

# IN DEFENCE OF A STANDARD PHONEMIC SPELLING IN ROMAN LETTERS FOR THE CANADIAN ESKIMO LANGUAGE

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## Introduction

**I**N Canada several systems of writing the Eskimo language are in use at present. There is the syllabic system (small triangles, right and acute angles, semicircles, etc.), used by the great majority of the Eskimo people and several alphabetic systems based on roman letters. The syllabary, which consists of 48 symbols each representing a syllable, was introduced in the Eastern Arctic about 1885 by the Reverend E. J. Peck as a modified version of the syllabic characters in use among the Crees. Labrador Eskimo had already been recorded in roman letters as early as 1864 with the publication of Erdmann's Eskimo-German dictionary for use among the Moravian missionaries.

The syllabary, because of its relative simplicity, eventually spread to all parts of the Canadian Arctic with the exception of the Mackenzie River area and Labrador where only the alphabet is taught. It should be noted that the syllabary is also unknown in Greenland. Shortly after World War II some missionaries of the Eastern Arctic began teaching both the syllabic and alphabetic spellings to the Eskimo children in the hope of gradually introducing a more practical and accurate writing system, but the natives who know both systems are still a small minority. It is claimed that at least 75 per cent of the native population read and write syllabics. Of the 48 symbols of the syllabary, normally only 36 are used by the people east of Hudson Bay, whereas those west of the bay manage with 32. The differences in the alphabetic systems are much more varied, but in any event, none of these orthographies is common to all Eskimo. In spite of its many inadequacies, the syllabary is the system of writing that gained the widest currency and stands today as the most satisfactory medium of written communication for the majority of the Canadian Eskimo people. Though not completely accurate, as will be shown presently, the syllabary nevertheless leaves out of account the many non-essential phonetic intra- and inter-dialectal differences, which the various alphabetic systems reveal in abundance. This no doubt accounts in great part for its popularity.

On the other hand, what accounts for the shortcomings of the existing alphabetic orthographies and for their many points of divergence among themselves, is not so much the actual difference in the dialects on which

they are based, as the various personal interpretations made of the phonological structure by their inventors, who were mainly French, English and German missionaries, each of whom was strongly influenced by his own linguistic background. As a result, the existing wide variety of alphabetic spellings for Eskimo can be classified broadly as follows: spellings *à la française*, spellings *à l'anglaise*, and spellings *à l'allemande*. What is really needed is a spelling *à l'esquimaude*, that is, a system of writing based on a scientific analysis of the phonological structure of the Eskimo language in which all foreign linguistic influences must be left out of account. Modern linguistic research has shown the influence that languages in contact have on each other's phonological systems, for example, in such areas as Switzerland with its four official languages, and in bilingual Canada. An individual tends to interpret the sounds of a foreign language according to the sounds of his own. For example, unless taught the specific mode of articulation of the first vowel in the French word *lune* most English learners will pronounce it very much like the vowel of the English word *loon* because the French phoneme (basic functional sound) in question does not exist in English and the normal reaction of the uninitiated is to pronounce the foreign sound like the one it most closely resembles in his mother tongue. It should be noted that a German learning French has no difficulty with the first vowel of *lune* because that phoneme exists in German.

The present wide variety of Eskimo orthographies is a direct consequence of the subjective interpretation of their designers who, each in their own way, unknowingly and unintentionally vitiated the Eskimo phonemic reality. The growing contact between the Eskimo and the Whites in recent years makes efficient communication between them a matter of necessity. The adoption of a standard medium of written communication is of fundamental importance in achieving this goal, but above all, a standard spelling is imperative for the Eskimo people, not only to enable all their members to attain literacy in a common system of writing, but also to make it possible for them to share their thoughts and feelings with each other, either in the form of simple correspondence or in a literature yet to be born. To achieve these aims with the greatest degree of efficiency, a standard spelling must be introduced that will eventually replace the existing systems of writing that are all, in one way or another, inadequate. In what is to follow, it is my purpose to show why the only solution rests in presenting a new orthography in roman letters based on a scientific analysis of the phonemic structure of the Eskimo language.

### **A scientific orthography: its meaning and main purpose**

The main purpose of an orthography is to be functional, namely, it should record as clearly, accurately, and economically as possible any and all the meaningful utterances permitted by the various permutations and combinations of the phonemes of the language in question. Writing, like other realms of human behaviour, has a long history of trial and error in

search of improvement or greater efficiency. Each attempt made in this field in the past was an effort to use visible symbols (pictures, signs, letters) to portray an invisible reality (the phonemes or combinations of phonemes) actualized in speech. Each designer of a writing system saw different significant units of the reality of language. For example, for the Chinese the idea or conceptual unit was the most meaningful item to symbolize, so they developed the ideogram or word-picture that describes a concept and not a sound. In this way a concept such as *man* might be pronounced differently in various dialects but its ideogram could easily serve for even the most radically divergent pronunciation of the word. Others became very conscious of the recurrent sound patterns or syllables in their speech, therefore they devised a syllabary in which each symbol stood for a syllable. Others went further and realized that even syllables could be broken down into smaller phonic constituents; consequently the alphabetic system of writing was invented. The most recent advance is phonemic writing, based on a scientific description of the sound structure of the language. Of course, the alphabetic orthographies designed in the pre-scientific era were in large part phonemic but usually imperfectly so. The majority of contemporary linguists agree that phonemic writing on a scientific basis leaves little margin for error, though André Martinet, the renowned French structuralist, who is of the same opinion, offers this word of caution: "even on the purely practical planes of language teaching, spelling reform, and the reduction of language to writing, the tyranny of the phoneme may also be detrimental . . . there are languages for which a syllabary would, if all factors were considered, appear to be more economical than an alphabet." (Martinet 1951).

Modern linguistic research has shown that each language possesses a phonological structure made up of a definite number of phonemes which are used in various permutations and combinations to express and to distinguish one meaningful unit from another. For example, *sing* and *ring* in English each contain three phonemes, /s/, /i/, /ng/ and /r/, /i/, /ng/ respectively, differing in meaning by virtue of the initial phoneme only. In *sing* and *sang* the second phonemes, and in *sin* and *sing* the final phonemes, establish a difference in meaning. If the phonemes of a given language can be combined in speech (words, phrases, sentences) and make their meaning intelligible to others, it should follow that when these same phonemes are represented graphically they should achieve the same result. Experience has shown that a clear, simple, and efficient orthography should contain no more graphic symbols than the number of phonemes in the language in question.

The chief defect of the Eskimo alphabetic systems is that they all contain more symbols (letters) than the actual number of Eskimo phonemes requires. The surplus letters symbolize non-functional phonetic differences that were considered functional by the non-natives who devised the spellings because they have a function in their mother tongues but they are not Eskimo phonemes. The most flagrant example of this is to be found in the use of the five vowels — *a, e, i, o, u* — in the French, English, and German versions

of the Eskimo vowels. Even though Eskimo has only three functional vocalic sounds — *i*, *a*, *u* — because the five vowels are phonemes in English, French, and German, it was easy for the missionaries to interpret the phonetic variants of the *i* and *u* Eskimo phonemes as two additional functional vowels, namely, *e* and *o*, for the simple reason that the latter have the function of distinguishing meanings in the European languages in question. It is a vitiation of the phonemic structure of Eskimo to impose upon it distinctions that are superfluous and unnecessary for distinguishing meaning. This kind of error is called the over-differentiation of phonemes.

On the other hand, the syllabary vitiates the phonemic structure of Eskimo by the under-differentiation of phonemes, that is, certain Eskimo phonemes that do not exist in the language of the non-natives are not heard as distinct functional units by them and therefore are left out of account when they speak and write Eskimo. A good example is the non-distinction of the /k/ and /q/ Eskimo phonemes in syllabic writing where both appear as /k-/. Only the context and the low functional yield of such a pair of phonemes can avoid the resulting ambiguity. For instance, if the /s/ and /r/ phonemes of English were both written with the same symbol, let us say /s/, upon reading the sentence *he sings the bell* common sense would tell us to interpret *sings* as *rings* in that particular context. It is easy to imagine utterances where the context would not be sufficient to clarify the ambiguity. Theoretically there would be nothing wrong in relying on context to differentiate meanings if it could be shown to be always dependable, for in reducing the number of symbols such a method would prove more economical. Such considerations are intimately related to the very important concept of functional yield. By functional yield is meant the frequency of occurrence of a given phoneme as being the only feature capable of distinguishing meaning between two utterances. For example, the /p/ and /b/ English phonemes have a fairly high functional yield as we can see in such pairs of words as *pill* — *bill*, *nipple* — *nibble*, *nap* — *nab*, etc. To assess properly the functional yield of a given phoneme in a language is a difficult and intricate matter, but it is worth while doing if it can serve the purpose of making an orthography simpler and more economical. For example, the final consonants in Eskimo have a low functional yield as evidenced by syllabic writing that functions satisfactorily even though it leaves them out of account. It would not be necessary to write them in an alphabetic system if it could be shown conclusively that context could always avoid ambiguity in the few cases where they have a function. If the syllabary proved adequate in spite of its under-differentiation of phonemes, it is because both the context and the low functional yield of certain phonemes came to its aid. It should be pointed out that the alphabetic systems are inadequate on account of both under- and over-differentiation of Eskimo phonemes, whereas the syllabary suffers only from under-differentiation. In the final analysis, the important thing to remember in designing an orthography is that it should never contain more symbols than phonemes found in the language in question.

### The syllabary: its strength and weaknesses

It has already been pointed out that the syllabary, in spite of its inaccuracies, has proved to be the most satisfactory writing tool for the Canadian Eskimo people. There are two factors that speak in its favour as opposed to the present alphabetic spellings. In the first place, it eliminates the need to write the word-final consonants /p/, /t/, /k/ and /q/ whose functional yield is very low in many dialects. In some dialects the final consonants are still heard in many words but do not necessarily have a function in such positions. They show different degrees of wear or latency in the various dialects, both in regard to the total number of words thus affected and to individual words. For instance, though the final consonant of the word /illu(k,q)/ "igloo" has been dropped in the speech of most people of the Eastern Arctic, this word is still sometimes heard as /illuk/ in the south of Baffin Island and as /illuq/ in Port Harrison. The syllabic writing gives *i-lu* (syllabic symbols are not reproduced here owing to printing difficulties) for both and thus avoids the problem of the different final consonants. However, what it gains in one position it loses in another, for it does not distinguish *igloo* and *frost* both written *i-lu* in syllabics. The roman spelling would distinguish these two words as follows: *illu* "igloo" and *ilu* "frost".

In the second place, the differences in alphabetic spelling of the various consonant clusters which appear interdialectally are avoided in syllabics. It eliminates almost 100 different consonant clusters found in the various Canadian Eskimo alphabetic spellings, for it has only single consonants at the beginning of a syllable. This tremendous simplification is very significant as it points to the minimal functional role, if any, of the post-syllabic consonant except where it is found as the first member of a geminate or double consonant and is needed to distinguish this from a single consonant as will be shown later. For example, *ippasaq* "yesterday" of Port Harrison, heard elsewhere as *ikpasaq* and *ikpaksaq*, can be written *i-pa-sa* in syllabics, thus easily overcoming the inter- and intra-dialectal differences. But here again, nothing prevents a roman spelling from achieving the same simplicity by writing this word *ippasa(q)* not to mention the added advantage of recording the double consonant which in many dialects must be distinguished from a single one in a similar phonetic environment.

Unquestionably, the syllabary is far closer to a phonemic orthography than either French or English spelling or any of the alphabets thus far devised for writing Eskimo. Nonetheless, the syllabary is inaccurate for reasons which will be made evident presently. In the final analysis, it must either be improved or discarded.

In a recent publication outlining the findings of a symposium of linguists and psychologists it is said: "The phoneme was foreshadowed by the pre-scientific invention of alphabetic writing. An adequate orthography of this kind disregards differences in sound which have no potential for the discrimination of meaning. Moreover, *unlike syllabic writing, alphabetic writing selects the minimal unit capable of such differential contrast.*"

(Osgood 1954, p. 10, italics mine). For instance, the Eskimo word *maniq* "lamp wick" in the Port Harrison dialect is distinguished from *manniq* "egg" only by virtue of the *n* at the end of the first syllable of the latter word. Since both are written *ma-ni* in syllabics they become homonyms graphically and thus are ambiguous. Except where the vowel alone forms the syllable, the syllabic symbols are all composed of two phonemes — a consonant followed by a vowel — therefore it is impossible to use these symbols for the post-syllabic consonant such as the *n* of the first syllable of *manniq*. One might rightly argue that such ambiguous pairs being so different in meaning might always avoid confusion in syllabic writing by never being found in the same context, and that, even if they were, a small post-syllabic symbol, prescribed by certain missionaries, standing for the single consonant or "the minimal unit capable of . . . differential contrast", could maintain the distinction. A brief glance at any publication which uses the secondary syllabic symbols will easily illustrate the complexity of such a practice, keeping in mind the minuteness of such symbols and the difficulty of reproducing them by hand at the upper right of the ordinary syllabic. They are very seldom used by the Eskimo people themselves. As mentioned earlier, this fact points to the low functional yield of the post-syllabic consonant and to the reliability of the context in avoiding possible ambiguities. These two factors plus the occasional paraphrase to avoid ambiguity have made it possible for the Eskimo to do without the secondary symbols which are difficult to manage in writing by hand.

Furthermore, the syllabary does not distinguish the following pairs of phonemes: /ng-/ and /g-/, /k-/ and /q-/, since both members of the first pair are written /g-/ and both of the second pair /k-/. The /g-/ and /r-/ phonemes are not distinguished by the Eskimo of the western Arctic, nor by all those of the eastern Arctic but the distinction exists in the syllabary. Many missionaries themselves have seen the defects and drawbacks of the syllabary and have recorded their views in print. The Reverend Maurice Flint gives the following opinion on the matter: "It should be fully stressed that the syllabic characters do not provide a scientific or perfect system for learning the Eskimo language, or reducing it to writing, but that they are an extremely simple form of shorthand representing phonetic spelling methods." (Flint 1954, p. vii). In addition, Father Thibert (1954, p. viii) makes these pertinent remarks in the introduction to his dictionary: "The syllabic system is a very simple way of writing syllables (not letters) with signs. Although it is very practical in many ways, it is not a precise manner of writing. Indeed, it is often ambiguous. For instance, *ka-ni*, (sounds representing the two syllabic symbols given by the author) may mean, KARNERK, hunger; KRANERK, mouth; KANNERK, snow; KRARNERK, burst; KRAMNERK, water flowing under the snow; etc. One must rely entirely on the context for the precise meaning of a word."

Aside from the few irregularities mentioned thus far, the syllabary follows the phonemic principle recommended by the majority of modern linguists as the soundest principle on which to base a system of writing.

This being so, why should it be considered necessary to introduce a new roman orthography instead of perfecting the quasi-universally accepted syllabic system, which is essentially phonemic? Could it not be easily revised and improved instead of being replaced?

### **The advantages of an alphabetic spelling**

In my view, the only justification for a new standard spelling in roman letters is that it will be more practical and efficient and generally more beneficial to all concerned in the long run. If the official government policy had as its goal the complete assimilation of all Canadian Eskimo into the English or French culture of Canada as soon as possible, it would certainly be a waste of time and money to devise a new system of writing for this native population, because with a few improvements the existing syllabic spelling could serve the period of transition just as well, if not better. It seems, however, that the purpose of designing a common spelling is not only to ease communication among the various Eskimo dialectal groups, and between them and the white man, but also to foster a native literature through which this widespread native population can identify itself as a people possessing a distinct culture worthy of preserving. Thus, it becomes essential to make the new system of writing as practical and efficient as possible. As the title of this article indicates, it is my belief that this goal can best be achieved with a phonemic alphabet.

Experience in other parts of the world shows that the following principle enounced by the French linguist, A. Sauvageot, (1953, p. 64, my translation) should be given serious consideration: "the language of a small native population, in the general interest, must adopt the orthographic conventions of the language of civilization concurrently used by the people who speak it." Eskimo has come into contact with various languages of civilization, namely, Russian in north-eastern Siberia where it is written in the cyrillic alphabet, Danish in Greenland where its spelling is roman, and finally English, French, and German in Canada where the various alphabets devised bear the imprint of each of these European languages. The adoption of the syllabary would break one of the important bonds that exist between the Mackenzie River, Labrador and Greenlandic Eskimo dialects, namely, the roman alphabet. At the same time, the tie that links these dialects with the languages of civilization with which they are in close contact would be severed.

Through the process of history the roman alphabet has reached into most parts of the world and enjoys a position of prestige as a writing tool. There is the well-known example of Turkey, which adopted the Latin alphabet some thirty years ago when it wanted to strengthen its ties with the western world. Besides, there are probably more books in the world printed in roman letters than in any other writing system. Even if this were not so, the statement would certainly hold true for the North American continent, including Greenland, and the future of the Canadian Eskimo

people is obviously bound up with that of the North Americans and the Greenlanders. The fact that Greenland is already in possession of a considerable body of Eskimo literature in roman type is in itself reason enough for basing the new Canadian Eskimo orthography on the same alphabet. The literary achievement of the Greenlanders could serve as a source of inspiration to the Canadian Eskimo. A common system of writing would undoubtedly strengthen the cultural ties between these two groups of common ancestry. Of course, the mere fact of having a spelling system with a common basis would not necessarily ensure easy communication between a Canadian Eskimo and a Greenlander. There are linguistic differences as well, but they do not present insurmountable difficulties. Greenlandic spelling, like the spellings of the Canadian Arctic, is not flawless. One of its chief drawbacks is that it is heavily burdened with silent letters. At present some Greenlanders are considering slight spelling reforms that would bring their writing system much closer to the one being considered for Canadian Eskimo. In turn, every effort is being made to make the latter approximate the Greenlandic one as much as possible.

Already French and English have made their influence felt in the Eskimo world and this contact is increasing daily and will continue to increase even more rapidly, for there is no turning the clock back. Anthropologists and linguists alike have pointed to the dangers of too rapid a rate of acculturation of a small native population in the presence of a dominant culture. These dangers can be reduced if the major culture respects the cultural identity of the minor one. This can best be done by respecting the language of the minority, if as Hegel the German philosopher believed, language is the most important medium through which culture is expressed. It follows that a written language permits culture to be actualized in concrete and permanent form. Moreover, if this language can be written in a form that will serve both cultures in contact, so much the better. Since the practical means of preserving and spreading cultural unity and identity among the Eskimo are in the hands of the two dominant cultures in Canada, namely, the French and English ones, it would seem desirable for them to try minimizing the practical obstacles for both the native people and themselves. Though an orthography must serve primarily the native people for whom it is designed, there is no reason why it could not serve others as well. A standard roman spelling would encourage those who work closely with the Eskimo to learn their language and make this task easier. Even an inadequate knowledge of Eskimo among them would do much good.

The development of one writing system and its spreading into all corners of the Arctic could bring many advantages in the field of education as well. In this connection the advice of Sauvageot (1953, p. 55), based on the experience of various educational policies used with natives in different parts of the world, is worthy of note: "It is obvious that as long as we insist on teaching native children in French only, it will take a long time for us to achieve any measure of success with the majority of them . . . Experience

proves, in Madagascar as well as in Kenya or in Kamchatka, that the native who begins with his mother tongue subsequently makes more rapid and more solid progress in the foreign tongue taught him . . . The ground thus cleared is better prepared to receive another sowing . . ." It might be added that some 30 years ago standardization of writing was introduced for the 1000 Siberian Eskimo, when the cyrillic alphabet was substituted for the roman. Soviet authorities claim that this change was one of the factors that brought rapid educational progress to their Eskimo. Today the Soviet Eskimo are being taught in their mother tongue by Eskimo teachers who have been trained in their own normal school. They are, like other members of the educated class, Eskimo-Russian bilinguals. In the final analysis the advantages of having a common alphabet for the native language and those of the dominant cultures in Canada are undeniable if Eskimo is intended to coexist with them.

Aside from the immediate and long-range benefits of a roman orthography, as just outlined, the main arguments against the widespread use of its alternative, the syllabary, are very practical. At a normal handwriting speed it is hard enough for the Eskimo to reproduce without danger of ambiguity the larger syllabics, such as the four vocalic signs consisting of a little triangle whose base appears at the top, the bottom, the left or the right, respectively, let alone the minute secondary signs, which might have to be used to make the syllabary more accurate. Quite frequently the *p*-plus-vowel series symbolized by a triangle without its base, pointing up, down, left or right, is not distinguished in rapid script from the *t*-plus-vowel series, which is a semicircle with the open side facing in the same directions. I have always been struck by the slow rate at which the natives read a new syllabic text. Sometimes non-natives were misled by this syllable-by-syllable type of reading to the point of coupling this inefficiency with the native's intelligence quotient. The difficulty of reading a new syllabic text can be compared to that which is met by one stenographer trying to decipher an unfamiliar shorthand text written by another. Furthermore, the absence of punctuation in unofficial texts, that is chiefly in correspondence, is another cause of slow reading and in some cases of ambiguity. Some Eskimo who know both the syllabic and alphabetic systems have expressed their preference for the latter on the ground that it is easier to read and write word units with letters than with the disconnected syllabic signs. The spaces between words are often not different in size from the spaces between syllables within a word. These may seem small matters but in reality, when added together, take on an importance that cannot be disregarded.

Many missionaries are at present using an alphabetic spelling as well as syllabics in their schools. From personal contact with these missionaries I have found them, with few exceptions, in favour of the idea of a standard alphabet although it was felt that the syllabary should not be replaced all at once. Both systems would probably have to coexist for at least one generation, during which time syllabics would gradually give way to the other. If done with care, the gradual replacement of one writing system by

another should be able to take place as painlessly to all concerned as the change from steam locomotives to diesel engines. Besides, Canadian Eskimo literature in syllabic script is not so voluminous — chiefly a small number of religious texts — that it could not be reprinted in the new orthography without incurring exorbitant expense. Furthermore, I do not believe that the Eskimo are sentimentally attached to their syllabics as many Englishmen and Frenchmen are to their spelling, and certainly they are not opposed to all spelling changes the way the white man is by reason of the etymological argument. However, it is interesting to note that today, after only 200 years of literary tradition, the Greenlanders are most reluctant to bring about any but the simplest spelling reforms. Aside from the deeply ingrained conservatism of people with long literary traditions, one of the most important objections to spelling reform in such languages as English and French, is a very practical one. The well-nigh insurmountable obstacle is the vast number of books which would no longer be of much practical value and the unimaginable costs of reprinting them in order to make them usable. These are reasons of a practical nature that cannot be easily ignored. But this is not the situation in Canadian Eskimo. In addition, the fact that standard type-setting machines and typewriters (although there are a few Eskimo syllabic typewriters in existence) could be used for Eskimo is by no means a negligible argument in support of the Latin script.

### Conclusion

In the final analysis, whether it is the syllabary or a new standard alphabet that wins the present contest between them, neither can ignore the phonemic principle if accuracy, clarity, and simplicity are the desired goals. In a following paper, an attempt will be made to explain the phonemic principle that forms the basis of the proposed alphabetic spelling. The success of such a project depends to a very great extent on being able to show the validity of this principle to all those who may have a hand in shaping and implementing a new standard Canadian Eskimo spelling.

### Acknowledgments

I am indebted to many people for having made it possible for me to conduct the present research in the field of Eskimo linguistics. First of all, to Mr. Graham Rowley of the Department of Northern Affairs and National Resources in Ottawa, through whose initiative the project leading to the establishment of a standard Canadian Eskimo alphabet was launched and from whose department I first received financial assistance. I am grateful to Dr. Gilles R. Lefebvre, a linguist at the University of Montreal, for his guidance in the early stages of my work. Without the substantial financial help from the Arctic Institute of North America and two fellowships from the Canada Council it would have been impossible for me to continue my research in theoretical linguistics at the Sorbonne and in Greenlandic at the University of Copenhagen. Furthermore, I owe special

thanks to my director of studies at the Sorbonne, Professor André Martinet and to a fellow linguist, Dr. Luis J. Prieto, of France's *Centre national de la recherche scientifique*, for their useful comments and suggestions during the writing of this paper. Discussions with Father L. Schneider, O.M.I., missionary to the Eastern Arctic for over 20 years and author of one of the Eskimo alphabetic spellings, proved useful in many ways.

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