VI. CARPU ELLUru.

(Dependent sounds).

Tolkāppiyur distinguishes between mutual eluttu or primary sounds and carpu eluttu or secondary or dependent sounds. The sanskrit grammarians speak of āśrta like jihvāmūla and upadhmāniya. Carpu corresponds to this term āśrta. There are people who hold that the word āytam also is a corrupt form of this word āśrta. But of this we shall speak later. The idea is that these secondary sounds or phones occur not by themselves but in particular environments. Perhaps the idea is that they are not independent phonemes but merely allophones occurring in complimentary distribution in particular environments. Therefore they can be illustrated only with reference to words in which they occur in their respective environments.

These are said to be of three kinds viz kurriyal-ul-karam i.e. shorter उँ, ै ई, ै e.
kurriyal-ī-karam i.e. shorter ई ई and āytam which will be explained at a later stage. Then ई ई and उ ई are short in relation to their respective phonemes of short vowels. But these particular ई ई and उ ई short vowels are further found to be shorter than their usual
quantities allowed for short vowels, and that shortness seems to be their in-born characteristic feature in relation to their particular environments. jval means nature or characteristic feature. Therefore they are called kuriyal ɬi ɬ and kuriyal ɬu ɬ. Hereafter they shall be referred to for the purpose of convenience as shorter ɬi ɬ and shorter ɬu ɬ. They occur not only within individual words but also within combination of words at their juncture. Hence the name tanimoliccärpu ɬ eluttu and panarmoliccärpu eluttu.

II.

As the shorter ɬi ɬ has to be defined in terms of the shorter ɬu ɬ the latter may be considered first. It has already been seen that plosives do not occur as word finals. Probably they had in Tamil a kind of a vowel release which was nearer the ɬu ɬ sound. The shorter ɬu ɬ, therefore occurs as the final sound, after the plosives. But if there are two consecutive open short syllables making a word, then the final ɬu ɬ there, even if it were to follow a plosive continues to remain as the short ɬu ɬ; it does not become the shorter ɬu ɬ e.g. puku, utu. Because the plosive precedes the shorter ɬu ɬ, the final syllable of such words will be one of these.
$\underline{\text{kuj}}, [cu], [tu],[tu], [pu]$ and $[ru]$.

These have to be preceded by either an open long monosyllable alone or by one or more syllables provided the last is a closed one, in case it is a short monosyllable, making up disyllabic, trisyllabic or polysyllabic words. In these particular environments the final $\underline{\text{ru}}$ becomes the shorter $\underline{\text{ru}}$. In all other places, with an exception mentioned lower down the $\underline{\text{ru}}$ remains the ordinary short $\underline{\text{ru}}$. Therefore the short $\underline{\text{ru}}$ and shorter $\underline{\text{ru}}$ are clearly in complimentary distribution, the shorter $\underline{\text{ru}}$ occurring in the particular environment described above and the short $\underline{\text{ru}}$ occurring elsewhere.

There is something further to be said about this in the chapter kurriyil ukara-p-punariyal. It will be seen that Tolkâppiyar divides the words into monosyllabic, disyllabic and polysyllabic (i.e. more than two syllables) once. The shorter $\underline{\text{ru}}$ is divided into six classes depending on the sound preceding the last syllable which they will be either $\underline{\text{kuj}}, [cu], [tu],[tu],[pu]$ or $[ru]$. There is (1) the shorter $\underline{\text{ru}}$ occurring in disyllabic words when the first syllable is a long open one i.e. $\text{iroluttu oru}$ moli. Then in polysyllabic words there are five varieties occurring according to the last syllable being preceded
immediately by a vowel, semivowel, plosive, nasal or an āytam. Unlike in disyllabic words, the vowel occurring here may be short or long. There are words in which two consonants precede the final [ku], [ctu], [tu], [pu] and [ru] Ḥ. And in such cases, the first of such two consonants will be as will be seen later on, only the semivowels [c y  thuyền, c r  thuyền or [c Ḥ  thuyền and any one of them will be followed by a plosive [c k  thuyền, [c c  thuyền, [c t  thuyền or [c p  thuyền or their respective nasals. The question may arise in such cases whether the final syllable should be taken to occur after these semi vowels or after those plosives or nasals. What immediately precedes is only the plosive or nasal and therefore the semivowel which do not precede it need not be immediately taken into consideration.

III.

According to the reading of the text accepted by Ḫampūraṇar the [c u  thuyền occurs as a shorter [c u  thuyền only when it is an utterance final and not merely a word final. That is to say, if other words follow the shorter [c u  thuyền it ceases to be a shorter [c u  thuyền. The [c u  thuyền there becomes the ordinary short [c u  thuyền. Tolkāppiyar however states that
in the midst of word combinations such as phrases and compounds also the shorter \( \text{u} \) \( \text{J} \) occurs. This is according to the interpretation of Ilampūranar who takes it generally that the shorter \( \text{u} \) \( \text{J} \) does not occur except as utterance final. The particular environment in which the shorter \( \text{u} \) \( \text{J} \) occurs as the word final even though it is not a utterance final is described in ff. 410. If the final syllable \( [\text{ku}] \) \( [\text{ou}] \) \( [\text{tu}] \) \( [\text{tu}] \) \( [\text{pu}] \) or \( [\text{ru}] \) \( \text{J} \) is preceded by a closed syllable ending in a plosive then the \( \text{u} \) \( \text{J} \) continues to be a shorter \( \text{u} \) \( \text{J} \) provided it is followed by a word beginning with a plosive in such a circumstance as to double the plosive according to the sandhi rules. In that way one gets two kinds of shorter \( \text{u} \) \( \text{J} \) (1) occurring at the end of the individual words as utterance final and (2) in the midst of combination of words.

This however is not the interpretation given by Naccinārkkiniyar, and later grammarians. During their time the shorter \( \text{u} \) \( \text{J} \) remained as such whether it was a word final or an utterance final. Therefore they adopted a different reading, for instance, \( \text{miraiyum} \) in ff. 47, instead of \( \text{nilaiyum} \) adopted by Ilampūranar. The sutra on about the shorter \( \text{u} \) \( \text{J} \) as occurring in the midst of combination of words has to be explained by them. They interpret it to mean that in certain particular environments the shorter \( \text{u} \) \( \text{J} \)
suffers further shortage. The \( \varpi \) there to start with was perhaps nothing more than a kind of release in that environment. The later day grammarians called this further shortening of \( \varpi \) as *kurriyal-u-kara-k-karukkan* probably will be introducing a third kind of shorter \( \varpi \). Tolkâppiyar’s general method of description of the all the dependent sounds seems to be against this kind of interpretations with reference to every dependent sound he speaks of their occurrence in individual words and again in peculiar combination of words; in all those case there is no question of further shortening. Péraciriyar also accepts the reading adopted by Ilampûranar.\(^{12}\) Even the later day authors do not assert that the shorter \( \varpi \) suffers further diminution when occurring in the midst of combination of words. Why then treat the shorter \( \varpi \) alone in a different way? Therefore Naccinârkkipiyar commentary has to be explained in terms of the change in the Tamil phonology which has occurred by his time. So that commentary however cannot be true to Tolkâppiyar’s age.

IV.

There is another change which has taken place by the time of Naccinârkkipiyar and others.\(^{13}\) It has been pointed out that the shorter \( \varpi \) was an allophone of the
phoneme the short $\hat{\iota}$ occurring in complimentary distribution with the other. But Naccinärkkiniyar refers to the shorter $\hat{\iota}$ and the short $\bar{\iota}$ contrasting in the same environments in words like kātu, kātātu, murukku and teruttu. If the $\hat{\iota}$ is short, then these words are in the imperative mood; if the $\bar{\iota}$ is shorter then these words are nouns. In modern pronunciation one has also different intonations in these two cases. But this may be a later development. Whatever be our pronunciation, Naccinärkkiniyar who has observed the difference seems to suggest that these two allophones the short $\hat{\iota}$ and shorter $\bar{\iota}$ have really become two phonemes by his time.

Further Naccinärkkiniyar states a further distinction in the sandhi; that is, when a vowel follows the short $\hat{\iota}$ there will be a glide occurring; whereas in such cases, the shorter $\bar{\iota}$ will itself disappear and the following vowel will form a syllable with the plosive preceding the original shorter $\hat{\iota}$. According to him the final $\hat{\iota}$ in perumuracu and tirumuracu are short because they are Sanskrit words whilst the $\bar{\iota}$ in tarukku and anukku is the short $\bar{\iota}$ because they words are verbs, as distinguished from nouns, as stated above.
The sutram ff. 68 speaks of the shorter $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ occurring in the initial syllable of the word $\text{mu\text{nj}}$ without affecting or changing the meaning, though he seems to feel as stated in ff. 67, that $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ in the initial syllable is often pronounced as the shorter $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$. Ordinarily wherever the sound is changed, there is a change in the meaning, also and $\text{llam\text{puran\text{ar}}}$ illustrates it by contrasting $\text{naku}$ with $\text{nak\text{u}}$ where the short $\bar{\mathrm{a}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ and long $\bar{\mathrm{a}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ are phonemes. Both $\text{Nacsin\text{arkk\text{in\text{iy\text{ar}}}}}$ and $\text{llam\text{puran\text{ar}}}$ point out that the difference between shorter $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ and short $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ consists in the unrounding and rounding of the lips respectively. Of course $\text{Tolk\text{app\text{iy\text{ar}}}}$ has not mentioned this; he emphasises that the short $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ and shorter $\bar{\mathrm{a}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ differ in quantity. Whatever might have been the state of affairs in Tolkëppiyar's age, by the time of $\text{llam\text{puran\text{ar}}}$ the shorter $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ was pronounced as an unrounded $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ and this state of affairs continues to the present times.

In ff. 68 where Tolkëppiyar speaks of the non alternation of meaning, he is only emphasising a free variation of short $\bar{\mathrm{u}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ and shorter $\bar{\mathrm{a}} \bar{\mathrm{a}} \bar{\mathrm{j}}$. If Tolkëppiyar looked upon the shorter $\bar{\mathrm{a}} \bar{\mathrm{a}} \bar{\mathrm{j}}$ as a different phoneme, he would have mentioned the change in the meaning also whilst defining the
environments for the shorter ə u ʃ. Therefore one cannot accept Naccinārkkiniyar’s view as those of Tolkāppiyar’s view, but the case of the free variation of the short ə u ʃ and shorter ə u ʃ in the word mun tai is important. The original form of the vowel in the second person singular nin and also in the second person nominative plural m yi in ə i ʃ. But in the bound forms the plural is found as gum. The consonant ə m ʃ succeeding the ə i ʃ seems to labialise that vowel into ə u ʃ. To start with, it was not pronounced as the short ə u ʃ but perhaps as an unrounded ə u ʃ as a kind of a centralised ə i ʃ. This was the general pronunciation. But perhaps due to the force of the written form or otherwise, the initial ə i ʃ of the initial syllable in that word came to be pronounced as a completely rounded ə u ʃ in later times. But in the age of Tolkāppiyar the later tendency was just beginning to be felt. Perhaps there were other ə i ʃ endings also becoming ə u ʃ. The noun roots, for instance, seem to be ending in ə i ʃ as may be seen in the words ariya, periya, kariya, and ciriy-ilai. The roots seem to be ari, peri, cir; but even by the time of Tolkāppiyam these roots have developed the alternant forms ciru, paru and aru where the ə i ʃ had become ə u ʃ.
Because the shorter $\text{ʃ} \ u \ \text{j}$ probably started as a kind of release of the final plosives, it disappeared when it was followed by a vowel. There is no example of the final plosive contrasting with the word final shorter $\text{ʃ} \ u \ \text{j}$. This characteristic feature of the shorter $\text{ʃ} \ u \ \text{j}$ explains the various rules of morpho-phonemic alternations such as its disappearance before a word beginning with a vowel, the duplication of such final plosives and lastly the change of its preceding nasal into its respective plosive in compounds (of course with exception). There are cases where one gets the final augment $\text{ʃ} \text{an} \ \text{j}$ or $\text{ʃ} \text{am} \ \text{j}$ (in some cases the final $\text{ʃ} \text{m} \ \text{j}$ or $\text{ʃ} \text{n} \ \text{j}$ of $\text{ʃ} \text{am} \ \text{j}$ or $\text{ʃ} \text{an} \ \text{j}$ disappears and the whole word behaves as a word ending in $\text{ʃ} \ u \ \text{j}$ doubling the initial plosives of the following word) and in these cases it is for consideration whether the original word itself may not be taken as ending in am or an (the other changes will be mentioned later on). In versification the shorter $\text{ʃ} \ u \ \text{j}$ plays an important part. There are four different metrical syllable (1) the monosyllable, (2) disyllable (3) the open monosyllable with the shorter $\text{ʃ} \ u \ \text{j}$ and (4) disyllable with the shorter $\text{ʃ} \ u \ \text{j}$, probably arranged in terms of increasing quantities e.g. māl, mālar, kācu and pīrappu.
VII.

The shorter $\sigma i \rightleftharpoons$ comes as an allophone of the shorter $\sigma u \rightleftharpoons$ whenever followed by $\sigma y \rightleftharpoons$. The $\sigma y \rightleftharpoons$ being a semivowel related to the front vowel $\sigma i \rightleftharpoons$ colours the preceding $\sigma u \rightleftharpoons$ and centralises it. Therefore the shorter $\sigma i \rightleftharpoons$ is only an allophone in complimentary distribution either with shorter $\sigma u \rightleftharpoons$ or short $\sigma i \rightleftharpoons$. $nāku + yātu \rightarrow nāki yātu$. This is explained as a mere alternation.\(^{17}\)

This is clearly a case of word combination. Therefore one has to look for the other variety of shorter $\sigma i \rightleftharpoons$ occurring in the individual words. Certain words which seem to be in the imperative mood consist of the root $miyā$, which appears as an empty morph in the age of Tolkāppiyam itself and $\sigma i \rightleftharpoons$ here coming after $\sigma m \rightleftharpoons$ also becomes the shorter $\sigma i \rightleftharpoons$ because of the following $\sigma y \rightleftharpoons$. Here the shorter $\sigma i \rightleftharpoons$ is more or like a release of the consonant $\sigma m \rightleftharpoons$.

VIII.

Before passing on to the third secondary sound one may pause here to consider the articulation of secondary sounds as described in Tolkāppiyam. \(^{18}\) ff. 101 gives this description. Tolkāppiyar refers therein first, to the three sounds which have no nature of their own except as occurring
as depending on other sounds. The next two lines therein explain their articulation. Their articulation according to \textit{Ilaampūraṇar}'s interpretation becomes one with the articulation of the sounds on which they depend, i.e. articulated at a place identical with or similar to the one where the latter are articulated. \textit{kāṭci} occurring in this context is here interpreted as the place of articulation. According to him though \textit{aṭṭam} comes after the short vowel, it has to be taken to be articulated as a sound depending on the plosive following it.\textsuperscript{19} The \textit{aṭṭam} is articulated according to \textit{Ilaampūraṇar} with the head-air.

\textit{Naccinārkkiniyar} makes the third line alone applicable to the shorter \textit{E i }\textit{a} and shorter \textit{E u }\textit{a}; and they are said to be born or articulated at the place where the consonants on which they depend are articulated i.e. the consonant just preceding other. The fourth line by-him is made applicable by \textit{Naccinārkkiniyar} to \textit{aṭṭam}; and \textit{kāṭci} is here interpreted by him as the heart or chest and he asserts that the \textit{aṭṭam} is articulated with the "chest-air" or air from the chest. He also takes the word \textit{tammivalpu} in the second line of the \textit{sutra} as put in apposition with \textit{munru} 'three sounds'. \textit{Naccinārkkiniyar} as already noted is for tearing away the words from their proper places to be attached
to other words in other distant places. He further adds that there are others who state that the āytam is articulated with the "throat wind" and that some others take it as being articulated with the head wind.

It is clear that the latter school is represented by Ilampūraṇar. Paṇḍanti follows Ilampūraṇar. But instead of speaking of the head wind he speaks of the head as the place of articulation. In this way every thing becomes a riddle.

But all are agreed that the shorter Ļ i ġ and the shorter Ļ u ġ are articulated at the place where the consonants preceding ġ with Ŀ are articulated. How can a vowel be articulated at the place where a stop or a consonant is articulated? The only way in which one can understand this statement is to take the shorter Ļ u ġ and short Ļ u ġ as something of a sound heard when the consonant is released. The shorter Ļ u ġ in that sense represents the sound produced when the plosives are articulated with some kind of a vowel released. This is a peculiar pronunciation of the Tamilians. It had already been pointed out that the release sound came to be recognised as an Ļ u ġ vowel; and in course of time the shorter Ļ u ġ came to be pronounced fully
as a rounded \( \tilde{u} \) except when it was utterance final. So also the release of the plosives and the release of the other consonants like \( \tilde{m} \) because of their being followed by \( \tilde{y} \) came to be related to the front vowel; it naturally came to be recognised as being similar to the \( \tilde{i} \) sound. If the shorter \( \tilde{i} \) and shorter \( \tilde{u} \) are merely release sounds, they are not separated in their articulation from the sounds on which they depend i.e. they are articulated, as their release sounds. The consonants especially the stops have each their closure aspect and then the release aspect. The shorter \( \tilde{u} \) and \( \tilde{i} \) are really a sort of release sounds.

IX.

And passing on to the āymām, one finds its articulation is not made clear by the sutram or by the commentators. Perhaps the sutram was clear to the people of Tolkāppiyar's age. As with other dependent sounds the āymām also occurs in individual words and in the middle of juxtaposed words. It occurs in a word after a short vowel standing alone or preceded by a consonant.

The second requirement is that it should be followed by any one of the plosives; the plosives themselves
being followed by vowels. (c) \( \tilde{v} - j \) aytam \( \subset P V \) where 
\( c = \) consonant, \( \tilde{v} = \) short vowel, \( P = \) plosive. On
their top in their written form the consonants have a dot or
pulli and therefore they themselves came to be called pulli.
In this sutram the aytam is spoken of as pulli and therefore
must be taken as a consonant: of aytappuli and it follows
the short vowel precedes one of the six plosives. That is
the meaning of ff. 38. Because it is a consonant, Ilampūra-
par states that there is no support or vehicle required for
it as is required by a vowel like the shorter \( \subset i j \) and
and \( \subset u j \). The two requirements given (short vowel and
plosive) explain the environment. The vowel occurring after
the plosive is in most cases the shorter \( \subset u j \) though in
some cases other vowels also occur as in vekkāmai. The
aytam is written as \( k \) by the Tamil lexicon. Naccinārkkiniyar
repeats the same explanation though he gives more examples
than Ilampūrapar. So much for the aytam occurring in a
single word.

The next variety of aytam is that which occurs
at the juncture of two words. When the ending of the first
word and the beginning of the second word come together, here
also the sound of aytam occurs. This is the interpretation
of Ilampūrapar. He also states that the environments are
the same as those given for the first category. Nacciṅark-kiniyar, however, instead of taking the word icaimai, as referring to the sound of āyam, interprets it as referring to the half a mātra of sound assigned to the āyam. Because he holds that the shorter ṭ u ṭ occurring before another word beginning with a plosive suffers further diminution in quantity, he has to state that the āyam in the middle of two words does not suffer any such diminution. Ilampūranar’s interpretation has to be preferred, as being simpler.

The second category seems to occur according to the rules of sandhi. If one refers to the chapter on pūparcci in Tolkāppiyam three sutras seem to be important in this connection viz. ff. 369, 379 and 399. ff. 378 refers to words ending in ṭ u ṭ. They are closed monosyllabic words and when they are followed by words beginning with plosives the ṭ u ṭ becomes an āyam, when the first is not in an oblique case e.g., av... plus katiya becomes ak katiya. In the example given, the words beginning with other plosives are also given but the forms akciriva, ak tiva and ak periya are not found. If the nasal follows the ṭ u ṭ preceding it becomes the corresponding nasal. If vowels and semi vowels follow ṭ u ṭ it remains as it is. Nacciṅarkkiniyar states that this usage ak katiya etc. are very rare in his age.
He uses the word ārya in that context it may be taken as non-occurrence.

The closed short monosyllabic words ending in ģ l ģ or ģ l ģ when followed by any word beginning with ģ t ģ undergo a few changes. First of all the ģ t ģ of the succeeding word becomes ģ r ģ if preceded by ģ l ģ and ģ t ģ it preceded by ģ l ģ. The final ģ l ģ and ģ l ģ then become ģ r ģ and ģ t ģ respectively. But instead of this ģ l ģ and ģ l ģ may both become āytam. "The later rule according to the learned men is not a mistake." In another place referring to ģ l ģ, Tolkāppiyar says that its change into āytam is not barred. 

karpitu alternates with kārītītu and muttiūtītu with maṅkātītu.

The way in which Tolkāppiyar is stating these rules seems to suggest that the āytam rule is a rarer occurrence, either as a usage passing out of currency or as one slowly coming into currency. As one proceeds, it will be becoming clearer that it is nearer the truth to speak of it as an old usage slowly going out of currency.

1.

It was suggested that these dependent sounds are really allophones and this is borne out by the alternate forms given above. The āytam plus plosive seem to be an
allophone of the camediated plosive. But one may ask whether in the case of \textit{ak\_katiya} the statement can be justified.

The question arises in such places, whether the demonstrative base is the open short demonstrative sound or whether it is a short closed monosyllabic base ending in $\overline{C} v \overline{J}$. In many sūtras, Tolkämpiyar seems to suggest that the demonstrative base is the short demonstrative vowel itself. According to this kind of explanation, the word beginning with plosive gets its plosive doubled when preceded by a demonstrative sound. \footnote{30} If the following word begins in a nasal that nasal doubles. \footnote{31} If the following word begins in $\overline{C} y \overline{J}$ and $\overline{C} v \overline{J}$ or a vowel, the $\overline{C} v \overline{J}$ is interposed and this $\overline{C} v \overline{J}$ doubles when followed by a vowel. \footnote{32} In this kind of explanation it is not clear why the $\overline{C} v \overline{J}$ becomes in when $\overline{C} y \overline{J}$ or vowel begins the following word. It must be more natural to take the $\overline{C} v \overline{J}$ as belonging to the demonstrative word. \footnote{33} $\overline{C} y, \overline{C} iv$ and $\overline{C} uv$ are not unknown to Tolkämpiyar and he gives rules for $\overline{C} v \overline{J}$ endings, of these words. \footnote{34} When this $\overline{C} v \overline{J}$ ending is followed by a nasal, the $\overline{C} v \overline{J}$ becomes a corresponding nasal as already stated. If the $\overline{C} v \overline{J}$ is followed by a vowel or semi vowel it remains as it is and this was also referred to above. It therefore seems natural
to assume that the demonstrative \( \{ a \} \), \( \{ i \} \) or \( \{ u \} \) followed by \( \{ v \} \) ending is really the demonstrative base.

In that case akkutirai etc. should be taken not as \( \{ a \} \) plus kutirai but as \( \{ a v \} \) plus kutirai. This is one form. The other form is the form with the \( \text{aytam} \) \( \{ av \} \) plus kutirai, therefore becomes, also akkutirai 'these are horses'. If reference to this suggestion with akkutirai is correct, the form akkutirai may be taken as alternatively with akkutirai. Then in such cases one can assert the germinated plosive has its allophone \( \text{aytam} \) plus plosive.

XI.

But the question of the phonetic value of the \( \text{aytam} \) still remains to be answered. It is said that the \( \text{aytam} \) is articulated at the place where the succeeding plosive is articulated. There are six plosives in Tamil and no one sound can be articulated at all these six places. Therefore the \( \text{aytam} \) must also be taken as consisting of six varieties, corresponding to the six varieties of plosives. In that case the \( \text{aytam} \) followed by velar will be articulated at the place, where the velar is articulated, similarly \( \{ c \} \), \( \{ t \} \), \( \{ p \} \) and \( \{ r \} \). Now in modern usage the velar
āyom is pronounced as a velar fricative as ku as e, the others are not so very clear though they may be also called fricatives except perhaps $\frac{\alpha}{\beta}k_t\gamma$ and $\frac{\alpha}{\beta}k_r\gamma$. These latter two are pronounced like an $\frac{\alpha}{\beta}h\gamma$ followed by $\frac{\alpha}{\beta}t\gamma$ or $\frac{\alpha}{\beta}r\gamma$. This probably nearer the pronunciation in German$^{35}$. Probably because of this variation $\frac{\alpha}{\beta}k_t\gamma$ and $\frac{\alpha}{\beta}k_r\gamma$ are spoken of by later grammarians as belonging to a different variety, a variation of the āyom which suffers further diminution of quantity. Pavanānti and others will assign one quarter of an\(\frac{\alpha}{\beta}\) unit of sound and they call these āyatakku\(\frac{\alpha}{\beta}\)kkam. The author of Ilakka\(\frac{\alpha}{\beta}\)navilakkam does not admit this variety.

Naccinārkkiṇiyar in interpreting the sutram about the āyom occurring at the juncture of two words asserts that the āyom there occurs with its half quantity, that is without suffering a diminution as contemplated by Pavanānti and others. It has been already noted that the people spoke of the head as its place of articulation. If the āyom is pronounced as a palatal fricive, that is articulated at the dome of the mouth it will also be a cerebral like other cerebrals, articulated at the dome. This is only a suggestion. N.S. Allen refuses to accept this interpretation of the
cerebral sounds and prefers to take them as subjective descriptions like the statement 'a head breaking sound' etc. 
Naccinārkkinīyav ar asserts that the āytam is articulated with the air escaping from the chest or lungs. In that sense it must be a mere breath, that is, a \( \sim \) sound. Such a pronunciation is also heard but unfortunately the āytam is not now current in the colloquial. Therefore Dr. Caldwell has said that it is only found in the poets and is generally considered unfortunately as a pedantic invention of the grammarians forgetting that no grammarian can invent a sound. 

These are reasons for considering the āytam as a fricative of the plosive. For one thing, it is articulated at the same place where the corresponding plosive is articulated. Secondly it seems to be an allophone of the plosive; People often mistake it for Visarga in Sanskrit. The āptmānīya and jihvāmsūliya are similar to āytam plus \([P]\) and āytam plus \([K]\) respectively. The written symbol for the āytam consists of two vertical dots with a pulli like a peg in between. And this is sometimes asserted as being no other than the visarga.

The name āytam itself throws some light.

Some suggests, as already noted, that the word āytam is a
variant form of aśra where the ĵr ĵ disappears and the ĵr ĵ becomes ĵy ĵ. But the idea of aśra is very well expressed by the other term cārpu. Tolkāppiyar himself gives the name malipu to āyam in cēyulīyal. See malipu vappam or rhythm where the āyam is predominant. The other grammarians use this term with this meaning in mind. One can analyse the word āyam into āy (the root meaning something gradually fainting away) tu + am. This name therefore suggests a sound which is a weakened form of the plosive nearby. The fricative corresponding to the plosive exactly answers to this description. This pronunciation is still found in current usage at least with reference to the word e-kku steṭṭi. For all these reasons one may take it as the geminated fricative occurring as an allophone of geminated plosive.

Unless one takes it as a geminated fricative one will be getting an open short monosyllabic word at the end of which the shorter ĵu ĵ may not occur as required by the words like ak tu ĵ, ka kcu ĵ, etc. If there is only a single fricative one will be getting an open short disyllabic word at the end of which the shorter ĵu ĵ cannot occur. The āyam represented by dots, is only a
symbol to show that the plosive following it is a fricative and pronounced as such. The script form is not a symbol for any distinct sound. It simply denotes that it should be represented along with the subsequent consonant as a geminated fricative.

XIII.

It should not be pronounced separately apart from the fricative of the plosive, but even during the time of Tolkëppiyar the āytam came to be misunderstood. There are certain words where the sounds seem to be echoing, the sense as in ka₇ ru which means darkness and cu₇ ru which represents a particular sound produced by the movements of the palmyra leaves. In such cases, there was then an attempt to exaggerate the sound by lingering on the fricative, though in some places where the fricative, instead of appearing in its shortened form, has extended length. At such times probably people began to write more than one āytam symbol to represent the extra lengthening. Tolkëppiyar objects to this; they should not be according to him written with an additional āytam like ka₇ k ru cu k₇ ru. The āytam symbol cannot be taken as standing separately. It has to be taken
along with the following plosive with which it forms one full sound that is a fricative. The plosive may be followed by a shorter \( \mathfrak{u} \) but the shorter \( \mathfrak{u} \) as already stated is only a release of the plosive. Therefore the words like \( \text{e k ku} \), \( \text{ka k cu} \), \( \text{ka k tu} \), \( \text{ka k pu} \), \( \text{a k tu} \), and \( \text{cu k ru} \) have really fricatives, ending with a release. Tolkāppiyar speaks of the word \( \text{a k tu} \) as beginning with a demonstrative sound and ending with the āytam or fricative. Unless the interpretation suggested here is accepted \( \text{cuṭṭu mutalākiya āyta iruti} \) namely the word beginning with demonstrative and ending with āytam will be nonsense, as pointed out by others.

The tendency to treat the āytam symbol as a separate sound and to write down more than one āytam symbol probably developed, in spite of Tolkāppiyar's protest. The āytam gradually came to be a vowel. Gradually the āytam came to be voiced and what was called \( \text{oppalapelai 'consomantai cluster'} \) was not contemplated to include the āytam in ff. 40. It is difficult to say that āyta alapețai is contemplated in ceyyuliyal. But Naccinārkkiņiņiar feels that it is so contemplated, because by his time āyta alapețai came to be an ancient metrical device.
Therefore he wants to find a place for
\(\text{āyta alapetāi}\) and this ff. 40 comes in handy for him. In
this way he tortures the text to squeeze out his meaning,
he wants. The sutram seems to refer to certain onomatopoetic
and other terms. But Naccinārkkiṇiyar would interpret it
in such a way as to include all cases of \(\text{āyta alapetāi}\) not
only in onomatopoetic words but in all other words as well.
\(\text{molikkurippellām}\) is therefore split and interpreted by him
as \(\text{molikkurippu}\) and as \(\text{moli ellām}\) covering these two cases
referred to. Again \(\text{eluttinīyālā}\) is interpreted by Iḷampūraṇar
to mean that they will not be represented by separate
sounds or letters. Naccinārkkiṇiyar has to bring out the
sense that the \(\text{āyta alapetāi}\) will be represented by sounds
or separate letters. Therefore the word \(\text{iyalā}\) which is on
the face of it a negative, is interpreted as a positive,
on the pattern of the word \(\text{ceyyā}\). The word \(\text{eluttin}\)
is interpreted as 'like the consonantal sound', Tolkāppiyar
refers only to some of the voiced consonants getting an
extra lengthening for the purpose of metre. But in his
interpretation, Naccinārkkiṇiyar makes \(\text{āyta alapetāi}\) behave
like the consonants. The ending \(\text{ek kāk-kālaiyāna}\) which
generally in Tolkāppiyam has a locative significance is
interpreted by Naccinarkkiniyar as a nominalised verb, as referring to the words. The whole interpretation is so strange and artificial that the interpretations has only to be stated to be rejected. Though one may reject the interpretation, it is very revealing as giving us an insight into the historical changes which had occurred from the times of Tolkāppiyar to the times of Naccinarkkiniyar.

XIV.

Veṅkaṭarājalu Reddiar objects to the interpretation of Iḷampūṟaṇar also. But Reddiar’s interpretation is neither clear nor definite. He seems to suggest that the onomatopoetic word where the āyam is patent enough (a kākkaḷaiyāṇa) it should be written with a symbol, other than the āyam. It is very difficult to understand what he means. He goes on suggesting a still another meaning wherein the āyam will be written only when the āyam sound is shortened and not elsewhere. But Veṅkaṭarājalu Reddiar concludes by admitting that the sutram is an enigma requiring further elucidation. But as it is, if one understands the history of the āyam Iḷampūṟaṇar’s interpretation is the most unobjectionable as far as explaining Tolkāppiyam.

It was stated in the last paragraph that the
āytam came to be voiced and it occurred as an aḷaṇṇṭai as well. When one understands its voicing, then the sound will be classed with the nasals and vowels which have mitarruvali (voicing). Naccipārkkhiṇīyar's commentary is important because he states in his commentary on ff. 101 that there were people who assign mitarruvali i.e. voicing to the āytam. All the statements by the conflicting commentators seem to get reconciled, once they are placed in their historical perspectives.

In passing it may be noted that in Namțaḷvīr's poems the āytam as a separate sound rhymes with ṭy ṭaktu 45 rhymes with cəytu, and there is a reading of a Namṇūl sutraṃ which will suggest ṭa k ṭai 49 and we have the inscriptive evidence for ka k cu being written as kəyəu 49.
CARPU E LUTTU.

(Dependent sounds).

Reference.

1. I. ff. 1
2. I D. p. 9
3. centamil xxiv p. 160
4. I ff. 1 and 2
5. I ff. 36
6. Ibid 46
7. Ibid 407
8. XII p. 122
9. I A. pp. 17 (ff. 37) and 136 (ff. 409)
10. I B. pp. 39, 40 (ff. 37)
11. I C. p. 47 and IX. p. 31
12. III B. p. 244
13. I b. p. 56 (ff. 68)
15. I A. p. 26 and I B. p. 56 (ff. 68)
16. I ff. 3 and 12.
17. I ff. 410
18. Ibid 34.
19. I A. p. 34 (ff. 101)
20. VI ff. 87
21. I ff. 38 and 39
22. I A. p. 17 (ff. 38)
23. Ibid 18 (ff. 39)
24. I B. p. 4 (ff. 39)
25. I D. p. 49 (ff. 39)
27. I ff. 149 and 150
28. I ff. 369 and 399.
29. XVIII. p. 468 Vol. II p. 757
30. I ff. 31, 204, 205 and 236 etc.
31. I ff. 204.
32. Ibid 304.
33. Ibid 205
34. Ibid 21 and 378
35. VI ff. 97
36. Ibid 99
37. XIII. p. 24
38. XIV. p. 130
39. XVIII. p. 467
40. I D. p. 9
41. centamill Vol. XXIV. p. 159 - 162.
42. XIII. p. 125
43. I ff. 40
44. Ibid 422.
45. I C. p. 39
46. Ibid
47. roman Vol. II p. 757