INTRODUCTION.

The subject of the thesis is 'Naccinärkkiniyar's conception of phonology'. This is attempted to be studied from Naccinärkkiniyar's commentary on Tolkäppiyar's aluttu atikāram. Tolkäppiyar's work is considered to be the earliest available grammar in Tamil. The position taken in this essay is that Tolkäppiyam, atleast the major portion of aluttu atikāram, belongs to a period anterior to the Sangam poems, now extant. The question of interpolation is also discussed from place to place. As this is not the main topic, no separate chapter has been assigned in this thesis for their detailed consideration. As the thesis on the study of the index of the words in Tolkäppiyam submitted to the Madras University by Miss. Sitabai deals with the problem of pre-Tolkäppiyam grammar it is also not discussed in this essay.

Naccinärkkiniyar's commentary as it stands to-day is the revised edition of Illampūranar's commentary which he has corrected wherever he disagreed with Illampūranar. The printed copy of Naccinärkkiniyar's commentary is given as an appendix to this thesis and therein the original contributions of Naccinärkkiniyar are left unmarked whereas the original version of Illampūranar's commentary is underlined. A perusal will convince of the statement herein made, that Naccinärkkiniyar
has only revised Ilampūranar’s commentary.

This, therefore necessitates a discussion of the views of Ilampūranar in addition to that of Naccinārkkiniyar’s. An attempt is made to explain why Naccinārkkiniyar differs from the original commentator. This, sometimes explains the history of the Tamil language. The study of the commentary is thus important in helping us to trace the history of the Tamil language.

The views of the subsequent grammarians like Nēminātār, Puttāmittirār, Pavanantī, Avinayanār, Mayilainātār, Cāṅkaranamacēvāyar, Cuppiramaniyatēcīkar, Vaiṭṭiyāṇatēcīkar, Civaṇanamunīvar, Dr. Caldwell, Venkatarājalu Reddiar and Dr. P.S. Cupiramaniya Sastri are all examined so as to estimate the original contribution of Naccinārkkiniyar. This part of the study includes also the views of the various editors; but it cannot be said that all the authorities have been completely referred to.

Really speaking, a study of phonology should cover only mūṅmarapu, mōḷimarapu and pirappiyal. These alone have been therefore studied in detail. The other chapters on sandhi, study the morphophonemic alterations either morphologically or phonologically conditioned. Certain general
principles of assimilation can be observed in these chapters. These chapters also have been studied because they have been recognised as a part of eluttu atikāram. The augments (gāriyai) are really morphemes and therefore they are not studied in detail in this thesis. Perhaps all these chapters on sandhi might have been omitted in this thesis; but as the discussions in these chapters throw a flood of light on the general standpoint of Naccinārkkiṇiṣṭha they have also been included in this thesis for a special study.

It would have been better if Naccinārkkiṇiṣṭha’s views have been discussed under various heads. Instead of this, this thesis follows the scheme of Tolkāppiyam and the scheme of Naccinārkkiṇiṣṭha’s commenting on Tolkāppiyam’s sutram, so that the readers might follow the intricacies of the methods followed by our commentator. Though this may, at first, seem to be a little confusing, this makes us realise more clearly the difficulties of the commentators. In this sense the thesis may appear to be another commentary of Tolkāppiyam and on its commentators: Ilampūranaṇar and Naccinārkkiṇiṣṭha. Attempts are here and there made in this thesis to collect the views of Naccinārkkiṇiṣṭha with reference to various points which arise in the discussions.
The thesis looks at the whole questions from the point of view of modern linguistics. The terms like phoneme, morpheme and morphophonemics are used in the sense they are used in the American textbooks. Some of the statements made in the Tamil Encyclopedia under the heading of the History of Tamil language, an article contributed by Professor T.P. Meenakshi sundaram, M.A., M.O.L., are accepted as the basis for the present study.

Instead of writing elaborately on certain points, an attempt is made to present them in tabular statements.

In transliterating the Tamil terms the system followed by Tamil lexicon is adopted, but because of the mistakes committed by the typist it is afraid that all of them have not been corrected.

The thanks of the candidate are due to the Vice-Chancellor, the Research Council and my supervisor, the Professor and Head of the Department of Tamil (Arts) and Dravidian Philology Sri T.P. Meenakshisundaram for permitting me to carry on this thesis.
THE APPROACH

I.

The peculiar approach of the other Tamil grammars to this study of phonology may be first considered before one takes up for detailed study Tolkāppiyar's approach. One may, as a starting point analyze what the commentators have to say about the various spheres of the study of phonology. The earliest commentator is Ilampūraṉar and in this matter Naccinārkkīṇiyar has simply copied as is his habit, Ilampūraṉar's commentary. Whilst Ilampūraṉar does not explain in detail with suitable illustration his statements Naccinārkkīṇiyar is the only author who helps us here with his explanations and illustrations.

II.

Indian thought was fond, at least at one stage, of analyzing any study under well defined and serially numbered aspects. One knows the flair for numbering for instance Sāṅkhya philosophy. The Jains, perhaps, had the same tendency and one wonders whether the serial numbering of the various aspects of study in phonology may not be the contribution by Jain grammarian like Avināyaṉar and others.

Whatever this may be, there are two different kinds of enumeration of these aspects. One school of thought,
it is learnt, analyses the study under eight different heads viz. (1) the number of sounds (2) their names (3) the order of these sounds (4) their quantity (5) their birth, that is, articulation (6) Sandhi or purarcci (7) their shape and (8) their characteristic feature.

(1) The number is expressed in three different ways viz. (i) the summarised total or tokai (ii) number of the classified categories or vakai (iii) number when detailed elaborately or vili. For instance, the summarised total of sounds in Tamil is given as thirty-three; and the classified categories are the vowels numbering twelve, Consonant numbering in all eighteen sounds along with the dependent letters numbering three. The number of detailed varieties is made up of lengthened long vowels numbering seven, syllabic sounds two hundred and sixteen (12 vowels x 18 consonants) making in all two hundred and fifty-six.

(2) The names of the sounds are vowel, consonant, short vowel, long vowel etc. and there is also the naming of each one of the alphabets, as [a] or akaram etc.

(3) The order is not elaborately dealt with; but the grammarians usually assume a knowledge of the alphabet system in Tamil and the unchanging order of the sounds therein.
(4) Quantity (quantum) of any sound is expressed in terms of māttirai or unit of time taken in pronouncing a particular sound, the units are comparable to the time taken in the snapping of the finger or that of the twinkling of the eye.\textsuperscript{10}

(5) The articulation is as given in the chapter, pirappiyal.

(6) punarccci is the well known Sandhi rules.

(7) tanmai 'feature' and

(8) vaticu 'shape' are not capable of being explained to us by the author according to Naccinārkkiniya and Ilampūranar who state that these are therefore omitted.\textsuperscript{11}

III.

Ilampūranar and Naccinārkkiniya refer to another school of thought which does not restrict to these eight aspects but proceed to explain the study under more than eight heads. These are not, any way connected with the eight above mentioned.

It is not, unfortunately clear who were the exponents of the two schools of thought. Ilampūranar gives only the headings which are not all self explanatory; and but for Naccinārkkiniya these will be riddles which never could
have been now solved.

What can one make of these terms such as
(1) deficiency (2) assemblage (3) separation (4) clustering
(5) word formation (6) standing or position (7) class
(8) one becoming many (9) the statement that one thing is the
altered form of what has been altered (10) the statement that
it is different (11) the statement that it is the same and
also the different thing (12) the statement that it withstands
a sandhi and (13) the statement that it does not withstand a
sandhi and (14) the statement that it both does and does not
withstand a sandhi.

Both the commentators add that this list may
be multiplied in a similar way.\cite{13}

The question arises whether Tolkëppiyar ever
followed any of these kinds of approaches. Naccinäkkänniyär,
however, gives examples for these various aspects of study
from Tolkëppiyam itself.\cite{14}

(1) Deficiency or kuṟaiṟu means the contrac-
tion in quantity suffered by any sound \( \mathcal{m} \mathcal{J} \) under certain
circumstances in reduced to half of its original quantity and
again the diphthongs \( \mathcal{a}i \mathcal{J} \) and \( \mathcal{au} \mathcal{J} \) which are considered
to be long vowels and as such having ordinarily two units of
quantity become shortened to one mātra when occurring in a word. It is from this explanation of Naccinarkkiniyar, we understand, what is meant by deficiency.

(2) The next is kūttam 'assemblage'. That is the coming together of a consonant and a vowel informing, for instance, a syllable or a syllabic letter; ff. 10 and ff. 17 are about this syllabic formation. The root of word iyaiyinum which means the same as the root of kūttam is used in ff. 10.

(3) pirivu 'separation' is the separation or disjuncture of two alphabetical sounds in a syllable. In a syllabic writing, for instance, if the vowel is removed, the consonant which remains is there with a dot or a consonantal mark. Though the word pirivu is not used, a synonymous root nīṅku is found to be used in this sutram.

(4) mayakkam may be translated as cluster of sound especially consonants and this is dealt with from ff. 23 to ff. 30.

(5) moliyākkam 'word formation' denotes how the sounds form into words. This is referred to in the ff. 45 which speaks of words of one sound, words of two sounds and
words of more than two sounds. Here the words are stated to be thus formed out of sounds.

(6) nilai 'position' refers to the position of sounds occurring initially and finally in words. Really this is treated under two heads by later day grammarian like Pavananti of Nambul viz. under the head of (i) initial sounds and (ii) final sounds. This position or status of sounds is dealt with in the ff. 59 from the positive point of view and in ff. 60 from the negative point of view. ff. 61 deals with consonant; and subsequent sutras 61 to 65 deal with the particular vowels which with the consonants can occur as initial syllables. ff. 69 deals with the sounds occurring finally in the words.

(7) inam 'class' refers to the grouping of words as belonging to a particular articulatory class such as explosives or hard letters, nasals or soft letters and semi vowel or medial letters; There is also the classification into vowels and consonants.

(8) onru palavātal 'one becoming many' This is the next aspect of study. A phrase or compound by a change in its pronunciation, perhaps by the change of juncture, may mean two different things as referred in to in ff. 141.
The oft repeated example is cemuponpatintati and semponpatintati both of which according to the rules of sandhi will be written as semponpatintati.

(9) The rest seems to refer to the various ways of looking at sandhi or morphophonemic alterations. When a short closed monosyllabic ending in [l] or [l] is followed by the dental [t], the latter changes into an alveolar [r] and cerebral [t] respectively. But in some cases instead of changing into [r] or [t] they become an āytam. This statement has to be interpreted in the following way. The initial sound of the coming word dental [t] which is spoken of here, is the really the alveolar [r] to which it had changed. Therefore [r] is looked upon here as [t]. This is the illustration for the statement that a particular sound or the original sound is the altered form, arising because of a change.

(10) For the statement that the sound is different, Nācchinkhinīyar refers to ff. 310 and ff. 312. ff. 310 speaks of the disappearance of the [m] ending in an oblique case and the coming in there of a plosive similar to the plosive beginning the succeeding word. Here, the author implies that the plosive which is coming in is different from the original [m] as against the statement in the other
sutram where a particular altered sound is looked upon as the
original sound which suffered the change.

(11) For the statement, that the sound is
both the same and a different one, Naccinarkkiniyar refers to
ff. 115. There, we have something like what modern linguists
call portmanteau morpheme. Tolkâppiyar asserts that an
empty morphemes \( \Gamma \) comes in, after the oblique form of
personal pronoun for instance in tamakku. But in tamatu a
difficulty arises because \( \text{tam} \) is the oblique form and \( \text{atu} \)
is the genitive case-sign. In forms like \( \text{minava} \) the final
\( \text{a} \) is a genitive case sign; \( \text{nin} \) is the oblique form and
\( \backslash a \) is the glide; here the medial \( \Gamma \) has to be
explained, as already posited, as an augment. The question
then arises what happens in tamatu where there is no such
medial \( \Gamma \). This sutram states \( \Gamma \) of the genitive
case sign \( \text{atu} \) stands for both the initial of the genitive case
sign and the empty morph \( \text{a} \) the \( \text{a} \) of \( \text{atu} \) having disappeared
in the presence of other \( \text{a} \). This is the meaning of the state-
ment that a sound is the same sound and also a different sound.
For instance \( \text{atu} \) in tamatu is not only representing the genitive
case sign \( \text{atu} \) but also the other empty morph \( \backslash a \).

(12). nilaiyirrenral 'that which sandhi' is
spoken of with reference to the end of a word and the beginning of the succeeding word juxtaposed in sandhi. These are cases where sandhi rules can be applied on certain well known principles; that is, here, it is possible to recognize two different words.

(13) nilaiyatu enral is that a thing does not stand a sandhi. A final sound of a word and an initial sound of a coming word cannot be identified in sandhi i.e., they do not appear in such a way as to identified as two different words. This occurs in what is called marūu where because of syncope etc. words become so very much altered beyond recognition. For instance, in arumaruntanna pillai, arumaruntanna becomes arumaṇa; it is not possible here to identify the original arumaruntu and anna; therefore, it is not possible to speak of any two recognizable words coming to form a sandhi in such cases. This is referred in ff. 111 according to Naccinārkkiniyar.

(14) nilaiyirrum nilaiyatum enral is the statement that a particular thing at the same time does and does not withstand a sandhi rule. A particular form occurs in a particular variety of sandhi and disappears in another variety of sandhi. This, unfortunately according to the illustrations given does not bear any relation to the two kinds
the long vowels getting still further lengthened and coming with their respective short vowels. ff. 17 speaks of the syllabic sounds made up of consonants and vowels. This sutram refers to syllabic writing. From these two sutras Naccinark-kiniyar states that Tolkappiyar adds seven alapetai and two hundred and sixteen syllabic sounds to the thirty three sounds already mentioned, to make up in all two hundred and fifty six sounds. \[25\] (4) The quantity is mentioned in ff. 3 which speaks of consonants having half of a mātra each and in ff. 12 which speaks of the dependent sounds having only half of a mātra each. This kind of classification of aspects of phonological study represe an a living tradition; for we find the same in Nammul also.

Pavananti mentions these in the second sutra of eluttiyal and proceeds to follow the headings in his further treatment of all the sounds in this chapter. Here are his headings:

- the total number of sounds, peyar the names of the sounds, murai 'order' pirappu 'articulation'
- uruvam 'shape'; mēttirai 'quantity', mutal nilai initial sounds,
- īrunilai 'final sounds', itai nilai 'the medial clusters of sounds' pōli 'the neutralisation of sounds' or 'alternative
sounds in a particular environment' and patam 'the formation of words out of letters and sandhi'.

It will be seen that uruvam 'the written shape' mentioned in Naṟṟul is not the same as vattiṟam as mentioned by Ilampūraṉar or NaccinārkkīṇiṆar as will be explained presently. mutal, īru, itainilai and patam are not found in the eight aspects of study pursued by the first school of thought. pōli is not at all mentioned by either of these schools; probably one has to take it as included under what the second school referred to as other similar aspects.

Pavanānti seems to be following a harmonious means between these two different schools and he has the support of Tolkāppiyar as interpreted by Ilampūraṉar who speaks of pōli eluttu. Though NaccinārkkīṇiṆar also follows Ilampūraṉar's interpretation, Ilampūraṉar alone preceded Pavanānti and therefore the latter must have relied upon the former and not on NaccinārkkīṇiṆar who must have come long after Pavanānti.

IV.

Though both the commentators speak of Tolkāppiyam discussing all these varieties of aspects, it will be very difficult to prove that Tolkāppiyar's scheme of study of phonology is based on these. If tanmai 'characteristic feature'
and *vakai* 'shape of sounds' are impossible to be explained to mortals as the commentators assert, why at all include it to swell up the number to eight?

A number is however, certainly fundamental in a study of phonology because one must know how many sounds are there in a repertory of phonemes. To speak of *tokai* 'summarised total', of *vakai* 'the classified categories' and of *viri* 'the total number when detailed elaborately', may be helpful for a systematic elaboration. But it will be difficult to assert that these are, here, fundamental. One can bring what is important here under 'class' or 'classification'. Tolkæppiyar does refer to numbers here and there. It is however difficult to bring these references under *tokai*, *vakai* or *viri* as we can bring the references in Nannūl. There are no two opinions about Nannūl following this method of study. Nannūl uses even the word *viri* especially when it gives the total number of dependent letters as three hundred and sixty nine. Tolkæppiyar never does so. ff. 41 and ff. 17 are referred to by Naccinärkkäniyär for *viri*. There, the author mentions only long vowel *nettelutta* becoming *alapetai* and never mentions the number seven. So also the ff. 17 refers to consonants combining with vowels to form a syllable. No number is given. To weave out an implication of a statement of number is to do
violence to Tolkappiyar's scheme of things.

It is true, however that quantity is discussed as a separate and important aspect of sound. Articulation is also dealt with in pirappiyal. So also, purarcci or sandhi is dealt with from the fifth chapter onwards to the end of elutta atikaram. Nowhere however, does Tolkappiyar mention the order of these sounds. Tolkappiyar assumes a knowledge of the traditional way in which the alphabet is written down and studied, perhaps even by infants. He, like Panini, has no mahasvarama sutra from which he could form the mnemonic formulae. Therefore, to interpret his sutram as giving the order of sounds is far fetched.

The names are certainly discussed. These names are technical or grammatical terms which are defined by enumeration or by reference to the well known order of the Tamil alphabet system. In all cases the number will occur as a part and parcel of the definition and enumeration. Really all these amount to an explanation of the technical terms. And mātra or quantity is one such term.

Apart from the explanation of technical terms, we have the explanation of the articulation of sounds and finally of sandhi, in Tolkappiyam, in which pirappu and purarcci are basic.
One may now pass on to a criticism of the second school of thought. The coming together of sounds (or letters) to form into syllables for being looked upon as a unity from one point of view and their standing separately as two different sounds from another point of view, are here referred only for a study of the principle of syllabification in this language. All these together give us a picture of the pattern of a syllable and a word. What is called formation of words out of sounds, also, has reference only to a study of these patterns. There are also aspects of sandhi found discussed in Tolkappiyam; but the fundamental unity of these six sandhi aspects are not explained or brought out by these kinds of classification. The 'class' which is mentioned here should refer to the classification of sounds, which forms really a part of the explanation of the technical terms.

The omission of these by the first school of thought is certainly serious. It makes up the omission by its conception of tokai etc. The rest referred to, as various statements are really explanations or conventions followed in laying down the morpho-phonemic alternations. It will be thus seen that though the second school of thought lays the emphasis
on certain important aspect of study, it has no mention of articulation, quantity or sandhi. This is certainly a serious defect. Again it does not go to the root of the matter but it merely deals with external aspects so much so the whole classification appears disconnected and even trivial.

VI

There is another attempt at bringing about a synthesis of all these aspects under two major heads of karuvi and ceykai. karuvi is the means; and ceykai is what is actually performed with these means or instruments. The main theme of phonology is looked upon from this point of view of as sandhi. It is from this point of view Vimacoliyam, a grammar has its chapter on eluttu-atikaram called cantippatalam. It is only for the understanding of sandhi that all the rest, explained above, are studied, according to this way of thinking. Now this karuvi and ceykai are divided into four categories each, a classification which reminds one of the classification of akam and puram in poetic subject matter, viz. akam, akap- puram, puram and purappuram, that is, internal, interio-external, external and exterio-external.

The interior karuvi refers to the explanation
given with reference to the endings of words which usually take part in the sandhi. For instance, the statement of Tolkāppiyar that the short [e] and [o] do not occur at the end of a word except in certain cases, 33 is not a rule of sandhi, but only an explanation or statement on which the sandhi rules can be later on stated such as the following: that the plosive doubles after the short [e] and short [o] in a particular context. Because the first statement or explanation relates to the final position in a word which takes part usually in sandhi, it is called interior karuvi 'a postulate' serving as a tool for further study of sandhi.

But when one lays down a rule with reference to the words which take part in sandhi and not to their endings, it is exterior; the description of the various kinds of changes undergone in sandhi, for instance, the classification of the various forms of sandhi and of the coming in of augment etc. dealt in puṇariyal are not interior karuvi because they do not refer to the initial or final part of a word with reference to which the alternation is going to be mentioned; nor are these statements treated as exterior like the statement in molimarapu where, without reference to the sandhi, the formation of words out of sounds, the initial and final position of various sounds, the allophones of phonemes etc. are all
described. These purnariyal statements are therefore, standing in between these statements relating to the interior and the exterior and as a consequence they are called interio-exterior karuvi. The sounds of the language, their classification, their technical names and their articulation are indirectly necessary for an understanding of their formation into words which go in their turn to form a part of sandhi. These are much more exterior than statements in melimarapu and therefore they are called exterio-external.

Similarly the ceykai 'sandhi' is also looked upon from the point of view of these four gradations. When a final sound of a word suffers an alternation, it is something of an interior change, a change occurring within a word. When there is an augment coming at the end of the word, it does not lie within the word; but all the same it is not external to that word like the succeeding word. Therefore, it is laid down that such alternations are called interio-external. The change, however, which occurs with reference to the initial of the succeeding word is a change or alternation which is exterior to the first word. Therefore this alternation is called exterior. As an example of exterio-exterior alternation the coming in of the glides is mentioned, because the glides which come in between the words, cannot be explained away as alternations
occuring to the exterior word; nor can they be explained as occurring to the interior word, that is, the first word standing in a sandhi. The glide is exterior to the exterior word and it is called an exterio-external alternation. This may not be quite correct for if it is an off-glide it has to be attached to the interior word and if it is an on-glide it has to be attached to the exterior word. But anyway this is the explanation that one gets from the commentators.

VII.

After a study of these one has a feeling that all this is strained and far-fetched. With reference to glide there seems to be an apparent contradiction in both the commentaries. The sutram referred to is ff. 140 and this sutram is given as an example for exterio-external sandhi as explained above. But in the commentary on the particular sutram, the commentators speak of it as karuvi 'instrument'. Really there is no contradiction in the general statement that glide may come in between two adjacent vowels when one vowel ends a word and another vowel begins the succeeding word. But in writing the commentary on that sutram Naccinärkkkipiyar points out that Tolkäppiyar is following his predecessor Akattiyar and therefore in the sutram Tolkäppiyam must be taken
to imply what Akattiyar had stated viz the glides are (1) y which occurs after [i, i', e] and [ai] and (2) u which occurs only after another vowels.

Ilampūranar significantly enough does not refer to the sutra of Akattiyar (can it be that it was not in existence then in his age or that he did not recognise it as genuine. One may note his doubts about the tradition of panniru patelam being the work of the twelve disciples of Akattiyar beginning with Tolkāppiyar). He himself however mentions the rule about the glides and their environment because of his duty as a commentator which is implied in the yukt uraiyirkottal.

It is true that if one were to judge from the bulk alone one must admit that the sandhi rules do occupy the major part of āluttattikāram. But no one to-day can assert seriously that all our study of phonology is as a means for our correct understanding of morpho-phonemic alternations. It is because of this wrong perspective that the later day grammarians have not realised the importance of the other aspect of phonology. It is also because of this, perspective that these other aspects have not been studied in greater detail in later ages to reveal more and more of their secrets.
In the Mīmāṃsaka system, the actions were emphasised as fundamental. Probably, this has something to do with the emphasis on sandhi as action in phonology, to which everything else is made a tool.

The way in which Tolkāppiyar approaches phonology can be very well understood by studying the names of the various chapters of eluttu-atikāram. But unfortunately their meaning is not clear beyond doubt. It is necessary that we should interpret the titles of the chapters in relation to the subject matter of the respective chapters. But generally it may be stated that he mentions phones by themselves and later in words where arises the question of allophones; that he next describes their articulation and finally describes the sandhi which are in a way the changes of the phones in particular environments, phonological or morphological. The preluminary explanations required for understanding the sandhi are given in the chapters on sandhis themselves. This arrangement seems to agree with modern procedure as may be seen in what follows.
REFERENCE:

1. I A p. 66
2. I B pp 13 to 16
3. I A p 6 and I B 13
4. I ff. 1
5. Ibid 8.
8. I B p.13
9. I ff. 1
10. Ibid 7.
12. I A p.6
13. Ibid and I B 14
15. I ff 13 and 57.

16. Pulli is often translated as dot according to modern usage but in the inscriptions of the seventh century A.D. it is represented by a small vertical bit of a line. This will explain why Naccinarkkiniyar speaks of kāl of later times represented by a sidewise pulli in ancient times. Though therefore pulli is translated as dot in this thesis, this must be kept in mind.
17. I ff. 139
18. VI ff. 57
19. I ff. 19 to 21
20. Ibid 8 and 9
21. Ibid 150
22. Ibid 369, 399
23. Puram 35 13
24. I ff. 108
25. I A pp 22 and 23
26. VI ff. 61
27. I A 384 etc.
28. Ibid ff. 8 and 9
29. Ibid ff. 60
30. Ibid ff. 18
31. I A p. 6 and I B p.15
32. ciyappu païyiram and purapporul veñramalai last attended verse
33. I ff. 272
34. I ff. 34 to
35. I A p.6 and I B. p.16
36. I ff. 163
37. Ibid 149
38. Ibid 140
39. III A p. 75