

## PHONETIC TRANSCRIPTION AND THE VOLNEY PRIZE

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### ABSTRACT

The institution of the Volney Prize in the early nineteenth century was intended to concentrate attention on the need for a standard system to transcribe and transliterate languages. This paper briefly discusses two of the essays submitted, and assesses how far the Volney Prize succeeded in its objectives.

### 1 THE BACKGROUND

This paper is concerned with the institution of the Volney Prize - an episode in the history of the development of transcription. The term 'transcription' is taken to include both (a) the recording of the phonological and/or morphological elements of a language using a specific writing system (referred to in this article as 'transcription' in a narrower sense); and (b) the recording of the graphic symbols of one writing system in terms of the corresponding graphic symbols of a second writing system (referred to henceforth as 'transliteration').

Prior to the 19th century there was no standard scheme for transcribing or transliterating languages, although a number of systems had been put forward, often with newly devised notations, using a non-roman script (e.g. Wilkins [6], De Broses [1]). The most practical scheme then existing was that of Sir William Jones ([3]) - intended particularly for converting oriental scripts to the roman alphabet.

Constantin François Volney (1757-1820) was a prominent member of the group of savants in France known as the *Idéologues*. It became one of his great aims in life to make oriental literature and culture more accessible to the West, and to open up the East to the influence of the superior (as he saw it) western civilisation. With

this in view he published two works in the course of his life which were intended to provide a system for transcribing (in the wider sense) the oriental languages, notably Arabic (Volney [4,5]), but he was conscious that they only went part of the way towards achieving this objective. He was aware of Sir William Jones' scheme, and believed it to be an important contribution to the advancement of transcription systems. When Volney died, in 1820, he left approximately 24,000 francs in his will "for the best work related to the philosophical study of languages" with the wish that it should "encourage all work promising to continue and bring to completion a method of transcribing Asiatic languages into European letters".

### 2 THE VOLNEY PRIZE

A Commission was set up to administer the Prize, consisting of members of the French Academies, and it began by asking for essays which would prepare the ground for a solution. This meant (a) setting out by what means Volney's wishes could be fulfilled; (b) determining the scope of the new system; (c) mapping out a plan of action to be followed; (d) specifying what a successful outcome might lead to.

Of the four essays submitted for this first competition of 1822 two were by librarians - no doubt committed by their profession to achieving a solution to the transcription problem. Scherer was from Munich, and Schleiermacher was later to be librarian of the Ducal library in Darmstadt. They were awarded the prize jointly, but took opposite views about one of the crucial issues - whether to aim at a transcription of pronunciation or simply a transliteration. Scherer favoured the former, Schleiermacher the latter. Over the years the members of the Volney Commission and the contestants had sharp disagreements about what Volney's real

intentions had been. There is no doubt that his ultimate aim was for a universal phonetic alphabet, but the question was whether to aim for a more limited objective, attainable in the immediate future.

Some of the problems involved in a transcription of pronunciation are:

1. to limit the sounds to be transcribed - there was as yet no clearly formulated notion of the phoneme, though it is clearly implicit in the mention in some schemes of 'fundamental' or 'important' sounds;
2. to be able to convey the pronunciation accurately so that non-specialists could understand and reproduce it. This required a satisfactory phonetic terminology - only in part available at that time;
3. to choose from among competing accents of a language;
4. to allow (at least if universal use is anticipated) for the incorporation in any scheme of 'new' sounds - i.e. to have an open-ended system;
5. to provide sufficient symbols for the sound distinctions required, and symbols that were aesthetically pleasing, easy to reproduce, and yet clearly distinct from each other.

### 3 SCHERER

Scherer's essay is admirably clear. While recognising the above problems, he believed that the benefits to be derived from a satisfactory phonetic transcription scheme would outweigh the difficulties. He had no intention of replacing existing orthographies - his alphabet would stand alongside them, helping to make oriental languages more accessible to the learner. He foresees the possibility in due course of what he calls 'philosophical' symbols, of which he means newly devised symbols, not taken from existing alphabets. However, the need to enlist wide public support, as well as considerations of expense, meant that the alphabet, to begin with, would have to use the easily available and familiar symbols of the roman alphabet, supplemented by some Greek letters or by other devices.

He sets out what he considers to be principles of a good notation:

1. No one sound is to be represented by more than one symbol, and no one symbol is to signify more than one sound.
2. Symbols should be chosen on principles

- of simplicity, consistency and accessibility in printing types.
3. They should be usable in handwriting as well as in printing.
4. They must include the marking of the 'syllabic accent' - ignored in most systems of transcription.

Where possible he aimed to combine a transcription of pronunciation with an indication of the original orthography. As regards scope, while accepting that in the first place limited groups of languages would be dealt with, he sees nothing in principle against the idea of a universal alphabet. Scherer envisages (far too optimistically as it turned out) that a solution to the problem could emerge in the following year's competition, and that the necessary tools would rapidly be made available - namely (a) the full notation system, with a suitable introduction and illustrations of its use; (b) a simple grammar, a chrestomathy and a vocabulary of two of the most important languages - Arabic and Sanskrit; (c) possibly a complete transcription of a selected oriental classic work. He sees the new alphabet as having five main benefits:

1. economy in the reader's time;
2. economy in printing costs;
3. attracting new students to oriental studies;
4. aiding language acquisition in general;
5. improving communication for all those coming into contact with foreign languages - administrators, travellers, traders etc.

Scherer's approach is practical, and the system he put forward in the following year's competition adhered closely to the principles he had set out in 1822. It dealt with phonetic transcription under the heading of 'phonography', and transliteration separately as 'semiography'. He attempted to combine the two by using lower case letters for phonography and upper case for semiography. He gives as an example the name *Muhammad* transcribed from Arabic. The semiographic version, transliterating the Arabic consonants, would be MHMD, but the combined version would be MuHAMMaD (the inserted letters representing the Arabic diacritics for vowels and for doubling the consonant). His phonographic alphabet contains 40 letters, of which all but 12 are taken from the roman alphabet, and most of the remainder only involve slight modifications of roman letters.

Scherer's phonetics is inevitably

incorrect in places, but he makes some interesting observations. He presents the vowels in a vowel diagram, which he specifically says does not relate to the vowels of a particular language. In his 1822 essay he had introduced a third dimension. Whereas the basic vowel sounds are envisaged as on the surface of a solid elliptical body, the vowel 'mute e' (i.e. schwa), which he describes as a "vowel yet unformed" is said to be in the centre (see diagram). In his 1823 essay he talks of this vowel as either "concealing itself within the vocal sphere" or "approaching the vocal periphery". He equates it with the colour grey which he regards as a mixture of all colours. (This comparison with colours is found in a number of early descriptions.) As with most early vowel diagrams the central line does not represent vowels with a central tongue position, but front rounded vowels.

#### 4 BRIERE

It is impossible here to give more than a taste of the essays on transcription which were submitted for the Volney Prize in the first 20 years (after that the Commission decided to drop the topic of transcription, disappointed with the results of previous competitions). They range from the most limited (both in respect of the number of languages covered, and in adhering strictly to a transliteration rather than a phonetic transcription) to the most ambitious, attempting to provide for all sounds in all languages. This end of the spectrum obviously includes those which are of more interest to the phonetician. I shall confine myself to one of these more ambitious schemes - the most ambitious in fact. It was by a certain M. de Brière - a pseudonym - his real identity is still obscure. He first put it forward in 1827, and resubmitted it in 1831. It did not win a prize on either occasion, though Brière did eventually win in 1837 with a much more limited scheme.

The 1827/1831 proposal was entitled Phonographie cyriographique or idéographique - the art of representing the movements of speech by precise letters - that is, it was a universal alphabet. After a description of the speech organs, accompanied by somewhat crude diagrams, he presents his alphabet, basing it on the productive mechanisms involved. His categories are derived from a description of articulatory movements relating to the lungs, larynx, velum, hard palate, teeth, lips, tongue tip, jaw and cheeks. To give an idea of the detail of his description,

21 possible lip positions are allowed for, and 17 different positions of the tongue tip (see Appendix for examples). Larynx raising and lowering are taken into account. Brière derives 80 subclasses of sounds, and each of these is then subject to distinctions of what he calls 'intensity' - the degree of variation within each category.

Interesting, and unexpected in a description of this period, is his recognition of variations which are frequently totally ignored in descriptions of speech. He lists these as: speaker's sex, age, temperament, physical dimensions, state of health, body posture, situation, proximity to others, timbre of voice, tones of voice, character, emotional state, airs and manners, social position, national or provincial accent, epoch in which he is living, the temperature, the time of day, simultaneous activity, and type of text (if read). His 'normal' or 'neutral' case is: A Frenchman, from Paris, aged about 30, of average height, with good constitution and health, of average social status, before a meal, not affected by any emotions, of good character, speaking in a friendly way, in a standing position, using a moderate degree of loudness, in an amply furnished room of average size, about noon on a fine day in spring in the nineteenth century.

Although variations of this kind may be disregarded for many purposes (and certainly they go far beyond what the Commission was looking for), they are evidence of an open mind and an observant ear. Brière also provided for features of connected speech, such as assimilation. He calculated that his system would allow for the description of 43,923,168 sounds! The word 'overkill' springs to mind, but he made it clear that the number of sounds which would require to be symbolised in reality would probably not exceed 220. The degree of expertise which his system would call for if applied in full is obviously far beyond what the average user of a universal alphabet would possess, but it is stimulating to find such a search after precision at a time when so many essays were little more than rehashes of previous work, involving little or no new observations.

One other particular point of interest is that Brière assigns an 'organic name' to each sound, based on its formation. It is the same idea, in effect, as Jespersen's alphabetic notation ([2]). To take one example: the Indian retroflex stop is given the name *tés-lé-rou*, where <t> = tongue tip articulation, <é> = aspirated, <s> = breathed out, <lé> = mid-palatal,

and <rou> = high intensity. The symbols of his notation are, he says, only an imprecise compromise forced on him by the Commission's requirements, and only the organic names can specify a sound with precision.

Finally, to provide for transliteration he uses a system of subscript numerals. He exemplifies it from Modern Greek, which retains the orthography of Ancient Greek, but has a much reduced vowel system. There are six ways of representing the vowel /i/. In transliterating Brière uses /i/ with the subscript numerals 1-6, so *κοιτη* is represented as *ki<sub>1</sub>ti<sub>5</sub>*.

#### 5 CONCLUSION

In all 36 essays on transcription were submitted, of which six were awarded the prize. The sad fact is that none of them was deemed by the Commission to have presented a system which they could do more than commend as worthy of further examination or wider circulation before approval could be considered. Volney's hopes for the adoption of a new system with the backing of the French Academies were never realised, though the institution of the Prize stimulated many valuable works in the wider linguistic field. Many of these are to be published as part of a major project concerned with the Volney Prize Essays in the course of the next year or so.

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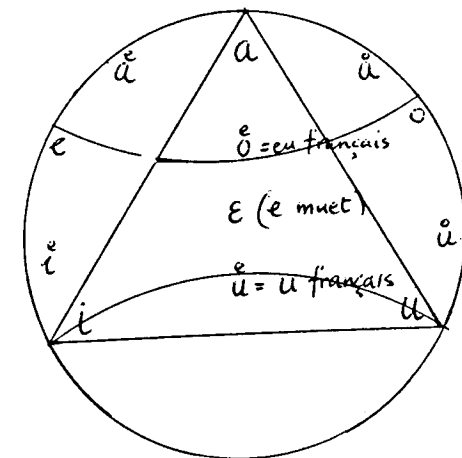
#### APPENDIX

##### EXAMPLES OF BRIERE'S CLASSES OF SOUNDS

1. pulmonité - lung movement
2. gutturalité - larynx action
3. glosso-staphylinité - tongue movement in relation to soft palate
4. nasalité - soft palate movement
5. lingualité - tongue tip movement
6. palatalité - contact with palate
7. maxillarité - jaw movement
8. dentalité - contact with teeth
9. labialité - lip position
10. oralité - mouth opening
11. genalité - inflation of cheeks

##### Examples of subclasses

1. gravi-gutturalité - larynx lowered
2. acuti-gutturalité - larynx raised
3. cavi-lingualité - tongue point lifted and curved
4. extensi-maxillarité - jaw pushed forward
5. lati-maxillarité - jaw moved sideways
6. distensi-labialité - lips lengthened
7. retracti-labialité - lips drawn back



Scherer's 1822 vowel diagram