

# Computer imbroglia in keeping with Sinhala language

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## 1. Augmenting the Sinhala technical language:

It is understood that Professor Tissa Vitharana, Minister of Science and Technology, is desirous of extending computer education to the rural areas as well.

Apparently, he is of the view that, the lack of an adequate knowledge of the English language should not be in the way of understanding communication technology and accordingly the national languages are to be used for the purpose.

This approach is, indeed, highly commendable. Considering the Sinhala language, the initial and essential requirement is to compile a glossary of the required technical terms. This has to be approached in a well thought out manner, which is in keeping with the genius of the Sinhala language. The purpose of this present assessment is to assist in achieving a Sinhala technical glossary suited to guarantee the success of this all-important national venture.

Sometime ago, this task was undertaken by the "Computer and Information Technology Council of Sri Lanka (CINTEC)" and a pamphlet entitled "Glossary of Technical Terms - Computer Science" was released by CINTEC around June, 1991. However, CINTEC has now been replaced by a new State organisation called "Information and Communication Technology Agency (ICTA)." Apparently, the ICTA is in the throes of urgently meeting the need for Sinhala technical terms in the field of communication technology.

The glossary produced by CINTEC was not the work of a set of mediocre persons. It was, indeed, produced by luminaries such as, Professor V.K. Samaranyake, Chairman CINTEC, Professor J.B. Dissanayaka, Professor of Sinhala, University of Colombo, Professor G.D. Wijayawardena, Professor of Sinhala, University of Colombo, Professor Mahinda Palihawadana, Professor of Sanskrit, University of Sri Jayawardenapura, Professor S. Weeratunge, Professor of Sinhala, University of Kelaniya. Unfortunately, this glossary was unsuited for the desired purpose, as the basic requirement in the formation of the words had been overlooked. This aspect is discussed later.

## 2. Development of the Sinhala technical language during the past long years:

For centuries, the Sinhala language had been used for the generation of technical terms in order to meet the needs of unsurpassed technological development. For about two thousand years, the Sinhala people engaged themselves in the manufacture of steel from iron ore. Our present day steel factory imports steel ingots, roll them into steel bars, and also draw them into steel wire. On the other hand, from ancient times the Sinhala people converted iron ore into steel itself not only for home consumption but also for export. The famous "Damascus" swords were produced from the steel imported from Sri Lanka. The technical terms necessary to express such technology was certainly generated by the Sinhala language. Similarly, the technical terms necessary for the famous hydraulic engineering projects were also supplied by the Sinhala language. Indeed, Mr. H. Parker the

British irrigation Engineer, in his book entitled "Ancient Ceylon" says. "Such was the function of බිසේ කොටුව of the Sinhala engineers: they were the first inventors of the valve-pit more than 2100 years ago". It will be noticed that in coining the word බිසේ කොටුව the ancient Sinhala engineers recognised the salient fact that by this contrivance the water, of the reservoir could be led down in a controlled manner to the level of the paddy fields. Therefore, it was natural for them to call it the බිසේ කොටුව which reduced to බස්වන කොටුව then to බසවු කොටුව and thence to බිසේ කොටුව.

This was one of the techniques available in the Sinhala language to generate new terms. When we recognise the fact that technical terms had been generated in abundance through the many years by the Sinhala language there is no question that the technical terms now required can be produced in a similar manner using the Sinhala language itself.

Therefore, begging for terms from foreign languages such as Sanskrit is not only unnecessary but also such procedure is inimical to the establishment of an effective Sinhala technical language. This fact will be clearly borne out as we proceed.

## 3. Technical word formation adopted by "CINTEC":

The terms of reference given to the CINTEC committee were to develop technical terms based on the Sinhala language, for, it was the intention to use Sinhala as the medium for technical education. Instead of keeping to this essential requirement, it was a national tragedy that the committee was only capable of merely borrowing terms from the Sanskrit or English dictionaries.

It was incumbent on the committee to first study the process of word formation inherent in the Sinhala language which had been effectively used for centuries and then develop the new words accordingly. This, they were unable to do. Their modus operandi was merely to transliterate related words existing in the English and the Sanskrit languages.

This did not need any special expertise. To justify the puerile nature of this exercise, what was relied upon was the fact that the English themselves had borrowed their technical terms from the Latin language. Accordingly, it was considered that the Sinhala people too were duty-bound to borrow from another language such as Sanskrit. In support of this argument, a myth, to the effect that Sanskrit was the language that gave birth to the Sinhala language, was spread to beguile the unsuspecting public.

In the 3rd/4th centuries, the great Panini injected a stylised grammatical structure to a Prakrit language and created what is now known as the Sanskrit language. India, which boasts of hundreds of languages, was unable to find a common language for the exchange of information amongst its people.

As Latin was used in the selfsame manner in the West, Sanskrit was created to meet the requirement of a common language. It was Panini who created the Sanskrit language by introducing an artificial grammar to a Prakrit language. Before that, there was no language known as Sanskrit. The Sinhala language existed from much earlier times and had its own phonology, its own morphology and its own grammatical structure.

It was in effective use even by King Pandukabaya reputed

for instituting the first municipal system in the world. Therefore, to argue that since the English language borrowed largely from the Latin language we also should borrow words from the Sanskrit language is preposterous. How the adoption of this attitude made the Sinhala technical language verily impotent will be seen as we proceed.

#### **4. Characteristics associated with formation of new words in the Sinhala language:**

I have comprehensively analysed this aspect of effectively using the Sinhala language for the production of technical terms, as well as the fact that Sanskrit appeared on the scene much later than Sinhala, in my book entitled "Technical terms in Sinhala" published by the Modern Book Company, of 198, High Level Road, Nugegoda. The book explains the consistent manner in which words have been formed in the Sinhala language and indicates how new words could be derived based on the same technique. As examples there are over 3,000 new words in their different functional forms such as verbs, nouns, adjectives, adverbs. Also, the manner in which the verbs can be conjugated is indicated.

Unfortunately, persons reputed for their knowledge of Sanskrit as well as Sinhala, thought it fit not to critically analyse the contents of this book and thereby denied this nation the benefit of their linguistic expertise.

The time is not too late for these academics to point out the erroneous aspects, if any, of my arguments and thereby assist the Honourable Minister to achieve his objectives. Such a critical review should not be conducted in camera but through the newspapers so that the general public could benefit by their wisdom.

Though criticism of the book was not forthcoming, there were some who expressed their appreciation. Seeing this book, erstwhile Professor Sucharitha Gamlath had this to say in his article in the "Silumina" of 2004.01.04.

මේ ශබ්ද නිර්මාණය කෙතරම් විදුහුරු ද? කෙතරම් තකුහුරු ද? කෙතරම් මන-  
හර ද? කෙතරම් ලගන්නේ ද? සිංහලයෙන් සිප්සුරු වදන් නැමැති ඵකුමත් ගේ  
අගනා කෘතියෙහි මෙවැනි තව ශබ්ද සම්භාරයක් ගැබ්වේ.

Broadly translated, it expresses the following:

(In their formation, how scientific, how rational, how pleasant sounding, how beautiful, how acceptable, are the words contained in the valuable book entitled. "Technical terms in Sinhala" by its author, in which there are many more such words?)

In this book entitled "Technical terms in Sinhala", the entire subject matter is expressed both in Sinhala and in English. Apart from other aspects, this feature had brought the contents of the book to the notice of UNESCO who has considered this book as "new outstanding publication". (Vide: Asia/Pacific Book Development (ADB) journal 2003, Vol. 33, No. 3, published by the Asia/Pacific Cultural Centre for the UNESCO).

#### **5. Setting up of facilities to produce the required Sinhala technical terms:**

Despite the aforesaid unfortunate experiences, the tendency seems to be to yet again appoint academics conversant with the language content as well as academic associated with the technical aspects to form a committee and to rely on their combined ability to produce satisfactory Sinhala technical terms. In this context, one is reminded of the village tale where a blind man who was able to walk, carried on his shoulders a cripple who was unable to walk but had good eyesight, thus joining forces to gain combined ability to trav-

el about. Unfortunately, the directions given by the cripple seated on the shoulders were not clearly understood by the blind man carrying the cripple.

The result was both persons falling into a well! It is in the same tenor that we should consider the arrangement where the scientist attempts to educate the linguist of the subtleties of the English technical term, which resulted in the linguist giving birth to inane expressions. What the cognoscenti declare is the peculiar statement that the Sinhala people readily understood words coined using Sanskrit but were puzzled when confronted with unadulterated Sinhala terms.

This, if true, is a very curious phenomenon. For instance, the people are supposed to readily recognise and understand a Sanskrit term such as 'තක්ෂණය' (thakshanaya) to be the equivalent of the English term "technology". Even Panini himself, the creator of Sanskrit, had no such knowledge! According to Panini 'තක්ෂණය' (thakshanaya) means "carpentry" and not technology! Let us examine, though briefly, the damage that such bungling has prevented the setting up of a proper Sinhala technical glossary.

Consider, the borrowed Sanskrit term තක්ෂණය (thakshanaya), which is given as the equivalent of the English term "technology". What does the famous Sanskrit dictionary of Sir Monier Monier Williams say as to the meaning of the word "thaksha"? The meaning is given as:

"To form by cutting, plane, chisel, to cut, split, to fashion form out of wood... Thakshaka, a carpenter".

In spite of the fact that "technology" is associated with disciplines such as Medicine, Biochemistry, Agriculture, Legal Science, Engineering etc.

These pundits, have classified those engaged in such professions, as "carpenters". Amazing is it not? I was always under the impression that Professor Vitharana, as the then Head of the Medical Research Institute, was engaged in conducting valuable research regarding the disease carrying microbes. It is only now that I realise how wrong I had been. Unknown to us, the good professor had all along engaged himself in nothing but carpentry!!

At a recent conference, it was claimed that, even though the meaning of the newly created term තක්ෂණය is erroneous, there is no harm, as many persons are already using the term තක්ෂණය (thakshanaya) to mean "technology". The essence of this argument is that, if many are doing the wrong thing there should be no difficulty in accepting it as correct.

To further bolster this contention reference was made to the statement 'වහරනු සෙරෙත් සපයා' meaning "any deficiency to be supplied in the with usage". This statement is supposed to have been made by the scholar Pathiraja Piruvan, the author of the famous grammar book called the "Sidath Sangarawa". However, the actual fact is that, it is only a part of his full statement surreptitiously presented in partial form to mislead the general public into believing that the pundits had acted correctly. What was quoted was only a part of a statement which reads, '...අනුරු සේවියොතත් ..... වහරනු සෙරෙත් සපයා'

This means that "any deficiency be made good in line with the usage of those who are worthy of being emulated". Pathiraja Piruvan certainly did not recommend that the usage of all and sundry be accommodated. This subterfuge is tantamount to intellectual dishonesty! If our universities are capable of employing such persons what future can we expect for our children?

For the moment, let us accept their contention as correct.

Then, we have to come to the conclusion that the newly formed technical term is acceptable though it does not reflect the meaning of the English counterpart. This new concept is really great! We can then, within a very short space of time, spawn all the terms we need. We have only to find a host of Sinhala terms irrespective of their meaning. This can be easily achieved by obtaining a copy of the **Namruwanmala**, the Sinhala synonyms dictionary authored by King Sirisangabo Prakramabahu around 1400/1500 A.C., and fix, without any concern as to their meanings, the numerous Sinhala terms given therein, against the English terms under consideration! What a blessing this new approach would be!

In English however such inane practices are not tolerated. Technical terms which do not reflect the correct meaning are corrected. For instance the reference to the battery of a car as an “accumulator” is no longer acceptable because the said equipment does not accumulate electricity. The term battery has replaced the earlier term accumulator.

**6. Aspects to be given consideration in forming a Sinhala technical glossary:**

Be that as it may, it was my pleasure to have attended a recent conference summoned by “Information and Communication Technology Agency (CITA) on the subject of forming Sinhala technical terms. At this conference I suggested that a formula be established by which the acceptance or otherwise of a suggested term could be judged. The following three minimal characteristics were suggested.

\* The selected term to be as short as possible.

\* The selected term to possess in built features, which will serve as mnemonics, facilitating the remembering of the meaning of the term.

\* The selected term should be derived from a verbal root of the Sinhala language in order to ensure flexibility.

The significance of adopting these norms is separately discussed below:

**6. (a) The acceptable word is the one that is shorter:**

This feature not only saves cost of paper and saves time but also provides clarity in communication. Brevity being an essential feature, sometimes existing English technical terms are adopting techniques such as joining together to make the words shorter.

The tendency is for the terms “Hydro electricity” to become “Hydrel”, “Aviation electronics” to become “avionics”, “Binary digit” to be shortened to “Bit” and so forth. We have no option but to use longer terms as we are opting for Sanskrit terms in preference to Sinhala terms.

Sanskrit terms are much longer when compared with their Sinhala counterparts as shown by the samples given below.

Sanskrit	Sinhala
සන්නිවේදනය	සන්නිවේදන
ප්‍රවේශනීය	ප්‍රවේශන
විකෘතිය	රැක
පාඨශාලාව	පාසල
ධෛර්ය	දීර්ඝ

(To be continued)

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