

# Samvruthokaram and Chandrakala

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In the Indo-European family of languages like Sanskrit, a large number of words end in consonants. But in Dravidian languages like Malayalam majority of words end in vowels.

But, the chillaksharams of Malayalam ( റ്റൻ, റ്റൻ, റ്റൻ, റ്റൻ, റ്റൻ ) are exceptions to this general feature\*

For the words that end in chillu, Samvruthokaram is used to make the pronunciation more clear.

There are 2 mechanisms used to attain this feature:

1. Samvruthokaram is added directly to the word-ending chillaksharam:
  1. വാൽ (vāl) -> വാല് (vāl)
  2. നീർ (nīr) -> നീര് (nīr)
  3. വാൾ (vāl) -> വാല് (vāl)
2. The word-ending chillaksharam is geminated and Samvruthokaram is added to it:
  1. പൊൻ (poṇ) -> പൊന് (poṇ)
  2. കാൽ (kāl) -> കാല് (kāl)
  3. കണ് (kaṇ) -> കണ് (kaṇ)

Even though Samvruthokaram may be seen as derived from the vowels അ (a) or ഉ (u), in fact, it has an independent identity as a vowel. This feature is seen only in Malayalam.

Even though at present, it is seen to be a distinct vowel, in ancient times in Malayalam it was considered and written as ഉ (u) just as in Tamil.

When Granthakshara was used in Malayalam to write Sanskrit, the Samvruthokaram took two forms in writing:

1. in Southern Kerala it is written as ഉ (u). Actually this ഉ (u) came under the influence of vattezhuthu (വട്ടെഴുത്തു)
  1. അതു (atu)
  2. കാടു (kāṭu)
  3. മാടു (māṭu)
2. in Northern Kerala it is written as അ (a)
  1. അത (ata)
  2. കൂത്തുപറമ്പ (kūttuparampa)
  3. കാട (kāṭa)

Even though in ancient times this vowel was written using some existing character, ancient Dravidian grammarians located this feature and named it as കുറ്റിയൽ ഉകരം (kuttīyal ukaram).

\*Even though these chillaksharams seems to be without vowel, some grammarians are of the opinion that a vowel is inherent in them. This inherent vowel within the chillaksharam is the samvruthokaram.

Gundert called it അര ഉകാരം (ara ukāram - half-u).

Rev. George Mathen called it അർദ്ധാച്ഛ് (arḍdhāccḥ) and identified as a vowel between അ (a) and ഇ (i).

In their grammatical works, chief grammarians like Atoor Krishna Pisharody and L.V. Ramaswamy Iyer have elucidated the samvruthokaram's individuality as a vowel.

It is Kerala Panini, the greatest Malayalam grammarian who elaborated on the properties and functions of the samvruthokaram that ultimately lead to its fixation as a vowel in writing and printing. As a result, the practice of attaching ഉ (u) and chandrakkala to the word-ending consonant was placed on a firm foundation as the samvruthokaram.

From then on upto the advent of computer typesetting this practice was continued. The practice of denoting samvruthokaram without ഉ (u) came in to vogue chiefly because of the lack of support in software and the keyboard input to achieve this.

Except for a very few publishers from Northern Kerala who used the അ (a) + ് form, everyone else had used the ഉ (u) + ് form for representing samvruthokaram, both in printing and writing. The vast majority of printed material in Malayalam uses the ഉ (u) + ് form for the samvruthokaram.

It is important to note that since the samvruthokaram is used only along with a word-ending consonant and there is no independent form of samvruthokaram (as other vowels), it is not given a place in the list of alphabets in grammatical texts.

The difference between the samvruthokaram, അ (a) vowel and ഉ (u) vowel in the context of Malayalam grammatical formations is explained in detail below:

1

When verbs in past tense (ഭൂതകാലം) and ending in ഉ (u) vowel, is transformed to the *adverbial past participle* (വിനയെച്ചം - viṇayeccam) form, the ഉ (u) changes to samvruthokaram.

കണ്ടു (kaṇṭu) -> കണ്ടു് (kaṇṭu)

വന്നു (vannu) -> വന്നു് (vannu)

ചെയ്തു (ceytu) -> ചെയ്തു് (ceytu)

ഉണർന്നു (uṇarnnu) -> ഉണർന്നു് (uṇarnnu)

Whether a verb in this class is in the past tense or the adverbial past participle form is determined by whether it ends in ഉ (u) vowel or samvruthokaram respectively.

2

Three different inflections of the same verb are attained by using അ (a), ഉ (u) or samvruthokaram.

ചെയ്തു (ceytu) : past tense (ഉ (u))

ചെയ്ത (ceyta) : adjectival past participle (അ (a))

ചെയ്തു് (ceytu) : adverbial past participle (samvruthokaram)

From these inflected forms it can be seen that samvruthokaram, അ (a) and ഉ (u) are independent entities in the grammatical process.

3

The following examples strongly show that samvruthokaram is different from the അ (a) vowel.

കാട (kāṭa - partridge) - കാട് (kāṭu - forest)  
ഞാറ (ñāra - strawberry) - ഞാറ് ( ñār - sapling)

4

The same is more evident in phonological changes that occurs in the joining of words ( സന്ധി sandhi)

കാട (kāṭa) + പക്ഷി (pakṣi) = കാടപ്പക്ഷി (kāṭappakṣi)  
കാട് (kāṭu) + പക്ഷി (pakṣi)= കാട്ടുപക്ഷി (kāṭṭupakṣi)  
നാട് (nāṭu) + വർത്തമാനം (varṭtamānam) = നാട്ടുവർത്തമാനം (nāṭṭuvarṭtamānam)

Here the അ (a) and samvruthokaram exhibit their original features in combination.

5

In Dravidian languages word-ending consonants are always pronounced with vowel. In the case of Loan words from Sanskrit, English, etc, they are transformed into Malayalam words by either geminating and adding a samvruthokaram, or by merely adding a samvruthokaram to the word-ending consonant.

ബസ് (bas - bus) - ബസ്സ് (bassu)  
മനസ് (maṇas - mind) - മനസ്സ് (maṇassu)  
റെക്കോഡ് (rekkoḍ - record) - റെക്കോഡ്സ് (rekkoḍṭu) (no gemination)

In all these loan forms samvruthokaram is added at the word ending position.

6

Kerala Panini in his grammatical treatise gives six unique characteristics (ആറ് നയങ്ങൾ) of Malayalam as distinct from Tamil. One of the most important of them is the സ്വര സംവരണം (svara samvaraṇam) that deals with the independent identity of samvruthokaram distinct from ഉ (u) used in Tamil.

Kerala Panini established two important facts (c.f. Preface of Kerala Panineeyam):

1. Samvruthokaram distinguishes Malayalam from Tamil
2. It is unique to Malayalam within the Dravidian family of languages

7

Samvruthokaram has a unique role in Malayalam, along with അ (a) and ഇ (i) vowels. They are the only three vowels which may be attached to word-ending consonants in forming nouns.

അ (a) : അമ്മ (amma - mother), ആന (āna - elephant)  
ഇ (i) : താടി (tāṭi - beard), ആവി (āvi - steam)  
samvruthokaram : കാത് (kāṭ - ear), മൂക്ക് (mūkk - nose)

8

Other than very rare instances of words such as കരു (karu), ഉരു (uru) (which are used in the same way as Tamil), generally in Malayalam no noun forms end in ഉ (u) vowel.

Also to be noted is that, all noun forms of Tamil ending in ഉ (u) vowel are transformed as samvruthokaram when used in Malayalam.

Tamil -> Malayalam.

വീടു (vīṭu) -> വീടു് (vīṭu)

കാതു (kātu) -> കാതു് (kātu)

9

Samvruthokaram is one of the main neuter gender indicators (suffix) in Malayalam. If a noun ends with a samvruthokaram, it might be a neuter gender.

മാറു് (māru - chest)

ചാറു് (cāru - juice)

പാക്കു് (pākkū - arecanut)

കാടു് (kāṭu - forest)

കോലു് (kōlu - stick)

മൂക്കു് (mūkkū - nose)

10

Samvruthokaram is a case marker: ക്കു (kkū) and ന്നു (nnu), the Dative case markers of Malayalam end with samvruthokaram.

രാമൻ (rāman) -> രാമനു് (rāmanu)

വടി (vaṭi) -> വടിക്കു് (vaṭikkū)

കമ്പ്യൂട്ടർ (kampyūṭṭar) -> കമ്പ്യൂട്ടറിനു് (kampyūṭṭarinu)

കവി (kavi) -> കവിക്കു് (kavikkū)

11

In phonological changes - for e.g., in ലോപസന്ധി (lōpasandhi) - samvruthokaram behaves just like other vowels

കണ്ടു (kaṇṭu) + ഇല്ല (illa) = കണ്ടില്ല (kaṇṭilla) (ഉ (u) is discarded)

വരിക (varika) + എടോ (eṭō) = വരിക്കെടോ (variketō) (അ (a) is discarded)

തണുപ്പു് (taṇuppu) + ഉണ്ടു് (uṇṭu) = തണുപ്പുണ്ടു് (taṇuppuṇṭu) (samvruthokaram is discarded as in the case of ഉ (u) and അ (a) above)

Above examples with ഉ (u) and അ (a) vowel show conclusively that samvruthokaram is invariably a vowel and it behaves like ഉ (u) and അ (a) in sandhi.

12

Some people consider samvruthokaram as അ (a) vowel and represent this by attaching a chandrakkala only to the word-ending consonant. This goes wrong when it occurs in certain combinations and grammatical formations.

വീടു് (vīṭu) + കാര്യം (kāryam) = വീടു്കാര്യം (vīṭukāryam) (and not വീടുകാര്യം (vīṭakāryam) or വീട്ടുകാര്യം (vīṭṭakāryam) as would have been the case if it was അ (a) vowel)

നാടു് (nāṭu) + വർത്തമാനം (varttamānam) = നാടുവർത്തമാനം (nāṭuvarttamānam) (and not നാടവർത്തമാനം (nāṭavarttamānam) or നാട്ടവർത്തമാനം (nāṭṭavarttamānam))

നാടു് (nāṭu) + കൾ (kal) = നാടുകൾ (nāṭukaḷ) (and not നാടകൾ (nāṭakaḷ))

In all these cases we see that samvruthokaram changes into ഉ (u) but not into അ (a).

The real value of the samvruthokaram can be derived from the metrical (മാത്ര - māṭra) considerations. According to the basic rules of Malayalam prosody short vowels possess one matra and long vowels possess 2 matras.

Under metric rules, consonants without vowels are not considered for assessment of matra. So consonants with chandrakkala (i.e., without vowel) are not considered to have a matra value.

Consider the following verses in Anushtuppu metre. We can identify the fallacy of considering chandrakkala as samvruthokaram.

കാടുവിട്ടു നടന്നിട്ടു് (kāṭuviṭṭu naṭanniṭṭu)  
നാടുപുക്കു വസിച്ചിതു് (nāṭupukku vasiccitu)

As Kerala Panini points out, if we consider the samvruthokaram without implicit vowel (as being written with chandrakkala only, just as any other consonant) then the metric value of the above verses goes completely wrong because consonants with chandrakkala are considered to have no matra value.

It is evident that the samvruthokaram in the words നടന്നിട്ടു് (naṭanniṭṭu) and വസിച്ചിതു് (vasiccitu) is a short vowel.

Metric rules (matra norms) of any language are derived from the basic phonological features and syllabic manifestation. According to Malayalam metric norms, samvruthokaram must be considered as a short vowel as in the case of any other short vowel.

What is apparent from the above cases is that the samvruthokaram is an independent vowel and has got an entirely separate identity from the അ (a) and ഉ (u) vowels. The representation of samvruthokaram as അ (a) vowel (as in അത (ata) and ഇത (ita) ) and ഉ (u) vowel (as in അതു (atu) and ഇതു (itu)) are both wrong since its basic (implicit) value is not properly ascertained.

Even though at times some used the അ (a)+് form for samvruthokaram, the link between the samvruthokaram and ഉ (u) vowel was well understood and grammarians from the time of Kerala Panini onwards had strongly accepted the writing of samvruthokaram as ഉ (u)+്.

Those people who used the അ (a)+് form to represent samvruthokaram, still used the vowel ഉ (u) in other grammatical forms of the same word just like those who used ഉ (u)+് for the samvruthokaram.

അ (a) + ് form: വിട് (vīṭu) + കൾ (kaḷ) = വിടുകൾ (vīṭukaḷ)

ഉ (u) + ് form: വിടു് (vīṭu)+ കൾ (kaḷ) = വിടുകൾ (vīṭukaḷ)

This practice of using ഉ (u)+് became the universally accepted method of rendering the samvruthokaram both in writing and printing.

The unscientific reforms introduced in Malayalam for the purpose of using the typewriter, proposed the change of rendering the samvruthokaram just as a chandrakkala, which had been already discarded from Malayalam at earlier times.

It was also suggested by the Typewriter reformers, that the same chandrakkala also be used to split the conjuncts. The reform recommendations were implemented only in government publications and some textbooks, and in the typewriter, which was only a minor portion of the total printing output. All publishers, printers, newspapers did not accept this part of the reform.

The most important aspect was that in writing, invariably, people used the  $\text{ഉ (u)+്}$  form of samvruthokaram.

In short, the reform proposals regarding samvruthokaram, has been totally rejected by Malayalees, identifying it as being unscientific.

When DTP arrived, the situation changed because of the direct adoption of the typewriter keyboard as the computer keyboard. Due to this, even though the Malayalee was aware of the real value and application of the samvruthokaram, there was no way out other than the passive acceptance of the reforms. Thus, the limitations of technology forced the Malayalee to accept these unscientific practices.

The chaotic reforms caused the use of chandrakkala to fulfill 3 entirely different functions which are:

1. to indicate vowelless consonants
2. to split conjuncts
3. as a substitute for samvruthokaram (pseudo-samvruthokaram)

In Malayalam, the chandrakkala and samvruthokaram exist for completely different purposes. The chandrakkala is used in order to represent the consonant-ending loan words from English and other languages, and also to write conjuncts which do not have glyphs.

In this sense, the first 2 functions of chandrakkala according to the reforms, is more or less the same and justifiable.

However, as we have seen earlier, the individuality and varied functions of samvruthokaram cannot be represented by the chandrakkala and vice-versa, for e.g., the chandrakkala in the sanskrit derived words such as തത് (tat), പ്രഥക് (prthak), etc should not take the value of samvruthokaram. In a similar way, one may consider all English loan words like സ്റ്റാറ്റസ് (status), ഹാറ്റ് (hat), കാപ്പ് (cap), ബ്ലിസ്സ് (bliss), ഷൂസ് (shoes), etc, and Arabic റൂഹ് (rrooh).

Medieval and modern Malayalam literature extensively uses consonant-ending Sanskrit words without any changes (tatsama words).

Even more important is that we have to consider a vast set of Malayalam words with consonant-endings, and which should be represented with chandrakkala and not samvruthokaram. In this regard, note the following chief cases of consonant-ending forms:

1. A large number of base/root forms (ധാതു dhātu) have consonant-ending. In several important circumstances like lexicography, grammar, etc, these base/root forms have to be shown or represented in their original form without ambiguity. For e.g. :  
തുമ്മ് (tumm),  
ഉറ (ūr),  
തുവ് (tūv),  
കുലുൺ (kuluṅ),

ഇളക് (ilak),  
കോത് (kōt), etc

2. Another case of Malayalam words, end in vowelless യ (y̆), most of them being noun forms. for e.g.,

തായ് (tāy),  
കായ് (kāy),  
നായ് (nāy),  
പായ് (pāy).

Since in the Typewriter script, a consonant without implicit vowel, and a consonant with samvruthokaram, is written the same way (ie, as consonant + ൾ), it will cause a series of problems as described earlier. The frequency of use of such words in Malayalam literature, newspapers and general writing makes this problem very serious.

Thus, in Malayalam, none of these words end in samvruthokaram; instead, they are consonant-ending words. The mechanism of Malayalam language used to write consonant-ending words will be lost through the introduction of the chandrakkala to denote samvruthokaram.

That the chandrakkala indicates both vowelless consonants and the vowel samvruthokaram, has very deep linguistic implications. If these implications are not considered in detail, and if the samvruthokaram and chandrakkala are considered the same, then it creates disastrous problems in sorting, and further computer applications.

It was after considering these problems that our great grammarians, to whom the Typewriter keyboard was not at all a consideration, have fixed the samvruthokaram's position between ഇറ (ī) and ഉ (u) in the Malayalam alphabetical order.

Date: August 6, 2005