DEVELOPING PHONEMIC TRANSLITERATOR FOR TAMIL WITH VOICE

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Abstract

There are many software are available for Tamil fonts, but they are not fully based on linguistics particularly, Tamil phonemics. As far as natural languages are concerned, there are two kinds of transcriptions such as phonetic transcription and phonemic transcription. These two transcriptions should sound right when we read it aloud again. But many software engineers often have a wrong idea about how precise the transcriptions can be. The IPA or phonemic symbols may look a bit like mathematical symbols, but they are not used with mathematical precision. Learning to transcribe is not at all like learning formal logic or algebra. It is more like learning how to make a recognizable sketch of an object.

The way the proposed tool usually represents and describes speech depends on a powerful idea that is already known by everyone who is literate in a language with an alphabetic writing system. The listeners can hear speech as a sequence of sounds, and each sound can be represented by a written mark. This tool provides how this idea can be the basis of a comprehensive system of phonemic symbols, suitable for representing reliably the sounds of not only Tamil but any language.

This paper simply aims at developing a phonemic transliterator for Tamil language. It is two folds: one for Tami script and another for phonemic transcription of the corresponding Tamil scripts. The developed tool / software is fully oriented with linguistics.It will be highly useful for Tamil community in particular Tamil learners, Tamil researchers, Tamil scholars; Tamil linguists.

Introduction:

Today, technology has ameliorated every aspect of our lives particularly learning and if only we integrate technology into language learning and research environments, Being

Tamilians, we will be equipping our learners to use our mother tongue commendably well, simultaneously enabling them to become technologically adept.Moreover,technologically incorporated tools are preferred, because it is the most accessible method today. It is interesting as well as informative. It goes hand in hand with enjoyment, especially in the case of face book and others communication networks. All concerns which affect enjoyable learning are eliminated in this environment.

The young learners are entered to form an online student community without any fear or inhibition for the community learning atmosphere. They are looped into a world which they have created for themselves. They also have the freedom to withdraw from any conversation or situation without the clouds of consequences looming large over their heads. The vast availability of Tamil language learning communities from various parts of the world perpetuates not only absolute Tamil language learning but also integration with several new cultures. Thus, it can be seen how the appropriate use of new technologies allows for a far reaching integration of language as well as culture than any other means. Moreover, we tend to be influenced by the orthography when making judgments about the sounds of words, because we all are constantly involved with reading and writing in our daily lives. After all, from kindergarten on, the written tamil language has been an integral part of our lives. Thus, the attempt is made for developing a technology incorporated tool named as a phonemic transliterator for Tamil language for not only linguistics community but also Tamil community.

Aim of the Paper:

The aim of this paper is to develop a phonemic transliterator for transcribing Tamil texts automatically, while typing and / or giving the text.

Objectives of the Paper:

- To make the learners understand the ways in which Tamil language is written and spoken.
- To make learners differentiate the similarities and differences in the speech sounds in Tamil.
- To make the learners speaking with clarity, negotiating and understanding.

- To understand how the speech is composed by vowels and consonants as a means of representing speech that considered as an acoustic signal.
- To understand what sounds are so common and basic that they are found in almost all languages.

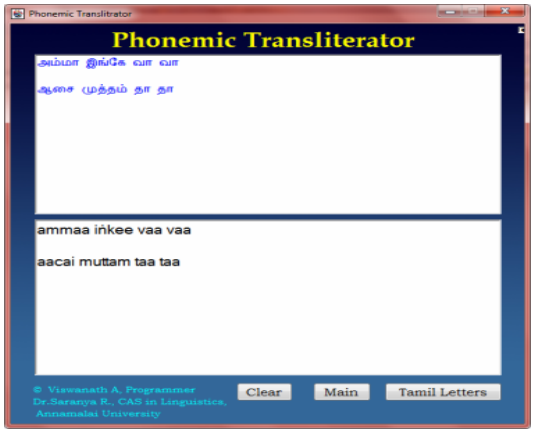
Methodology:

For developing the proposed software, the vowels and consonants found in Tamil with their phonemic transcriptions are instructed to the machine using Unicode, and the program source codes are written by VB.Net. The software includes the borrowing consonants (ஸ, ஷ, ஹ, ஸ்ரீ, ஜ). The proposed tool consists of five buttons namely Typing the text, Giving the text, Speech sound, About and Close. They are described below with the screen shot:

Description of Phonemic Translitrator for Tamil:

Button -1

If the button for typing the text is clicked, the two text message boxes are opened. When the text is typed, the corresponding Tamil text is displayed in the first text box. In the second text box, the displayed Tamil text in the first text box is automatically transcribed. The phonemic transcriptions are purely based on linguistics.



Button -2

If the button for giving the text is clicked, the two text message boxes are opened. When any text document is pasted in the first text box, the corresponding phonemic transcriptions are automatically made. The sample visual is given above.

Button -3

If the button for speech sound is clicked, vowels and consonants in Tamil are displayed under the heading of Tamil letters. If we want to learn the proper speech sounds of both vowels and consonants, click each letter whatever it may be for its proper pronunciation. The visual is given as a sample. And the button 'About' is for knowing the author of the proposed software. If it is clicked the button, the information regarding the authors is displayed. Further, the button 'Close' is for ending it.

Conclusion:

Though there are some similarities and differences between this tool and others like Azhagi, Azhagi+, NHM Converter, Murasu Anjal and so on, it is fully based on linguistics. It will be useful for learners of Tamil as a second language and also researchers from various disciplines like Tamil, linguistics, Tamil computational linguistics and so on. It will be highly useful for Tamil community in particular Tamil learners, Tamil researchers, Tamil scholars; Tamil linguists. It is obviously stated that mother tongue mirroring holds an important role in attracting learners towards other languages particularly global language, because globalization in all the fields demands one to learn more languages.