dōdrans* of *dē*, *certō* of *certē*) + the *-ne* of *pōne superne*.

(14) The classical Roman dialect modified all the original diphthongs except *au*:

ei became *ī*, *deicat* (of δείκνῡμι) *deiros* (cf. Sk. *dēvás*) *eitur* (cf. εἶμι) = later *dīcat dīvus ītur*, *nei sei patrei tibei* are the older forms of *nī sī patrī tibī*: *līveō*, 'am beaten black and blue' stands, I would suggest, for **leiveō* and goes like *lēvis* (sec. 11) with λεῖος 'beaten smooth.' In words of obscure origin like *ceivis leis leitera* the old diphthong may merely be a graphic way of representing the length of the vowel. The relation of *sīspes* or *seispes* to *sōspes* is as obscure as its derivation.

oi is found in old Latin, *coirāre foidere loidos moiro oino oitile co-moinem*: later we have *coerāre foedus loedus moerum oenus oetier moenia* 'duties' (*moenia* 'walls' must be a different word, a technical term which like *foedus* 'treaty' preserved its archaic *oe* through all periods), later again *cūrāre* (also spelt *courāre* to show the quantity of the vowel) *lūdus mūrus ūnus ūtor commūnis* and *mūnia*. So *mūtō* is for **moitō*, cf. μοῖτος; and *pūmex* for **poim-ex*, Ags. *fām*. (The same change from *oi* to *ū* occurs also in Old Umbrian: *kuratu* = Lat. *cūrātum*, *muneklu* = Lat. *mūnusculum*.) In all these spellings original *oi* coincides with the original *ū* discussed above (sec. 10); and the identity is further shown by the spelling of original *oi* as *ī* in Ennius' *fīdus* 'treaty,' *līra* (Gothic *laists*), *tībia* (Lith. *staibiai*), and as *ē* in *fēdus dē-lērus pō-mērium*. So the Nom. Plural ending, Gk. *-οι*, appears as *-oe* in the old form *Fescēnīnoe*, as *-ī* in *colōnī* (in old Latin spelt *colōnei* to show the length of the vowel), and as *-ē* in the old form *ploirumē*; the Genitive Singular in old Latin was in *-oe*, *poploe*, later in *-ī*, *populī* (or *populei*); the Abl. Plural, answering to Gk. *-οις*, was in *-oes*, *ōloes*, later in *-īs*, *illīs*. In this last the original diphthong was *ōi*, sec. 16.

ai became *ae*, *aide aiquom airid praidad quaistōrēs*=later *aedem aequum aere praedā quaestōrēs*.

eu is found in early proper names, *Leucesie Leucetio Teupilo Teurano*, and remained in the interjections *eheu heu heus*: in *ceu neu seu* (see sec. 11) and *neuter neutiquam* it is unoriginal. Later it generally became *ū* (or, to show the length of the vowel, *ou*, *abdoucit*): *gūstō* goes with γεύω for *γεύσω, *lūgeō* with λευγαλέος, *lūridus* (I would suggest) with λευρός (for the transition of meaning see above on *līveō*), *nūtō* with νεύω, *plūma* with πλέω for *πλέϜω, *pūlmō* with πλεύμων, *rūctō* with ἐ-ρεύγομαι; *dūcō lūbricus lūx prūna* and (I would add) *nūtriō* (for **nūdriō*, cf. sec. 5 fin.) with Gothic *tiuhan sliupan liuhath frius* and *niutan* respectively. So *brūma* stands for **breuma* from **brevima*.—But there are indications that this *ū* from earlier *eu* was not a genuine *ū* but our *ǖ* (sec. 10): from the root *leubh* in ἐ-λεύθερος (for *ἐ-λεύφερος) we get *lībh* in *līber* or *leiber*, *loibh* in the old form *loebertātem*; the original **plē-iōs* or **plē-jōs* 'more' became successively **plē-ōs*, **pleōs* (though the form *pleores* in the Arval Hymn is perhaps a mistake for *ploeres*), and **pleus*, whence in forms actually found we get alike *ū* in *plūrima* or *plouruma*, *ī* in *plīsima*, *ē* in *plērus* (which can hardly go with πλήρης), and *oi* (later *oe*) in *ploirumē ploera*.

ou became in classical Latin *ū*: *jous loucom poublicom* are the earlier forms of *jūs lūcum pūblicum*, *lūcusta* and *rūbīgō* come (as we have seen, sec. 12) from roots with *ou*, *clūnis cū-dō mūcus* go with Lithuanian *szlaunìs kau-ti mauk-ti* respectively, *cloāca* (sec. 12) is also spelt *cluāca*. So unoriginal *ou* became *ū*, *noundinom nountios* are the earlier forms of *nūndinum nūntius*. The shortening of *ou* to *u* in *jubeō* was due, I would suggest, to the analogy of *habeō*.

au, alone among diphthongs, remained in the pure Roman dialect: for instances see sec. 12 on the New-Umbrian reduction of it to *ō*. Its reduction between consonants to *ū* may be conjectured to have belonged to the vulgar dialect of Rome: beside *caulae caupō claudō claudus fraus naugae raudus* we find *cūleus cupō clūdō clūdus frūdō* (and *frūstrā*) *nūgae rūdus* (spelt also *roudus*).

(15) Accent has no influence on long vowels,[1] and (as has been said above, sec. 11) but little on diphthongs: all, except *ae* (from *ai*) and *au*, have the same form in the unaccented as in the accented syllable. The diphthong *ae*, when unaccented, regularly becomes *ī*, *exquīrō incīdo pertīsum* from *quaerō caedo taedet* (so *sī* or *sei*, as a 'proclitic,'=**svae*, Oscan *svai*): *au* in such cases regularly becomes *ū̆*, written (1) *ū* in *indūtiae* beside *ōtium* for **autium* (see sec. 12), and, I would add, *ad-ūlor* for **ad-ūdor* from *audiō* (like *assentor* from *sentiō*), and *ob-tūrō* 'put a dead weight on' from *taurus*; (2) *oe* in *oboediō* from *audiō*, and (3) *ē* in *obēdiō*. Analogy, however, sometimes appears in the form of 'Re-composition,' and the diphthong remains as in the accented syllable, e.g. *conquaerō pertaesum exaudiō* (*explōdō suffōcō*).

(16) Diphthongs beginning with a long vowel undergo various metamorphoses in Latin:

(*a*) Those ending in *i* lose the *i* before a vowel, see **plēiōs* sec. 14, or when final, *equō* cf. ἵππῳ. The Dative in *-ā* however, *Fortūnā Menervā*, is un-Roman; that in *-ae* is said to be a Locative, not from *-āi*.

(*β*) Those ending in *u* change it to *v* before a vowel, *gāvīsus nāvis*. *Octāvus* goes with Sanskrit *ashṭâu* (quasi **octōvus* by a change similar to that of *ov* to *av* in Latin, sec. 7). *Bovem* and *bōs* are un-Roman, sec. 7; *Jovis* (Nom.) goes with Ζεύς (cf. *jugum* ζυγόν, and see sec. 7), not with Sanskrit *dyâús* 'sky, day,' Latin *j* never comes from *dj* or *di*.

(*γ*) When a consonant follows, the first element of the diphthong is shortened, *ŏloes* (sec. 14) from *-ōis* cf. Sanskrit *áçvāis*, *gaudeō naufragus claudō*. *Ōvum* cannot=**ōivom* (which would give **oevum*, **ūvum*), but must go with ᾠ-όν ὤ-(Ϝ)εον ὤ-βεον from a root *ō*, not with ᾠ-όν ὤι-ον and Old Slavonic *aj-e* from a root *ōi*.

[1] *Anhēlus* for *anēlus*, from the root of *anima* + a termination similar to that of *crūdēlis*, owes its *h* to a false connexion with *hālō*: *convicium*, if rightly so spelt, must mean a meeting in the street, *vīcus*: *suspīciō* (the spelling *suspītiō* is obscure) = (I would suggest) 'an inward pricking,' from *spīca*, and to it *suspicor* and *suspectus* owe their meaning, which is quite distinct from that of *suspicere*.

IV.—ON THE CONDITIONS OF A UNIVERSAL LANGUAGE, IN REFERENCE TO THE INVITATION OF THE AMERICAN PHILOSOPHICAL SOCIETY OF PHILADELPHIA, U.S., TO SEND DELEGATES TO A CONGRESS FOR PERFECTING A UNIVERSAL LANGUAGE ON AN ARYAN BASIS, AND ITS REPORT ON VOLAPÜK. By

ALEXANDER J. ELLIS, F.R.S., a Vice-President.

(*Read* 15 *June*, 1888.)

CONTENTS.

§ 1. ORIGIN OF THIS PAPER.

THE following letter was addressed by the American Philosophical Society of Philadelphia to the President of the Philological Society. It was directed to Prof. Skeat, our last President but one, and hence did not come formally before the Society till our last Anniversary, 18 May, when it was of course impossible to consider it. It was consequently remitted to the present writer, together with the reports of a Committee mentioned in it, which are necessary to understand the reason and nature of the request in the letter, to introduce to the Society at the present meeting.

HALL OF THE AMERICAN PHILOSOPHICAL SOCIETY,
PHILADELPHIA, *March 12th*, 1888.

SIR,

At a meeting of the Society, held at Philadelphia, January 6th, 1888, the following resolution was adopted:

Resolved, That the President of the American Philosophical Society be requested to address a letter to all learned bodies with which this Society is in official relations, and to such other societies and individuals as he may deem proper, asking their co-operation in perfecting a language for learned and commercial purposes, based on the Aryan vocabulary and grammar in their simplest forms; and to that end proposing an International Congress, the first meeting of which shall be held in London or in Paris.

Accordingly, I have now the honour of transmitting it for your consideration, and to invite your co-operation in accomplishing the object to which it refers. In order that the views of our Society, which have led to the adoption of the resolution, may be understood, I have obtained permission to send herewith copies of the Reports of the Special Committee to which the subject of a plan for a universal language had been referred by the Society.

You will perceive that the resolution of the Society does not go so far as what was advised by the Committee, but the subject is of such large interest that it is eminently worthy of the fullest investigation. I therefore ask for it your early and favourable consideration, and request that your action may be communicated to me, and, if favourable, whether you would prefer the holding of the Conference in London or in Paris, and also indicate the number of Delegates each Society should send.

On receipt of action by the different bodies with which we are in correspondence, I will make the call for the Conference.

Very respectfully yours,
FRED FRALEY, PRESIDENT.

To the President of the Philological Society,
London, England.

The above letter was based on the "Reports of the Committee (D. G. Brinton, Henry Phillips, Jr., Monroe B. Snyder) appointed October 21, 1887, to examine into the SCIENTIFIC VALUE OF VOLAPÜK, presented to the American Philosophical Society Nov. 18, 1887, and Jan. 6, 1888." It appears therefore that this Committee was not, as implied in the letter itself, appointed to consider "the subject of a plan for a universal language" in general, but the "scientific value" of one particular proposal. The Reports of the Committee, however, far exceeded the terms of the reference. After a preface in which the desirability, indeed almost the necessity, of an international language in view of the veritable Babel now existent in the transactions of local societies received by the American Society, and therefore specially for learned purposes, the Committee proceed to examine the "requirements of such a tongue to merit the recommendation of" the American Society, and then rather briefly, and unfortunately not always quite correctly, reviewing Schleyer's scheme for a Universal Language termed Volapük, and finding it "plainly evident" that their own scheme and his "are in absolute opposition," they state that they "cannot recommend Volapük as that which is suited to the needs of modern thought." Finally, they proposed a resolution slightly more extensive than that contained in the letter just read, which however was reduced to its present state in the discussion which ensued on the presentation of their report, as explained in a second or supplementary Report of the Committee.

§ 2. The Nature of the Invitation.

Now the letter "invites" our "co-operation in accomplishing the object to which" the resolution "refers," that is, "in perfecting a language for learned and commercial purposes" ("ordinary intercourse," together with "an international scientific terminology," having been eliminated from the resolution as originally proposed by the Committee) with the distinct limitation that it should be "based on the Aryan vocabulary and grammar in their simplest forms." This last restriction, as appears by the reports, excludes Volapük altogether, and would direct the deliberations of the proposed "International Congress" towards the consideration of an entirely new scheme, intended to oust Volapük, and to proclaim it entirely unsuited for "learned and commercial purposes," and to accept the invitation would consequently imply that we accepted the limitation to Aryanism and therefore rejected Volapük.

Now Volapük is the only scheme which has ever numbered its adherents by the hundred thousand. Complete Introductions to it have been published in every European language, including Turkish and Hungarian, its grammar has been briefly explained in twenty-one languages, and the fourth edition of its Dictionary, published since the date of the American invitation, contains over 20,000 words. If, then, any scheme of a Universal Language is to be considered at all, Volapük has the first claim for attention, instead of being peremptorily excluded. Several other schemes, with different bases, have been hatched by the altogether unexpected warmth of the reception accorded to Volapük, and theoretically would have also to be considered, as well as the unhatched scheme which is proposed by the Committee, and which I suppose we are invited to "perfect."

By the kindness of Mr. Henderson, author of *Lingua*, I am able to lay most of these new schemes before the Society. They are as follows:

I. ON A LATIN BASIS.
- Mr. Henderson. Lingua. 1888.
- Anonymous (Bamberg). 1887.
- Volk und Fuchs. Die Weltsprache. 1883.
- Lauda. Kosmos. 1888.

II. ON A BASIS CHIEFLY ROMANCE.
- Samenhof (under the name of Dr. Esperanto). International Language. 1888.
- Bernhard. Lingua Franca Nuova (chiefly on an Italian basis). 1888.
- Menet. Langue universelle. 1886.

III. MIXED ROMANCE AND TEUTONIC.
- Steiner's Pasilingua. 1885–8.

IV. SYMBOLICAL.
- Maldant. Langue Naturelle. 1886. Subsequently withdrawn in favour of Volapük.
- Janne Damm's Praktische Pasigraphie, which need not be considered.

V. VOLAPÜK IMPROVED ON A NEW PLAN.
- Prof. Georg Bauer's Spelin. 1888 [pronounce *Spay-linn*, with accent on the last syllable, not *Spellin'*].
- To which I add Dr. E. Müller's Lecture, *Das Phantom der Weltsprache*, (The Phantom of a Universal Language), 1888, arguing against the possibility of our ever having one, and well worth reading.

At the outset of my remarks I may state that I shall conclude by proposing that the Philological Society respectfully decline the invitation of tho American Philosophical Society. This invitation is to take part in deliberations for "perfecting" a scheme which is not so far advanced as to assume a discussible form, but is vaguely stated to be "based on the Aryan vocabulary and grammar," as if there were such things in existence. There are certainly very various vocabularies and grammars of the languages termed Aryan, mutually unintelligible, so that the very scheme itself would have to be patched up in the heat of a discussion. A scheme must have been well thought out, well tried, widely approved, before it is ripe for the discussion of a congress. Last year such a preliminary meeting of the favourers of Volapük assembled at Munich, and appointed an Academy, of which the Inventor of Volapük, Herr Schleyer, is president, but M. Kerckhoffs, of Paris, director. This academy, now consisting of twenty-seven members representing fifteen countries,[1] is preparing for an international congress at Paris, on the occasion of the universal exhibition to be held there next year, at which it will probably be reconstituted. If then the Congress proposed by the American Society also meet in Paris next year, there will be the most open and possibly far from friendly rivalry.

§ 3. The Two Preliminary Conditions fulfilled by Volapük.

There are two preliminary points in forming a universal language: first it must be invented, and secondly it must be accepted.

First the invention must be by one man, well acquainted with the contrivances for conveying thought in numerous languages, and such Herr Schleyer is reported to be, his

[1] These are Belgium, Denmark, Germany, Portugal, France, Austria, Russia, Holland, England, North America, Roumania, Spain, Sweden, Syria, Italy (*Le Volapük* p. 178). The work of the Academy is divided into six parts—1. Alphabet; 2. Word forms (radical, non-radical, and compound); 3. Order of words in a sentence; 4. Grammar (declension, conjugation, prepositions, adverbs, etc.); 5. Examination of false words in the dictionary; 6. Formation of new words (*ibid.*).

repertory extending, it is said, to fifty tongues, of which he can speak five. In his new year's address, written both in German and Volapük, contained in No. 85 of his *Central Volapük Journal*,[1] for January, 1888, Herr Schleyer says: "In March, 1879, having been born on the 18th July, 1831, I thought out my universal language, or Volapük, from pure love of humanity, without any desire of fame or gain, entirely original, without any assistance whatever, but that of God, my creator, and without knowing or desiring to know what had been done by my predecessors in the idea of a universal language." The one source of Vp. is therefore indisputable and complete. The proposal of the American Committee does not even attempt to satisfy this first condition.

Secondly, acceptance is essential to the very existence of any language, and in this Herr Schleyer has been singularly fortunate. Numerous men of different nationalities already use his language, and the number is increasing daily. An edition of his "middle grammar" has been published every year from 1880. The first edition of his dictionary in 1880 contained only 2782 words, the second edition, appearing in 1882, contained 10,127 words, the third in 1885 contained 12,570 words, and the fourth in 1888 contains 20,480 words. The Vz. No. 91 shews that there have been appointed after examination and certificated 42 professors, 150 head teachers, and 772 teachers, by the Central Bureau in Constance, Baden, and that 234 societies have been started to promote Vp. Names and addresses are all given in Vz. Besides which much has been done by the Paris Association for the Propagation of Vp., which also grants certificates and gives medals. I mention the above numbers because they shew better than anything I can say the wide acceptance accorded to Vp., but they do not shew half the reality, for the numerous Societies founded throughout Europe are constantly adding to their number, and encouraging the study of Vp., so that the new expositions and journals of Vp., which are constantly appearing, are rapidly exhausted.

[1] *Volapükabled zenodik*, henceforth contracted into Vz., while *Volapük* will be contracted into Vp.

Hence the two preliminary conditions for founding a Universal Language have been eminently well fulfilled by Vp. One mind thought out the whole system, many thousand minds are already using the system. Other plans have been invented of more or less ingenuity, by other individuals. But none have had the same wide acceptance as Vp., and, with that in the field, all other schemes, even if thought out in the same degree as Vp., which is now really a language and not merely a proposal, have a great obstacle in the way, for it is impossible to suppose that the thousands who have already learned Vp. will throw it away in favour of a new aspirant, while the writers of books and teachers have a vested interest in the old system. The American Report (p. 15), after specifying the wide acceptance of Volapük, says: "If this is the case with so imperfect a language, backed by no State, no learned body, not even by the name of any distinguished scholar, what would be the progress of a tongue perfect in adaptation and supported by all those aids to its introduction? In a decade it would be current among ten million people." There is much virtue in an "if." *If* Volapük were not already in the field; *if* all or at least a preponderating majority of learned societies could invent a single language and agree upon its use; *if* they could adapt it for general purposes; *if* unlearned society could be got to see the good of it, which the very fact of its emanation from the learned would render difficult, — *then* the notification of the Committee might be fulfilled. Under the present circumstances it seems to me a useless expenditure of time and thought to take part in any such deliberations as those proposed by the American Society.

§ 4. What Acceptance of the Invitation would imply.

And, observe, the expenditure of both time and thought would be very large indeed. First, as each Society addressed could not go in a body, each must, as implied in the invitation, select "delegates." These would have to attend each meeting of the Conference, or at least to examine, report upon, and vote upon first all those schemes presented to them, which in some degree satisfy "the Aryan basis," whatever meaning be given to this elastic term. Next they would have to join with the rest in selecting one. After this, they would have to examine the details of a vocabulary of not less than 20,000 words as a commencement, the means of selecting these words, the means of modifying each for the different classes of ideas to be symbolised, in connection with the means of connecting those ideas grammatically. Again, as it is to be a language for "learned" as well as "commercial" purposes, the wants of each branch of learning in the way of communication as well as the wants of each branch of commerce—and why not of each matter now spoken or written about in each language, extra-European as well as European?—would have to be studied. Would each branch require a separate Committee? and would all the Committees accept the work of each separate Committee *en bloc*? or would they have to overhaul it? I see nothing but years of labour and continual debates, at least on paper, and endless controversy, with small chance of that adherence which would alone render the result in the slightest degree useful. I could not recommend our Society to enter upon such a work.

For Volapük there is one head, the Inventor, who says (Vz. June, 1888, No. 90, § 1276) respecting the auxiliary Academy, "Any resolution of the Academy not accepted by the Inventor is *null*, even if the whole of the members united against the Inventor. *He* has thought over everything relating to Vp., often and deeply, and he cannot make alterations every day in his system already so widely spread. Otherwise thousands of his best friends would be angry and desert him." But in a system which had no head, only committees and committees, only debaters and proposers, none with a stake in the existence of the scheme, where would be the security for its stability? There could only be worry and useless labour.

§ 5. Further Conditions.

Leaving these general considerations I pass to the particular suggestions made by the committee, and to a comparison with the methods employed in Vp. For this purpose I have endeavoured to make myself better acquainted with the facts of the case than I was when Mr. Dornbusch first brought Vp. under our notice in Dec. 1887, or than the American Committee seem to have been when they so summarily dismissed it from consideration. But I think it will be more convenient at each step to see what has been done in Vp., in immediate connection with what are apparently the conditions of a universal language, than to leave it to the last, as the American Committee has done.

§ 6. Phonetics—English Sounds.

First then a universal language must be a *spoken* one. It must not be like Arithmetic, a succession of signs which each nation calls by names unintelligible to any other, or like the ideography of the Chinese, to which different sounds are attached in different parts of the Empire, or like the Latin language of modern days, which each nation pronounces in its own abominable way, and the English nation the worst of all. Men from Asia, Africa, and Polynesia should be able to *converse* in it with men from Europe and America, and not merely *correspond* in it, although of course correspondence is extremely important. For the purpose of speech the sounds should be *easy* to acquire. Mr. Melville Bell has proposed the English language for universal use, with a new orthography, which he considers to be the one thing needed. "Give," says he in his *World-English*, p. 22, "Give definite and certain phonetic values to letters, and English utterance will be found to be, in no case, and in no degree, difficult to native or foreigner. . . All the elementary sounds will be correctly pronounced, almost at first effort, by any person to whom they are properly exemplified. The vowels in a(n), u(p), a(ll), and the consonants in th(in), th(en), h(ue), wh(y), may perhaps need a few repetitions by strange organs to render them facile. The only real difficulty to speakers of other languages is the *accent*, or stress." Thus to every one his own sounds are easy. Mr. Melville Bell has had a wide experience in phonetic teaching, but my own experience does not corroborate his on this point. I consider received English to be a most difficult language for a foreigner to pronounce.

§ 7. Phonetics—The Vowels—Umlaute.

What then is easy? The American committee say, "The vowels should be limited to the five pure vowels: *a*, *e*, *i*, *o*, *u*, pronounced as in Italian." They do not seem to be aware that *e*, *o* have each *two* sounds in Italian, which has thus *seven* vowels. The only European languages that I know with five vowels are Spanish and Modern Greek, and these do not pronounce their five vowels in precisely the same way. Many Englishmen, especially Londoners, have a difficulty with *e*, *o*, and their number is increasing. A Swede is very troubled with *u*, and so are some Midland speakers in England. Schleyer admits eight vowels, the former five, *a*, *e*, *i*, *o*, *u*, or *vokals*, and the three "*umlaute*," *ä*, *ö*, *ü*, or *vöküds* as he calls them. These sounds are all extremely easy to him, a South German. He finds the last three add much to the beauty of the sounds of language, and that without them a language is "like a coloured picture without violet, brown, grey or rose." See Vz. May 1888, p. 385, § 1244, 9, where Schleyer quite rises to poetry over them, and explains how he has used them in Vp. He finds them frequent in Europe in German, French, Swedish, English, Hungarian, and Turkish. "Almost every educated man," says he in this article, "has hitherto learned Latin, French, or English. But in all these three languages *Umlaute* occur, as in Cæsar, c*æ*lum, h*y*mnus; maire, peu, lu; a, sir, much." The c*æ*lum exists only in the German pronunciation of Latin; I do not know what country pronounces h*y*mnus with *ü*, although of course it was ancient Greek and was meant to be indicated by the Latin *y*. The three sounds also exist in French, one at least under two distinct forms, as in *peu*, *peuple*. But I think it will be news to all here present that the English words *a*, *sir*, *much*, are pronounced *ä*, *sör*, *müch*, or *möch* as Herr Schleyer elsewhere states. The fact is that *ä ö ü* are pronounced by most English people very indifferently, and in general only after much training, although in West Somerset, Norfolk, and lowland Scotch, there is provincially some approach made to the last two. Herr Bauer in his *Spelin* has six vowels, *i*, *e*, *a*, *o*, *u*, *œ*, the latter of which he also, as well as Schleyer, identifies with English *sir*, *much*, but he avoids *ä*, *ü*.

M. Kerckhoffs of Paris, as Director of the Academy for Volapük, in proposing the consideration of *ä*, *ö*, *ü* to the Academy, says (*Le Volapük*, No. 13, Jan. and Feb. 1888, p. 197): "The introduction of the sounds *ä*, *ö*, *ü* certainly forms one of the greatest faults of Volapük, because they are foreign to most European tongues. But we do not see the possibility of eliminating them from the language without the complete reconstruction of the grammar. We cannot suppose that M. Schleyer would concede a point, the necessity of which might be contested." Schleyer has indeed (in his Vz. for June, 1888, p. 391, § 1276) expressly declared that they must remain. In fact, to any one who examines a dictionary of Vp. it will be clear that they could not be changed, as far as the writing is concerned, without a complete reconstruction, not of the grammar only, but of the whole language. Nine years ago that would have been possible. Now, it would destroy all the progress that has already been made. Vp. must be taken as it is, or left. Three of the Academicians have spoken, one would retain *ä*, *ö*, *ü*; another would reject them from suffixes, where *ä* and *ö* are now very prevalent; the third, resident in Russia, says they cannot be admitted, as the distinctions *e*, *ä*, *ö* are too difficult for a Russian (*Le Volapük*, 209–210). But all this is time thrown away. Those who use Vp. must learn to pronounce the sounds sufficiently well to be intelligible. And it is not only Englishmen that will have to do so. A very large number of middle Germans habitually confuse *e*, *ä*, *ö* on the one hand and *i*, *ü* on the other.

§ 8. Phonetics—The Consonants—Voiced and Voiceless.

The American Committee allow only sixteen consonants, but do not specify them. They however reject "all gutturals, aspirates, lisps, and nasals." Presumably they would have *p b*, *t d*, *k g* ; *f v*, *s z*, *sh*, *y* ; *r*, *l*, *m*, *n*, but I feel doubtful as to *z* at least. Prof. Bauer, in his Spelin, uses only fifteen of these, omitting *r*. Herr Schleyer has nineteen consonants, arranged thus : *b p*, *d t*, *v f*, *h*, *y*, *g*, *k* ; *l*, *r*, *m*, *n* ; *s*, *j*, *c*, *x*, *z*, where the *r*, *c*, *x*, *z* are in excess of Prof. Bauer's. Here certainly *v* was to Schleyer German *w*, *s* was probably both our *z* and *s* according to position, as it is in German, but he recognises English *z* alone ; *j* represents our *sh*, *c* is said to be the English *g* in *g*erm, which I have rarely met any German who could pronounce, and *x*, *z* are the difficult initial combinations *ks*, *ts*, of which the first was familiar and the second impossible to an Athenian. But Schleyer considers *x*, *z* to be *gz*, *dz* with English *z*, as in e*x*amine, o*dds*, which initially are extremely difficult (Vz. No. 91, § 1320).

The American Committee says, "elsewhere he extends his alphabet to 37 letters." This is an error. Schleyer's alphabet of 37 letters was apparently composed before he invented Vp., and was intended to be a Universal Alphabet. He introduces it in his Vp. grammar as a means of writing foreign names phonetically. It is however very deficient. It contains the eight following letters in addition to those used in Vp., the figures give the numbers in his greater alphabet, p. 2 of his Grammar, 6. English *a*ll, 14. English *th*e (English *th*in is not named), 19. German la*ch*e (but German i*ch* is not distinguished), 24. Spanish Sie*rr*a, a very strong trill, but the "soft" Spanish *r* is not recognised, 27. French no*m*, 28. French mo*n* (the two words *mon nom* exactly rhyme, so that their sounds should not have been separated, and Schleyer does not take account of the three other French nasal vowels), 29. German sa*ng*, 31. German Flei*ss* (shewing that *s* is theoretically not used in Vp.), 35. English *ch*ild. With this alphabet he introduced a system of accents, the grave meaning long, and the acute short accented vowels, which he used in writing German, as in *Wéltspràcheliteratùr*, and occasionally in Vp. words used in his Grammar, Dictionary, Vz. and elementary books. But these accents are no part of his Vp. alphabet, and no other writer thinks of employing them. Hence when the American Committee say that "he (Schleyer) also introduces various diacritical marks, indicating accent, tones, vocal inflection and quantity, all of which we consider needless and obstructive," the Reporters convey an entirely wrong impression. "Tones" and "vocal inflection" are never indicated. The marks for accent and quantity intended to assist the learner, and especially the German learner, vanish from the printed pages of other writers. In his dictionary and elementary works, Schleyer also often italicises root syllables, which is convenient, and in his Vz. he does the same, especially when introducing new compounds, because his Vz. is in fact an elementary teaching book. No other Vp. writer uses italics in this way. To say then that Vp. "is both written and printed with underscoring and italic letters, *necessary* to facilitate its comprehension," is thoroughly misleading, and shows that the reporters possessed an insufficient knowledge of the system they condemn.

With regard to the pairs of letters *p b*, *t d*, *k g*, there is in Germany and Holland great difficulty in distinguishing the separate letters, especially when final. The double letters *x*, *z* are difficult to many speakers, $x=ks$ initial is even troublesome to Germans, and $z=ts$ is very troublesome to English, French, and Spanish. As to using *c* for English *j* (the American Committee wrote "French *j* (*dsch*)," an evident slip), and *j* for French *ch*, Schleyer says in his Vz. (p. 391, § 1276, 5), "A speaker of Vp. can pronounce the letter *c*, at pleasure, either as *g* or *c* in the Italian words *gena*, *cena*, similarly the letter *j* as the French pronounce *j*, *ch* in the words *Jean* and *chant*. Many men have no ear for these fine distinctions; therefore, as you please!" And again, in Vz. for July, § 1320, he says that *s* may be pronounced as English *s* or *z* at pleasure, "for many men have not fineness of hearing for these sounds," and then reverting to his *j*, *c*, *x*, *z*, says, "the pronunciation of all these in Volapük is indifferent," adding, "though in our (Schleyer's) eyes *x* and *z* are *gs* and *ds*, and if *x* and *z* have to be *ks* and *ts*, write them so, and not *x*, *z*," and he then refers to Vz. for 1884, p. 162, § 363, which I have not at hand.

These explanations are a key to much not only in Vp., but in all general phonetic writing. We do not want to enter upon all the niceties and subtleties of accurate phonetics. It is for some persons, as myself, a most attractive study, for others it is mainly incomprehensible and wholly stupid. They hear a sound and are satisfied with giving some sort of an imitation of it which shall convey to the person addressed a knowlege of the *letters* intended. Taking then the fact that "many people have no ear for these fine distinctions," we may say that every sound in any universal language may be more or less altered, provided only it does not cease to be recognisable. The *ä*, *ö*, *ü* of Vp. would be in an Englishman's mouth the *a* of b*a*t lengthened, the *ir* of s*ir*, and the *ew* of n*ew*. The vowels *a*, *e*, *i*, *o*, *u*, would be pronounced long, as in *father*, *there*, *machine*, *so*, *rule*, and short as in *pat*, *pet*, *pit*, *pot*, *put*, all of which have, of course, a slightly different quality. No possible confusion would thus arise. If, however, we limited ourselves to five vowels, we should only be creating immense difficulties in the formation of roots, unless we adopted Prof. Bauer's combinatorial and correlative system, and even then he requires six vowels.

But the written language as distinct from the spoken must also be considered. Up till last year Schleyer did not write *ä ö ü* with two dots, but knicked in the commencement of each letter, thus requiring three new types. The seventh edition of his grammar, and the first 104 pages of the eighth edition, still contain these marks, but they have now vanished, as decided by the Munich Congress. There remains a difficulty for telegraphing and type writing, and it is proposed there to write *a: o: u:*, with a colon, or the two dots, by the side instead of over. But in the printing telegraph of Prof. Hughes, which is most common, this colon could not be used without a new type wheel substituting (:) for *w*, as only twenty-six forms exist on the present type wheel. Hence there seems nothing left for telegraphic purposes but to use *w* as *aw*, *ow*, *uw*, or duplications as *aa*, *oo*, *uu*, or the secondary German forms *ae*, *oe*, *ue*, and when those combinations occur, as they do, in a few words, to double the final *e*, thus the usual *vät* 'weight,' and *nöt* 'nut,' would be *vaet*, *noet*, and the usual *vaet* 'juice,' and *noet* 'a note,' would be *vaeet*, *noeet*. In ordinary writing the two dots can remain, but they are often intolerably frequent, as *pökälöl*, one to be taken care of, a patient. English printers, who would soon run short of *ä*, *ö*, *ü*, or *a:*, *o:*, *u:*, and have no capital double dotted A, O, U, may use either plan with due explanation. None of these difficulties occur in Spelin.

§ 9. Phonetics—Other Alphabetical Difficulties.

There are several other points of the alphabet which I should like to touch on briefly. The aspirate *h* is a great difficulty in France, Italy, Spain, Greece, Russia, where it does not exist. The *r* was felt to be so difficult for Chinese that Schleyer has nearly banished it, and either omits it or uses *l*. But then a new trouble arises, for *tr*, *dr*, *kr*, *gr* having become *tl*, *dl*, *kl*, *gl*, great difficulty is felt in the separation of the first two from the last two at the beginning of words. In England the greater number of speakers unconsciously use only *tl-*, *dl-*, and say *tlay*, *dloves*, for *clay*, *gloves*, but then they are puzzled to distinguish *tl*, *kl*, and *dl*, *gl*. Vp., like ancient Greek τλῆμι 'I suffer,' and κλῆμα 'a bough,' has both. Modern Greek avoids τλ-. It will require some training to distinguish *kl-*, *tl-*, and *gl-*, *dl-*. Then with regard to length of vowels, I think we need not be particular in Vp. or any other universal language, provided we do not let quantity determine meaning, as we do in English. It is generally laid down that all Vp. vowels are *long*, and the accent or stress upon the last only. The following is Schleyer's last statement on the subject (Vz. June, 1888, p. 391, § 1276, 4): "Vowels are not always long. Only in monosyllabic words, and in the last syllable of words of two or more syllables are the vowels long. Poetry is free.

In every beautiful natural language vowels are both long and short, hence short vowels are by no means an exception in Vp., just as two eyes are not an exception. Every lan guage without short vowels is stiff and ugly. We read the word *jinunel* (female messenger) with the long vowel on the last syllable, not in the second, but as the French read the word *général*," in which we must assume the way that Germans usually pronounce it, which is somewhat different from the French. Again he says (*ibid.* 7), "To lay the stress on any other syllable but the last is difficult and too complicated (*pekosiadöl* properly compounded), hence it cannot be allowed." To almost all but Frenchmen this position of the accent is strange, and as in French we must mind to keep the preceding syllables distinct, and not hurry them over to get to the last, compare Italian *Libertà*. I find on examination that any other position of the accent in Vp. would not act, on account of its method of composition and inflexion. As a general question it must at present be left undetermined. Prof. Bauer's Spelin is enabled to have a different, and to most Europeans a more natural system of accentuation (see p. 91, No. 7).

The ideal limit of sounds cannot be easily settled. There is no one set of sounds essentially easy, and another essentially difficult. We can speak only relatively respecting the languages we ourselves encounter. To any speaker, only the sounds with which he has been surrounded during the first ten years of his life are easy. All others have to be acquired with difficulty and after considerable practice, and can never be really acquired without living, for a while at least, and that while comparatively young, in their atmosphere. There are of course great individual differences in the power of appreciating and assimilating new sounds, and the increase of phonetic knowledge and training will probably render such a power more general. Still there will always be individuals who remain quite impervious to any attempt to teach them new speech sounds. We cannot take count of those. Although we may regret the use in Vp. of *ä*, *ö*, *ü*, *h*, *x*=*ks*-, *z*=*ts*-, *tl*-, *dl*-, and the position of accent, yet as these are *all* the difficulties of speech in this language, they are so few compared with those of such widely diffused languages as English, French, and German, that I think we cannot complain. At the same time I should of course have preferred the much simpler alphabet of Professor Bauer. This contains only the six vowels, *i, e, a, o, u, æ*, and the fifteen consonants, *p b m, f v, t d n l, y s z, c(=sh), k g*, of which *æ, y, z*, are used "euphonically" to separate consonants and vowels, and admits only the initial combinations *bl, fl, gl, kl, pl, sl, sf, sm, sn, sp, st, sv, tv, kv*, in *bl*ow, *fl*ow, *gl*ow, *cl*ay, *pl*ay, *sl*ay, *sph*ere, *sm*all, *sn*ail, *sp*ell, *st*ay; the last three are easy substitutes for the difficult English *sw, tw, kw*, in *sw*ain, *tw*ain, *qu*een. These initial forms would offer difficulties to very few, such as Arabs. There are also no double final consonants, the euphonic *æ* being always interposed. These would suit all European Aryans.

The American Committee says roundly the phonetics of Vp. are "strange in part to every Aryan," but the phonetics of any one Aryan language are still more strange to that of every other. The easiest, the Tuscan, having two forms of *e* and *o*, two forms of *z* (*ts, dz*), peculiar *c*ena, *g*emma, and their varieties, with a most "vagrom" accent, difficult for any foreigner to "comprehend," and all entirely unmarked.

§ 10. The Aryan Basis—Vocabulary.

Leaving phonetics, let us go to the language itself. The invitation is expressly for "perfecting" a language on an Aryan basis. The Committee say: "The Aryan stock is now and has been for two thousand years the standard-bearer of the civilisation of the world; *hence*, a universal language should be based upon the linguistic principles of that stock." This is a wonderful *non sequitur*. Had the languages used by the Aryan races anything to do with this "standard-bearing"? It is not even hinted that they had. The history of the Aryan race, so far as it is known, for the origin of it is lost in obscurity, and who were the original Aryans is just at present a matter of rather lively discussion—did they come from the North of India or the North of Europe?—the history rather shews that their advance in civilisation was independent of the languages used. The fact that one language for a long while prevailed over Europe was a mere matter of conquest, and broke down with the breakdown of the power which had conquered. It is notorious that peoples change their language from the action of circumstances. We have a curious little bit of history in that way in our own dominions in North-east Caithness and the Orkneys and Shetlands. Similarly, it is doubted whether there is a drop of Greek blood in Greece. We have long known that commonness of language is no proof of commonness of descent. But that advance of civilisation should be due to a certain common origin of language, and should condition the formation of a new cementing language which has especially to act on peoples beyond its limits, is altogether new and to my mind untenable. What follows seems to have a trifle more foundation, but really is equally untenable. "In the Aryan stock," say the Committee, "the six principal living tongues in the order of their importance and extent, may be ranged as follows: English, French, German, Spanish, Italian, Russian. It should be the aim of the proposed general tongue to ally itself to these somewhat in the order noted, as thus being more readily acquired by the greater number of active workers in the world at the present time." Now in the first place, if only those six languages were concerned, we could do without a universal language. In the next place, it is *not* these peoples that we want especially to enlist, except as recruiting sergeants for the non-Aryans, and lastly it is very doubtful whether any one of those six nations who had to learn the Universal Language would be at all specially benefited by its reference to the five others which he did not know and did not wish to acquire. No, what we want is a short simple means of expressing thoughts and their relations, and whether this is connected in any way with Aryan or non-Aryan stocks, is of no consequence whatever. It should be constructed quite independently of any racial considerations.

Now the first thing we have to deal with is the construction of a *vocabulary*, and it is just here that the most diverse opinions exist. The Report states: "The vocabulary of the Universal Language should be based primarily on *the vocabulary* which is common to the leading Aryan tongues." There *is* none. There is no common vocabulary. We must not take English and German as examples. They both belong to one Aryan branch, and their common words are not those of the Romance languages, which are in common with (lexicographical but not constructional) English. And how many (bating scientific terms and a few that came through the Latin mint) are in common with Greek? What shall we say of Russian? But the Report adds: "There are 1500 words in German, which are almost or quite the same in English; there are more than this number common to English, French, Italian, and Spanish. A selection should be made from these similar or identical word-forms as the foundation of the lexicon. At least a thousand words in common use will be found to be the same in all these languages, *when we allow for the operation of simple and well-known phonetic laws*," a large proviso, which is immediately further developed by saying: "*Let the learner be taught these laws*, and he will at once know a good share of all the more usual terms of daily intercourse in the new language."

Now to my mind this proposition is simply impossible. What! people, in order to learn a new universal language, are first to learn the phonetic laws by which the particular branches of the great Aryan division of languages have been altered in Western Europe, and then they, who must be Western Europeans, or their trans-European descendants, to be in the slightest degree benefited, will forsooth "know"—save the mark! *know!*—a good share of the terms of daily intercourse, which differ so widely even in Western Europe. And what of non-Europeans? Does "universal" mean "West European"? Are the Semitic stems, the various non-Aryan, Asiatic, African, American, and other languages to be eliminated from the "universe"?

This therefore may be at once dismissed, and with it the dream of an Aryan basis for the world-language, which could only be realised by Mr. Melville Bell's World-English, and this is just what no one can afford to wait for.

§ 11. The Formation of New Roots.

The basis of the vocabulary must be sought elsewhere. In all languages the roots must be learned quite independently of any other language. In a natural local tongue the meaning of the roots gradually arises in the mind of the child by constant intercourse with his parents and companions. In an artificial universal language the learning of the meaning of roots must take place by help of a previously known natural native language. There is no help for it. Each root must become separately familiar to the person who uses it; and it is not of the least consequence what sound that root has, provided the learner can approximate to it, and provided it is suitable for constructional purposes and distinct from every other root in sound and meaning. In the so-called Aryan languages a long course of descent and circumstances have given to the most usual roots a great variety of meanings, as dictionary makers know only too well. In order that the universal language should be of any use, each root should have one meaning only, or at most two, literal and figurative. This eliminates the words of any language in particular, except as occasionally suggesting forms for the roots.

How are the roots to be chosen? Bishop Wilkins in his *Essay towards a Real Character and a Philosophical Language*, 1668, a work which should never be neglected by any one who thinks of a universal language, first made an elaborate classification of all ideas known to him, with their differences and species, and then instituted a philosophical inquiry into the nature of grammar and the relations of spoken sounds. After this he invented a set of signs which marked all the "integrals and particles" as he termed them, thus forming his "real character," which was addressed only to the eye, like Chinese ideography. This done, he vocalised his characters in such a way that each part of any real character was transcribed into a sound, that thus represented his classification of ideas and views of the philosophy of grammar. He gives as specimens of this language the Lord's Prayer (pp. 395 and 421) and the Apostles' Creed (pp. 404 and 427), and compares the first interlinearly with 50 other languages, reckoning written and spoken English as two (p. 435). These are probably the only specimens that were ever written. I give the first two words of the first, namely, "our father,"—*hαι* Coba, as he writes them, with his explanations. "(hαι). This Dipthong (*αι*) is assigned to signifie the first Person plural amongst the Pronouns, *viz. We*. The Letter *h* prefixed to it, doth denote that the Pronoun is to be used possessively, *viz.* Our.—2. (Coba). Co doth denote the Genus of *Œconomical Relation*; the Letter (b) signifying the first difference under that Genus, which is Relation of Consanguinity; the Vowel (a) the second Species, which is *Direct ascending*; namely, Parent," Sex was left undetermined in this case, it comes under Natural Powers VI, and is expressed in his "real character" p. 396, and see also p. 415. It is evident that a language which required such a preamble could never become practical. Nor could any language which depended upon any classification of ideas, as long as it was entertained, for the classification of to-day must be superseded by the knowledge of to-morrow. Hence all words which recall a classification in our present languages are only useful by reason of the classification having been forgotten, or becoming overlooked. We may therefore dismiss all such as thoroughly unpractical, including in them the construction of roots where each letter refers to some general conception or idea, which, combined with the conceptions suggested by the other letters, make up, in the mind of the inventor of the root, the general conception which he desires that root to express. Not only would such combinations become obsolete, but the inventor would soon find himself at the end of his resources in inventing them.

Next there is the onomatopoetic principle, which, however, has such a limited range of action, and becomes so extremely vague when applied to ideas not immediately connected with sound, that it may be passed by as naturally insufficient.

Another plan is to take a language generally known, with all the values of the words it contains, and make use of clippings from it as roots. This has been done, or rather suggested, by Mr. Henderson, in his *Lingua*, taking Latin as the basis. An examination of this decidedly ingenious book convinces me that it is impracticable. In fact it requires a preliminary knowledge of Latin, and its clipped forms are so many stabs in the heart to one who knows Latin. The same remark applies to the other attempts to found a language on Latin, or Romance, or mixed bases. They all give me the feeling of breaks down, nigger language, talkee-talkee. And it is to me very ominous that the American Committee refers with satisfaction to the Creole Indian jargons. When we set to work to form a new language, it should evidently be composed of living co-ordinated parts, and not a loose heap of dead chips.

It remains then that the roots should be chosen arbitrarily, like Linnaeus's "trivial names" of plants, so as to suit the method selected for indicating construction. But when thus "the world is all before us where to choose," it is very difficult to strike out any path at all, and hence it is necessary to recur to the forms existent in such languages as happen to be more or less known to the inventor, and to reduce the roots to the shape required for the system of grammar and derivation to be adopted. This is what Schleyer has done. He has taken a large number (the American report says 40 per cent.) from English, but has so changed the forms for his purpose, that they are scarcely recognisable. Thus *nil* near, *lil* car, *nim* animal, *dled* dread, *vol* world, *flen* friend, *läd* lady, *söl* sir, gentleman, all monosyllables, always beginning and ending with a consonant, and all the vowels long. Prof. Bauer limits himself to taking the roots from English, French, and German; they are, however, necessarily more or less similarly transformed out of all knowledge. But it is really of no consequence whatever whether or not the old words are recognised in their new forms. They have to be learned by Frenchmen and Arabs who know nothing of English, just as Englishmen know nothing of the other languages laid under contribution. It is necessary to insist on this in the formation of an artificial language. The roots must be arbitrarily selected. There ought to be no "most favoured nation clause" in this "international commercial treaty," in the sense that the result should be more easily comprehended by one nation than another. The Universal Language is wanted as a means of communication between *all* nations. Every one who wishes to communicate by its help must learn the meaning assigned to the roots. There are at present numerous handbooks for teaching Vp., but a literature is as yet wanting, for Schleyer's little books of unconnected scraps (*Rimapets*, or Proverbs in verse; *Nur Geist*, a collection of 200 pithy remarks; *Das Buch der Wahrheiten*, of a similar character; *Biblika*, biblical texts, to which may be added his *Bib I.*, or translation of the first Epistle of St. John) do not form literature sufficient for the purpose of rendering a reader familiar with a language.

That will, however, not be long delayed. The pioneers in this direction are Fieweger's translation of Lessing's *Minna von Barnhelm*, and Dr. Lederer's *Volapükabuks* (Andersen, Grimm, etc.). In the mean time the various newspapers and journals, especially Schleyer's Vz., and Kerckhoffs' *Le Volapük*, supply a good deal of more or less interesting matter to read and understand. But till a very considerable number of roots is absolutely familiar there can be no proper speaking or writing. In Vz. for July, § 1326, it is however announced from Chicago that Corinne Cohn, a girl of six, daughter of a professor of Vp., already *speaks Volapük*, in addition to German, French, and English. But then America is so go-ahead!

§ 12. The Aryan Basis—Grammar—Analytic or Synthetic.

The third and most important point is *grammar* or construction, the means by which the relations of thoughts to one another are expressed. Now here the Aryan theory breaks down altogether. Anything more perplexing than the verb in Sanskrit, Greek, Latin, and even in modern Italian, Spanish, French, German, and English, could hardly have been conceived if we had not seen the Semitic verb, and if Prince L.-L. Bonaparte had not devoted a large quarto volume to the Basque verb, both of which are of course non-Aryan. It would be utterly and totally impossible to construct an intelligible universal verb upon any one of these bases. The American Report suggests that the modern Aryan forms have become analytic both for tenses of verbs and cases of nouns. They have become so only to a very small extent. They could not bite through the meshes of the net which enveloped them. It seemed left to the mouse of Vp. to do so, and then Spelin passes through the rent.

The conception of *analytic* in place of *synthetic* conjugation has arisen entirely from our use of periphrastic forms, that is, of several words having originally different senses, used to replace one of the Aryan complicated forms, as *he shall or will have loved* for *amaverit*. Now clearly it would be trying to extract bright water from mud, to attempt to use anything of the kind in a universal artificial language. What we want is to analyse the relations and express each by an appropriate syllable of the simplest kind, tacked on to the verb or noun (so far as speech is concerned, they may be separate in writing), taking care that there are no exceptions whatever. This I contend, and not the periphrasis, is a truly analytic process. If it is synthetic because the syllables are placed together, then *hĕ-will-hăve-lŏved* is a synthetic and not an analytic form. Oh! but this tacking on of syllables, says the American Report, "is what is known to linguists as the agglutinative process, and is found in the Ural-Altaic tongues in high perfection." This relates to Dr. Esperanto's (Samenhof's) *Langue Internationale*, in which "the mutual relations of words to each other are expressed by the union of *invariable words*." Mr. Henderson uses the like in his *Lingua*, and draws especial attention to the fact that his relational syllables *are* all real words. In Vp. they are not so. They are generally merely vowels, and occasionally syllables. You must allow me to illustrate this somewhat, or it will not be understood by those who have not paid attention to Vp.

The mere root in Vp. expresses generally a concrete or an abstract idea; as *pen* a pen, *bin* a being, *nun* information, *nul* novelty. These are made into verbs by additions of syllables before or after them. Thus *ob*, *ol*, *om*, which when used independently mean I, thou, he, act, when affixed to a root, to erect the noun into a finite verb, having person expressed, and hence meaning much more than in their independent state, and this is, I think, the only case in which added syllables happen to be real words with an independent signification. Thus arise *penob* I pen, or write, *binob* I am, *nunob* I inform, *nulob* I renew. Here let me correct the American report, which says, "In the conjugation the subject follows the verb, *bin-ob* I am, where *bin*=am, *ob*=I." Now the Vp. *bin* does not mean *am*, but *a being*, and in English *am* it is the *m* tacked on at the end which expresses the first person, as in Latin *sum*, Greek *εἰμὶ*, so that *I am* is a repetition, just as in Vp. we may say emphatically *ob binob* I am. Thus the *ob* tacked on is not the subject, but gives the verb the form it must assume when the pronoun *ob* precedes, just as in Latin the *m* of *sum* prepares the verb for the subject *ego*. But just as in Latin the *ego* is usually omitted because the termination *-m* is sufficient in itself, so in Vp. in *binob* am, *binol* art, etc., the subject is not postfixed but omitted, and when inserted is prefixed. Indeed in the third person it is usually necessary to name the subject, and then its name is generally placed before the verbs, as *man at binom gletik*, man this is great or tall, the *om* remaining to mark the verb and third person. All these finite terminations have *o*, but for the infinitive *-ön* is added with *ö*, making the noun into a verb or new verbal noun (as in ancient Greek), thus *penön* to write, or a writing, *binön* to be, or a being, *nunön* to announce or an announcing, *nulön* to renew or a renewing.

Then for tenses "augments" as in Greek, or prefixed letters, are used so as not to interfere with the suffixes just explained. Thus *a* is present (only used in the passive voice or in the continued form), *ä e i* are all past the first imperfect, the second perfect, the third pluperfect, thus *äpenob, epenob, ipenob,* I did write, I wrote or have written, I had written. But *o u* give the futures present and past, *openob upenob,* I shall write, I shall have written. I should certainly be wrong in the opinion of the American Reporters, but I consider this process much more *analytic* than the English, which uses clumsily *periphrastic* forms that do not analyse the conception at all, but actually suggest wrong meanings, as we see at once if we try to put them into French. Then the continued forms insert an *i*, as *aipenob* I habitually write, *äipenob* I used to write, *oipenob* I shall be habitually writing; forms absent in most other languages where their meaning has to be expressed by periphrasis. These forms do not seem to be much used except by Schleyer himself, who is very fond of them. The English forms "I am waiting, I was writing," have been adopted in Vp., as *binob penöl, ebinob penöl,* where *-öl* is the participal termination.

Prof. Bauer in his *Spelin* adopts another and, I think, still simpler process. Taking *mil*=love, he forms five infinitives, present *mili* to love, past *mile* to have loved, pluperfect *mila* to have had loved, future *milo* to be about to love, future past *milu* to have been about to love. Then by prefixing to these the personal pronouns, which with him are the simple vowels *i* I, *e* thou, *a* he, *o* she, *u* it, *æ* one=French *on*, he makes these finite, as *i mili* I love, *e mile* thou lovedst or hast loved, *a mila* he had loved, *o milo* she will love, *u milu* or *æ milu* it or one will have loved. This is the very simplest verb which I have seen. But the beauty of its construction cannot be properly appreciated by an isolated example. The whole grammar of Prof. Bauer's Spelin turns on this correlation of *i, e, a, o, u, æ*. In the passive voice *bi* is prefixed and a participle in *-ed* added, thus *i bi miled* I am loved, as in English. But in Vp. *p* is prefixed to the active form to make it passive, as *pened papenom* or *pipenom*, the letter is written or had been written.

In Vp. the direct or name-case of nouns is left untouched, the three oblique cases have *a, e, i* subjoined, *pena, pene, peni* of a pen, to a pen, a pen. And for the plural *s* is added, as *penas* of pens. Is not this also analytic? For these syllables express these relations without any exception for every class of words; as *pen ola* the pen of you, *egivom penedi ole* he (*om*) gave (*e*) a letter (*i*) to (*e*) thee, compare the Latin *dedit tibi epistolam*. Here again *Spelin* is simpler than Vp. It leaves the original form untouched, but adds *æs* for the plural; the genitive and dative are expressed by prefixed prepositions *dæ*, *tu* in both numbers, and the accusative is, as in English, left to position to determine.

I am not writing a grammar of Volapük or Spelin, and hence I do not go into further particulars. The mere English reader will find good introductions in C. E. Sprague's Handbook of Volapük (Trübner, 1888), and H. M. Hain's Grammar of Volapük (Carr & Co., 1888), both written in English especially for English speakers. Swan Sonnenschein & Co. have also published a translation of Alfred Kirchhof's Grammar, while Auguste Kerckhoffs' *Cours Complet* and *Dictionnaire* are admirable for a Frenchman, but those who know German should get Schleyer's own grammar and dictionary.

§ 13. Volapük according to the American Committee.

Now I turn specially to the appreciation of Vp. by the American Committee, which is in some respects founded on inaccuracies, and this is a pity, considering how uncompromising the condemnation is. They begin thus: "His (Schleyer's) scheme is evidently the result of conscientious labor and thought, and he manifests a just appreciation of the needs of the time; but unfortunately the theory of construction he has adopted is in conflict with the development of both the Teutonic and Romance languages, *and full of difficulties to the learner*." This last assertion any one who has even dipped into Vp. is competent to contradict. The "development of the Teutonic and Romance languages," so dear to the Reporters, is, as I have already said, unsuited for a universal language, which is wanted for persons beyond that influence, or under very different forms of that influence, and whatever plan is used, it must be altogether much simpler than in any Aryan language.

The Reporters then enter upon the phonetics of Vp. already sufficiently considered, together with the incorrect assertion that accents and italics were necessary, and the fact "that various sounds of the Volapük alphabet could not be pronounced by a member of any Aryan nation without special oral teaching," which they say "we regard as a fatal defect." *Actum est!*

"Moreover," they continue, "many words are manufactured from entirely new radicals, capriciously and even fantastically formed, and this we condemn." Unfortunately no examples are given. It is, however, of no consequence even if correctly stated, as I have already endeavoured to show. "The article is omitted which is well." Whenever the article is of importance there are substitutes, as *sembal* 'some one,' corresponding to Latin *quidam* and *at, et* 'this and that,' Latin *hic, ille*, which can be used as in that language. In fact, in his dictionary Schleyer gives *el* as "the definite article, general; but only where absolutely needed" (bestimmter Artikel, allgemein; nur, wo durchaus nötig). He uses this *el* in the Lord's Prayer (Grammar, p. 56), *O Fat obas, el in süls*, O Father of us, *the* (one) in heavens, where it is rather a demonstrative pronoun as the Greek ὁ ἐν τοῖς οὐρανοῖς, which it translates, and in usual Vp. would have been *ut kel binol*, or *binom*, that one which art or is.

Then the American Committee proceed to complain of the cases of nouns already spoken on, and would probably in this respect prefer Spelin. Next they find fault with the method of forming "diminutives, comparatives, and superlatives, by prefixes and suffixes." In the illustration the comparative (by a misprint?) is made to end in *üm* instead of *um*. "It will be observed," say they, "that while this process is not dissimilar to that *once frequent* in the Aryan stock," it is still very frequent, "it is not analogous to that which the evolution of that form indicates as its perfected form," that is, the degrees of comparison are not formed by the clumsy prefixment of two adverbs meaning greater and greatest in quantity, to adjectives which may not have any relation to quantity, as "more good-natured, most good-natured," but by the addition of the syllables *um, ün* in every case without exception, as, *gudäl* being "good-natured," *gudälikum, gudälikün.* To prefer the former to the latter is certainly riding a theory very hard.

Then comes the passage about *binob* I am, already spoken of, with the comment, "this we object to as contrary to the logical arrangement of the proposition." Now in Vp. the arrangement of the order of the words, as in Latin, is arbitrary, because the inflectional system allows it. The Reporters themselves go in strongly for position as indicating sense, thus they say "the phrase *give to the child a spoon*" would be just as intelligible in the form *give spoon child*, if we remember that the direct precedes the indirect object." In Vp. *givol-öd cile spuni* might be put in any order, as feeling or emphasis dictates. In English we should say, when we use a preposition, *give a spoon to the child*, or, omitting the preposition, *give the child a spoon*, in each case precisely contrary to the order used by the Reporters. But they seem to impute it as a fault to Vp. that "the meaning is largely derived from placement," a statement which is quite incorrect. It is only when the adjective, as is generally the case, follows its substantive, that, in imitation of the German custom, it is not declined, otherwise it is declined. Schleyer illustrates this on p. 46 of his *Mittlere Grammatik*, by first showing how position can be varied, and lastly giving a passage which is purposely ambiguous, chiefly from confounding the adjective and adverb, and which is immediately corrected. Now this is cited (and the citation is incorrectly printed[1]) to shew not only that much depends on position, but that "it is acknowledged by the author that obscurities

[1] The errors extend even to the translation, though here the Reporters had the German before them. The original has "*Gudikòs plidòs Godè* das Gute gefallt Gott," where the accents are written to prevent probable German errors in reading. The Committee print "*Gudikòs plidös Godè*, Goodness pleases God" where *plidös* has no meaning, but may be a misprint for *plidòs*, and *Gudikòs*, like *das Gute*, is 'that which is good,' Latin *bonum*, not abstract goodness, Lat. *bonitas*, which is *gud* in Vp., and *die Güte* in German. The ambiguous passage in Schleyer is "*gudik Godè plidos*, it pleases the good God, or what is good pleases God," or even "it pleases God well," which, in order, should be *gudike Gode plidos*, *gudikos Gode plidos*, *gudiko Gode plidos*, which are quite unambiguous, but the more usual forms are *plidos Gode gudik*, *gudikos plidos Gode*, *plidos Gode gudiko*, without accents.

may arise from these transpositions, and there is much dependence on accents and tones." The errors in these statements can only have occurred through carelessness. But much capital is made out of them, and in summing up the case against Vp. the Reporters end by saying "its expressions involve *unavoidable* obscurities," which is an incorrect assertion founded only on their own mistake.

The Reporters say: "We are surprised to see the German third person plural (*Sie*) retained by the author as a *courteous* form. It should be the first duty of a universal language to reject such national solecisms." Of course it was not the third person plural in Vp., for that would be *oms* or *ofs*, but it was a special form *ons*, a quasi-plural to *on*, used as the French *on*, that is meant. The second Vp. Congress at Munich in 1887, before the Report was read, had rejected it. But Schleyer says (Vz. Jan. 1888, p. 365, § 1138, 12a), "It seems a secondary matter whether one corresponds with *ol* thou, or *ons* courteous you. But if any one does not like to use *ol*, or looks upon it as an insult, we cannot compel him to employ it," and consequently he gives *ons* with all its derivatives in the last edition of his dictionary, just published. In the East especially a courteous form of address will be a necessity.

The Reporters say, "The excessive multiplication of forms lends to Vp. an appearance totally un-Aryan." This is of no consequence. "The verbal theme is modified by sixteen suffixes and fourteen prefixes." This is a very small amount compared with the alterations in the numerous older Aryan conjugational forms, and the heaping of auxiliaries in the newer, especially when we remember that each suffix or prefix affects every possible verb in precisely the same way. "There is a *durative* tense," already spoken of, but it is merely facultative, and its effect may be given by adverbs or auxiliaries as in other languages, *aipenob* I am habitually writing, or *penob egelo*, or *fovo*, j'écris toujours, ich schreibe immerfort. There is "a *jussive* mood, conjunctive, optative gerund, and supine forms all indicated by added syllables, reminding one of the overloaded themes of Turanian tongues."

There is no supine syllable; supines are expressed by prepositions, and the infinitive, which is treated and declined like a substantive. The passive gerund *amandus* has indeed a peculiar form, as *pölöföl*, one to be loved, rarely used, and easily expressed periphrastically. The other gerunds are cases of the declined infinitive. "This mechanism," say the Reporters, "is not only superfluous, but if any lesson may be learned from the history of articulate speech, it is precisely the opposite to what the universal language should and must be." The mechanism being quite different from any that could be thus alluded to, this remark does not apply, and perhaps the ease with which these things are acquired, the rapid increase of readers and writers of Vp., may lead some people to disagree with the Reporters.

Their own propositions are extremely vague, and so far as I can see totally insufficient to express modern thought. They fall back on "jargons," and they pay the English language the compliment of calling it "a jargon of marked type," which is quite incorrect; for though we incorporate foreign words in abundance, we almost always nationalise them, and never lose grip of our Teutonic grammar. They say that "the evidence, both from theory and history, is conclusive that the progress of language, linguistic evolution, means the rejection of all paradigms and inflections and specialisation of the process of placement" (p. 14). To my mind the history of the break down of Aryan forms has nothing to do with the invention of an artificial language, except to teach us what to avoid. The strange confusion even of the English verb, the wonderful use of auxiliaries, the distinction of *I shall* and *he will* in the pure future, never mastered by many English speakers, as in Scotland,[1] and their difference from *I will, he shall*, with

[1] In one of her novels Mrs. Oliphant, a Scotch writer, makes her heroine, supposed to be an English lady, say, "If you read that *I will die*," meaning merely *I shall die* in the simple future, not that she had any intention of putting an end to her life. This reminds one of the supposed fraudulent bankrupt, who was reported to have declared, "I will be a bankrupt," and in whose case Lord Eldon is said to have ruled that "*shall* and *will* mean the same thing," and of the man in Joe Miller, who, falling into the water, cried in a fright, "I will be drowned, nobody shall save me!"

subtle distinctions again in interrogatives and negatives, may all be pardoned historically, but would be a digrace artificially. If ever the proposition of the American Philosophical Society comes so far as to the construction of a single book of examples, which I do not anticipate my living to see—but then I have turned seventy-four—I own I shall be curious to learn how they have waded through the grammatical slough of Aryanism.

§ 14. Volapük contrasted with other Languages and with Spelin.

The author of Spelin, Prof. Bauer, of Agram in Austrian Croatia, a mathematician and a linguist, who is thoroughly acquainted with Volapük, possessing a "certificate as head teacher," *diped löpitidela*, writes four languages, German, French, Italian, and Croatian, and reads also Latin, English, Russian, and Spanish, and is therefore thoroughly competent to compare the two artificial languages, Vp. and Spelin, with natural languages, after receiving the American Philosophical Society's Report, just considered, writes to the following effect (Spelin, pp. 50–54, here abridged).

"*Volapük is superior to natural languages in these respects.* 1. No exceptions. 2. Almost phonetic orthography. 3. Latin alphabet only. 4. One place of accent. 5. One single word for each idea. 6. No grammatical gender. 7. Treatment of sex as in English. 8. One declension. 9. One conjugation. 10. Suitability for mathematical combinations [this is in reference to his own proposed improvements]. 11. Simple syntax. 12. Greater and more correct linguistic feeling. 13. Brevity. 14. Neutrality with respect to nationality as a universal commercial language." [There would probably be great jealousy if it were proposed to adopt any existing language as a basis.]

Then he contrasts his own Spelin with Vp., and I may say at once that if Spelin had preceded Vp. (which was impossible, as its existence is entirely due to Vp.), and had been worked out in the detail now attained by Vp., it must have been far more widely accepted, and have become as its name implies the All-language; but now to all appearance Vp. stops the way.

Spelin is superior to Vp. in the following points:—1. An Alphabet common to German, English (reckoning *æ*=*ŭ* English), and French. 2. Strict phonetic orthography. 3. No letter but *i* for which the pen must be raised in writing. 4. Acoustic vowel series *i*, *e*, *a*, *o*, *u*. 5. Euphony attained by a linguistic anatomy of European languages (especially German, English, French, and Italian). [Spelin is certainly very much more euphonious than Volapük.] 6. Two euphonic vowels *e*, *æ*, and two euphonic consonants *y*, *z* [used to prevent harsh collisions of consonants and vowels]. 7. Accent as in Spanish [on penultim of words ending in a vowel, on the last syllable of words ending in a consonant, in which case the vowel is short in Spelin]. 8. *Modern* linguistic ideal observed. 9. Sex treated as in English. 10. No declension, only prepositions. 11. The Croatian law of correlation extended to all grammatical forms. 12. Relative and interrogative pronouns identical. 13. Only five tenses, present, past, pluperfect, future, future past. 14. No subjunctive. 15. Imperative and optative as in English. 16. Conditional and its correlative as in Hungarian. 17. The letter *s* used not only for the plural, but also when prefixed for the durative and frequentative form of verbs and collective names. 18. Nearly twice as many monosyllabic words as in Vp., in flowing sentences. 19. Fewer letters for expressing the same thoughts by 19 per cent. 20. Vowel termination frequent and no indistinct conflux of consonants. 21. No words of more than four syllables. 22. No lexicographical isomery or words with the same letters and different meanings.

§ 15. Spelin and the American Committee.

Points on which Prof. Bauer agrees with the Americen report:

1. The alphabet should be one known to the leading commercial nations. 2. Absolutely phonetic spelling. 3. No accents or other diacritics. 4. Latin letters. 5. No

difficult combinations of consonants. 6. Brevity important. 7. Vocabulary *primarily* founded on those of the principal Aryan languages. 8. No article. 9. Only natural gender or sex indicated. 10. Plural not needed in connection with numbers expressed. 11. That the dative never precedes the accusative unless necessary for understanding.[1] 12. Interrogatives replace relatives.[2] 13. The reflective pronoun confined to the third person. 14. That the form of the verb remains unaltered for all persons and numbers. 15. One syntactic order of words; subject before predicate; noun before adjective; verb or adjective before qualifying adverbs; immediate before remote object.[3] 16. No postfixed conjunctions [as Latin enclitic *-que*, *-ve*].

In the following points Prof. Bauer differs from the Committee:

1. That every sound used should be common to all the Aryan languages. 2. That the sound *ö* should have no place in a universal language. [If we identify it, as we may for all purposes of speech, with English *ŭ* and Sanskrit *ă*, it is one of the commonest sounds in the world.] 3. That scientific language should have a second vocabulary, different from the other. 4. That the grammar should be founded *only* on that of the Aryan languages. 5. That we should renounce inflected forms of comparatives and superlatives. 6. That postpositions should not be used, though we have prepositions before nouns and postpositions after verbs in English. [The Committee was thinking probably only of nouns, but we also use postpositions after nouns in English, as "something to cut with," "the house I live *in*," etc., and

[1] The English usage is here peculiar. When only one object is a pronoun, it comes first, whether dative or accusative, as "he gave it Charles, she gave him the cup." When both objects are pronouns, the acc. precedes, "he gave it me," not "he gave me it," so in "he gave her him," her is the accusative; if we want to make *her* the dative, we must use a preposition as "he gave him to her." When neither object is a pronoun, *to* is generally used before the dative, "they gave a chair to Charles," but if not, the dative comes first, "they gave Charles a chair." The indirect object is often the one most thought of. It is at any rate not usual to find such rules of position observed as in the text. These and similar alterations in other languages render dependence upon position very doubtful.

[2] As in modern English, the man *who* did it, or the older "Our Father *which* art, etc." But "the man *what* drove the coach" is unbearable.

[3] This rule would greatly hamper construction. See footnote [1] above.

they were used in Latin *mecum*, etc.] 7. No affixes, suffixes and infixes; because, says Prof. Bauer, "the more of them, the fewer roots." 8. No method of forming entirely new roots.

Points of indifference between the Report and Prof. Bauer: 1. Whether adverbs should have a particular form. 2. Whether interjections should have a particular form.

I have cited all these points as they form a kind of summary of the Reports.

§ 16. SCHLEYER'S STATEMENT OF THE PRINCIPLES OF A UNIVERSAL LANGUAGE.

The following thirty-one principles are given on the cover of Herr Schleyer's *Grosses Wörterbuch*, 4th ed. 1888.

1. For one humanity a single speech. [This put into Vp., as *menade bal püki bal*, contracted still further to *m. b. p. b.*, forms his motto and mark at the beginning and ending of his dictionary; it gives the conception of a universal language its simplest form. Kerckhoffs objects to the form, which is that of a prayer, *God givom-ös menade bal püki bal*, 'may God give one language to one humanity,' and alters it inharmoniously as *Menad bal, pük bal* 'one humanity, one language.']

2. For common language but one common writing.

3. For common writing but one common sound.

4. For every single sound a single sign.

5. For every single sign a single sound.

6. Roman letters only used.

7. No mute or superfluous letter.

8. The same orthography everywhere.

9. No exceptions to any rule. [This is the wonderful and attractive part of Vp.]

10. The order of the words in general free. [This is dead against the American Reporters' view.]

11. No double negatives. [This is a common Aryanism.]

12. No article, or only very seldom. [See exceptions on p. 86.]

13. No irregular verbs! [What a blessing!]

14. No Ablative, Instrumental, Locative, Dual, Deponent. [Many may ask, why then Nominative, Genitive, Dative and Accusative? Why singular and plural forms? The answer is that these relations must all be symbolised, and that the Vp. system of symbolising is extremely brief, and admitting of no variety or exception, is very convenient. But compare Prof. Bauer's declension, p. 85.]

15. Simplicity preferred to complexity.

16. Rarely strange words. [In fact they are only introduced for names of persons and places, and when a strange word has to be expressly treated.]

17. Use of all that is good, beautiful, brief, simple, free, and rational in all languages.

18. No want of clearness in ideas. [That is, in the power of expressing them.]

19. Names of things without genders.

20. Crowding together of consonants and vowels avoided.

21. Not too long compound words. [Schleyer limits all his words to six syllables, so that this is one of the longest, *volapükatidel*, world-language-teacher; generally they are much shorter, roots are, as a rule, monosyllabic, comparatively few dissyllabic, the other syllables are formative. Thus in the last word *vol* 'world,' *pük* 'language,' *tid* 'instruction,' are the roots; the two *a* are marks of genitive, and the *el* corresponds to our *-er* in teach-*er*. Prof. Bauer stops at four syllables to a word. On account of the accent falling on the last syllable in Vp., it is a relief to the ear to have words of three or more syllables to break the monotony of an accent recurring on every two syllables.

22. The letters *r*, *c*, *h*, *ng*, *th*, *jtj*, must occur very seldom. [*r* and *c*=English *j* and *h* do occur in a few Vp. words, but *ng*, *th*, *jtj*=*shtsh*, are only found in foreign names introduced.]

23. No sibilant at the end of declinable words. [This arises from the use of *s* as the mark of the plural; the courteous *ons* raises a difficulty, and Schleyer proposes *ōns* in the singular and *ŏns* in the plural, which is so contrary to

his principles that it would alone render the dropping of *ons* advisable, as recommended by the Munich Congress.]

24. A single mark of the plural, *s*. [Those who have struggled with the plurals in other languages, German and Arabic for example, will appreciate this.]

25. Principal radicals monosyllabic.

26. Only one declension, one mode of comparison, and one conjugation.

27. Imperative, Infinitive, and Participles, referring to all times and all persons. [This gives a remarkable power to Vp. possessed by no other modern language, but very easily acquired. It will, however, probably not be much used.]

28. Direct preferred to indirect construction.

29. Almost all prepositions govern the nominative. [Schleyer has not been able to divest himself of the German habit of occasionally using the accusative where motion is implied, but this is unnecessary, and has not been generally adopted.]

30. The stress or accent lies on the last syllable of every word.

31. An International Academy for Language, an International Congress for the world's speech, and an International Senate. [This of course is all extralingual, but so far as the Academy and Congress are concerned, it has already come to pass, at present with very doubtful advantage.]

In reference to the 17th principle above, Schleyer in his *Hauptgedanken* ("Chief Thoughts contained in my public lectures on the Universal Language which I have invented, called Volapük"), 1885, gives the following statement concerning his "borrowings" from different languages:—

"From the Hebrew my formation of the names of tens [in both Hebrew and Vp. the tens 30–90 have the form of the plurals of the ones 3 to 9, thus Heb. 3 *sh'lōshāh*, 30 *sh'lōshīm*, Vp. 3 *kil*, 30 *kils*. But in Heb. 20 *'esh'rīm* is the plural of 10 *ăshārāh* mas., *'esher* fem., whereas in Vp., which has no exceptions, we have 1 *bal*, 10 *bals*, and 2 *tel*, 20 *tels*].

"From the Russian the syllable for question and conjunctive Vp. *li*, *la* [Russian *li*, *bi*, the latter with the past tense as *ya skazàl* I said, *ya bi skazàl* I should say or should have said Vp. *äsagob*, *āsagob-la*, or *isagob-la*].

"From the Greek the Aorist [durative form].

"From the Hungarian the application of comparative and superlative terminations to substantives and verbs Vp. *söl* gentleman, lord, ruler, *sölum* greater gentleman, etc., *sölün* greatest gentleman, etc. [Hungarian *ember* man, *emberebb* more human; *ördög* Satan, *ördögebb* more Satan-like].

"From the Latins and Sclaves (Poles, Russians, Servians, Slovenes, Czechs) the absence of the article.

"Further I took from Latin its brevity and logic.

"From Latin and German I borrowed the free order of words: [which the director of the Vp. Academy, M. Aug. Kerckhoffs, is trying to do away with.]

"From the Greek the abundance of participial forms.

"From the Chinese the simple radicals.

"From the Swedish the sharp distinction between reflective and reciprocal verbs [Fr. *ils s'aiment*, Germ. *sie lieben sich* might be either they love themselves (reflective) or they love one another (reciprocal), Vp. *löfomsok*, and *löfoms balvotik* respectively, Sw. *vi roa oss* we amuse ourselves, *de berömma hvarandra* they praise each other; such so-called reflective verbs as Fr. *ils se battent*, Germ. *sie schlagen sich* they fight, do not exist in Vp., for to translate *ich schlage mich mit ihm*, that is, I fight with him, by *flapobok ke om* = I beat myself with him, would be mere nonsense, and should probably be *komipob ke om*.]

"From the French, the logical form of phrases.

"From the Russian the reflective *-ok* for all three persons of the verb [the Russian form is not *ok*, but *sya*, except after vowels, when the *a* is omitted, for all persons and tenses, as *umibáyu* I wash, *umìbáyusy* I wash myself; *ymibdem* we wash, *ymibdemsya* we wash ourselves; in Vp. respectively *vatükob, vatükobok, vatükobs, vatükobsok*], and the genitive in *-a* [in the second declension, as *slon* an elephant, *sloná* of an elephant.]

"From German and Turkish the dative in *-e* [Germ. *der Mann* the man, *dem Manne* to the man, Vp. *man mane*, but the *e* is short and unaccented in German, and long and accented in Vp.; in Turkish there are properly no cases, but affixes which give the required meaning, if the word end in a consonant the dative affix is written *h* and pronounced *eh*, if it end in a vowel the dative affix is written *yh* and pronounced *yah*, thus *ev* a house, *eveh* to a house, *bābā* a father, *bābāyah* to a father], and from the last (Turkish) the pronoun *kim* who? [which has the same form in Turkish].

"From the Italian the accusative in *-i* (*tutti fratti*). [But there is no case-termination in Italian, and here *-i* is simply a masculine plural form; in Turkish, however, *-i* is the affix of the accusative case].

"The *s* of the plural is common to Vp. and Spanish, French, English Portuguese, Latin [occasional], Greek [occasional], Dutch, Rhetoromanic and Sanskrit."

§ 17. Conclusion.

A careful examination of Vp. leads me to the conclusion that it is well adapted for the purposes for which it was intended, and displays great ingenuity in its construction. At the same time Spelin seems to me simpler, easier, and more adapted for speech. We have at any rate *two* universal languages, both on a non-Aryan basis, both highly ingenious, both eminently suited for their purpose, both having the characters of living tongues, thoroughly compact and organic, without the slightest indication of patching or break down. Whereas such proposals as are avowedly formed on an Aryan (generally a Latin or Romance) basis have the appearance of mere makeshifts, or of jargons so dear to the hearts of the Reporters. But Vp. alone has at present the ear of the public, and is in possession of a vast organisation highly interested in propagating it and making it become as its name implies "the language of the world." Vp. therefore has the chief claim on our attention, and all those who desire the insubstantiation of that "phantom of a universal language" which has flitted before so many minds, from the days of the Tower of Babel, should, I think, add their voice to the many thousands who are ready to exclaim *lifom-ös Volapük*, long live Volapük!

§ 18. Summary of Reasons for Declining the Invitation of the American Philosophical Society.

Hence I recommend the Philological Society not to accept the invitation of the American Philosophical Society to take part in their proposed Congress, for reasons which may be thus summarised.

First, because the subject is not one which can be properly dealt with in a Congress, even if a complete programme were laid before it for consideration.

Secondly, because the invitation is one-sided; and while it is by no means clear from the Reports what is meant by "the Aryan vocabulary and grammar in their simplest forms," it is also by no means clear, *à priori*, that an Aryan basis is desirable, and this would be conceded by acceptance.

Thirdly, because there already exists a Universal Language, Volapük, which has a large number of adherents in all countries of the world, and which is completely elaborated in grammar and vocabulary, but has been formed entirely without reference to Aryanism.

And lastly, because the whole value of a Universal Language consists in its general acceptance, while the attempt to form an opposition scheme by the aid of all learned Societies, upon an incompatible basis, would, if in any respect successful, materially impede the progress of Volapük, and would possibly altogether defeat its object.

I therefore beg leave to move :

"That our Hon. Sec., Dr. Furnivall, be instructed politely to acknowledge the invitation of the American Philosophical Society, and to say that the Philological Society of London, having duly considered the invitation and the reports sent with it, have resolved to take no action in the matter."

P.S.—This resolution was seconded by Prof. Rieu, and supported by the Hon. Sec., Dr. Furnivall, and the Chairman, Mr. H. Bradley, and passed unanimously, and the paper was ordered to be printed *in extenso* and widely circulated.

V.—THIRTY-FIVE WORDS OF THE CAYAPAS INDIANS IN THE INTERIOR OF ECUADOR. By Gustavus Wilczynski.

(Read at the Phil. Soc.'s Meeting on 1st June, 1888.)

This Vocabulary was collected by Mr. Gustavus Wilczynski, who is the head of a firm carrying on large mercantile business at the Pailon in Ecuador, which brings him into close and intimate connexion with the natives of the interior from whom he buys the country produce, etc. The tribe of Cayapas is a pure and unmixed one, difficult to approach by white men, although fairly peaceable.

ENGLISH.	CAYAPAS.	QUICHUA.
Head	Mishpuca	Uma
Hair	Achua	Agcha
Forehead	Lechi	
Eyebrows and Eyelashes	Capupijo	
Eyes	Capucua	Naguiuctu
Nose	Kijo	Singa
Mouth	Fipaqui	Shimi
Cheek	Teyu	
Teeth	Tesco	Quiro
Tongue	Nigca	Callo
Arms	Fiamilia	Rigra
Hands	Fiapapa	Maqui
Fingers	Fiamisho	Maquipalca
Nails	Fiaqui	Sillo
Chest	Fembapo	
Legs	Embo	Changa
Feet	Nepapa	Chaqui
Man	Luipula	Cari
Woman	Supula	Guarmi
Boy	Cana	Cariguagua
Girl	Guarmiguagua	Supunama
God	Dios apa	Dios yaya
Life	Sunchachi	Causay
Soul	Tembuca	Aya
Walking	Gino	Puringapac
Sick	Penhuma	Ungushca
Handsome	Unnala	Alinagui
Old	Rucula	Ruca
Ears	Pungui	Rinri
Singing	Verse	
Weeping	Huato	Guacangapac
Laughing	Ucagto	Asingapac
Speaking	Pacto	Rimangapac
Sleeping	Casto	Puñungapac
Sleep	Puñuniyaguanmi	Yucasabesusay