The shorter $\varphi u \varphi$ endings are separately dealt with probably because they could not be specifically stated as vowels or consonants. They are vowels but they get a pulli 'dot' in their written form; they also behave in sandhi in a way different from vowels. The classification of shorter $\varphi u \varphi$ and the change which shorter $\varphi u \varphi$ undergoes when followed by other words beginning with $\varphi y \varphi$ etc. have already been dealt under $\text{c̨ārpu aluttu}$ (Supra pp.12-13). It was also explained under the discussion of shorter $\varphi u \varphi$ that shorter $\varphi u \varphi$ when followed by $\varphi y \varphi$ becomes the shorter $\varphi i \varphi$.

II.

Venkataarājulu Reddiar thinks the $\varphi u \varphi$ lost is the fully rounded $\varphi u \varphi$ because when other words follow the shorter $\varphi u \varphi$, it becomes the fully rounded $\varphi u \varphi$. Other commentators agree with Nācchinārkkiṇīyar in saying that the shorter $\varphi u \varphi$ is always remains as it is whether it occurs in word final or in utterance final.
III.

neṭil toṭar and uyirttoṭar shorter $\text{ʃ ∫ u ʃ}$

when succeeded by words, beginning with plosive and standing
in case relationship, follow the rule of the doubling of the
following plosive though as the next sutram states there are
exceptions. The commentators try to bring in the optional
rule of the coming in of the augment as an implication of the
sutra, but it is very doubtful whether those instances can
belong to the age of Tolkāppiyam.

ɪṭaiyoruttottar and āytattottar according to
the scholars follow the rule of no change. vanroṭar and
menroṭar get the following plosive doubled. In menroṭar the
nasal becomes the plosive corresponding to the plosive follow-
ing it. The last line in ff. 414 runs thus: 'valloṛru
iruti kilaiyorṛakum'. This is taken as an instance of
conjunctive compound occurring with predicates and thus giving
two sentences, iruti valloṛru and kilaiyorṛu ākum. The
first is taken to refer to words where the nasal is a homorganic
nasal and where it becomes its homorganic plosive occurs with
the plosive following it. kilaiyorṛu refers to non homorganic
nasals like alveolar and cerebral nasal occurring before other
plosives and getting themselves changed into their respective
respective plosive e.g. enku and enpu becoming etku and erpu.
Vahkataraju Reddiar points out that vallorru iruti kilaiyorraru
really defines only the homorganic nasals and according to
him the change of the non homorganic nasal is a later day
usage based on the analogy of the first.

IV.

The names of trees get the augment \( \ell \) am \( j \).
This seems to imply that the nasal of this augment coming
before the homorganic plosive has become a plosive and before
other words, it usually does not undergo any change. This
is made clear by the subsequent sutram which speaks of names
of trees. Some words meaning the trees do not get the
homorganic nasal converted into their respective plosive.

The question is raised by Naccinarakkiniyar
whether maram includes the pul variety. maram is said to
refer to those plants where inner portion is hard. pul is
said to refer to those plants where outer portion is also
hard. He points out that though maram is elsewhere distin-
guished from pul in marapiyal, here it includes pul also,
though it may be a contradiction of Tolképpiyar’s specific
statement in marapiyal.

The coming in of \( \{am\} \) occurs with reference to
metiltotar and vallorruttotar. And these have to be learnt by a study of traditional usage. These refer naturally to non tree words.

There are also other words which get the augment ț akku ț and where the homorganic nasal does not undergo any change. kunnakkukai and manrappennai are given as examples but kurnam and manram are also found to occur. Venkataramulureddiar feels that this sutram by specifically mentioning kilaimoli refers to words denoting a community. kilaimoli according to him is kilaippayar. Perhaps words like kurtumpu in the phrase kurtumpurintu occurs and one may have kurtumpakkuthi the clan of kurtum as though Venkataramulu Reddiar states that there are no examples available.

V.

The numerals are said to get the augment{an} which has been prescribed for them when they take case signs.

As usual specific words are then taken up for discussion at the end of this section. veantu and penpu get the augment{in} and of these penpu is not objected to even if it gets{am.} veatu and aktn get{an} even as they do
when they are followed by case signs.

VI.

The non-case relationship is taken up, and for the sake of continuity forms like ektu, iktu and ukku are taken up. When these are followed by vowels the āyam disappears. When non-vowel follows, the āyam does not disappear. The reason for these changes are not clear. Is it that the āyam in a sense shows that the plosive following is voiced when a vowel which is a voiced sound follows it? When it is followed by words beginning with consonant this does not happen. But it has to be mentioned that the nasals and the semi vowels are also voiced consonants; and if so why should not the plosive in the syllable preceding them be voiced. Therefore it looks that the fricative pronunciation continued only when a vowel follows and not when a consonant follows.

The next sutram refers generally to all combinations of non-case relationship, which as usual follow the rule of no change. The exception is when the first word is vallorruttotar. This exception will be unnecessary if the previous sutram is interpreted as stating that the non-case relationship also will follow all the rules mentioned above i.e. for case relationship. A series of examples are
given by commentators, applying the case relationship rules
to non-case relationship. But it is very difficult to say
that these are usages of Tolkāppiyar’s age.

The next sutram is something akin to ff. 159
which dealt with words beginning with demonstrative and
interrogative bases; but here the ending is the shorter \( \_<u \) 
mellorruttotlar. These get the doubling of the plosive of
the second word. Of these, \( \text{yāṅku} \) however may optionally
follow the no change rule. But all these four words do not
themselves undergo any other change.

VII.

There is a sutram according to which \( \text{untu} \)
where followed by words beginning with a plosive becomes \( \uparrow \).
This seems to be like ff. 372. This is probably an ancient
usage. As Venkaṭarājulu Reddiar points out it is \( \uparrow \) which
has become \( \text{untu} \) probably with a formative suffix \( \text{itu} \), a for-
mative which in later times has come to signify neuter singular
suffix. But Venkaṭarājulu Reddiar is wrong in saying
that in this \( \text{untu} \), \( \text{tu} \) which is only a formative could be
identified with \( \text{tu} \), the neuter singular suffix. \( \text{untu} \) the
neuter singular predication should be distinguished from this
untu which occurs as a predicate of all nouns.

VIII.

The words of direction end in shorter \( \text{u} \text{j} \) and these are next taken up for consideration. When two words of direction combine, there is an augment \( \text{u} \text{j} \) coming in between them. The next sutram speaks of other changes occurring, when according to commentators angular directions, like northwest, are intended. In such case the first word will be either terku or vatakku. The sutram says the \( \text{u} \text{j} \) with its plosive preceding it will disappear; if the word is terku the alveolar plosive \( \text{r} \text{j} \) in the middle will change into an alveolar nasal \( \text{n} \text{j} \). But in vatakku, the disappearance of the velar plosive in the middle of the word is not specifically stated. The commentators read therefore an implied rule for such disappearance because of an extra word. Veṅkaṭarājulu Reddiar, however, points out that when the law of convertibility of surds into sonants did not apply, vatakku must have been written as only vatakku and that when the pronunciation of the intervocal plosive changed into one of voiced plosive, the additional \( \text{k} \text{j} \) was introduced in writing to retain the old pronunciation of an unvoiced plosive.
He gives other examples which behave like this: pāku pākku,
etc. All these examples of gemination are post-Tolkāppiyam
usages according to him.\textsuperscript{32}

II.

The last subject to be dealt with under this chapter is the combination of numerals with numerals and other
words. In this discussion, the methodology differs violently
from that followed for the description of the sandhi rules
given till now. When two words combine together the changes
have all been given in one sutra. But when coming to the
numerals the changes in relation to one sandhi have to be
described in a number of sutras. This resembles one of tokai-
marapu but even there the changes are not discussed piecemeal
as here. For instance, one to nine are taken up for explain-
ing their changes when followed by pātta 'ten'. It is
first stated the final syllable of all these numerals consist-
ing of a consonant and a shorter \textsuperscript{33} \textsuperscript{-} u \textsuperscript{-} disappear. In
relation to this, then follow a number of sutras referring
to each one of the numbers one to nine when they came before
the word pātta, thus changed. The same scheme is followed
when numerals are followed by measures and weights and these
are said to follow the rules already laid down; and the subsequent sutras give the changes in the numerals wherever such changes differ from what has already been stated. These are treated separately according as the following word begins with a plosive or otherwise.

ff. 460 describes the behaviour of the numerals when followed by *nūru* 'hundred'. These are said to follow the general rule. The subsequent sutras give exceptions to this general rule.

ff. 464 and the following sutras give the behaviour of numerals when followed by *āvram* 'thousand'. It is curious that there is no general rule as in the case of hundreds, weights etc. Perhaps there was a line after the first line of ff. 464 prescribing the linkage perhaps like the second line of ff. 446, *kīlanta iyala tōpruṅkāi*. In that case the present second line in ff. 464 should be a separate sutram which begins to explain the exceptions.

When *nūrāvram* follows the numerals it behaves like *nūru*. If *nūru* is followed by the numerals one to nine, the alveolar plosive of the word *nūru* doubles. The same thing happens when *nūru* is followed by numerals denoting the tens. When *nūru* is followed by measures and weights,
it follows the same rule.  

Numerals denoting tens such as orupatu and irupatu are next taken up for discussion, when followed by numerals one to nine. The original form of modern pattu is paktu and this paktu becomes pattu in these combinations i.e. the āytam disappears and a plosive comes in because they (tt and ṝt) are alternate forms. No other change is mentioned. If after these terms āyiram occurs the augment[ in] comes in after the disappearance of the āyiram but without the coming in of a plosive in the place of āytam. The same rule applies when tens are followed by measures and weights.

This discussion closes with three sutras. The first deals with numerals when followed by other words beginning with plosive, semi vowel or nasal, and states that these will follow the optional rule of ānu becoming oru.

The second sutram deals with cases where the following word begins in a vowel. Here oru becomes or, i.e. the initial vowel is lengthened and the final /u/ is lost. This is part of a general rule that a closed long monosyllabic form occurs before a word beginning with a consonant and that an open short disyllabic form occurs before a word beginning with a vowel. The numerals two to nine preceding the word
follow the rule stated in ff. 446 where \( \mathcal{L} \) \( m \) \( \mathcal{J} \) is the following consonant. 44

I.

A sutra follows which has nothing to do with any shorter \( \mathcal{L} \) \( u \) \( \mathcal{J} \); really it must have come in puḻimayaṇkiyal where the \( \mathcal{L} l \) \( \mathcal{J} \) endings and the \( \mathcal{L} n \) \( \mathcal{J} \) endings are dealt with, if the ending of the first words are considered and in punariyal if the augments are considered. 45 This sutra states that in combination of two words implying case relationship, when the first word ends in \( \mathcal{L} l \) \( \mathcal{J} \) or \( \mathcal{L} n \) \( \mathcal{J} \) the augments \( \mathcal{L} w m \) \( \mathcal{J} \), \( \mathcal{L} k e l u \) \( \mathcal{J} \) etc. come in verse. This sutra is evidently misplaced in this chapter. Since it deals with augments not listed by Tolkāppiyar it can be argued that it is a later addition.

II.

ff. 482 is very important as explaining the coming\( \text{long} \) words which cannot be explained in terms of combination because of the difficulty of recognising two distinct words therein. kuraiccol here mentioned is interpreted as uriccol. Čēnāvaraiyar calls these dhatus or 'the roots'. 46
It is said these cannot be separated and discussed as separate units; these occur as bound forms and there also these do not follow any uniformity of procedure e.g. vantān, varuvān; they have alternant forms. The papputtokai compound is made up of an attribute and a head. This sutram states that the attribute should be really a noun agreeing in gender with the head word but there is such gender suffix appearing in the compound. Such agreement is necessary only in Sanskrit and not in Tamil. It is not clear why Tolkāppiyar emphasises this concordance. The vinaittokai is a compound of a verbal root and a noun; the root has the force of a past relative participle or an aorist participle. As there are these two possibilities, the compound cannot be definitely split; because Tolkāppiyar feels it is a compound depending on the context for its specific meaning.

He also refers to compounds formed by numerals coming before other numerals. These numerals are so transformed that it is difficult to recognise the base forms. There may be other such combinations. All these are considered to be marūṇa 'telescoped terms which are beyond recognition as two different words.' Their combination is not clear and hence not to be treated in the chapters
on sandhi. This is the interpretation given by Prof. T. P. Meenakshi Sundaram (Commemoration volume presented to K. A. P. Viswanathan). On this basis certain sutrams had already been referred to in this thesis as not probably belonging to the age of Tolkappiyar.

The last sutram gives the general exception. But one wonders why there should be the former sutram ff. 405 at the end of pullimayyankiyal which can be safely omitted in view of this sutram especially when there is no such sutram at the end of uyirmayankiyal.

If changes not mentioned here occur in literary composition and also in colloquial usage and if even after changing beyond recognition as maruu, these and others seem to follow rules which look different from what had been described as their nature in this book, the wise should after careful research, know the truth about them from the usage. This is the meaning of the last sutram.

The commentators show many examples under this rule as being exceptions to the various sutrams. Evidently they are post Tolkappiyam usages or dialectal varieties.

XII.

It is better to see separately how the sandhi
changes are explained for the words like tonnu and tollayiram. The absurdity of such explanations reaches its climax when these are explained. Here is the rule for tonnu in ff. 445.

\[
\text{oppatu} + \text{paktu} > \text{oppaktu} + \text{pattu} > \text{toppaktu} + \text{paktu} > \text{toppaktu} > \text{ton} + \text{tu} > \text{tonnu}
\]

ff. 463 is the rule for tollayiram. There is no rule for the loss of pattu unless we interpret that the first word behaves as in tonnu except for the change nn becoming 11

\[
\text{oppatu} + \text{nuru}
\]

\[
\text{ton} (\text{pattu}) + \text{nuru} > \text{toll} + \text{nuru} > \text{toll} + \text{uru} > \text{toll} + \text{aru} > \text{toll} + \text{airam} > \text{toll} + \text{airam} = \text{tollayiram}
\]

These are parodying the sandhi rules.

The aim of the author of the sutras, wherever he may be, is to show perhaps a foreign student who has to learn the basic numbers on to ten, hundred and thousand to arrive for himself at the form of the other numeral combinations in a mechanical way, without caring for the probability of such changes occurring either on phonological or morphological grounds. This method is helpful to a foreigner.
though very very confusing to the native speaker of the language.

The easier way will be to say oppatu + nūru always occur as tollāyiram. The explanation of other combination of numerals also proceed on this basis instead of giving the variant forms above in the various environments, without going to the details of the change of every sound in the combination.

The method cannot be said to be that of Tolkāppiyar. Perhaps a later student found a lacuna and introduced these sutras. If these sutras are removed as later additions, then the general exception mentioning the numeral compounds should be taken as referring to all numerical combinations which Tolkāppiyar looked upon as marūna and merely to forms like ovvonru, ivvirāyru where the same number occurs before the same number a restriction which the commentators had to introduce in view of the other sutras on numbers in this chapter which they consider as genuine.

There are other such sutras in the other chapters which might be therefore attributed to the same student. Such sutras were also referred to under this category in this thesis itself.
Kurriyalukarappunariyal.

Reference.

1. I ff. 105
2. I ff. 410
3. I C. p. 165
5. I ff. 411
7. I ff. 413
8. Ibid 464
9. I C. p. 165
10. I ff. 415
11. Ibid 416
12. I B. p. 233
13. I ff. 417
14. Ibid 418
15. I C. pp. 167 and 168.
16. I ff. 419
17. Ibid 420
18. Ibid 421
19. Ibid 422
20. Ibid 423.
22. I ff. 425
23. Ibid 426
24. Ibid 427
25. Ibid 428
26. Ibid 429
27. Ibid 430
28. I C. p. 170
29. I ff. 431
30. I A. p. 144 and I B. p. 240
31. I ff. 432
32. I C. p.
33. I ff. 437
34. Ibid 446
35. Ibid 471
36. I ff. 470
37. Ibid 471
38. Ibid 472
39. Ibid 475
40. Ibid 476
41. Ibid 477
42. Ibid 478
43. Ibid 479
44. Ibid 480
45. Ibid 481
46. II A. p.
47. I ff. 483.