

V.—TRANSCRIPTION OF FOREIGN TONGUES. By
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TRANSCRIPTION is made necessary for one sole reason, the absence of a single universally accepted alphabet, which would obviate all but a small portion of the problem which we have before us. How, for instance, is anyone to refer to events in world-history even in the most cursory and popular way if he is to avoid confusing his readers by using forms like "Meer Jaffier" when quoting Macaulay and "Mir Dschaffir" when citing a German contemporary of Macaulay's. Compare Erskine and Areskine with their numerous variants. How, too, is Hertzen, the son of the great Russian writer Iskender (Aleksandr Gertsen) to be perceived to belong to the same family as his father? I have so far avoided quoting anything in foreign scripts and hope to avoid it in this the first part of my paper, reserving the bulk of it for the critical part.

There are, then, certain purposes for which transcription is necessary; I group these under the following five heads, first remarking that I am quite deliberately postponing to a later stage the discussion of the distinction between transliteration and transcription. Now these five groups are as follows:—*(a)* bibliographical, *(b)* connected with library catalogues, *(c)* similarly connected with documentation, *(d)* connected with historical and other scientific (e.g. phonetic) research, and lastly *(e)* commercial.

If I may, I will justify the addition of this last group first, though some may wish to classify my illustration under Documentation. However that be, one of the most important commercial factors in industry and commerce at the present day is the existence of patents. Without pretending to any knowledge of patent law, it is obvious that various persons engaged in commerce must have occasion from time to time to search themselves or by deputy for the record of an international patent, i.e. one registered in more than one country. Suppose they are fortunate enough to know the name of the

original patentee, and that in one case the name is my own, Wharton, and in the other the common German name of Johann Müller. Now no great difficulty will arise in records printed in the Roman or Gothic letter, apart from translating Christian names or omitting diacritic marks or identifying the precise J. Müller, etc. But suppose this is registered in Russia and the entry for that country must be checked for export purposes. To take Müller first, the natural Russian form for the surname is Miller, for the Christian name it is never quite certain what will be done in official lists. Please note that the Russian language has two forms for John standing side by side, Ioann and Ivan, and either might appear here—or Iogann or Iokhann as the transcription. If the former Ivan form is taken and there be John Miller's from English-speaking lands in the registers, there is a fair chance of confusion—for they will fall at the same point. For my own name, it suffers severely in writing and in speech both in France and Germany, but it has very little chance in Russian. For, according to the accepted theories and the often divergent practices in Russia, *W* is a poor relation of *V* or *U*, and is largely an afterthought. So White is either Vait and placed with the third initial letter or Uait and put at the latter part of the alphabet. *H* it will be noticed is ignored, so that whatever becomes of White confused with Wight, Wharton is almost certain to be confused with Warton, not to speak of *V* or *U* followed by nearly similar letters. Comment is superfluous. The same disability applies to all the other groups, but I hope that I have justified the inclusion of this group in this paper and that I may merely state that I take it in the widest possible sense. In all cases of personal names the exact interchangeability of a name is essential or serious injustice may be done; e.g. James Thomson, author of *The Seasons*, must not be confused with any other James Tompson or Tomson by reason of his appearing in a bibliography or library catalogue in a foreign script.

For bibliographical purposes it is often necessary to use only one script or type; there are quite considerable precedents, it is true, for translating the titles of books, but this leads to ambiguity and is bad in principle. I say this though so good a historian as the late Robert Nisbet Bain did it. One wants

to attain absolute certainty that a bibliographical description gives the exact words of the book's title as spelt in the book ; only transcription or transliteration can do this. The same applies to library catalogues, though here the chief stress must be laid on the importance of getting an exact transcript of the names of authors. For Documentation the names of persons and places must also be the chief point and here a rigid uniformity is necessary to avoid fearful historical errors.

In History and the history of knowledge in all its branches the same principle holds good, but some special sciences are in a place apart. The chief instance of this in my own mind is Phonetics. The earliest founders of the science in its pre-scientific days were so much impressed by their difficulties that they began the creation of that elaborate terminology which serves so admirably to describe single phenomena taken by themselves or in smaller groups, but is so powerless to represent even the spoken utterance of a short paragraph without an altogether disproportionate expenditure of space. Here some sort of transcription is urgently wanted and efforts have long been made to supply it. We must remember that all our scripts were phonetic as soon as they passed out of the syllabary stage.

I think that all who have thought seriously of the matter are aware of the close interdependence of all branches of knowledge and of the universal scope of the "tools" provided by bibliography and the historical method ; they will therefore agree that a single uniform transcription or transliteration for all languages and scripts for all purposes is eminently desirable, if only for the saving of trouble in carrying on research. Can it be or has it been partially attained ?

Perhaps I may here interject the pertinent question, what is transcription or transliteration ? As to the former word, the sense in which I use it here is modern, for N. Bailey's *Dictionary* (1775) does not recognize it, only defining the word as " the Act of transcribing or copying ". The other word he omits. Abraham Rees's *Cyclopædia* (vol. xxxvi, 1819) has neither word. So, too, the *National Cyclopædia of Useful Knowledge* (1851). As it happens, neither has the *Encyclopædia Britannica*. In any case both words for our present purpose mean the transference of words from one script into another ; one may

differentiate transcription as a free transference of the whole word, while transliteration aims at exact representation of each letter.

Transcription bears a certain analogy to transposition in music, where, in fact, I thought the word transcription was commonly used, though it does not appear in Grove's *Dictionary of Music*, 1st edition. The Joint Code¹ defines Transliteration as "a representation of the characters of one alphabet by those of another", a sufficiently vague definition to cover either word. Personally, I think that the ideal is rather transliteration than transcription for every purpose tending towards exactness and interchangeability. This does not really raise difficulties from the phonetist's point of view, because all *spoken* speech must be analysed into its ultimate elements and those elements transcribed with all the necessary additional diacritic marks, if the problems of exact study of language are to be solved.

Perhaps it is worth while to elaborate a little what is meant by the ideal transcription to which I at least aspire being international, and I would do so by taking an example.

A sufficient uniformity has been attained already in one sphere, diacritic marks apart, and that is in the case of the transliteration of the Sanskrit alphabet, which was a purely phonetic one as far as I know. Here so early as 1862 the transcription given in *The Student's Handbook of Comparative Grammar*, by the Rev. Thomas Clark, is actually the same as that adopted by Bopp with the "continental" [i.e. German-Italian] pronunciation of the vowels as basis. (Incidentally, it is practically that of Sir William Jones.) This is now overwhelmingly accepted and appears in the titles of philological treatises written in scripts so different as the Gothic, the Roman, and the various kinds of Cyrillic, irrespective of the language of the writer of the said treatise. The reason for the acceptance of this normal transcription is the only one possible, that the system is a good one; after all many scholars of divers nations, all of them conversant with Sanskrit and almost all well acquainted with at least one language used by their fellow scholars besides their own, have been able to build up a system which enables everyone provided with the key not only to transliterate Sanskrit texts, but also

¹ Anglo-American Joint Cataloging Rules.

to form an idea, albeit rough, of how they were pronounced. It is true that difficulties arise; thus in strictness we should write Ṛg-veda, and not Rig-Veda, which is now universal. Further it has been objected against English scholars in the past that they put *h* in too much in the compound letters, e.g. *chh* where others put *ch*. I believe this has been settled now in favour of the objectors. This is not of course a perfect system for the phonetist, but it is capable of being used for cataloguing and bibliographical purposes, as well as for the ordinary purposes of philology and Oriental scholarship; what is more, this system is actually used in all these cases. Now there seems no reason to doubt that this represents a great step in advance, which might well be expected in other quarters. It has already been found possible to extend it to the whole of the Aryan vernacular languages of India. This is done in some cases by reducing the vulgar form to its classical equivalent (in the case of proper names) and transliterating that in the usual way. To a certain extent this is being done by analogy in the non-Aryan languages of India, where the enormous extension of the various scripts used in the Aryan languages allows fixed equivalents to be found. This part of the world then has gone a long way to attain the ideal.

In this department of research great service has been done by the co-operation of scholars of all nations, chiefly owing to the existence of this standard transcription, which after all enables them to be sure that they are discussing the same phenomena and not something quite different. As the increase of international collaboration is one of the tendencies of the present day which every rational man should most desire to foster, it is well to bear in mind that a uniform transliteration, combined with the formulae of science, can contribute amazingly to human progress. Transcriptions corresponding to this ideal may be said to exist in nearly all of Asia, apart from those cases where a *phonetic* transcription is wanted. In Europe we have the group of languages using the Roman alphabet in a more or less modified form, which we may regard as not needing transliteration (as national rules can be followed by those who are aliens), except always Roumanian, Basque, and Albanian. As German has now got Roman equivalents for its Gothic letters

in increasing use, the Gothic need not trouble us. I made three exceptions above owing to conflicts of spelling and dialect, which will necessitate a discussion of those cases in the next part where also Greek and the various Slavonic alphabets must be discussed. I am also postponing the American and African languages, as they present special difficulties, though here also much has been done to attain the ideal. I do not mean here to say that the regular Arabic transcription is inapplicable to the Arabic-speaking African because he is an African, but simply to cut off the Bantu, Bushman, Hottentot, etc., as problems *sui generis*. The geographical names, which present a great problem, would seem to be most satisfactorily dealt with when we come to discuss the transcription of the Royal Geographical Society.

So far then we find that a surprising amount of progress has been made; our next task is to consider the systems of transcription proposed for purposes of cataloguing and bibliography in more detail, and first, *honoris causa* as a great instance of international collaboration, that of the Anglo-American Joint Code of Cataloguing Rules (see Bibliography, No. 136), which, moreover, the International Congress of Librarians and Record Keepers of 1910 recognized as the first step to and model for a truly international code of cataloguing rules. The chief points which concern us are at pp. 13-16 and pp. 65-73 of the English edition (1908). The former set of pages gives various rules for selecting the form of a name to be adopted in a catalogue, numbered from 42 to 56. In these the most important for our present purpose are numbers 42, 46, 52, and 54 (for their footnotes), and finally No. 56. I hope that my readers have a copy of this code before them, but I will try to sum up the points which interest us particularly now. No. 42 is headed "Variations Due to Language, Transliteration, etc." The point of the rule is that the author's own use of a regular transliteration when using the Roman alphabet should govern the cataloguer's choice, even when no book has appeared with that transcription. Beyond this there is a reference to Appendix 2, to which we shall come presently. It may be well to warn my readers that the rule governing the whole of the section here discussed is No. 23 (p. 9): "Full name in vernacular form. In the heading give

names of authors in full and in their vernacular form, with certain specified exceptions," under which last come the rules which we are now discussing.

Rule No. 56 is headed "Oriental names known under Western forms" and prescribes the retention of such forms as Avicenna and Confucius for headings with references from the proper original form. It winds up with references to Appendix 2, the Prussian *Instruktionen* and other sources. Rules 46, 52, and 54 deal respectively with the names of sovereigns, Muhammadan writers and Indian ("Indic") writers, but I quote them mainly by way of a digression on account of the footnote, which in the case of the first named reads "Library of Congress enters sovereigns of nations not using alphabets in roman or gothic characters under the English form, e.g. Paul I, *emperor of Russia* (not Pavel I); Catherine II, *empress of Russia* (not Ekaterina II)." One may add that the British Museum rule is to give the recognized English form to all sovereigns and saints. In the other two cases the footnote is in identical terms, as follows:—"Library of Congress printed cards follow in the main the form of heading adopted in the catalogues of the British Museum." Now this is highly important; here we have two of the largest libraries in the world using practically the same transcription in a limited sphere and the Library Associations of the two great groups of the English-speaking world recommending uniform rules; moreover, it is easy for their German-speaking kindred to follow in their footsteps, because they have kept the rules of two of the greatest libraries of the German-speaking world in view; I mean the rules of Berlin and Vienna. When all temporary divergencies are cancelled out, there remains a large common deposit, which will make a stately edifice when the German-speaking world gathers its scattered forces to the task, and I personally hail the prospect with delight.

But the kernel of our subject lies at pp. 65-73, being Appendix 2, Report of the A.L.A. Transliteration Committee, and I must discuss it in detail. Before I do so, however, I must quote the definition of Transliteration from p. xii, viz. "A representation of the characters of one alphabet by those of another." The history of this scheme is worth noting, as it is not quite a part of the Rules themselves, being of purely American origin.

The Report which contains it was originally made by Messrs. C. A. Cutter, C. B. Tillinghast, W. C. Lane, and M. Heilprin to the American Library Association in 1885, and printed in the "Proceedings of the Lake George Conference" in the *Library Journal*, vol. x, pp. 302-8. Cf. No. 104 in the Bibliography. In passing over the early part of the report, I would call special attention to the wise prevision, whereby the compiler of a catalogue is warned to be just a little ahead of the present moment in his schemes. What is said about the use of the vowels (the "Continental value") is distinctly worth saying, though one may cavil at the term; for after all the value assigned is rather the Italian and Spanish (or German) than simply Continental. As for the other details taken from articles by Mr. Heilprin, one cannot quite take up all, but some may be considered. Thus, No. 3 is: "*Biblical* names are to be written as we find them in the English Bible, and the names of post-Biblical Jews, if derived from the Scriptures should retain their anglicized form. On the other hand, a strict transliteration is demanded of rabbinical and of other more or less pure Hebrew names which are not taken from Scripture . . . to which again there is an exception in the case of a few celebrated Jewish authors, as Maimonides, where an un-Hebrew form has been fully adopted in English Literature." There is more, but I wish to pause here to point out that in German catalogues it would be possible perhaps to take the forms in one of the great pre-Reformation Bibles in German and adopt the rest of the rule without further change.

As it stands the principle is thoroughly sound, though it is perhaps wide of the pure transcription problem to point out that the use of a national standard (such as our Authorized Version now affords) is thoroughly justified in a national institution—and still more in one of narrower appeal. In the next paragraph it is recommended that East Indian names should follow Hunter's transcription, but this is done hesitatingly. My views of this question have already been adequately expressed as regards names, but I shall return to this later. The next point is that it is recommended that all other Asiatic and African names should be transcribed according to the Royal Geographical Society's scheme of 1885, which I shall discuss later.

I will therefore say nothing of this now nor of the comments by which it is accompanied (pp. 66-8). Of the tables I know nothing of Semitic and can only say that the first table corresponds fairly with what I understand to be the generally accepted scheme, though a footnote recommends the use of a system for Arabic and Hebrew contained in the Jewish Encyclopædia. Cf. No. 134 in the Bibliography.

What is described as the standard system of transliteration for Sanskrit follows, at pp. 70-1, with notes by Professor C. R. Lanman, of Harvard University. This agrees very fairly with the anonymous transcription given in pp. 33-5 of the Rev. Thomas Clark's *Student's Handbook of Comparative Grammar* (1862), though Professor Lanman classifies the cerebrals as linguals and does not use quite the same order of alphabet. It is not advisable for me to do more than call attention to the Professor's recommendation to use the sign of length rather than the circumflex, which is certainly a view very generally taken now and one to be commended. The similar rule to write *r* wherever *ri* occurs may be considered rather pedantic by some, especially as it may lead to a formidable sequence of what appear to the eye to be consonants. In any case a certain latitude must be allowed to the users of a transcription involving so many special letters.

The next group, dealing with Slavonic languages, is of great importance, and I am anxious to discuss this and its appendices in comparison with Liverpool and other schemes of transcription of Russian (pp. 72-3). This choice of a subject for detailed discussion will have the advantage that, while the matter is fairly familiar to me, it raises the same questions of principle found in other parts of the field of investigation. First I would mention its history: we have first the Report of the A.L.A. Committee on Transliteration of Slavic (*sic!*) languages. This (which I propose to call the A.L.A. scheme in the ensuing discussion) dates from 1900 and is signed by S. A. Chevalier, A. Cary Coolidge, and A. V. Babine; after it come "Library of Congress Supplementary Rules 10-11", consisting of Russian and Modern Greek transliteration. Footnotes say that these last were printed 26th January, 1905, and I shall describe them as the Congress scheme. I may say that I quarrel with nearly all these

schemes. With them I have to compare the "scheme of two alphabets for transliteration into English" of Russian arrived at by the Liverpool School of Russian Studies and published at p. 768 of the Russian Year Book for 1912 (Bibliography, No. 139). This provisional system agrees very closely with that used in the British Museum (really the War Office Scheme, with some modifications), and I shall mention any divergences. In the discussion I shall quote these last as Liverpool and B.M. respectively. I am inclined to quarrel with the A.L.A. scheme at the outset because it uses the un-English word Slavic, which was coined by that ornament of German letters, Talvj, the translator of the Serbian folk-songs into German. For her it was perhaps natural to think that with the word Slav existing in English already one might transform *slawisch* into Slavic, but after all English has other sources than Teutonic and we should be surprised at one who wrote Englic or Anglistic as purporting to be English words. With nearly every word of the report one would agree, and particularly in the choice of the Serbo-Croatian forms as the basis. But when one sees the scheme in detail doubts arise. Moreover, I object personally to schemes with alternative renderings as we have here; it is the less necessary as it will take a long period of education to bring all the libraries into line with the text of the rules (and this scheme is in the appendix), to some of which certain individuals among us are very recalcitrant. It would therefore be quite allowable to set forth a more ideal scheme in the hope that its definiteness, while it might scare people at first, would at least point the way to future progress. As it is, the Library of Congress has put in its scheme and others might have done it had another policy been adopted. First as to the A.L.A. scheme, it would seem that we are to apply it to *all* Slavonic languages using non-Roman alphabets, but it seems hard to adopt a scheme which would lead to the separation of works in the Croatian language and character from those in the Serbian, even when the author was the same. Yet such is the logical result of the preference expressed in footnote 2, p. 72, for the *zh* transcription of ж in Serbian. Thus we might have side by side Karadzhitch and Karadžić. What that means in a large catalogue may be readily guessed, and I will not press the point, but the fact is that the principle of provenance must be applied. After all any given work comes

from a given author and in an author catalogue should go under his name. It is not always easy, but it should always be the rule to ascertain the real nationality (not the mere political citizenship) of each author and decide the form of his name accordingly. Thus, there are Serbians in Croatia who use the Croatian alphabet for their own dialect and there are Moslem Bosnians who do the same ; in neither case can you say that any given author will always use the one alphabet only. You must therefore arrange your schemes accordingly by establishing a simple table of equivalence between Serbian and Croatian, as in the B.M. I will now discuss the table in detail. In all these schemes, A.L.A., Liverpool, Congress, and B.M., the first three letters are transliterated alike. The same is true of the fourth letter, except for unfortunate footnotes in A.L.A. and Congress ; the former says, "In foreign names, instead of *G* for *Г*, follow the original spelling" ; the latter says, "Russian transliterated forms of foreign names (more particularly those of Western European origin) are not to be transliterated in accordance with this rule, but are to be given in the original form, Herten, *not* Gertsen ; Rubinstein, *not* Rubinshtein." This is exceedingly unfortunate, for while the former might seem to be easily disposed of under my principle of nationality, I fear that the explicitness of the Congress scheme means that a certain amount of unnecessary antiquarianism is demanded in both cases. In fact I believe we should have to write Michael Learmont instead of Mikhail Yur'evich Lermontov. This is sufficiently absurd ; why should so true a Russian (whatever his grandfather was) as Iskender¹ be removed from the circle of his native language ? I admit a considerable difficulty with his son, who was naturalized (if not born) abroad and never returned to Russia, but after all such things as cross references have their uses. Next A.L.A. and Congress agree with B.M. as to *d*, *e* ; but, while Liverpool uses *d* for *д*, it has unnecessary complexities for *e*. Thus, in the bibliographic form *e* = *e*, but after *ъ* or *ь* = *je* (and popular = *ye*, and after a vowel = *ye*). These inconsistent additions seem to me to be excrescences, as does the use of *ë* in the bibliographic column, for this last is so very erratically used by Russians that I have hardly ever seen it on the title page

¹ Iskender was a pseudonym of Aleksandr Gertsen, father of Alessandro Herten.

of a book that used it inside. Even the use of it in the text of a book is rare now, phonetic manuals apart. I think this outweighs even the consideration of bibliographical accuracy, which is after all sacrificed by the change of character; points might turn on the space occupied by a *ш*, which is much narrower than *šč* or *shch* (*shch*), its equivalents, whose form would unconsciously affect those who consulted the entry in the bibliography. With *ж* we reach one of the unfortunate victims of alternation; A.L.A. gives *ž* or *zh* and intimates a preference for *zh*; Liverpool gives both, the former as bibliographic, the latter as popular, which last is the form used by B.M. as well as Congress. The next two letters are the same in all the schemes, but A.L.A. writes *ř* for *ř* as does Congress, while Liverpool's bibliographic form is *ř*, but their popular is *y*, with *ыř* and *йř* as *y* too. B.M. has simple *ř*, but the London Library uses *y* final, e.g. Tolstoy. *i* is represented by simple *i* in A.L.A., B.M., and Liverpool, but by *ĩ* in the Congress scheme. This last is desperately inconvenient, for *ĩ* is constantly used by Continental writers for *ř*, e.g. in Tolstoĩ, the usual French form. All schemes at present under discussion agree in regard to the letters from *k* to *f*, but in passing beyond that it is not useless to remark that I have heard that the majority of the Russian people cannot say the usual Western *f*, even in its bilabial form, for which some substitute *w*, which also does duty for *ø*. For *x* A.L.A. has *h*, *kh*, Liverpool has *kh*, but in its popular column uses *h* when it is initial, while Congress and B.M. have *kh* always. It is not out of place to say that *kh* is specially good, because the Russian transcription of Khan is *ханъ* and similarly with nearly all other Oriental words where Western scholars use *kh*, though of course *Ḥammurabi* and *Ḥapi* are representatives of what is nearly the same sound, which also appear with *x* in Russian. (Yet Russian usage is so uncertain that it is best always to assume the equation $x = kh$ and to ignore the oddity of *Гаммураби*, which is not impossible.) The next letter is given by *ts*, except in A.L.A. which has *c*, as well as *ts*. I believe it is not national prejudice which makes me prefer *ts* to *c*¹; apart from Polish and

¹ Further experience of the reality of the difference in sound and in practical literary use of *ts* and *c* in Croatian script (e.g. in *Hrvatski v. realac*) tends to make me abandon this position and prefer *c* in scientific works at least.

Croatian *c* is ambiguous in the Roman alphabet, and for instance **Dezember** is now written *Dezember* even in Germany, while *c* has the *k* sound in Welsh.

For the next letter A.L.A. has *č*, *tch*, which latter conflicts not only with the Royal Geographical Society's scheme and with all the others, but also with the excellent remarks of the A.L.A. Committee at p. 67, with which I am in hearty agreement. Congress agrees with B.M. and Liverpool popular in using *ch*, while Liverpool bibliographic has *č*. Regarding the next two letters Liverpool popular agrees with Congress and B.M., but Liverpool bibliographic uses *š* and *šč* and A.L.A. has *š*, *sh*, and *šč*, *shch* respectively. Against the *t* I have already protested and regard the forms *š*, *šč* as preferable ideals, but am content with the *sh*, *shch* in practice, at any rate at present. The mute letter is disregarded by A.L.A., B.M., and Liverpool, but Congress says "Final, disregarded, in middle, " " As to this one may remark that in Bulgarian a difficulty arises; the character **Ѣ**, which used to sound like French *on*, is sometimes represented by **ъ**, which is as little worth regard there as in Russian as a rule. Here we must know what **ъ** stands for and act accordingly; the most natural transcription for **Ѣ** and for **ъ** when it stands for **Ѣ** is *a*, the Polish nasal *a*, which the Poles themselves transcribe by *on* in French, e.g. *Zaïontschkovsky*. (*ñ* is allowable, the modern Bulgar **Ѣ** being nearly **ы**.) **ы** is represented by *y* except by B.M. To use *y* is confusing, where Liverpool is using it for so much else; otherwise it would be commendable. **ѣ** is less fortunate, for, while the A.L.A. has ' or ' or disregard, Congress has ' , Liverpool bibliographic has *j* and popular omits, while the B.M. has ' or disregards. The reason for this is that both uses exist in Croatian, e.g. *knjiga* and *kńiga*. As Liverpool bibliographic uses *j* in transliterating where no letter at all exists (*ja* for **ѧ**), it seems a pity to use it here, where exact convertibility is required. For **ѣ** A.L.A. has *ie*, *e* without comment, Congress has *ie*, Liverpool equates it with *e*, while B.M. has *ye*. Much may be said for the Liverpool scheme, but it is not calculated to promote bibliographical accuracy, if two editions of a book about the kopek have the word "kopeika" on their title as transcribed, while one has the old spelling **копѣйка** and the other the modern **копейка**. A.L.A., Liverpool, and B.M. make the

next letter *e*, but Congress uses *é*, a very vicious form, being the Bohemian *ě* as used in Gothic letter, whereas the whole point is that *э* stands for the unitacized *e* equal to the French *é*. More variety follows: what A.L.A. calls *iu*, *u*, Congress calls *û* and Liverpool *ju* and *yu* respectively, with the latter of which B.M. agrees. A.L.A. scorns consistency and has *ia* for *я*, while Liverpool has *ja* and *ya*, B.M. *ya*, and Congress *â*. I confess that, having complained of Liverpool's duplicating *j* and *y*, I must now enter a general complaint against the Library of Congress for inventing new letters for the printer in *î*, *û*. For *o* A.L.A. gives *f*, *th* without comment, B.M. has *th*, Congress and Liverpool have *f*; on this I had something to say under *f* above, and I cannot agree with *f* at all. Lastly *v* is given as *y* by A.L.A., *y* by Congress, and *i* by B.M. and Liverpool. The justification of *y* is obviously that *y* like *v* is simply the Greek upsilon with changed connotation, but as the modern Greek and the Russian use their iotas quite calmly for *υ*, *у*, it seems unnecessary to make a fuss about the use of *i*. It would perhaps be nice to know of the rare occasions when the Holy Synod in Russia puts *v* in its own name instead of *u*, but even in a bibliography the case is so rare that we may content ourselves with *i*, especially in view of the treatment of *ъ* and *ь* all round. Liverpool adds that *kc* = *ks* and *oe* = *oje*, *oye*. For the latter I will but refer back to my protest against similar superfluities above. For the former one may remember that Church Slavonic has a *ξ* for which modern Russian uses *kc*, but a bibliographically accurate transliteration must use *x* for it. For Serbo-Croatian A.L.A. gives the six special characters with their Croatian equivalents followed, in five cases, by what I regard as unnecessary alternative forms.

A.L.A. further says: "Old Bulgarian after Leskien, "Handbuch . . . 2. Auflage, 1886, allowing variants according to the preceding scheme, and substituting *i* for German *j*." The choice of the greatest exponent of the language as authority is to be commended (although he did not construct his table for this purpose), but the variants are very objectionable, meaning permanent confusion. The B.M. rightly uses the same transcription for Old and New Bulgarian and Russian with the precaution mentioned above on *ъ*.

The only other transliteration scheme connected with the

Joint Code of Cataloguing Rules, with which I propose to deal here is that of Greek, and I must recall that Rule 49 declares that classical authors are to be entered under the Latin form of their names with references from the English and occasionally from the Greek forms, following the classical dictionaries indicated. Next the Byzantine writers (Rule 50) are to be put under the personal name in the Latin form with references from family names. Thus the rules; but the Library of Congress and the British Museum have their own ideas, the latter taking the English forms, e.g. Homer, not Homerus, and the former having an elaborate scheme of transcription (p. 73 of the Code), which will be discussed below. Further the B.M. transcribes mediaeval and modern Greek names by the usual concordances with the Roman alphabet, without any of the elaborate reservations of the Library of Congress. Where the two systems coincide I make no remark. The table then runs thus: $\alpha = a$, $\beta = b$, though the Library of Congress allows *v* to be used where the author transliterated thus when writing a Western language; they say nothing of German *w* here. $\gamma = g$, before γ , κ , $\chi = n$, $\delta = d$, $\epsilon = e$, $\zeta = z$, $\eta = \bar{e}$, but B.M. uses simple *e*, where Congress has a variant permitting *i* (owing to the well-known modern plan of writing, e.g. *Μιτιλίβι*). Then $\theta = th$, $\iota = i$, $\kappa = k$, $\lambda = l$, $\mu = m$, $\nu = n$, $\xi = x$, $o = o$, $\pi = p$, though Congress allows of *b* for π after μ ; $\rho = r$, $\rho' = rh$, though the simple *r* is permitted as a variant by the Library of Congress. (Thus according to the scheme $\alpha\rho\rho\eta\nu$ would be given as *arrhēn*.) Again $\sigma = s$, $\tau = t$, $\upsilon = y$ (B.M. *u*), $\phi = ph$, $\chi = ch$ (where Congress excepts in favour of the pointless variant *h* when initial), $\psi = ps$, and $\omega = \bar{o}$. In this last case again B.M. has simple *o*. ' = *h*. Dialectal variants certainly justify plain *e* and *o*, which are also good in view of the tendency to confuse *o* and ω in modern Greek spelling.

Next we may consider Roumanian. Here the consensus of the nation has declared emphatically since the middle of the nineteenth century for a more or less modified form of the Roman alphabet, and this for the good reason that the origin and main-tendencies of the language prove it to be a member of the Romance group of languages. Yet this Romance language has large and important Slavonic and even non-Aryan elements in vocabulary

and flexion and a history which accounts for my discussing it here. The broad outline of the history of the language may be put thus. Ethnology and politics apart, it is universally admitted, I believe, that the shepherds of Northern Greece and the various inhabitants of the valley of the Moldau and the mountainous country by it which formed part of the Dacian provinces of the Roman Empire had very considerable elements of Roman culture and even of the Roman language, Latin. It is usual to quote the famous Torna, frate, but this is neither necessary nor just: purely Greek culture might quite well produce this phenomenon, which the ultra-patriotic Philhellene uses for his own purposes. Yet there is a considerable body of evidence for early Roumanian and the most critical must admit that the stream broadens with time. But present conditions arise from complex causes. The northern part of the Vlacho-Roumanian districts, the modern kingdom and the Roumanian districts of Transylvania and Hungary, Bessarabia and Bukowina were under alien rule for many centuries. Bulgarian and Serbian influence and rule, tempered by the occasional overlordship of Hungary and Turkey hardening into a partition between these two powers coupled with a stronger exercise of pressure by them would describe most of the centuries of their history before the eighteenth. Meanwhile for two centuries the language of Church and State was uniformly Slavonic, with some admixture of Greek and Latin in diplomatic relations; the Slavonic language varied slightly as Serbian or Bulgarian influence prevailed, but the differences were far slighter than now. After the national government lost its Slavonic character—and later its independence, the Slavonic language and alphabet remained the ecclesiastical and literary norm. In 1688 we get a Bible in Slavonic character but Roumanian language. Later the language is officially recognized in the service books. The Phanariote rulers of the eighteenth century brought Greek nearly to the level of the old standing Slavonic. The transition to the Roman alphabet and the destructive “purification” of the language of alleged alien elements was a very slow process, and even now every second writer has his own theories of spelling. For we have to reckon with a transcription from the Slavonic to the Roman character. The Roumanian Academy has fixed a transcription, dealing

particularly with the nasal †, a symbol of their own added to the Slavonic script. Cf. Nos. 93, 94, in the Bibliography.

This I do not feel inclined to discuss at present, nor is it necessary, as any foreigner may rely upon the Academy's own publications giving the correct form of the words and the Government uses the same with one or two slight modifications. No one can pretend to study the phonetics or history of the language without making himself acquainted with these equations and studying the texts in the Slavonic script, where the phonetic conditions and other details are clearer.

Albanian is in a rather worse position, for it has had no written alphabet till the eighteenth century. Then the churches began to use the language in some matters of popular interest with whatever alphabet agreed with their natural taste. Thus the Orthodox Church, supplied from Greek and Slavonic sources, used and introduced Greek and Slavonic alphabets, the Latins used the Latin alphabet with the Italian pronunciation and spelling, and the Mohammedan people used the Arabic script in its Turkish form. Now a movement has been set on foot to make a general uniform Latin script with some extra letters, and much trouble has been caused by an attempt to exalt the Turco-Arabic script above the really well-thought-out normal script, which is a great pity. Then Basque, with its different dialects and divided allegiance, has long had difficulties about keeping in touch by writing, but recently efforts have been made for philological purposes to adapt the spelling of the Biscayan dialect. This should make it more possible to compare the dialects without confusing differences of spelling with real differences of pronunciation. One must say something now of the American and African languages. Here nearly all the languages owe what alphabets they possess to the efforts of missionaries. It is not my intention to do more than allude to the diverse linguistic bases on which these men worked in Africa. Apart from its native Coptic and Ethiopic and invading Arabic, all which count as Oriental scripts (Semitic), the parcelling of Africa in the missionary as in the political sphere makes it impossible to do more here than hint at the difficulties raised in such a closely-defined sphere as e.g. the Bantu languages. These run in a broad band right across Africa and cover territories possessed by States or served

by missionaries belonging to the most diverse European races, Italians, Portuguese, Germans, Spaniards, Scandinavians, English, French, Dutch, so that the very name of the race will be Bantoe to one and Bantou to another and Bantu to a third. Remembering also that the practice of the English-speaking world for instance is not fixed yet on such points as the use or not of the collective affixes *chi* (*ki*), *wa-*, *ba-* and so on in speaking and writing English, it is obvious that a uniform orthography and transcription is rather to be reckoned as desired than as attained, though some signs of hope are appearing. America may be dismissed much more shortly, because of its history. South America divides East and West; East is Brazil with its Portuguese character and consequent use of its own special orthography for the scanty written records of the native languages. West, practically all the rest, is Spanish in character and settlement; this also applies to the lower part of the Pacific Coast of the United States of North America, to Mexico and to all Central America, to New Mexico and part of Old Louisiana and Florida. (A transcription of the native languages has been made by C. H. Behrendt.) The rest of North America is under English or French, as well as slight Dutch, Scandinavian, and Russian influences. There are then only about half a dozen systems in actual use in that huge continent, while Australia does all its transcription on an English basis. I fear this does not necessarily imply a single uniform system. I wish to remind my readers that America too has its native scripts—the picture-writing of the Aztecs, Mayas and others, as ancient specimens, and the remarkable modern syllabary of the Cherokees, which enables their language to be printed in a quite satisfactory form. The shapes of its script are modelled on the capital letters of the Roman alphabet, but have no relation to their European values. It was from this point that Mr. Behrendt approached the problem.

The system of spelling adopted in Sir William Wilson Hunter's *Imperial Gazetteer of India* is in the nature of a simplification of existing transcriptions, e.g. reducing variant vowel sounds to a single representation and representing Arabic koph by *k*, not *q* (i.e. Kurān not Qurān). In fact in the "Notes on Transliteration" in the new edition of vol. i (1907) only eleven letters are

mentioned with the addition that the length symbol - is preferred to the accent ' for long vowels. One may note that *a* stands for the indistinct vowel ə and \bar{a} for the pure *a* sound as found in English *father* and German *Vater*. The fact is that Sir William Jones's scheme is at the base of it and the notes only refer to the modernizing of some details.

This matter of geographical transliteration or transcription is one of the worst with which one can deal, and the kernel of the problem is soon reached by the discussion of the Royal Geographical Society's scheme of transcription. A full table of this system with the preliminary rules and a statement that they are the same as those used in the British Admiralty charts is given at pp. 66-7 of the Joint Code with criticisms following it (in the Report of the A.L.A. Transliteration Committee). Here settled existing transcriptions are adopted as a matter of course, just as Hunter adopted the recognized forms; after all, in India the use of several alphabets side by side has led to a uniformity in the mutual representation of sounds which it was thus comparatively easy to adapt to the English alphabet. In such civilized languages and conditions then as those of the great Indian dependency and its neighbours (Ceylon and Burmah) and of European countries and other Europeanized parts of the globe the R.G.S. simply accepts the recognized spelling in the Roman alphabet. But it does this with some qualification; that is, Indian names are taken from Hunter's *Gazetteer*, Portuguese, Spanish, Dutch and other languages of Roman alphabet are taken from the standard spelling in use in the country. Though not stated, this will include German and other Teutonic languages. Nothing is said about the Slavonic languages, but the Roman alphabet rule would cover Bohemian, Polish, and Croatian names. Traditional English spelling of such names as Calcutta, Celebes, etc., is retained, but for the rest the standard local pronunciation is transcribed according to a table whose main feature is the (at best partial) adoption of the Italian sound of the vowels and the English sound of the consonants. By partial I allude to the fact, often named by critics, that the R.G.S. gives only one *e* and *o* each, though Italian has two of each. I do not discuss the amplified rules here, because all the details have arisen in my discussion of the Slavonic systems of Liverpool and other places.

The only danger about this scheme is that it may be taken (in flat contradiction of the declaration of its authors) to be a phonetic system and used for the phonetic transcription of languages for which no alphabet exists. This, however, may be allowed where a mere approximation to the sound is aimed at and the transcriber of the language has no phonetic training. Where real phonetic work is wanted other means exist and should be used. Thus, for true phonetic purposes, the practical student of languages has the choice of using the splendid wealth of Bell's Visible Speech symbols in their original form or as modified by the late Professor H. Sweet, or the Broad and Narrow Romic alphabet, or again and in more recent times the system formulated in the *Exposé des principes de l'Association Phonétique Internationale* (No. 138 in the Bibliography). The great feature in all these schemes and other alphabetic ones is the possibility of using varying degrees of accuracy of transcription according to the purpose or the person for whom the transcript is designed. But I must not allow myself to deal with these systems here, for after all what we have in view is the question of how we are to deal with written or printed or otherwise reproduced matter in several alphabets, where it is necessary to bring together works by or about individuals given us in the several alphabets, and the problem of phonetics, however attractive, is quite different. It is, however, very useful for a librarian to know something of it if he is, for instance, to classify various versions of the Bible by language. He does not want one language in three places; e.g. chi-Suahili, kiswahili, Swaheli. What one has now to do is to sum up what has been said and state where it has been said in this paper, and then introduce the bibliography, which will be in chronological order, although the paper is in no sense an exposition of the history of transcription, but rather an exposition of one phase of the present state of the problem. We have seen then that the origin of our problem is the absence of a single accepted alphabet for all the world (p. 59) and the practical difficulties in all departments of life and thought arising from it. Further the purposes of a transcription were considered and grouped under five heads (pp. 59 sq.). We also saw that it was often necessary to reproduce particulars in several alphabets in bibliographical and similar works in one

single alphabet (p. 60). Phonetics is an exception, being a case apart (p. 61), but is historically of very great importance. The unity of knowledge and of scientific method was next shown to point to the desirability of a single uniform transcription for all purposes and from all languages and scripts (p. 61). It is perhaps Utopian to dream of a perfect interchangeability of transcription from and to all languages. An attempt was made to define transliteration and transcription (p. 61), with which compare also p. 65 for another definition. Further consideration was given to the exact meaning of the ideal international transcription (p. 62), and its conditions, followed by a survey of part of what has been done to provide recognized transcriptions (pp. 62-4). More will be found in the bibliography. This was followed by detailed discussions of the following systems: that of the Anglo-American Joint Code (pp. 64 sq.), and in conjunction with that for the Slavonic script of the Liverpool School of Russian Studies, and those of the British Museum (= War Office) and of the Library of Congress (pp. 64-74). Further, some remarks were made on the transliterations of Greek (p. 73). It was the turn of Roumanian next, where a certain outline of the history of the language and people seemed necessary and useful (pp. 73-5), and then Albanian's special case was considered in a sketchy manner (p. 75), and a passing allusion made to Basque (p. 75). The African languages were next dealt with in a general way (pp. 75-6), and the American follow (p. 76), with a passing glance at Australia (p. 76). Sir William Wilson Hunter's system in the *Imperial Gazetteer of India* is next discussed (pp. 76-7) by way of an introduction to the thorny question of geographical transcription in general (pp. 77-8). This is dealt with by a discussion of the Royal Geographical Society's system (for however much abused it may be, it *is* a system, after all) (pp. 77-8), particularly its attitude to established habits. My opinions on the details have been largely given in previous discussions as stated (p. 77) and the phonetic question is not quite in place here. A brief account of some of the painfully abundant phonetic schemes is given after this, however (p. 78). Conclusion and summary of contents of paper (pp. 78-9). As I have endeavoured to be quite objective throughout this paper, I may perhaps be allowed to express a

strictly personal hope, which is as follows. The International Congress of Orientalists, acting under impulses arising alike in Germany and England, did establish a transcription for the Arabic scripts and the Sanskrit scripts, which is a great step forward. The late Monsieur Garnier invented a system for geographical purposes which has very great value, and we have the R.G.S. system. Why should not the former Congress, the Americanist Congress, the Neuphilologentag, and similar linguistic Congresses combine with the leading historical and geographical congresses and the Congresses of Librarians and Archivists and of Bibliography and Documentation to establish a single transcription answering to the ideal that I have already set forth? It would be no harm if this scheme were such as to afford a firm basis for a practical *phonetic* scheme as well.

In the Bibliography which follows I have tried without attempting anything recondite, to give a chronological summary of all the transcriptions of which I know and indicate in some cases what is my opinion of them. It is obvious that a sort of transcription existed in Nineveh, as we have tables comparing Akkadian and Assyrian, etc. But I leave all such matter out and start with that period of the modern world when modern languages were pushing forward and the problem of transcription was making itself felt as more and more important in the increasing mass of written (and, later, printed) matter. Where I have only the year I shall arrange entries in alphabetical order of authors, putting the items which possess definite dates at the end. The whole I shall close with an index of authors and collaborators, in which the year will give the reference with a number added, and after that a brief index to languages and subjects (where I have specified them in the entries). The last date for any entry is 2nd July, 1912.

1266-7.

1. Bacon (Roger). *The Opus Majus* . . . Edited, with introduction and analytical table, by J. H. Bridges. 3 vols. Oxford, London, 1897-1900. 8°, vol. i, pp. 74-7, in "Linguarum cognitio" of pars tertia. Supplementary vol., pp. 89-94 (end of chapter 3), and facsimile frontispiece.

The matter given here is enough for my purpose, but more would of course be found in his Hebrew and Greek Grammars.

ABOUT 1650.

2. Wilkins (John), Bishop of Chester. *An Essay towards a real character, and a philosophical language.* (An alphabetical dictionary, wherein all English words according to their various significations, are either referred to their places in the philosophical tables, or explained by such words as are in those tables), pp. 454, London, 1668. fol.

This is an attempt at a fresh start with a new language with new signs, but does incidentally deal with our problem.

1657.

3. Walton (Bryan), Bishop of Chester. *Biblia Polyglotta, etc.* [London], 1657, fol. Tom. i, Proleg [omena] ii. *De literis sive characteribus, ipsarum usu mirabili, origine et inventione prima et diversitate in linguis præcipuis.* [With tables] pp. 6-14.

It appears that this may have been by Dr. John Owen.

1660.

4. Dalgarno (George). *Ars signorum, vulgo character universalis et lingua philosophica. Quæ poterunt, homines diversissimorum idiomatum, spatio duarum septimanarum, omnia animi sua sensa . . . mutuo communicare, etc.*, pp. 127; J. Hayes, Londini. 1661. 8°.

I had not intended to include this, but it may serve as an example of the keen desire of that age for some such things as Dalgarno and Wilkins offered. The former is on a basis of phonetics but has practically nothing on transliteration.

1686.

5. Lodwick (Francis). *An Essay towards an universal alphabet (together with a further essay concerning an universal Primer, to which is added a specimen of a new character fitted to the said alphabet by Fr. L. Reg. Soc. S.)*, pp. 126-37, London, 1688. 4°. In *Philosophical Transactions, etc.*, vol. xvi, No. 182 (Abridgment, vol. iii, pp. 373-7.)

1787.

6. Langlès (Louis Mathieu) *Alphabet Mantchou, rédigée d'après le Syllabaire et le Dictionnaire Universel de cette langue. . . . Troisième édition, augmentée d'une notice sur l'origine, l'histoire et les travaux littéraires des Mantchoux actuellement maîtres de la Chine*, pp. xv, 208. Paris, 1807. 8°.

I have unfortunately not seen the first or second edition.

7. *Note du Cen. Langlès sur sa manière d'orthographier les mots orientaux.* pp. iv–viii. Paris, an vii [1798–9] 4°. In *Notices et Extraits des Manuscrits de la Bibliothèque Nationale, etc.* tom. 5. This applies to Arabic, Turkish and Persian and is compared with Volney's system, although I have been obliged to place the latter under 1795.

1788.

8. Jones (Sir William). I. *A Dissertation on the Orthography of Asiatick Words in Roman Letters.* By the President [with tables], pp. 1–56. Calcutta, 1788. 4°. In *Asiatick Researches: or, Transactions of the Society, instituted in Bengal, for inquiring into the History . . . and Literature of Asia*, vol. i.

9. *A Dissertation on the Orthography of Asiatick Words in Roman Letters.* By the President [with six tables], pp. 253–318. London, 1807. 8°. In *The Works of Sir William Jones*, vol. iii.

10. Monier Williams (Sir Monier). Original Papers illustrating the history of the application of the Roman Alphabet to the Languages of India. Edited by M. Williams, pp. xix, 276. Longmans, London, 1859. 8°.

11. Morris (Henry), M.R.A.S. Alphabet for languages not yet reduced to writing, pp. 23–8. London, 1898. 8°. In the *Journal of the Royal Asiatic Society . . .* for 1898. The system is a modification of that now used by the R.A.S. It is not universal nor original. Cf. Nos. 8–10, 52, 53 and 78–9.

ABOUT 1795.

12. Chassebœuf (Constantin François), *Comte de Volney.* L'Alphabet Européen appliqué aux langues asiatiques. Ouvrage élémentaire, utile à tout voyageur en Asie. (Procès-verbaux de la Commission réunie . . . pour fixer le mode de transcription de l'Arabe en caractères français.—Extrait du Rapport de M. De Chénier, Commissaire de l'Académie Française, lu au Conseil d'État, le 27 février 1808, . . . réimprimé . . . en 1816, sous le titre de Tableau historique de l'état et des progrès de la Littérature Française depuis 1789.) pp. xviii, 223. Firmin Didot, Paris, 1819. 8°.

13. — Coup d'œil sur le rapport de la Commission Tri-

Académique qui a été lu dans la séance publique des Quatre Académies, le 24 avril, 1822. pp. 39. [Paris ? 1822 ?]. 8°.

This criticism of the Commission was, as I suppose, by Roederer.

14. — Essai sur les questions préliminaires proposées par la Commission Tri-Académique, et concernant le mode d'envisager le projet d'un alphabet transcriptif Universel, conçu par M. le Comte de Volney, et les moyens de le réaliser. pp. 22. [Paris ? 1822 ?] 8°.

This was also by Roederer, I think. Cf. No. 24. .

1798.

15. Fry (Edmund), Letter Founder. Prospectus of a new work, entitled *Pantographia*, etc., pp. 11. [London, 1798.] 8°.

16. — *Pantographia*; containing . . . copies of all the known alphabets in the world; together with an English explanation of the peculiar force or power of each letter; to which are added specimens of all well-authenticated oral languages forming a comprehensive digest of Phonology. pp. xxxvi, 320. J. and A. Arch, etc., London, 1799. 8°.

1808.

17. Ausfeld (Johann Carl). Sprachalphabet der Völker alter und neuer Zeiten; ihre Aussprache verglichen mit der Sprache der Teutschen und mit ihren Eigenthümlichkeiten dargestellt und in Kupfer gestochen. 1^{tes} Heft, Stuttgart [1809]. *Obl. fol.*

1819.

18. Rees (Abraham). *The Cyclopædia*; or, universal dictionary of arts, etc., 39 vols. Plates, 6 vols. London, 1819. 4°. Articles: Alphabet, vol. 1; Letters, vol. 20; Writing, vol. 38; and Characters, universal, vol. 7. These articles are very interesting, especially the last. Transcription and transliteration are not given, and there is hardly any attempt to deal with our problem here.

19. Schütz (Ferdinand). De l'alphabet universel. Examen des essais de Ch. de Brosses, de Volney et de M. Lepsius. [A critical study.] pp. 83. Nancy, 1859. 8°.

ABOUT 1820.

20. Harkness (Henry). Ancient and modern alphabets of the Popular Hindu Languages of the Southern Peninsula of India. [Tables arranged under English transcriptions. Divanagari,

Grantha, Telugu, Karnataka, Malayalam and Tamizh.] Ff. 36. Royal Asiatic Society, London, 1837. 4°.

1824.

21. Johnson (John) *Printer. Typographia*, or the Printer's Instructor: including an account of the origin of printing, with . . . a series of ancient and modern alphabets, and Domesday characters, together with an elucidation of every subject connected with the art. Two vols. Longmans, London, 1824. 12°. In the tables of Alphabets he gives the values on much the same lines as those of Ballhorn.

1827.

22. Schleiermacher (Andreas August Ernst). De l'influence de l'écriture sur le langage. Mémoire qui, en 1828, a partagé le prix fondé par M. le Comte de Volney; suivi de grammaires Barmane et Malaie, et d'un aperçu de l'Alphabet harmonique pour les langues asiatiques, que l'Institut Royal de France a couronné en 1827. pp. xxxii, 710, 32. Darmstadt, 1835. 8°.

23. — Das Harmonische oder Allgemeine Alphabet zur Transcription fremder Schriftsysteme in Lateinische Schrift, zunächst in seiner Anwendung auf die Slawischen und Semitischen Sprachen, von dem im Jahre 1858 verstorbenen . . . Dr. A. E. Schleiermacher. Unveränderter Abdruck des . . . hinterlassenen Manuscripts. pp. xxiv, 568. Darmstadt, 1864. 8°.

ABOUT 1832.

24. Brière (de). [Probably le Comte Pierre Louis Roederer.] Histoire du prix fondé par Volney, pour la transcription universelle des langues, en lettres Européennes régulièrement organisées, et pour l'étude philosophique des langues . . . Avec quatre planches lithographiées, etc. pp. viii, 140. Paris [1832 ?] 4°. A criticism of the Committee. The author had twice competed for the prize in vain, in 1826 and 1827. It is not reprinted in Roederer's works.

1834.

25. Marsden (William). *Miscellaneous Works*. 3 parts. London, 1834, fol. Part I: On the Polynesian, or East-Indian Languages, has two plates showing the "Alphabets of the Hither Polynesia" [that is Sumatra, etc., with the names and powers of the letters].

Part II is: On a conventional Roman Alphabet, applicable to Oriental Languages. pp. 27. London, 1834. He decomposed the English Alphabet as then pronounced, omitting W.

1835. (SEE No. 23, 1827.)

12th November, 1835.

26. Lepsius (Carl Richard). Zwei sprachvergleichende Abhandlungen. . . . 1. Über die Anordnung und Verwandtschaft des Semitischen, Indischen, Äthiopischen, Alt-Persischen und Alt-Egyptischen Alphabets. 2. Über den Ursprung . . . der Zahlwörter in der Indo-Germanischen, Semitischen und der Koptischen Sprache. pp. 150. F. Dümmler, Berlin, 1836. 8°.

1837.

27. Matusík (Andreas). Alphabetum et orthographia universalis. Ex naturae, et artis observationibus deducta ac elaborata. pp. 82. Rozniaviae, 1837. 8°.

1840.

28. Pagliardini (Tito). An International Alphabet. (Proposed in 1840.) pp. 44-5, 59-61, 76-8, 94-7, 118-21, 129-31, and 161-7. Rostock, 1881. 8°. In *Zeitschrift für Orthographie, etc.*, Zweiter Jahrgang.

29. Prinsep (James). Essays on Indian Antiquities, historic, numismatic and palæographic . . . Edited, with notes and additional matter, by Edward Thomas. 2 vol. John Murray, London, 1858. 8°. Vol. 2, pp. 1-54, 124-70.

30. Rutherford (John). *William Moon . . . and his Work for the Blind*, etc. pp. vii, 280. Hodder and Stoughton, London, 1898. 8°. An account of the Moon-type for the blind is given here. Like Braille, this only professes to enable the writer to spell out the words in the normal spelling, but like it, it can be used phonetically, and is so used in China.

1842-3.

31. Ballhorn (Friedrich). Alphabete orientalischer und occidentalischer Sprachen zum Gebrauch für Schriftsetzer und Correctoren. Zusammengestellt von F. Ballhorn. Zweite vermehrte Auflage. pp. 26. Leipzig, 1844. 8°.

I have unfortunately not seen the first edition, but this gives an idea of its modest beginnings. He gives the "power" and the "name" of each letter in each alphabet, and occasionally a brief history of the individual alphabet. Cf. Fry, No. 16. I only mention a few editions here.

32. — — Vierte vermehrte Auflage, pp. 36. F. A. Brockhaus, Leipzig, 1850. 8°.

33. — Alphabete orientalischer und occidentalischer Sprachen zusammengestellt von F. Ballhorn. Achte vermehrte Auflage, pp. 76. F. A. Brockhaus, Leipzig; B. Quaritch, London, 1859. 8°.

34. — *Grammatography*; a manual of reference to the alphabets of ancient and modern languages: based on the German compilation of F. Ballhorn. pp. 76. Trübner and Co., London, 1861. 8°. Anonymous. Apparently from the ninth edition of Ballhorn.

1844.

35. Ellis (Alexander John). The Alphabet of Nature, or contributions towards a more accurate analysis and symbolization of spoken sounds. . . . Forming an appendix to the *Phonotypic Journal*. pp. v, 194. J. and J. Keene, Bath, 1844-5. 8°.

36. — [Reprint] . . . With some account of the principal phonetical alphabets hitherto proposed . . . Originally published in the *Phonotypic Journal*, June, 1844-June, 1845. pp. vii, 194. S. Bagster and Sons, London; Isaac Pitman, Bath, 1845. 8°.

37. — *The Essentials of Phonetics*, containing the theory of a universal alphabet, together with its practical application to the reduction of all languages . . . to one uniform system of writing. . . . In lieu of a second edition of the *Alphabet of Nature*. pp. xv, 251. F. Pitman: [London], 1848. 8°. Printed in phonetic characters.

1848.

38. — *The Ethnical Alphabet, or Alphabet of Nations*. Being an extension of Messrs. Pitman and Ellis's English Phonetic Alphabet [4 pages]. [Bath, 1848.] 8°.

39. — *Phonetic Spelling familiarly explained for the use of Romanic Readers*, etc. pp. 32. F. Pitman, London, [Bath], 1849. 16°. This gives forms for foreign languages also.

1849.

40. Herschell (Sir John Frederick William), Bart. *Essays from the Edinburgh and Quarterly Reviews*, with addresses and other pieces. pp. 750. Longman, etc., London, 1857. 8°. pp. 745-50 consist of the Appendix from the *Admiralty Manual of Scientific Enquiry*, edited by Sir John Herschell in 1849, and deal with transcription of place-names and unwritten languages.

ABOUT 1850.

41. Braille (Louis). *Écriture à l'usage des aveugles. Procédé de L. Braille*, etc. [A table in impressed characters.] [Paris, 1890.] Single sheet. 8°.

There are, of course, many editions and accounts of this system. See also note to 30 above. A Committee formed to carry out certain modifications tending to make the Braille system a true transcription gives its reports in No. 42, the organ of the users of the type.

42. *The Braille Review*. London, 1903, etc. 8°.

The New York Point Alphabet is an American modification of Braille script.

1851.

43. Forster (Charles). *The One Primeval Language traced experimentally through ancient inscriptions in alphabetic characters of lost powers from the four continents . . .* With illustrative plates, a harmonized table of alphabets, glossaries and translations. 4 pts. R. Bentley, London, 1851-4. 8°. Though this does not treat of transcription or transliteration directly, and though it is devoted to the exploded theory of the primitiveness of the Hebrew language, I have included this book for the sake of its wonderful fourth part, *A Harmony of Primeval Alphabets*. These are arranged against two columns of English equivalents for purposes of comparison.

1854.

44. Ellis (A. J.). *The Latinic Alphabet . . .* First steps towards the solution of the problem: given a common fount of types, to construct a universal alphabet, in accordance with Latin usages and physiological analogies. pp. 4. F. Pitman, London; R. Seton, Edinburgh, [1854]. Fol.

45. Müller (Right Hon. Friedrich Max). *Suggestions for the assistance of officers in learning the languages of the seat of War in the East*, etc. pp. xviii, 134. Longman, etc., London, 1854. 8°.

46. *The Languages of the Seat of War in the East*. With a survey of the three families of language: Semitic, Arian, and Turanian . . . Second edition, with an appendix on the Missionary alphabet, etc. pp. xcvi, 150. Williams and Norgate, London, 1855. 8°. [Cf. 50c and 56.]

47. Caldwell (Robert) Coadjutor Bishop of Madras. *A Comparative Grammar of the Dravidian or South-Indian Family of Languages*. pp. viii, 528. Harrison, London, 1856. 8°. pp. 93-8 deal with the transliteration employed, which is one of the well-known Romanic forms. Cf. no. 60.

48. — Second edition, revised and enlarged. pp. xlii, 154, 608. Trübner and Co., London, 1875. 8°. Transliteration, etc., pp. 3-14 of the Comparative grammar.

49a. Lepsius (Carl Richard). *Das allgemeine linguistische Alphabet. Grundsätze der Übertragung fremder Schriftsysteme und bisher noch ungeschriebener Sprachen in Europäische Buchstaben*. pp. 64. W. Hertz, Berlin, 1855. 8°

49b. — *Standard Alphabet for reducing unwritten languages and foreign graphic systems to a uniform orthography in European letters . . . Recommended for adoption by the Church Missionary Society*. pp. ix, 73. Seeleys, London, 1855. 8°.

49c. — Second edition. pp. xvii, 315. London, 1863. 8°.

50a. — Lepsius's *Succinct Exposition of his Universal Standard Alphabet*. pp. 399-438, 1854. 8°. In Baron C. C. J. Bunsen's *Christianity and Mankind*, vol. 4. Besides this, the same has :

50b. *The Universal Alphabet and the Conferences regarding it held at the residence of Chevalier Bunsen, in January, 1854*. pp. 375-97.

50c. Max Müller's *Proposals for a Missionary Alphabet*. pp. 437-88. This is followed by a very valuable comparative table of the chief continental systems with that of F. Max Müller. Cf. also No. 45, 46, 56, 58, 59, 62.

51. Leemans (Conrad). *Het algemeen alphabet*. [A criticism of Lepsius' Standard Alphabet.] pp. 38, 3, 8. [Leyden, 1885.] 8°.

52. Wilson (Horace Hayman). *A Key to Professor H. H.*

Wilson's System of Transliteration. Published by order of the Philological Committee of the Asiatic Society of Bengal. [With a note by R. M., i.e. Rājendralāla Mitra.] pp. 7. [Calcutta, 1868.] 8°. Cf. nos. 8–11. Like 11, this is a modification of Jones's, and it is in a sense the basis of Hunter's, system. Cf. nos. 53 and 78–9. Cf. also no. 60.

53. — *On the Orthography of Native Names.* pp. 404–11. 1875. 8°. In H. L. Thuillier and R. Smyth, *A Manual of Surveying for India.* . . . Third edition, etc. This scheme was first put in the second edition (1855) as *The Orthography of Native Names*, pp. 562–7; and is eclectic but mainly confines itself to Wilson's and Hunter's rules.

1856.

54. Ellis (A. J.). *Traveller's Digraphic Alphabet of Ordinary Types for approximating to the Sounds of All Languages.* [2 pp.] R. Seton, Edinburgh; F. Pitman, London, [1856]. 4°.

55. — Universal Digraphic Alphabet composed entirely of ordinary types for accurately exhibiting the Pronunciation of all languages. pp. 4. R. Seton, Edinburgh; F. Pitman, London, [1856]. 4°.

56. — *Universal Writing and Printing with Ordinary Letters for the use of Missionaries, Comparative Philologists, Linguists, and Phonologists:* containing the digraphic and Latinic alphabets for accurately exhibiting the pronunciation of all languages, by means of the ordinary Roman letters, without any diacritical accents or hooks, or any intermixture of Roman and Italic types; accompanied by full explanations of the . . . practical use of these alphabets . . . a detailed comparison of these alphabets with the systems of Professor Max Mueller and Professor Lepsius, and suggestions for the formation of a future permanent panethnic alphabet, together with a practical approximate alphabet for the use of travellers . . . and others who have to indicate the pronunciation of foreign words and names. pp. 22. R. Seton, Edinburgh; F. Pitman, London, 1856. 8°. There is a comparative table at p. 22. Cf. nos. 49 seq. and 45–6.

57. Schütz (Ferdinand). *Propagation des sciences européennes dans l'extrême Orient. Nouveau syllabaire et alphabet chinois phonétique. Transcription chinoise de tous les noms*

étrangers, et correction des traductions de la Bible. 2 pt. [pp. 60, 25.] Nancy, 1856, 57. 8°.

1859.

58. Thompson (John George). A Complete Phonetic Alphabet, based upon Lepsius' Standard Alphabet, but easier to learn, to read and write, and less likely to be mistaken; cheaper to cast, set up, correct, and distribute; and less liable to accident. [A corrected reprint of pp. 1-16 of the pamphlet which follows.] pp. 20. Printed at the Education Society's Press, Bycullah, Bombay, 1859. 8°.

59. — *An Unpointed Phonetic Alphabet*, based upon Lepsius' Standard Alphabet, etc. [as above]. pp. 64. Mangalore, 1859. 8°. Lithographed. For corrected reprint of pp. 1-16, see No. 58.

60. — *Pointed and Unpointed Romanic Alphabets compared*, in six versions of Luke xiv, 18-20, pp. 6. Printed by G. Plebst, German Mission Press, Mangalore, 1859. 8°. The languages concerned are: Malayalam, Tamil, Telugu, Canarese, and Hindustani, while the English version is added for comparison. The alphabets compared include those of Forbes, Caldwell and Wilson. See Nos. 52 and 47, 48. I have not found Forbes.

1861.

61. Fournier (Emile). *L'Alphabet Universel déduit du mécanisme de la Parole*. Restitution de l'alphabet primitif, par lui . . . F . . . , pp. 24. Paris, 1861, 4°. Lithographed.

7TH JANUARY, 1862.

62. Brücke (Ernst Wilhelm von). *Über eine neue Methode der phonetischen Transcription . . .* (Mit einer Beilage.) (Vorgelegt in der Sitzung vom 7. Jänner, 1862.) pp. 223-85. Wien, 1863. 8°. In Sitzungsberichte der K. K. Akademie d. Wissenschaften. Phil. Hist. Class. Bd. 41. A purely phonetic study of transcription as against Lepsius' transliteration, introducing new symbols. Cf. no. 49 sq.

1863.

63. Bell (Alexander Melville). *English Visible Speech and its Typography elucidated*. . . Reprint from the *British and*

Colonial Printer and Stationer, pp. 9, 4. Volta Bureau, Washington, 1904. 8°. Reprints of *Useful Knowledge*, No. 39.

64. — *English Visible Speech for the Million*; for communicating the exact pronunciation of the language to native or foreign learners, etc. pp. 16. Simpkin, Marshall & Co., London [1868]. 8°.

65. — *English Visible Speech in Twelve Lessons*. Illustrated, etc. pp. viii, 80. Volta Bureau, Washington, D.C. [1895]. 8°.

66. — Explanatory Lecture on Visible Speech, the science of Universal Alphabetics. Delivered before the College of Preceptors, 9th February, 1870. [With a table.] pp. 16. Simpkin, Marshall & Co., London, 1870. 8°.

67. — *Sounds and their Relations*, a complete manual of universal alphabetics; illustrated by means of visible speech, and exhibiting the pronunciation of English, in various styles, and of other languages and dialects. pp. viii, 102. J. P. Burbank, Salem, Mass., 1881. 8°. A popular exposition of the wonderful discovery of the visible speech symbols.

68. — *Visible Speech, a new fact demonstrated*. pp. 59. Hamilton, Adams & Co., London; W. P. Kennedy, Edinburgh, 1865. 8°.

69. — *Visible Speech: the science of . . . Universal Alphabetics*; or self interpreting physiological letters, for the writing of all languages in one alphabet. Illustrated by tables, diagrams, and examples. . . . Inaugural edition. pp. 126. Simpkin, Marshall & Co., London; N. Trübner & Co., London and New York, 1867. 4°. With sixteen plates. This inaugural edition is of great importance as the first extended account of the system, though the defects of the book render it hard to use. As the system represents the physiological positions required to produce each sound, the system, though too cumbersome for ordinary use, is of very great value, because it can be used to interpret the details of any and every other system of transcription or transliteration, phonetic or otherwise, thus reducing them all to a common denominator. It is well known that A. J. Ellis made use of the system with very great benefit to his work. If so great an authority found it useful, lesser mortals may well respect it. Moreover, it cannot establish any false associations as the use of any existing alphabet invariably must.

1867.

70. B., L. L. [i.e. Prince Louis-Lucien Bonaparte]. *Spécimen d'orthographe applicable aux dialectes de la langue d'Oïl, dans le but exclusif de l'étude comparative de leur prononciation avec celle de la langue française.* [A portion of St. Matthew's Gospel.] pp. 16. Londres, 1867. 16°.

1868.

71. Bachmaier (Anton). *Pasigraphisches Wörterbuch zum Gebrauche für die deutsche Sprache.* [A system of universal writing or language by the use of numerals.] pp. viii, 32, 127, 120. Augsburg, 1868. 8°.

*72. *Dictionnaire Pasigraphique, précédé de la grammaire.* pp. vi, 26, 167, 149. Augsburg, 1868. 8°.

73. *Pasigraphical Dictionary and Grammar.* pp. viii, 25, 188, 169. London, 1870 [1871]. 8°. In spite of the obvious difficulty of a system of representing ideas instead of sounds—which puts the system out of the reach of all considerations of transcription—there are some valuable tables, for whose sake I have included this. The system was invented by Bachmaier.

BEFORE 10TH NOVEMBER, 1868.

74. Berendt (Carl Hermann). Dr. C. H. Berendt's *Analytical Alphabet for Mexican and Central-American Languages.* pp. 4, 8. American Church Press Company : American Photo-Lithographic Company ; N.Y. [1869]. 8°. This is a lithographed account of the scheme with the Lord's Prayer in Maya, Spanish and German, and a preface. It was issued by the American Ethnological Society as part of their printed prospectus for 1869. The system is of great value in spite of some peculiar deviations from the right path.

1869.

75. Ellis (A. J.). *On Early English Pronunciation, with especial reference to Shakspeare and Chaucer . . .* preceded by a systematic notation of all spoken sounds by means of the ordinary printing types, etc. pt. 1-5 = pp. vii, xx, xx, 1432, xx, 88, 835. London, 1869-89. 8°. Published by the Philological Society and the Early English Text Society. Palæotype, pp. 1-16 of pt. 1. This also contains in pt. 4 without headings Prince

Louis-Lucien Bonaparte's list as published separately, for which see 76.

76. Prince Louis-Lucien Bonaparte's *List of Vowels and Consonants, and Identification of European Vowels*, with examples. (Reprinted from pp. 1293 to 1307 and pp. 1352 to 1357 of Alexander J. Ellis's *Early English Pronunciation*, etc., pt. 4.) [London, 1869.] I have not seen this except in 75, as noted.

1870.

77. Kirkby (William West). *A Manual of Devotion and Instruction for the Slave Indians of McKenzie River*. pp. 70. W. M. Watts, London [1870]. 12°. This is printed in the so-called syllabic character in the language of this northern tribe of Amerinds, and I include it as the only source known to me for this attempt at a phonetic script. Another native attempt is the one invented by the Cherokee Sequoyah (George Guess), which is the more remarkable as being a phonetic analysis of the language unhampered by English analogies.

1871.

78. Hunter (Sir William Wilson). K.C.S.I. *Guide to the Orthography of Indian Proper Names*, with a list showing the true spelling for all post towns and villages in India. pp. xiii, 146. Calcutta, 1871. fol. This represents the first step in the process by which the system used in the *Gazetteer* was officially pushed. For this see below under 1881.

79. Leskien (August). *Handbuch der altpulgarischen (altkirchenslawischen) Sprache. Grammatik. Texte. Glossar*. pp. vi, 245. H. Böhlau, Weimar, 1871. 8°. Introduced here because recommended by the A.L.A. Committee as the authority for transcribing this language and because the relation between the individual letters of the two scripts is well set out.

80. — *Grammatik. Texte. Glossar . . . Zweite völlig umgearbeitete Auflage*, pp. xvi, 232. H. Böhlau, Weimar, 1886. 8°. This is the edition preferred by the A.L.A. Committee on Transliteration. Cf. No. 79.

81. — *Vierte Auflage*, pp. xv, 347. Hermann Böhlau's Nachfolger, Weimar, 1905. 8°.

1872.

82. Kristoforid (Konstantin). *Alfabët shk'ip*. pp. 30. Konstantinopol, 1872. 8°. This is a primer, with the alphabet of the Albanian language in Greek, Slavonic, Roman and Turco-Arabic characters in their traditional application. There is no symptom of the later compromise Roman script nor of the alphabet of Elbasan, for which see No. 97.

ABOUT 1876.

83. Taylor (Isaac) Canon of York. *The Alphabet: an account of the origin and development of letters*. 2 vols. Kegan Paul, Trench & Co., London, 1883. 8°. Printed by Gilbert and Rivington. This is valuable for giving the transcriptions of individual alphabets of various authorities, such as those of Sir William Jones, Chodźko, Fürst, Wright, Lane, Lepsius and Thomas for Arabic and modern Persian letters and so on. Vol. i is Semitic alphabets, vol. ii Aryan. That this did not, as in fact it could not, satisfy everybody is proved by the following.

84. Lecky (James). Dr. Isaac Taylor's *The Alphabet*, p. 183; Phonetic Transliteration, pp. 234-5; [a reply by Canon Taylor]; Indian transliteration, p. 201, and a further note by F. Pincott, p. 251 of *The Academy*, vol. 24, 1883.

85. Taylor, No. 83. New edition, 2 vol. E. Arnold, London, 1899. 8°.

1877.

86. Damant (Guybon Henry). *Note on the Old Manipuri Character . . .* (With two plates). pp. 36-8. Calcutta, 1877. 8°. In *Journal of the Asiatic Society of Bengal*, vol. xlvi, pt. 1.

87. Jozon (Paul). *Des principes de l'écriture phonétique et des moyens d'arriver à une orthographe rationnelle et à une écriture universelle*. pp. 244. Paris, 1877. 8°. This has a very valuable table of comparison and an original notation, neither of which is limited in its interest to phonetists alone.

88. Sweet (Henry). *A Handbook of Phonetics*, including a popular exposition of the principles of Spelling Reform. pp. xx, 215. Clarendon Press, Oxford, 1877. 8°. In the Clarendon Press Series.

89. — *A Primer of Phonetics*. pp. xi, 113. Oxford, 1890. 8°. In same series. It has a list of symbols.

90. — Third edition, revised, pp. viii, 119. Oxford, 1906. 8°. This is also valuable for the list of symbols at the end. I will not be so impertinent as to praise the book as a whole.

1878.

91. Faulmann (Carl). *Das Buch der Schrift, enthaltend die Schriften und Alphabete aller Zeiten und aller Völker des gesammten Erdkreises*. Zusammengestellt und erläutert von C. Faulmann. pp. xii, 272. Wien, 1878. 4°.

92. Sewell (Robert). *The Kistna Alphabet*. [On two non-existent alphabets given in Faulmann's *Buch der Schrift* from Prinsep's article of 1837.] pp. 135-43. London, 1891. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1891.

1879.

92a. Lundell (Johan August). *Det svenska Landsmåls-alphabetet*. Tillika en öfversikt af språkljudens förekomst inom svenska mål. pp. 12-157. Stockholm, 1879. 8°. In: *Nyare Bidrag till kännedom om de svenska Landsmålen och svenskt Folklif*, I, 2. This elaborate system is also applied in other languages. Its application to Chinese is described at pp. 227-336 of his *Études sur la Phonologie Chinoise*, I, 1915, by Bernhard Karlgren.

1880.

92b. Sweet (Henry), M.A. *Sound-Notation*. pp. 177-235. London, 1880-1. 8°. In *Transactions of the Philological Society*, 1880-1. This is subsequent to his *Handbook* and is a general survey of the field of exact phonetic transcription. It has been reprinted in Professor H. C. Wyld's edition of the *Collected Papers*, 1913, at pp. 285-343.

1880-1.

93. *Ortografia limbii Române*. Regulele primitive de Academia Română în sesiunile generale din 1880 și 1881. Adunate și adaose cu exemple și explicațiuni. pp. 15. București, 1885. 8°. The official approbation of the government was given in the *Monitorul Oficial* of 17th (29) May, 1882.

94. — Regulele admise de Academia Româna și adoptate pentru școlile publice din țară. pp. 14. Ploiesci, 1895. 8°.

1881.

95. Fleay (Frederick Gard). *On an International Vowel Representation*. (Eine Internationale Vokalbezeichnung [translation by W. Viëtor].) pp. 186-9. Rostock, 1881. 8°. In *Zeitschrift für Orthographie*, etc., I. Erster Jahrgang.

96. Hunter (Sir William Wilson). *The Imperial Gazetteer of India*. New edition, etc. Oxford, 1907. 8°. The first edition was issued in 1881. The only note in the last edition is the briefest possible mention in the introductory notes in vol. 1, "Notes on Transliteration". The only consonant mentioned is the Arabic koph. For fuller account see preface, etc., to 78.

1883.

97. Geitler (Leopold). *Die Albanesischen und Slavischen Schriften . . .* (Mit 25 phototypischen Tafeln), etc. pp. x, 188. Wien, 1883, 4°. This deals with the origin of the script of Elbasan and another Albanian script form and their relations with the two Slavonic scripts.

1884.

98. Jespersen (Otto). *The Articulations of Speech Sounds represented by means of Alphabetic Symbols*. pp. ii, 94. Marburg in Hessen, 1889. 8°. Based on his Om lydskrift. The system (a phonetic one) has been criticized (and praised). The notes on other systems are valuable. A modified form of it is in his *Lehrbuch der Phonetik*, 1920, which I have not seen.

99. Viëtor (Wilhelm). *Elemente der Phonetik und Orthoëpie des deutschen, englischen und französischen mit Rücksicht auf die Bedürfnisse der Lehrpraxis*. pp. vii, 271. Gebr. Henninger: Heilbronn, 1884. 8°. At p. 208 is an "Erklärung der phonetischen Umschrift" of the author's invention.

100. — *Fünfte durchgesehene Auflage*. Mit einem Titelbild und 35 Figuren im Text. pp. xiii, 386. O.R. Reisland, Leipzig, 1904. 8°. Übersicht der Laute und Lautzeichen, p. 386. pp. 327-330, Phonetische Alphabete, a comparative survey, and a valuable bibliography, pp. 319-26. In the last edition he uses the symbols of the Association Phonétique Internationale, for which see below under 1908.

ABOUT 1885.

101. Murray (William H.). *Murray's System for Teaching the Blind of China*, pp. 35-9 in Constance Frederica Gordon-Cumming's *Work for the Blind in China*, etc. London [1887]. 8°. This is a numerical syllabary more or less based on Braille, which last is capable of true phonetic treatment (besides being available to spell any Romanic transcription) as well as Moon-type which has long been in use for Chinese. The unfortunate duplicating of effort involved is criticized in the two following items.

102. Campbell (William), of Taiwanfoo. *The Blind in China*: a criticism of Miss C. F. Gordon-Cumming's advocacy of the Murray non-alphabetic method of writing Chinese with additional remarks by Rev. W. Campbell. pp. xx, 104. Kelly and Walsh, Hongkong, Shanghai and Yokohama, 1897. 8°.

103. [Anonymous.] *The Blind in China*. Letters on Miss C. F. Gordon-Cumming's advocacy of the Murray method of printing the spoken languages of China. pp. 32. [Glasgow, 1895.] 8°.

SEPTEMBER, 1885.

104. Transliteration. [Report of the Transliteration Committee of the American Library Association, presented to the Conference of Librarians at Lake George, September, 1885.] pp. 302-11. New York, London, 1885. 4°. In *Library Journal*, vol. 10. Discussed at p. 65 seq. of the text above.

OCTOBER, 1885.

105. *A Table of the Russian Characters with their English Equivalents*. (Intelligence Div., No. 493, October, 1885. Revised January, 1892.) A single sheet [London, 1892]. *Obl.* 8°. This is a publication of the Intelligence Division of the British War Office, and their scheme only differs from that of the British Museum by the following points: For Russian *г* *h* is allowed as an alternative to *g*; *ж* = *j* (not *zh* as in B.M.). *ы* = *ui* medial, *i* final—a much too elaborate system. *ь* and *ъ* are omitted. *Ө* = *f*. *ый*, *ий* = *ii* in adjective endings. Cf. also Nos. 115 and 135.

1886.

For Leskien, see above No. 80 under 1871.

1888.

106. Murray (Sir James Augustus Henry). *A New English Dictionary on Historical Principles, etc.* [= *The Oxford English Dictionary.*] Clarendon Press, Oxford, 1888, etc., fol. Vol. i, pp. xxiv-xxv. Pronunciation. Key to the Pronunciation. This is important as being practically the work of the Philological Society and as being adapted to interpretation by Visible Speech symbols.

1889.

107. Beauregard (Ollivier). *De l'articulation des mots égyptiens, à propos de la question d'un alphabet conventionnel de transcription.* pp. 165-89. Leide, 1892. 8°. In *Actes du huitième Congrès International des Orientalistes . . . 1889. Quatrième partie.*

108. Fischer (Károly Antal). *A hun-magyar irás és annak fennmarodt emlékei.* (Tizenkét régi magyar alphabettel és 83 különféle ábrával.) pp. 105. Budapest, 1889. 4°. This is a study of Hungarian and Hunnic alphabets with tables of comparison.

109. Passy (Paul). *Les Sons du Français.* Leur formation, leur combinaison, leur représentation . . . Troisième édition entièrement refondue. pp. 143. Paris, 1892. 8°. The first edition (which I have not seen) was issued in 1889. The standard edition is that of 1899 (which I have also not seen); the English edition was translated and adapted from that of 1906. The phonetic alphabet of the Association Phonétique Internationale is used and explained in it. Cf. below under 1908.

110. — *The Sounds of the French Language.* Their formation, combination and representation. . . Translated by D. L. Savory . . . and D. Jones, pp. viii, 134. Clarendon Press, Oxford, 1907. 8°. This was specially adapted to English use with the author's assistance.

9TH AUGUST, 1889.

111. Wulff (Fredrik Amadeus). *Un Chapitre de phonétique avec transcription d'un texte andalou.* Extrait du recueil offert à M. Gaston Paris le 9 août, 1889. pp. 50. Stockholm, 1889. 8°. Tables of transcription are given.

1890.

112. [A very good illustration of the haphazard usages traditional in books of reference by way of transcription may be found in the энциклопедическій словарь of Brockhaus-Efron, edited by Ivan E. Andreevsky and others. Here the rules for the transliteration of various languages are given in three pages at the end of the seventh volume and another account is given at the beginning of the sixth volume in the preface. The Russian Alphabet, ideally fitted for transcription as it is, is never used properly.]

17TH MARCH, 1890.

113. Lyon (H. Thomson). *On a Proposed Method of Transliterating the Languages written in the Arabic Character*. pp. 631-8, with two tables. London, 1890. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1890. He criticizes Sir Monier Monier-Williams's grammar for its absence of explanations. A letter by way of rejoinder by F. W. Newman appears at pp. 340-3 of 1891 under the title "Transliteration".

21ST APRIL, 1890.

114. Monier-Williams (Sir Monier). K.C.I.E. The Duty of English-speaking Orientalists in regard to United Action in adhering generally to Sir William Jones's *Principles of Transliteration*, especially in the Case of Indian Languages; with a proposal for promoting a Uniform International Method of Transliteration so far at least as may be applicable to proper names. pp. 607-29. London, 1890. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1890. He also wrote papers for the Oriental Congresses of Berlin (1881) and Leyden (1883), which this one supersedes. He deals with the Nāgarī, Greek and Latin alphabets, and discusses the haphazard treatment of the problem by Max Müller in the *Sacred Books of the East*, by the Church Missionary Society (which after all recommended Lepsius, No. 49), the British and Foreign Bible Society, the Society for Promoting Christian Knowledge, and the Society for the Propagation of the Gospel. He also gives a history of the question from 1780 to date. There was a criticism by Sir George A. Grierson and a reply at pp. 814-21 of the same volume.

1891.

114a. *Universal Syllabics*. (A new method for learning to read, applicable to all languages.) This is at p. 85 of : *The Lord's Prayer in three hundred Languages*. . . . With a preface by Reinhold Rost. pp. 88. Gilbert and Rivington, London, 1891. 8°. This is not one known to me, but seems to be an eclectic form of writing.

JANUARY, 1892.

For Russian transliteration see above 1885, No. 105. Revised January, 1892.

115. The Following System of Orthography for Native Names of Places adopted by the Council of the Royal Geographical Society, the Foreign and Colonial Offices, Admiralty and War Office is to be adhered to in all Intelligence Division Publications. [A single sheet.] [London, 1892.] fol. This was published by the Intelligence Division of the War Office in February, 1892. It is stated that Indian names are to follow Hunter's *Imperial Gazetteer*. For discussion of some points in this scheme, see above, p. 76 sq. Cf. also Nos. 105 and 135.

1893.

116. S., E. J. *De l'alphabet universel, au sujet de la réforme projetée de l'orthographe*, etc. pp. 24. Paris, 1893. 12°.

20TH MAY, 1893.

117. Conder (Claude Reignier). *Notes on the Hittite Writing*. pp. 823-53. London, 1893. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1893. This is a very early attempt at a decipherment of Hittite, and is specially distinguished for its tables of the syllabary showing its sounds and its Cypriote and Cuneiform equivalents.

1894.

118. *X^{me} Congrès International des Orientalistes*. Session de Genève. Rapport de la Commission de Transcription. pp. 15. Leide, 1896. 8°. At end of : *Actes du . . . Congrès . . . Troisième partie*.

119. Tenth International Congress of Orientalists, held at Geneva. Report of the Transliteration Committee. (Transliteration.) [On the transliteration of the Sanskrit and Arabic

alphabets.] pp. 879–882. [This is followed by :] Report of the Sub-Committee on the Transliteration of the Sanskrit and Prakrit Alphabets. [Signed by Émile Senart.] pp. 883–7. [Followed by:] Proposals of the Sub-Committee for the Transliteration of the Arabic Alphabet. [Signed by G. T. Plunkett.] pp. 888–9. London, 1895. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1895. The final report was dated Sept. 10, 1894. The full committee consisted of Messrs. Barbier de Meynard, G. Bühler, J. Burgess, M. J. de Goeje, H. Thomson Lyon, G. T. Plunkett, Émile Senart, Socin, and Windisch. At pp. 890–2 is a final note by G. T. Plunkett: On the Work of the Committee on Transliteration at the Tenth Oriental Congress. Cf. Nos. 123, 129 and 131 below.

120. Burgess (James). *The Transliteration of Oriental Alphabets*. [With tables.] pp. 27–42. Leide, 1895. 8°. In *Actes du dixième Congrès International des Orientalistes* . . . 1894. Deuxième partie.

121. Foulché-Delbosc (Raymond). *La Transcription Hispano-hébraïque*. pp. 22–33. Paris, 1894. 8°. In *Revue Hispanique* première année.

122. ——— *Extrait de la Revue Hispanique*, tome 1. pp. 16. Paris, 1894. 8°. [This treats it analytically with specimens of Judæo-Spanish typography from the East and Africa. Cf. also below No. 134 under 1906.]

8TH MAY, 1894.

123. Report of the Transliteration Committee [of the Royal Asiatic Society of Great Britain and Ireland]. (Adopted by Council, 8th May, 1894.) [Sanskrit, Pali and Arabic, with a table of Arabic as transcribed by this scheme, by B.M., in German and French schemes and that of the Bengal Asiatic Society. Another table gives additions for other languages.] pp. 13. London, 1894. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1894.

1895.

124. Aston (William George). *Writing, Printing, and the Alphabet in Corea*. [Containing a history and transcript and transliteration of the phonetic alphabet based on the Sanskrit alphabet.]

pp. 505-11. London, 1895. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1895.

125. Burgess (James). *Geographical Place-Names in Europe and the East*. pp. 493-503. London, 1896. 8°. In the *Report of the Sixth International Geographical Congress* . . . 1895.

126. Chisholm (George Goudie). *On Some Points connected with the Orthography of Place-Names*. pp. 483-92. London, 1896. 8°. In the *Report of the Sixth International Geographical Congress* . . . 1895.

127. Poussié (Emile). *Unification Internationale de trans-litération en caractères latins pour la transcription des noms géographiques*. pp. 513-16. London, 1896. 8°. In the *Report of the Sixth International Geographical Congress* . . . 1895.

128. Ricchieri (Giuseppe). *Per la trascrizione e la pronuncia dei nomi geografici*. pp. 505-12. London, 1896. 8°. In the *Report of the Sixth International Geographical Congress* . . . 1895.

1896.

129. *Transliteration*. [The Report of the Committee of the Royal Asiatic Society appointed on this question on the motion of Sir Monier Monier-Williams.] pp. 12. London, 1896. 8°. In the *Journal of the Royal Asiatic Society* . . . for 1896. This Committee adopts the Report and scheme of the Oriental Congress of Geneva, with its own notes and tables of comparison. I. Sanskrit and allied (Devanagari). II. Arabic. The Council suggests a scheme for Hebrew. This was reprinted under a modified title as a supplement to the *Journal* in 1913. Cf. no. 123 and no. 118 seq. and 131.

1897.

130. Garnier (Christian). T. R. G. *Méthode de transcription rationnelle générale des noms géographiques s'appliquant à toutes les écritures usitées dans le monde* . . . *Ouvrage couronné par l'Institut, prix Volney*. pp. xii. 148. Ernest Leroux, Paris, 1899. 8°. Posthumously published. This appears to contain everything and to be very good. It is on a French basis. Cf. no. 133.

131. Kuhn (Ernst Wilhelm Adalbert) and Schnorr von Carolfeld (Hans). *Die Transscription fremder Alphabete*. Vorschläge zur Lösung der Frage auf Grund des Genfer "Rapport

de la Commission de Transcription " und mit Berücksichtigung von Bibliotheks Zwecken, pp. 15. Leipzig, 1897. 8°.

I include this, though I have not seen it, as a necessary supplement to No. 118, and also in deference to the authority of the authors. See No. 132 and review in *Centralblatt für Bibliothekswesen*, xiv, 304-6.

132. Müller (Friedrich). *Die Transcription fremder Alphabete*. pp. 12. Wien, 1897. 8°. In *Sitzungsberichte der Philosophisch-Historischen Classe der Kaiserlichen Akademie der Wissenschaften*. Band 136. There are valuable tables (eight in number) for the transcription of eight groups of languages, from which, however, he seems to omit the Slavonic. He criticizes the authors, of No. 131 from a purely theoretic point of view and produces a scheme which appears to be unduly complex (e.g. Greek and Čech letters) and to take too little account of the work of the Congress of Orientalists, the history of whose Committee seems to have escaped his notice. Cf. 131 above.

133. Schrader (Franz). *La Méthode de transcription rationelle générale des noms géographiques par feu Christian Garnier*. pp. 974-81. London, etc., 1901. 8°. In *Verhandlungen des Siebenten Internationalen Geographen-Kongresses . . . 1899*. Theil 2. Cf. No. 130, of which it is a critical account.

1898.

For Morris's system published in 1898, see above 1788, No. 11. Jespersen (Otto) see 98.

1902.

133a. Vissière (A.). *Méthode de transcription française des sons chinois, adoptée par le Ministère des Affaires Étrangères*. pp. 112-17. Paris, 1902. 4°. In *Bulletin Mensuel of Comité de l'Asie Française*. Année II. No. 12, Mars, 1912.

1906.

134. *The Jewish Encyclopedia . . .* I. Singer . . . editor, etc. 12 vol. Funk and Wagnalls Company: New York and London, 1901-6. 8°. Vol. 12 Transliteration. pp. 229-31 and p. vii-viii. This contains not only an account of the forms adopted in Hebraizing Greek and Latin and other languages historically, but also an account of the reverse process; wherein it is to be noted that Origen and Bargès (1854) are given as the only

historical attempts at the latter before 1860. Cf. no. I on the contrary. The R.A.S. scheme is given. The article is by Isaac Brojde. pp. vii-viii give the "Systems of Transliteration and of citation of proper names". A note says in all other matters of spelling their Standard Dictionary is followed. *A* is: Rules . . . for . . . Hebrew and Aramaic. *B*: Arabic. *C*: Russian Proper Names, etc. [A little eccentric at times.]

135. Knox (Alexander). *Rules for the Transliteration of Place-Names occurring on Foreign Maps*. Compiled . . . by A. Knox, etc. pp. iii, 83. London, 1906. Published by the Department of the General Staff at the War Office. It states the points reserved by the Admiralty and the Royal Geographical Society. Cf. nos. 105 and 115.

1907.

136. *Cataloguing Rules, Author and Title Entries*, compiled by Committees of the American Library Association and of the Library Association. English edition. pp. xii, 88. The Library Association, London, 1908. 4°. pp. xii, 13-16, 43, 65-73. [Discussed at pp. 64 sq.]

136a. Schmidt (Wilhelm) *Pater, Professor of Ethnology. Die Sprachlante und ihre Darstellung in einem allgemeinen linguistischen Alphabet.*—Les sons du langage et leur représentation dans un alphabet linguistique général . . . Traduit en français par le Dr. P. J. Hermes. pp. 282-329, 508-87, 822-97, and 1058-1105. In *Anthropos*, Bd. 2, 1907. Salzburg, 1907. 8°. The *Anthropos Alphabet* is a very extreme case of diacritics, and raises interesting questions of principle by its contrast with Passy's ideas.

1908.

137. Sweet (Henry). *The Sounds of English*. An introduction to *Phonetics*. pp. 139. Clarendon Press, Oxford, 1908. 8°. [pp. 112-20.]

138. *Exposé des principes de l'Association Phonétique Internationale*. pp. 20. Imprimerie B. G. Teubner, Leipzig, 1908. 8°. [Mentioned p. 78.]

1911.

139. Kennard (Howard Percy). *The Russian Year-Book for 1912*. Compiled and edited by H. P. Kennard . . . assisted by

Netta Peacock. pp. xx, 821. Eyre and Spottiswoode London, [1911]. 8°. [p. 768. Discussed pp. 68 sq.]

25TH JUNE—2ND JULY, 1912.

140. Johnston (Sir Harry Hamilton). *Phonetic Spelling* [of English]. pp. 1–2. London, 1912. fol. In the *Westminster Gazette* for June 25th, vol. 39, No. 5954. [Quite valuable, especially in his sense of the need for international agreement as against sectional variants.]

141. — *The Phonetic Spelling of English*. [A letter in rejoinder on No. 140.] In *Westminster Gazette*, 2nd July, 1912. Refers to the fact that his recently published book has something on this point.

MAY, 1912.

142. Johnston (Sir Harry Hamilton). *Views and Reviews*: from the outlook of an anthropologist. pp. 332. Williams and Norgate, London, 1912. 8°. [I have not seen this unfortunately. Cf. above No. 141.]

1912.

143. Ezersky (Theodor V.). *L'Alphabet universel, transcription des noms géographiques de tous les pays*. Rapport au X Congrès International de géographie, Rome, 1912, pp. 24. Davos Platz, [1912]. 12°.

Published also in his: — Универсальный Географический Алфавитъ. Alphabet géographique universel. Alfabeto geografico universale. Geographisches Universal-Alphabet. Universal Geographical-Alphabet. Geografiskt universal alfabet, pp. 4, 8 . . . St. Pétersbourg, 1913. 8°.

Each part is pagged separately. The basis is the use of Russian letters with some exceptions.

APPENDIX.

144. Breymann (Hugo). *Die phonetische Literatur von 1876–1895*. Eine bibliographisch-kritische Übersicht, pp. 170. G. Böhme, Leipzig, 1897. 8°. This is my source for almost all the modern books not such as Sweet, Viëtor, Ellis and Bell.

145. Raudnitzky (Hans). *Die Bell-Sweetsche Schule*. Ein Beitrag zur Geschichte der Englischen Phonetik. pp. xi, 182. Marburg, 1911. 8°. In *Marburger Studien zur Englischen Philologie*, Heft 13. Very useful for its bibliographical references

in the domain of English phonetics, but only transiently concerned with transliteration as such. It would be useful to supplement my bibliography for the purposes of covering phonetic transcription to make a close study of 144 and 145.

146. Karaman (Matheu) Bishop, etc. I only mention his name for the sake of mentioning his share in a primer of the Cyrillic and Glagolitic scripts published at Rome in 1793. What I wish to do is to accomplish far more than merely calling attention to his individual work; this is but a late part in a magnificent series of such primers which are an ever memorable monument of the broad spirit in which the Congregatio de Propaganda Fide has viewed its duty. It has moreover in its *Tipografia Polyglotta* and in its college continued to keep before the public two ideals, the value of knowing the language of those you convert and the necessity for your own study and the instruction of others of a scheme of transliteration of some sort. Several weeks at the library of the Congregation would be needed to catalogue all they have done and sift out what is required, and it would perhaps unduly overshadow the rest of this list. Therefore let this suffice to mark one's appreciation of their work.

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It may perhaps be permitted to close this article with an expression of apology for the inadequate and uneven quality of the bibliography and of its indexes. I may say that the date under which the items appear may often be faulty owing to the hasty way in which I was obliged to deal with matters not all equally familiar to me.

The field is important; perhaps our congresses may carry the question one step nearer solution; I am very sure this can only be done by holding fast the results attained by other bodies of experts and by the largest measure of international collaboration with them.

LEONARD C. WHARTON.

July, 1912.