

# Transliteration of Tamil to English for the Information Technology

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## ABSTRACT:

Transliteration as I understand is a method by which one could read a text of one language in the writing method of another language word to word. In other words, it is the transcription of a text in one language using the script of another language. However the transliterated word or words may not sound the same as the original unless corresponding letters that sound the same are found in the transliterated language. 18 English letters have similar sounds in Tamil that can represent the 18 basic Tamil letters. The balance 13 basic Tamil letters need some 'sound connection'. That is why we have to devise a standard scheme that will also fit into modern technology. The 'jAzhan' Scheme, therefore, uses only 22 English letters of the QWERTY Keyboard without having to use symbols or diacritical marks that are used to mean different things to different people.

Transliteration of Tamil has to fit the need for Tamil to be recognized as the only other known language comparable to the English language with a 26-letter keyboard. This dispels the notion that Tamil is a complicated language with 247 letters in the Alphabet. Whereas there are only 31 basic Tamil letters that fit into the 26-letter keyboard without using any symbols or diacritical marks.

Tamil is a unique language and belongs to the Dravidian family. Dr. Steven Pinker, the Peter de Florez Professor in the Department of Brain and Cognitive Sciences at the Massachusetts Institute of Technology, in “Words and Rules” places Dravidian language around 15,000 years ago in the Ancestry of Modern English Chart vide (<http://www.mit.edu/~pinker/>).

Tamil has survived the many floods of challenges and other natural calamities, through the efforts of Academies or SANGAMS. There is doubt among some Tamils that Tamil will not survive long in its pristine form under current human indifference and Tamil self-interest. Tamil diaspora is estimated to be in the millions in number. The post Indian independence Tamil migration to foreign countries and the Tamil exodus since the worst race riots of 1983 in Sri Lanka leaves some in doubt if future Tamil generations growing up in a more ephemeral environment, a ready made attraction for the young minds, care much about their roots. This is more so when Tamil is viewed as a difficult language and of little significance commercially.

Tamil solidarity events like TAMIL INTERNET 2002 CONFERENCE are likely to help Tamil progress through Information Technology. A long felt need to bring all branches of Tamil activities under an umbrella group is taking shape with the establishment of the World Tamil Organization Leaders Coalition and propagation of Tamil through Transliteration of Tamil works is one of its missions. It is through translation into other languages and or through the learning of Tamil that the non-Tamil speaking world will benefit from this ancient tradition that stood out some two thousand years ago.

Tamil writing - in the computer age, is anachronistic and cumbersome. Hence, this is an effort to introduce Tamil script through English, the almost universal computer language. It is the desire of this writer to devise simple methods to use Tamil in the computer and introduce Tamil through transliteration. (Much to the chagrin of this author, The Tamil Keyboard using only the 26 Keys of the QWERTY Keyboard, the Character Phonetic Dependencies Yarzhan Tamil Editor, acclaimed as "a marvelous" concept is not being used by Tamil writers).

There are many schemes for transliteration, based on the Madras University Lexicon method. It is axiomatic that an unknown is introduced through a known. Most of the transliteration schemes make the 'sound connection,' - that is, devise new connections - by agreeing to make a combination of English letter or letters modified by recognized subscripts, superscripts or "cross scripts" with symbols and diacritical marks. There is a glitch in the use of symbols and diacritical marks, since they are not readily available in the standard keyboard but as an insertion from symbols available in popular word processors. However, transliteration of Tamil can be made to fit the need for Tamil to be recognized as the only other known language comparable to the English language with a 26-letter keyboard. This dispels the notion that Tamil is a complicated language with 247 letters in the Alphabet. Whereas there are only 31 basic Tamil letters that fit into the 26-letter keyboard without using any symbols or diacritical marks.

The paper will discuss 'jAzhan' Scheme of Transliteration. It is the author's hope that the Tamil Internet Conference 2002 will recommend its wide adoption. This would help those Tamils who are proud to flaunt English or pronounce Tamil with a foreign accent and allow to be cajoled by foreign cultures, to rethink and embrace their proud culture by learning initially to read and write Tamil through 'jAzhan' It is hoped an appetite created through English recognition of Tamil letters will lead to learning Tamil works in their originals.

## INTRODUCTION:

Tamil is an ancient language replete with literary works, some of which still could sway modern living tantalized by cultures that have not passed the test of time and tide of challenges. It is through translation into other languages and or through the learning of Tamil that the non-Tamil speaking world will benefit from this ancient tradition that stood out some two thousand years ago. The purpose of this paper is to introduce Tamil through transliteration. The "transliteratee" is the English system and the "transliterater" is the Tamil system. It is not the intention of this paper to devise a method with Tamil as the "transliteratee" and English as the "Transliterater" since a transliteration scheme is necessary to introduce Tamil to Tamils and non-Tamils who are not literate in Tamil to write Tamil the Tamil way.

No combination of letters in English could be made to identify unequivocally with Tamil sounds if such sounds are not already present in the English language. The 247 letters in the Tamil alphabet are the product of 31 basic Tamil letters. 18 English letters have similar sound connection with 18 Tamil letters. It is only the 13 remaining Tamil letters that need a 'sound connection' with English. We can make the 'sound connection,' - that is, devise the new connections- by allocating letters that are in use either in combination or singly as illustrated in the chart (Annexure A). However, because of the complexity of pronunciation, this method uses only letters without any symbol or diacritical marks to write Tamil with Roman

characters. E.g. the word 'akam' is pronounced in at least three ways, namely, 'aham', 'akam' and 'agam' but Tamil grammar and tradition is very clear that whatever the pronunciation is, there is only one way to write the three sounds namely, 'akam' - அகம் .

N.B. The 'jAzhan' Scheme of Transliteration (JST) is used in this paper.

## CHANGE WITH THE TIMES IS INEVITABLE

Nothing is absolutely static in the world. Change for the better is imperative and hence should be encouraged. Change for the worse is prohibitive and therefore discouraged. A standard acceptable, simple scheme of transliteration of Tamil to English is a necessity. The cause and effect of a new standard transliteration scheme is discussed here:

'pazhyjana kazhitalum putijana pukutalum  
vazhuvala kAla vakyjinAnE."

( 'NannUI' by Pavananthy Munivar, formula ( 'cUttiram) 462 Around 12 Th century A. D.)

""Old order changeth, yielding place to new,"  
Is faultless as it is the way of changing times.

(The first line is a corresponding line from Morte D. Arthur by Alfred Tennyson 1842 and the second line interpretation by AppuArchie)

## WHY TRANSLATE?

It is well known that only after foreigners introduced Tamil to a few academics outside Tamil land, great Tamil works such as THIRUKKURAL came to be translated into more than 70 languages. Nevertheless, there is still misrepresentation of Tamil or total disregard to give credit to Tamil that also need to be addressed.

“Our mother tongue Tamil has been neglected in her own birth place for the last 2000 years. Instead of finding a place in the inner sanctum sanctorum of divine Tamil, Tamil continues to languish in the backyard. It is because the Tamils are not governed my Tamils. Despite there were Tamil governments in between and a Tamil State government is in now, Tamil is not respected. Tamil is not given its due importance. Do other languages suffer the same fate as Tamil in their birthplaces? Tamil research under such conditions only brings tears to the eyes and heavy sobs in the heart. How did Tamil stand up firmly like the mighty oak despite such adverse conditions? This reveals another truth about Tamil. Tamil has its own strength. That is, it is a naturally propagated language from within and because is so well disciplined, flooding river like challenges could not disintegrate Tamil. I am constrained to point out another fact. Despite Tamil being a powerful language, it has not grown as much as some other younger languages. It is because the Tamil mainstream has been forced into a position that encouraged illiteracy for the last 2000 years. Their knowledge and skill have suffered without the light of education. Tamil is not going to be benefited by the type of education with Tamil dumped in the dirt heap.” (Dr. G. Rajendran of Christian College Madras lamented in the Introduction to 'ulakam paravija tamizhin vEr kal' Vols. 1,2,3,4)

Dr. Ilakkuvanar in his Preface to the book “THOLKAPPIYAM in English With Critical Studies” expressed an opinion that work in any Indian language, however great, will not draw

the attention of foreign scholars unless an English or European languages versions are studied eagerly.

### WHY TRANSLITERATION?

It is this writer's belief Tamil can be introduced to English literate Tamils and non-Tamils with a simple transliteration scheme. The scheme will be revisited later. English language undoubtedly is the best vehicle of communication – the window to the West, nay to the entire world. One of the greatest drawbacks for learning Tamil, by people including children of Tamil parents uprooted from their native habitats is Tamil Alphabet made to look difficult through misrepresentations.

Unlike English, Tamil is introduced to have 247 Tamil letters in the Alphabet with more than 500 characters. Even though Tamil script has architectural beauty and residual pictography in some letters, beginners, especially children find it hard to write such Tamil letters represented by 'i, y, o, O and w.' - இ, ஐ, ஒ, ஓ, ஔ respectively. This does not augur well for learning Tamil that apparently has no commercial value compared to English that has the added advantage to bloom only from 26 letters.

### ANTIQUITY OF TAMIL LANGUAGE

Radio Singapore airs a program called 'NAM aRivOm' and in one of the programs an interesting talk on the Tamil script and its shape was discussed making a case for the shape to represent a particular function, e.g. the letter ஏ - 'E' is the first letter of the word ஏர் - 'Er' - plough. If we look at the letter ஏ it could easily pass for a plough with the share pointing in the direction ready to rip the soil.

(<http://oli.mediacorpradio.com/content.asp?story=family/meenatchi>)

It is also common knowledge among foreigners that Tamil pronunciation is complex. This is mostly due to Tamil being written in English characters more for pronunciation than for writing Tamil letters in the Roman characters. Each Tamil letter has a specific pronunciation but combination of letters to form words will change specific letter pronunciation to suit the relative position of each letter to the others in a word. There are rules on pronunciation based on natural interference with the outgoing breath.

“What we call a word is really and primarily the combined action of human muscles to produce an audible effect; and we see that the shortening of a form means a diminution of effort and a saving of time in the communication of our thoughts.” (Jespersen, Language etc.)

Quoting THOLKAPPIYAM in his thesis for a Ph.D degree from Madras University, Perungkavikko V. M. Sethuraman wrote that word is a continuum of letters and implies a meaning and any word in a language has a meaning and no word exists without meaning in any language.

“A literary dialect is naturally less subject to the inroads of decay than an unwritten one. This spelling of words reacts upon their pronunciation and preserves it from extensive alteration.” (A. H. Sayce, Introduction to the Science of Language) Therefore it is imperative that we write right, since there is only one script - grapheme to one phoneme in Tamil.

Spelling of words in English is a nightmare among other things with only 26 letters and no wonder Dr. Richard Lederer called it “Crazy English”. Tamils on the other hand designed the alphabet with only 247 letters. If an alphabet to represent every possible sound were created, the enormity would prohibit such a device and if put to use will eventually disappear. This limited letters in the alphabet although is wanting in letters to meet the technological advances, spelling is straightforward and pronunciation was not a problem until foreign languages crept into Tamil and created some confusion. (‘mozhi Nul’ p. 46-47) However, the introduction of GRANTHA letters to give Tamil its own identity helped thwart any attempt to replace Tamil with the Sanskrit language.

#### TAMIL AND TECHNOLOGY:

There is no dearth for Tamil words to meet the literary needs of modern society. But Scientific and Technical words have a problem. Even the best of languages have to adopt some system to accommodate new terminologies that may be proper nouns or verbs conveying a new process or procedure. Under these circumstances, the new words can be written with the existing Tamil letters with its English equivalent put in parenthesis until Scientists and Tamil Scholars can agree to modify the new word to fall within traditional Tamil grammar as was done with foreign words in the past. “E.g ‘tatva’ - தத்வ became ‘tattuva’ தத்துவ’ - ஐஐ,ஓ using “anaptyxis or assimilation.” (‘mozhi Nul.’ P.34)”

I am glad Dr. Ilakkuvanar, confirms the inadequacy of the current methods of transliteration, and evolved his own scheme of transliteration, for reasons stated in “Note on the scheme of transliteration” in his book.

“The schemes of transliterations are found to vary with various authors. I have found that all of them are wanting in one respect or other.” However, I feel he has not clearly explained when he said: “The purpose of the transliteration is to enable the foreigners, who have not studied Tamil under a teacher whose mother tongue is Tamil, to pronounce the Tamil letters as they are pronounced by a Tamilian.” (ibid)

In the first place, it is the natural process of pronunciation that determines the accent in any language. Tamil accent among Tamils are so varied, there is no established Tamil accent. N. Anbarasan, CEO, Applesoft Bangalore wrote in the Tamilnet 99 Conference papers:

“Correct Pronunciation: Children learn to pronounce words by imitation of others. The occasions of training and the amount of motivation are the main source behind the level of pronunciation.” In other words, the best of graphics is not the best way to good pronunciation. The important thing is to write correctly using familiar letters rather than symbols that can be confusing. In computers today this is a time consuming operation since symbols are not punched directly off the keypad, but by accessing symbols via a word processor.

#### TAMIL ACCENT:

Under Language and Literature in “Tamil Studies Selected Papers” Dr. Pon Kothandaraman, Vice-Chancellor, University of Madras, wrote:

“Tamil, as already stated, is a diglossic language; the literary language functions as a standard variety which will be understood and accepted by the Tamil-speaking community living in Tamil Nadu and elsewhere. In the spoken language there are several dialects – regional and social. The regional dialects, according to the dialectologists, may be listed as follows:

Central dialect  
Knniyakumari dialect  
Southern dialect  
Coimbatore dialect  
Western dialect  
Madras dialect  
Northern dialect”

However I would like to add to this list:

‘jAzhppAnham’ - Jaffna dialect.

#### INADEQUACY OF TAMIL LEXICON:

“The Tamil Lexicon published by the University of Madras published in the pre-independence era is the best one available till date. .... . With all modern technological developments and new knowledge we ought to have compiled a better lexicon more modern and up-to-date. When this fact comes to our mind, the old pride vanishes.” (ibid)

Dr. Ilakkuvanar included the University of Madras Tamil Lexicon also in the list when he said: “The schemes of transliterations are found to vary with various authors. I have found that all of them are wanting in one respect or other.” Surprisingly some scholars believe that the transliteration scheme found in that lexicon need not be improved as a mark of deference for the authors. This writer, no doubt, respects the respecters and the respected. Regardless, I respect more the need for a better scheme of transliteration suited for the changing world to take advantage of Information Technology.

#### ‘jAzhan’ SCHEME OF TRANSLITERATION:

Most current transliteration schemes use symbols, or diacritical marks. Dr. Ilakkuvanar, Prof. Hart, and several others use a dot or hyphen to show the difference in representation of one English letter for more than one Tamil letter. E.g. ‘a,’ represents ‘AnA’ - அ, the short vowel and ‘,’ with a dash on top of ‘a’ represents ‘aAvannA’ - ஆ the Tamil long vowel. One has to drop down the symbol box in MS Word, select Ç and insert it at the appropriate space in the document. It is a time consuming operation. The ‘jAzhan’ scheme of transliteration uses no symbol or diacritical mark, but ‘a’ for அ and ‘A’ for ஆ. 1 letter for each of the 26 basic Tamil letters and 2 English letters in combination in only 5 Tamil letters in the Alphabet totaling 31 basic Tamil letters.

Essentially, “to transliterate,” according to Webster’s New Twentieth Century Dictionary “is to write or spell (words, etc) in the alphabetical characters of another language that represent the same sound or sounds.” Even this definition is misleading. Tamil Alphabet has 12 vowels, ‘ujir’, 18 consonants – -‘mej’ and 1 ‘Velar Fricative’ – ‘Ajtam,’ Thirty of the 31 basic Tamil letters in combination of 12 vowel and 18 consonants form the 216 ‘ujirmej’ – Dependencies. i.e. 12 x18 = 216. Therefore:

Vowels (5 short + 7 long) = 12  
 Consonants = 18  
 Velar Fricative – (••• •••) = 1  
 Dependencies or combinations = 216  
 Total = 247

The English language has only 26 letters. Letters “b, f, g, h, q, x, & z” sounds have no corresponding similar sounds in Tamil. However, most people are familiar with z used in combination with h to represent the exotic L - ழ - that is found only in the two Dravidian languages, Tamil and Malayalam and not in any other Indian and other languages. However, a zh combination is used in English to represent a Russian sound almost similar to the Tamil exotic L sound – ழ.

Therefore letter h, that changes the sound in English when used with other letters such as “t in the” and with “c in chore,” could be used in combination with few English letters to represent sounds in Tamil that are not common to English, e.g. ன்ற = nh for one of the three N sounds in Tamil, as in FUN. Hence there are 26 – 8 = 18 English letters with similar sounds in Tamil and could represent 18 Tamil sounds. The velar fricative letter ( ஃ ) already exists in English as a symbol, but f is commonly used to represent it. The letter g in combination with n is commonly used to represent the two letters ன் and ன் in Tamil that sound like ng and gn in English respectively. Hence we have to develop a system using the 18 + 3 (g, h, & z) = 21 English letters to represent the 246 Tamil letters in the Alphabet and with f gives 22 English letters to write the 247 letters of the Tamil Alphabet. (Letters Q, S, X & B are not used.)

(Please refer annexure A for ‘jAzhan’ Transliteration Scheme Chart)

\*zh or the exotic L - ழ “is very much in use in Tamil. However, this very same letter, in speech is either mispronounced or pronounced in several ways. It sometimes sounds like L - ழ in some parts and in others as j – ழ and still in some others as c - ழ. Very few pronounce this exotic L correctly. In literature it sometimes is dropped as in (pOzhtu > pOtu). The eleventh century ‘vIracOzhijam’ established the clear rule in grammar for zh to change into L. This exotic L is still in vogue in Malayalam. It has disappeared from Telugu and Kannada. This exotic L was used in the old Kannada. This letter is found in the 9<sup>th</sup> century Kannada stone inscriptions. Thereafter it changed to the r and since the 12<sup>th</sup> century is written as L” (‘mozhiNul’ Dr. Mu. Va.)

Combination of letters form words. Words are noted for either simplicity or are praiseworthy. Dravidian languages prefer simplicity to the preciousness of the word. “Among the Dravidian languages, Tamil is the only language that is not loaded with foreign words but modifying such words to conform to utterances of Dravidian linguistic forms. Thus Tamil still maintains the old Dravidian linguistic form without any change.” Dr Mu. Varatharasanar in ‘mozhi Nul.’

“Short and long vowels have no separate letters in many European languages including English. Although French language has no separate letters for short and long vowels, their long vowel sounds are clearly distinguished wherever they occur. Vowel sounds of words ending in consonants are longer. Therefore, French vowels are either short or long depending on where they are used. On the other hand Tamil has different letters for short and long vowels. This helps us to understand the different messages as well as the difference in the sound lengths of vowels very clearly.” (ibid)

“The writing system in English is anomalous and terribly confusing. The total number of letters is much less in English. Therefore, impressionistically we form an opinion that the English system is exemplary. Strictly speaking there is no comparison between the English writing system and the Indian writing system for the latter is far superior to the former one.” (Dr. Pon Kothandaraman in The aspects of the Tamil Culture.)

Nobel laureate for literature, George Bernard Shaw campaigned for the simplification of spelling, and the reform of the English alphabet. It therefore follows using a confusing script to write Tamil is more confusing. Fortunately, “Tamil is a language which illustrates particularly well the grouping of several quite distinct sounds into single phonemes. It is noteworthy that Tamil orthography does not show any difference between all these sounds. Those who originally invented this orthography must have had a clear conception of the phoneme idea, though the theory had never been formulated.” (Daniel Jones, The Phoneme Its nature and Use. P. 22.)

Edgar H. Sturtevant in his Introduction to Linguistic Science in p. 16 confirmed, “Alphabetic writing in India approached phonemic perfection more closely than it ever did in Greece.”

It is an accepted fact by linguists Tamil writing system is the simplest and the most scientific found in the Indian languages. With such exalted position, Tamil literature is in virtual darkness for foreigners. It is through transliteration we can introduce Tamil texts that will in turn create academic and scholarly thirst internationally to know more about such exalted works found in Tamil Originals.

“Albert Schweitzer, Philosopher, Physician & Humanitarian, was awarded the 1952 Nobel Peace Prize for his many years of humanitarian efforts. Schweitzer has been called the greatest Christian of his time.”

(<http://www2.lucidcafe.com/lucidcafe/lucidcafe/library/96jan/schweitzer.html> )

His complementary remark about Tamil and THIRUKKURAL in particular is quoted below from the book “Indian Thought and Its Development” by Albert Schweitzer and Translated by Mrs. Charles E. B. Russell:

“ With sure strokes the Kural draws the ideal of simple ethical humanity. On the most varied questions concerning the conduct of man to himself and to the world its utterances are characterised by nobility and good sense. There hardly exist in the literature of the world a collection of maxims in which we find so much lofty wisdom.”

It is a requirement nowadays to validate statements with documentation, preferably from a well-recognized authority. Tamil works suffer because of critiques from most Western thinkers and scholars, who knew India mainly through Sanskrit and the window opened to it by scholars such as Max Muller. Although Max Muller was not hated for his bigotry according to an article in the Internet, he was also not accepted. Irrespective of the doubtful motive of Max Muller, he introduced India through his Vedic translation:

[[http://www.hindunet.org/srh\\_home/1997\\_2/0088.html](http://www.hindunet.org/srh_home/1997_2/0088.html)

“ARTICLE : Max Muller - A Missionary Bigot! Posted By S.L. (itechsom@voicenet.com)  
31 Jan 1997 16:12:23 GMT



If a north Indian is troubled by Max Muller's misrepresentation as made out in the above piece, and yet such sources rightly or wrongly expose India to the Western scholars. In fact without a peep into Dravidian India, "If I were asked, says Max Muller, " what I considered the most important discovery of the 19 th century with respect to the ancient history of mankind, I should answer by the following short line: Sanskrit Dyaus Pitar =....= Latin Jupiter = Old Norse Tyr." Quoted in Cultural History of India by Friedrich Wilhelm and H. G. Rawlinson (India and the Modern West.) But how about Dravidian feelings when their culture and language are totally ignored when Western Scholars are not exposed to Tamil as much as Sanskrit?

It is not within the purview of this article to discuss about changing Tamil script or about the speed with which Tamil is processed in a computer. However, since 'Jazhan' transliteration scheme is based on the Character Phonetic Dependencies Yarzhhan Tamil Editor using the QWERTY keyboard, Dr. V. Krishnamoorthy of Anna University, Chennai has referred to the "Report of the Committee for Standardization of Keyboard Layout for Indian Script based Computers" in his article "Computer Keyboard for Tamil – Issues Involved" in the Conference Papers of Tamilnet 99:

Under "Character frequency considerations" he quoted "4. (p. 12) When the efficiency difference between the Sholes keyboard and Dvorak keyboard is so small, it leads to the conclusion that frequency considerations cannot constitute the paramount factor in evolving an optimal keyboard layout."

Approach to Tamil through a simple, logical and non-confusing transliteration has been found to make Tamil learning quicker by non-Tamil speaking English literates. A recent note to me from one such beneficiary is appended below:

TESTIMONIAL:

[“Vanhakkam,

Sorry for the delay on my write up comment on my learning Tamil from your software. I will contact you later on this week regarding this e-mail. Here is my comment:

As a Tamil born in America I have not had the opportunity to learn my Mother Tongue (TAMIL). My father is from India and my mother is from Malaysia. I also have relatives in countries like Sri Lanka, Singapore, and Burma. My Tamil bloodline is spread out throughout South and South East Asia. As for my relatives in Singapore and Malaysia, there are some who a) cannot speak Tamil and b) some who cannot read or write Tamil.

As an individual born out here in the U.S. I have seen many people like me forgetting about their roots, especially their language (Tamil). One day I was up in UC Berkeley for an International Tamil Language Conference. There were Tamil Americans there too. To my surprise, one of the student speakers who was born here has taught himself how to speak Tamil through tutorial books and movies, but had a hard time pronouncing some of the words. So, after that, I had taken it upon myself to learn Tamil.

I have tried buying books on Tamil from Malaysia, India and so forth only to start giving up on learning the language due to pronunciation of certain letters and the difficulty of reading the Tamil script. The problem with the books I have bought in the past was the proper teaching of the Tamil alphabet and their pronunciations. It was this year when I have told

myself that I really need to get on the ball of learning my mother tongue. The only way for that, since books didn't help was to find someone who can teach me one on one. I was surfing the internet and came across the Tamil Sangam in San Diego. After that, I started calling around until I have found the right person to teach me.

To my luck I have come across Mr. Shanmugalingam. He has introduced to me his Tamil Tutorial Software and that is when I started to learn Tamil. Believe it or not, I have learned how to read, write, and translate the Tamil script in about a week. I will explain to you the difference between learning Tamil from books and learning Tamil from this software. My problem with learning Tamil from the books was that books cannot show you how to pronounce certain Tamil characters. This software can. Also, proper pronunciation comes through learning the Tamil script, which I highly recommend in order to read and speak Tamil efficiently. Something that seemed impossible to me has become possible. I highly recommend Mr. Shanmugalingam's Tamil Tutorial Software for anyone who is interested in learning Tamil. I rate this product #1. Alexander W. Doss"]

#### CONCLUDING REMARKS:

The current system of designing schemes for transliteration by individuals, although serves a purpose, its varied approach is rather confusing and one has to remember the multiple keys used in each scheme. S. A. Sourirajan in his article in Tamilnet 99, 'tonmy vErkaLy inhykkum min vEr.' - "Root to antiquity tapped by electronics." took pains to emphasize the importance of Tamil learning and the use of the computer. How to help interface Tamil diaspora with each other on language, culture, etc.? It is through an economic, efficient electronic media and bringing the various media under an umbrella like entity, Tamil can prosper in perpetuity.

First Tamil writing should be introduced to the generations that find it convenient and easy to learn English. It is axiomatic that an unknown is introduced through the known. So naturally a simple, logical scheme to introduce Tamil through Roman script will hopefully whet the appetite of not only Tamils but also foreigners who want to learn more about Tamil in the original as all translations tend to be inept (with a few exceptional exceptions of course.)

Although pronunciation is important, Tamil letters or phonemes have only one grapheme for each letter with only one pronunciation. However, in word combinations Tamil Phonemes become Allophones and there are grammatical rules to help, but it is through imitation and repetition the correct pronunciation will be developed. Different speakers pronounce the same words in similar fashion because they agree to do so by convention and instruction. This convention and agreement are not available in a different speech community, which has its own conventions, and for its own symbols whose sounds are not necessarily duplicated in other languages. Tamil allows for letter representation without resorting to symbols and diacritical marks.

The 'jAzhan' Scheme of Transliteration is a straightforward scheme that defines each Tamil letter with a corresponding English letter and or a combination of letters to make the sound connections. It is hoped that agreement on the 'jAzhan' Scheme represented only by letter/s without subscripts, superscripts or "cross-scripts" with symbols or diacritical marks can be accomplished without much difficulty through the medium of the Internet.

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‘NannUl mUlamum virutti uryjum’ Edited by Arumuga Navalar)

Appendix