Morphophonology of Tamil: A Review of the Literatures

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Introduction

This paper is aimed at evaluating the contribution of literatures related to Morphophonology of Tamil. Tamil has larger bodies of works on Morphophonology ranging from aspects related to Morphology and Phonology interactions. Some of these studies were mere extensions of grammar thoughts (which will be addressed as non-research-based works), while others were research-based. Though both types of literatures have descriptions of the development of the Morphophonology from time to time, only a few of them have made significant contributions. This purposive study has reviewed some of the literatures having significant contributions and reviewed them accordingly.

The literatures have been selected based on two specific criteria, i.e. selected time-frame and regional variance. Research-based studies produced in the past three decades have been targeted for this purpose; yet, research papers with noteworthy contribution beyond the mentioned period also have been included, because of their exceptional contributions. The review also included literatures belonging to different regional varieties as much as possible, to establish their interconnectedness of the similarities and differences so that the wider perceptions of Morphophonology could be unveiled. Altogether 25 literatures have been identified fulfilling these criteria have been reviewed in this paper.

The selected literatures have been divided into two groups, based on applied methodology and the data. Methodologically the selected studies can be divided into three groups; namely, descriptive studies, studies that have employed various theoretical perspectives, and socio-linguistics studies. The descriptive studies delivered categorical explanation for various Morphophonological mechanisms and instruments, such as the locality of the interactions, its impacts and so on including various stages of the language development; the classical, the medieval and the present-day periods. The research-based studies, which are divided along the priority of the applied theory and applied data, grounded on five distinguished phonological theories; Descriptive, Generative, Derivative, Lexical Phonology and Optimality Theory. The socio-linguistics studies, particularly error analysis literatures from two different regions, Tamil Nadu (India) and Malaysia, provided description on the learners' and the appliers' attitudes towards Morphophonology. These studies have applied data of the spoken language. Studies belonging to both spectrums seemed to have concentrated on analyzing the morphology-phonology interactions and the inconsistencies resulting from the interactions.

To acknowledge the contribution of these studies as per se the review has been presented within two main headings and a few sub-themes, chronologically, as shown in (1).

I) Non-Research literatures
i) Classical Grammar

II) Research literatures
Linguistics Studies
a. Descriptive studies
b. Generative studies
c. Derivative studies
d. Lexical Phonology

e. Constraints based analysis

III. Extended Grammar Works
Classification of morphophonology
On empty morphs
On Vowel, Hiatus, and its permutations
Barred /u/
Other Studies
Error Analysis
Standardization of Morphophonology

The review of the selected literatures has been given under two main headings, Non-Research-based Literatures and Research Literatures. Studies belonging to the former comprise of descriptive works, which have mainly applied data from literary works, while the latter comprises of various studies with methodological approaches, including Generative, Derivative, Lexical Phonology and Constraint-Based Studies, which have applied data from spoken and Literary Tamil. The research-literatures consist of both research thesis and research papers.

The focus of the Non-Research-based Literatures and Research Literatures also verified from one to another. The two non-research based literatures chosen for the review were two classical grammars, which have solely depended on predetermined data from classical literatures. The research-based studies such as Beckman (1997, 2004), has offered ways to analyse selective phonological issues, such as Positional Faithfulness and Coda Condition. Vasanthakumari, Christdas and so on, which fall within the same category, have shown keen interest in verifying the morphophonological status of the language in whole, while most of the other research papers have focused on analysing either one of the following topics; emergence of empty morphs, their functional roles, its locality predictability, vowel hiatus and its misperceived conception. The subtle outcomes of the review have been presented orderly.

The rest of the chapter is organised as follows: Following this Introduction is review of Non-Research Literatures: it includes preview of two classical grammars. This is followed by review of Research-based Literatures and the sub-categories in the given order. Next to this is discussion, which highlighted the importance of the review and its implication on setting the trend and aim of the present study. The last section is conclusion, which concluded the chapter.

I) Non-Research literatures

i. Classical Grammar

In addressing the morphophonological setting of present-day Tamil, it is necessary to review two major classical literatures. The two major grammar works, *Tolkaappiyam* and *Nannuul* have provided significant introduction to the concerned field of study. The former is the first grammar treatise of the language, and the latter is a continuum of the former. *Tolka:ppiyam* (D.Albert 1985, Tolka:ppiyam 1996, Tolka:ppiyam 1996) , [1], the oldest grammar treatise of Tamil belong to 3rd BC[2] provided

[1] Tolka:ppiyam has been heavily reproduced with different interpretations in many ways in the past five decades. The listed studies are considered exhaustive and complete in covering every genre that has covered by author of the masterpiece.

[2] The date of Tolka:ppiyam has been debated for several decades. The mysteries surrounding its belongingness came to an end with discovery of three heroic stones somewhere close to Madurai, Tamil Nadu in 2001. From

authentic rules of sandhi for classical literary heritage (Ilakkuvanar 1994) The *Nannu:l* (Cinnasamy 1996, ka:ndikavurai 1997{ka:ndikavurai, 1997 #324)[3], a grammar work belong to 11th century, displayed an updated information of sandhi in Tamil (G.Vijayavenugopal, 1968 (Agesthiolingom 1990 S.V.Shanmugam., 1967) [4]. To show the development and the morphology-phonology related studies covering various periods, brief previews highlighting the significant contribution of these manuals have been included.

Tolka:ppiyam[5] (Ilakkuvanar 1994), the earliest grammar extent of the language, offered insightful explanation of mechanisms of morphophonology and its functional roles. The taxonomic manual[6] has introduced the morphological and phonological mechanism involved in modifying the interfaces. The author seemed to have treated the interfaces changes in the light of morphological perspectives rather than phonological motivation. The manual also offered some notes on the nature of Morpho-syntax behaviour elsewhere in the manual. Most of his opinions spread all over the manual within a range of chapters were given in (3).

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the similarities of writing system between the stone sculpture and the era of Tolka:ppiyam, it has been predicted that the Tolka:ppiyam must have come into existence somewhere between 300 BC and AD 300.

[3] Like the Tolka:ppiyam, Nannu:l also found in many interpretative forms. The listed works refer to the manuals which have been occasionally referred in this study.

[4]Shanmugan (1967) has offered an exclusive review for one of the commentary works (*Naccina:rkiniyar)*. The author has shown laborious effort to evaluate the traditional phonological theories and provided refreshed overview to understand the phonetics and phonological conception of the classical Tamil. The notes have been presented within five chapters (out of the 12 chapters), as follows.

i. *punariyal* (pg 101-105) - Chapter on *sandhi*
ii. *tokaimarapu* (pg 113-130) _ Chapter on compound word formation
iii. *uyirmayangkiyal* (pg 131-149) _ Chapter on epenthesis and other matter related to vowels in word formation
iv. *pullimayangkiyal* (pg 150-162) - Chapter on epenthesis and other matter related to vowels in word formation
v. *kuRRiyalukarappuNariyal* (pg 163-175) - Chapter on nature of shorter *u* and other matters related to words ending with shorter *u* word formation. In short, this book has revisited the characteristic of Traditional phonology with thorough care, where the author realigned some of the misconception and misinterpretations, along with adding some additional commentaries. His priority concerns around the juncture, an area where most of the commentators still disputes. He has pleased the readers with highlights on some of the outstanding explanation portrayed by *Naccina:rkiniyar,* especially where he differs from his predecessors. Notes on morphology-phonology evolved around following issues - verifying the nature of Tamil morphophonemic patterns and their pre-requirements, characteristic features and some important comments on contextual requirements. Special care has been given to explain two types of common rules that widely practised in Tamil - Compulsory rules and Optional rules. His main concern was to highlight the inconsistent explanations provided by the Traditional grammarians, including *Naccina:rkiniyar.* In overall, it is not obvious to claim that this critique manual grants critical outlook on conception traditional phonology of Tamil.

5 Among the oldest grammar extent work found in Indian languages, Tolka:ppiyam always considered as a text inherited with numerous authenticity. This grammatical manual for Tamil, one of the oldest Proto-Dravidian languages, consists of 1618 rules in the form of verses providing grammar information of classic Tamil. Although, all of them are given under different themes, they perform a single purpose, providing description for language application and literature criticism. All of those purposefully carved metrical verses inherit their renowned message in this one of the earliest language work in human history. According K C Pant the most striking feature of this manual is the structural exposition of the language and the science if the language in general. - K C Pant – Union Minister of Education, New Delhi, July 1985. D.Albert. Tolka:ppiyam, (1985) Phonology and Morphology and English, ITTS. Madras.

[6] The manual has employed taxonomic methodology - an instrument that believed to facilitate him in providing economic explanation for *sandhi.*

The sandhi, the classification of the interaction and the outcomes of the interaction, ought to be treated most significantly of all. *Tolka:ppiyam* has presented a practical method of classification[7] based on the necessary underlying inputs. According to the manual, there are at least three possible ways of classifying the *sandhi*; case-related classification, Interactive point based classification and Noun-Verbs[8] based classification. Ramaswami Iyer (1992) believes that the two psycholinguistic parameters: case-relation MP and non-case related MP, are most significant of all, while Rajagopalan (1999) and Kothandaraman (1995) seconded the second classification - interaction between vowel and consonants of preceding *(nirutta col)* and succeeding *(kuRittu varu kilavi)* terms *(Tolkappiyam 103 and 106.)* They believed that the privileged classification may render generous and concise generalisation. However, it is the third classification, interaction based on two main word classes found in Tamil; Noun, and Verbs, apparently earned the consensus of the author, compared to the other two choices. He has further divided this method as case-relational and non-case relational[9] interactions (the former is termed as *ve:RRumai vazi puNarcci* and the latter is *alvazi puNarcci* in Tamil) in his classifications. The priority of his classification well documented in sutras 148, 149, 311 and 315 (Tolka:ppiyam 1996, 1996) Tolka:ppiyam (Tolka:ppiyam 1996) and in sutras 108 and 109, belong to the chapter on Phonology. As for the outcomes of the interactions, the author verified that the language has four-fold prominent interactions in relation to phonology, morphology and syntax. They are namely; consonantal alternation, insertion, deletion of segment and natural assimilation. Among them, the deletion and natural assimilation have been treated as phonological exercises aiming to repair the ill-formedness of the structure, while the alternation and insertion were treated as morphologically related strategies. On top of this, insertion of epenthesis has been treated as part of Morpho-syntax reaction, as well. The influence of these methods is obvious in the present-day pedagogical grammars, where they have been received with little modification.

The richness of morpho-phonology related information found within this emergent work can be listed as under three main classes as follows:

[7] *Tolkaappiyam* provides wide range of descriptions on morphophonemic changes that take affect at intersections. The fourth chapter in *Tolka:ppiyam*, so-called *eluttatikaram*, is exclusively on TMP. Most of the theoretical aspects of Tamil MP have been extensively and precisely dealt in this chapter, which were supported by detailed explanation on MP process in the upcoming chapters. This chapter therefore serve as background venue for the other issues dwelt in the various chapters or elsewhere in the book.

[8] However, some argue that the four-fold morphological classification rendered by *Tolka:ppiyam* has its methodological weaknesses. A few Agesthialingom (1979), Caldwell (1987) doubt the validity of this classification with aid received from modern linguistics thoughts. They claimed that Tolka:ppiyar did not included bound morphemes such as particles and adjectives in his treatment on MP.

[9] *Tolka:ppiyam* exhibited constant concerned with MP involving case marker and nouns, for which he has advocated few sutras to provided comprehensive explanation. The information given in the chapter on *ve:Rrumai maangkiyal* (Tolka:ppiyam, 1996). The chapter begins with introduction to the case markers in sutra 113 and followed by notes on MP changes that emerge between the stem and case markers in sutras 114 and 115, while sutra 117 provided full detail of their individual occurrences. In sutra 118 and 119, the author provided list of epenthetic phonemes and morphemes and their exclusive functional roles. The empty phonemes and empty morphemes were given an extensive explanation in two chapters, '*puNariyal'* and '*urupiyal'*. In short, it could be concluded that the '*puNariyal* chapter was used to provide some information of the needed instruments to study the MP process, while the subsequent chapter provided some-detailed explanation on the issue.

i. MP based on vowels and consonants at word final and word initial

Vowel + vowel

Tamil does not permit adjacent of two vowels. In the unavoidable cases, a glide is inserted in between them. - /y/ and /v/

Vowel + consonant

Vowel + any stops [k, c, t, p], especially in the minimal disyllable words, the stops are doubled.

Consonant + vowel

Consonant + consonant

Glide + consonants [y, r, z + k, c, t, p] the stops will double.

Glide + nasal [y, r, z + nt, nj, m] the selected nasals will be doubled.

Lateral + stops [l, L + k, c, t, p] would alternate to retroflex R and dental t, respectively.

MP based on type of words

Noun + noun

Noun + verb

Verb + verb

Verb + noun

Morpho-syntax patterns

MP of case-relation (VeeRRumaip puNarcci)

MP involving casal markers (Urupup puNarcci)

MP involving semantic realisation (poRuL punarcci)

MP of non-case relation (alvalip puNarcci)

MP involving first case marker (ezuvaay punarcci)

MP involving eight case marker (viLi)

MP of conjunctions (ummait tokai)

MP of nominal compounds (irupeyaroddup paNuttokai)

MP of finite verbal form (vinaimurru)

MP of adjectives (peyereccam)

MP of finite adverbial forms (vinaiyeccam)

MP involving eight particles (idaiccol)

MP of reduplications (adukku)

MP of finite mutative forms (maruuvu) (Tolkaappiyam, 1996a, 1996b)

The massive account of morphophonological information delivered by the author distinguishes him from other descriptive studies that preceded him, both in terms of qualitative and quantitative contributions.

1.3.2 Nannuul

While Tolka:ppiyam has rendered extensive account of Morphophonology on classical Tamil, *Nannuul* (Cinnasamy 1996, ka:ndikavurai 1997, ka:ndikavurai 1997) the most obvious and notable literature belong to medieval period of Tamil, has offered the same for the development of MP in the later period. This well-known grammar work belongs to the 12th century has demonstrated the variety of mechanical changes that may occur within lexical and syntax interfaces, in well-organised manner. Although this manual has been widely accepted as good referential manual accommodating with

morphophonemic methodology of the 12th century, it offered relatively little contribution to the advancement of MP studies in Tamil compared to *Tolkaappiyam.*

Nannuul, which resembles the predecessor in many ways, has provided significant contribution to acknowledge the Morphophonology of Tamil in many ways. Despite of most of the notes on mechanic of sound changes which are believed owing its explanation from *Tolka:ppiyam, Pavanathi,* the author, has offered classic introduction to acknowledge the varieties of word-level junctures under a chapter so-called, so-called, *pataviyal.* A word structure, according to him, may consist of two substantial elements; the base and the suffix as minimal, and as maximum as six sub-elements; that is, intermediate elements, Junctures and special character.
Word Internal Component and Word Formation

Base	+ Juncture/Inflectional juncture	+ Intermediate suffixes	+ Epenthesis	+ Suffix	
cey				kai	ceykai ‘the act’
va:z		k		kai	va:zkkai ‘life’
koL				kai	koLkai ‘principle’
col		n		a:n	conna:n ‘he said’
pa:r	t	t		a:n	pa:rtta:n ‘ he saw’
ta:	nt	t		a:n	tanta:n ‘ he gave’
paRa	nt	t	an a		paRanttana ‘they flown’

A closer look at the diagram would reveal that a ‘complete’ lexical item may involve at least four interactions and four repairing strategies. Let’s focus on the last example, *paRa-nt-t-an-a* > *paRantana* ‘they-have-flown’. Interactions occurred at four places, between the stem and juncture, between the stem and juncture and intermediate suffix, between intermediate juncture and epenthesis and between the epenthesis and the suffix. All of these word-internal interactions, which could be translated into interaction between morphology-phonology elements, involve four changes. In some cases, it might involve derived and non-derived environments, as well. The four repairing strategies: deletion, alternation and epenthesis, nominated by the author, in fact, are mechanical information that has been repeated from his predecessor. It is apparent from the foregoing explanation that the methodology of accounting word internal intersections is the pre-eminent contribution of the author, *Pavanathi*, presumably.

II. Research Literatures

The research literatures are divided apart by three key aspects - the preference of data, the applied theory and the dialectal forms. Some of these research works have carried out experimental studies - including application of various theoretical frameworks, while other studies have focused on contemporary issues - to meet the call of the time. Four of these studies which fall within the category of Linguistics studies have analysed the data of spoken Tamil, (while one has applied secondary data), while one of them has relied on Literary Tamil. The literatures also can be divided along their dialectal differences, as study of Tirunelveli dialect, study of Madurai dialect, and study of *Kanyakumari* dialect, and study of Malaysian dialect. The review of these literatures has been presented in the following order:

II) Research literatures

Linguistics Studies
a. Descriptive studies
b. Generative studies
c. Derivative studies
d. Lexical Phonology
e. Constraints based analysis

Extended Grammar Works
Classification of morphophonology
On empty morphs
On Vowel, Hiatus, and its permutations
Barred /u/
Other Studies
Error Analysis
Standardization of Morphophonology

1.4.1 Descriptive studies

1.4.1.1 Dialect of Vellar

Subramoniam (2003)[10] offers some significant notes on the morphophonology of the *Vellar* dialect, a dialect which is spoken in the southern part of India. The significant notes of MP carry individualities that are hardly noticed in Tamil spoken elsewhere. Altogether, 12 types of such morphophonological exercises, (as shown in (8)), have claimed to have an effective role at M-P Interfaces and Morpho-Syntax. The study also has verified that morphological and phonological apparatus play a crucial role in shaping allomorphic changes between two morphological boundaries with different values, as indicated below.

i. /i/ and /e/ before vowels > iy or ey respectively between stem and suffix

ii. a,u and o before vowels > av, uv or ov respectively between stem and suffix

iii. all consonants ending stems except those in –y and –v before word juncture

ii. after short vowel monosyllabic stems all Cs lengthen
iii. long Vy before y > V.y
iv. e before morphemic juncture > ay
v. all t-, ending N.sts. > -m ending ones everywhere except before case markers
vi. Phonemic actualisation of morphophonemic –q
vii. Shortening. After nasals, long stop > short stop ka:n.-p.- tu > ka:npatu
viii. Palatalisation

iq or yq + t > ic. Or yc
ik > ik.y
–nt>-nc

ix. Assimilation

d+t>dd

[10] This is his PhD dissertation submitted to the University of Edinburgh in 1968 publication of which was delayed for decades. Nevertheless, its inclusion is justified by its date of 'birth'.

R+n>RN
N+n>NN
N+t>Nd
L+n> LN

x. Reduction u
u > u between suffixes $V_2 + V_1 > V_1$ (Subramoniam 2003)

The chart shows some interesting outcomes. Few of the given morphophonological reactions are typical dialect-centric exercises, while others are common to Literary Tamil (LT). The last three phonological changes such as palatalisation, assimilation and reduction of /u/, ought to be treated as dialect-specific processes. They make a significant contribution to the morphophonology of Tamil as a whole, as other regional variants or LT do not have any.

Nevertheless, the explanatory defect deters readers from accepting these prominent findings without a second thought. Palatalisation, Assimilation and Reduction of /u/ are common phonological reactions in Tamil, but the highlighted examples turned them into a significant outcome. Since their significance remained unexplained an alternative move to validate them based on established knowledge produces a different result.

Let us focus on the assimilation of d-t in (8xi (a)). Obstruent such as /d/ is prohibited in word final positions in Tamil. Despite the restriction, the author claims assimilation of both lead to voice assimilation, /dd/. It is unclear why and where the, /d-t/ association is possible and they are altered to /dd/. Since the language prefers obstruent clusters or sequences of the same kind, say, /kk/, /cc/, /tt/ and /pp/ (gemination) within tauto-morphemes, it is impossible to receive /d/ and /t/ in adjacent positions at first place, (what's more the assimilation.)? Though the study has indicated significant morphophonological outcomes of spoken Tamil, its explanatory discrepancies have obscured the validity of their significance.

1.4.1.2 Dialect of Malaysia

Balasubramaniam (1989: 137-170) analysed the nature of morphophonology on standard spoken Tamil in Malaysia. It observes that morphophonemic of the standard spoken Tamil is divided into two significant classes; lexical morphophonemic and morpho-syntax. The MP studies in Balasubramaniam (1989) centred on the internal organisation of minimal sound-blocks, syllables. It claims that syllables and the properties of the participating sound segments are crucial in determining the outcome of interactions. Except for the information on phonological reactions triggered by the contact between syllable and segments plus indications on the form of syllable structure, as in (9 and 10), the study offers very little explanation verifying other outcomes, which creates doubts on his stance on the role of syllables on the study of Morphology-Phonology.

Nominals ending in consonants
CVC → CVCC / case suffix

All short monosyllabic nominal ending in consonants double the final consonant when followed by a casal suffix.; kaN + e = kaNNe 'eye-accusative'. All other consonantal ending Nominals other than

short monosyllabic Nominals of the VC structure take 0/ empty morpheme before the case suffix; ma:n + e → ma:ne (Balasubramaniam 1989:141).

Gemination of voiceless obstruents receives extensive elaboration in Balasubramaniam (1989). The study claims that the four voiceless stops, /k.c.t.p/, which usually geminate in intervocalic environments, are extended consonants which are applied to fill a phonological gap resulting from the interaction between participating components at intersections. His description on gemination is as follows:

(i) Lexical Morphophonemic

In a V+V structure where V stands for infinitives and V stands for finite or imperative verbs, the consonants k, c, t, and p are doubled after:

a) Infinitives ending in –a. Example: tara + connaangka = *taracconnaanga* 'they told to give'. In a VP + V structure (where VP stands for verbal participle and V stands for finite or imperative verb), the consonants k, c, t, and p are doubled after verbal participles ending in i, u, -y. Example: eddi + pa:r = addippa:r (Compound verbs). Nominal ending in ã that precede verbs with p-initials in a compound verb stem of the N+V type, drop the nasalization of the final ã and double the initial p- of the verb, as in the example of: a:ttirã + padu = a:ttirappadu 'feel angry'. When nominals ending in -ddu and –ttu precede verbs with –initials in a compound verbal stem of the N+V type, the p-initial of the verb is doubled, as in the example of : kaddu +padu = kadduppadu 'obey'.

b) Casal Noun + verb

Verbs with k, c, t and p initials double their initial consonants after nominals ending in accusative case marker –e and dative case markers, -akku, -ukku, as in the example of : enakku + teriyũ = enakkutteriyũ

(ii) Morpho-Syntax

In an adverb + verb structure (where Adv stands for adverb and v for verb) the consonants k, c, t and p are doubled after, the adverbs of time, Example: *ne:ttu, and ta:matama*:, adverbs of affirmation, Example: *kaNdippa:, niccayama*: adverbs of manner, Example: *a:seya:, veruppa:; ippadi, appadi*;

Interrogative adverbs, Example: *eppadati* and *etukku*
Adverb of time + verb : ne:ttu + conna = neettucconna
Adverb of affirmation +verb : kandippa + ceyna~ 'he wil certainly do it'
Adverb of manner + verb : ippadi + conna~ = ippadic conna~ 'he said like this'
Interrogative adverb + verb : eppadi + conna~ = eppadic conna~ 'he said like this'

(Balasubramaniam 1989: 116-166)

The given geminates share a common cause of appearance. Every voiceless obstruent geminates (double) in intervocalic positions regardless of lexical differences. Although the description intimates that the gemination flexibility within standard spoken Tamil in Malaysia and that of LT have similarities to some extent, the study did not offer details of similarities or differences, except for the value of their appearance.

The study also provides some over-generalised rules for certain morphophonological reactions. While discussing sound changes at the intersections, it concluded that interaction between coda and onset or vice versa and their phonological reactions in Tamil are divided into three main phonological rules:

(i) Rule I concerns within mono-syllabic nominal ending in consonants such as n, N, y, l, L and the plural suffixes or casal suffixes). The coda consonants usually doubled.

(ii)Rule II is concerned with the doubling of word initial consonants such as, k, c, t, and p. He has provided close to 11 environments in which this sort of doubling usually take place. Most of the rules resemble the MP rules suggested for the same environment in the literary Tamil.
(iii)Rule III is about nominal words that end in /du/ or /Ru/. According to him, nominals with $V:C_1U$ and $CVCVC_1U$ structure, where C_1 is either d or R, always doubles. In these cases, the /d/ will be replaced with /dd/ and the /R/ with /tt/. The given rule is just another verification of the same context in the literary Tamil (Balasubramaniam 1989: 166 - 170)

Although the study offers examples of descriptions of morphophonemic standard spoken Tamil, it does not totally detach itself from classical grammarians thinking. The study has given the impression that it is an elaborate description of classical grammar. Therefore, except for the verification of the rules concerned and the operation of the old morphophonemic mechanism in modern Tamil, the study has delivered relatively few significant outcomes. Selected methodology seems to be the factor which has mainly deprived him of his noble aim.

1.4.2 The Generative Phonology (a study of the Madurai dialect)

A generative study by Vasanthakumari (1989)[11] offers phonological treatment for morphology-phonology interactions in the Madurai dialect, a dialect which is spoken in the region located at the south-west of Tamil Nadu, South India. The study explains various generative rules of verb and noun formations and inflections, and the detail of morphophonology and mechanisms related to it in the form of rules and rule orderings.

Chapter Four of the book entitled *The Phonological Rules* offers the findings on morphophonology. It includes segment insertion, segment deletion, feature switching, contextual variation, consonant alternations and principles of rule ordering, which are conditioned by phonologically and morphologically derived environments (Vasanthakumari 1989: 88-121). The author believes that alternation patterns which differ from one another are 'characterized' by a minimal set of features (Vasanthakumari 1989: 87). Discussion on MP covers a range of morphophonological activities and pertinent issues related to it. Three of them are worth mentioning. First, is the topic on segment insertion having recursive application in the language, including the u-insertion, t-insertion, doubling of consonants, v-glide insertion, and y-glide insertion. Second, is palatalisation, and third is the level ordering in Tamil.

Insertion of /u/, a crucial phonological exercise in Tamil, has been extensively dealt in this study. Previous studies (Caldwell, 1987, Christdas, 1988/2006) argue that Tamil generally has been in the practice of adding /u/ to lexical words ending with selective stop segments. However, this is still in dispute as scholars have yet to reach a full consensus on its appearance and application. Some believe that it is a euphonic sound (Caldwell 1987, Samuel 1996), whilst others believe that it is an epenthesis (Christdas 1988, Vasanthakumari 1989).

[11] This study emerged somewhere parallel to that of (2006 #219) which used another influential theory in the Phonology, Lexical Phonology.

Vasanthakumari claims that Tamil has obligatory and non-obligatory u-insertions. An obstruent is inherently prohibited at word-finally, but if it appears in that position the grammar suggests automatic insertion of /u/, which is called obligatory /u/. Other obstruents that may freely occur in word-finally sometimes receive a /u/, which is called non-obligatory /u/. Vasanthakumari argues that glide /y/ behave differently, and do not receive non-obligatory /u/ as widely perceived, among other obstruents. She prefers insertion of /i/, instead, a stance which clearly correlates with that of Samuel (1996) and Caldwell (1987: 130), who also speculate that glide /y/ usually receives a euphonic /i/. In summary, Vasanthakumari asserts that spoken Tamil has numerous lexical items bonded with both obligatory and non-obligatory /u/.

The topic of palatalisation is another interesting outcome of the study. Palatalisation has never received a proper explanation in previous literatures of the language. She claims that palatalisation triggered by interaction between the base stem and intermediate elements (as in (12)) should be treated as feature switching.

tuni + nt+… → tuni +nc + … 'to dare…'
pati +tt+…→ pati +cc + … 'to read..' (Vasanthakumari 1989: 105)

According to the first instance, alveolar /t/ in the suffix palatalized when they are attached with stems ending with /i/. Both of them were palatalized after gemination in the second. Note that feature changing referred by Vasanthakumari in fact can be referred to as consonant lenition. Vasanthakumari also gives an account of rule-based level ordering in Tamil. She stressed that some lexical items involve few levels of change before surface; therefore, strata rule cannot be avoided in Tamil. The author lists five instances highlighting the significant intermediate levels in Tamil. The following is one instance.

ciri + t+…	Underlying representation
ciri + tt + …	Doubling of consonants
ciri + cc + …	Palatalisation
ciricc+…	(Vasanthakumari 2000: 120)

Accordingly, the output /ciricc/ has surpassed three levels; underlying forms, gemination and palatalisation. The double palatalisation occurrence is conditioned by the double alveolar stop, /tt/. The data allows her to conclude that Tamil involves at least three different levels. As an emergent study, the Generative Phonology of Tamil (Vasanthakumari 2000: 105) has offered a significant generative experiment on the Phonology of Tamil and offered some valuable findings for the advancement of MP.

1.4.3 Derivative study

The book entitled *Grammar of Contemporary Literary Tamil* by Kothandaraman (1999: 261-334) consists of two chapters enumerating vast lists of morphophonemic illustrations within a derivative approach. The manual lists 168 morphophonemic rules with recurrent applications, reflecting the status of present-day Tamil morphophonemics. Unfortunately, most of them are elaborated forms of classical grammatical works.

Despite being a good reference manual regarding the status of present-day Tamil, it not only contains some misleading information but also lacks in giving supportive explanations. Some of the findings have been introduced in an unfriendly manner, as can be seen in the following examples.

na:n + Pl_1 → na:ngkaɮ

na:n + Pl_2 → na:m

na:n + Pl → na:ngkaɮ

Pl = plural, Pl_1 = plural inclusive, Pl_2 = plural exclusive,

(Kothandaraman 1999: 261-334)

The examples demonstrate that the grammar derived three different outputs for the same stem word attached to a plural marker (which is unstated). The second example created an intriguing outcome - alternation of the input to a non-similar form, *na:m* 'us'., Since the given derivation rules (are left supported without) do you mean 'are not supported with' additional information, except for the outlined indication at the bottom, the cause of the alternation remained unexplained. It seems that the author's ambitious attempt to promote various complex issues in simplex forms was the root cause for the defects *(c.f. chapter 5&6).*

1.4.4 The Lexical Phonology (a study of the Kanyakumari dialect)

Christdas (1988), a significant linguistic study done within the framework of Lexical Phonology, is another dialectal study with special focus on the Phonology and Morphology of Tamil. Empirical data for the study was obtained from a dialectal Tamil spoken in the district of Nagercoil, in South India. The manual considers Phonology and Morphophonology as a single domain of study consisting of some interesting and controversial findings.

Although notes on morphophonology can be seen throughout the thesis, chapters on Noun[12] and Verb[13] formation provide a plentiful background of information on Morphophonology. The chapters introduce morphological issues arising from a number of primary and secondary affixes to stem words. Primary affixes are believed to bind more closely to the stem, while the secondary affixes distance themselves from the stems (as in 15) in word formation, similar to affixes in English. The former is known for conveying the primary grammatical meaning, and the latter which is also referred to as post-cyclic affixes and less productive in word-formation, conveys additional grammar sense to the structure they bond. Both the derivational and inflectional affixes are said to have distinctive

[12] This chapter has dealt extensively with the following issues; i) Discussion on inflectional morphology centered around six different structures of nouns; namely, noun stems, nominatives, oblique stems, case suffix, plural suffix and clitics. ii) Explanation on morphological and phonological constitution of various sound segments, including, obstruent final stems, apical gemination, p-final stems, nature of polysyllabic sonorant-final stems. iii) Status of monosyllabic stems iv) Notes on derivational morphology - suffixation of as vowel initial suffix, obstruent-initial suffix, sonorant-initial suffix, prefixation and compounding.

[13] The chapter on verb morphology has dealt with the following issues extensively; i) Discussion on inflectional verbs with special reference to two important structural patterns - temporal stems and pronominal suffixes; ii) Phonological conditions of gemination; governed gemination and automatic gemination; iii) Tense formation in relation to coronal and assimilation. iv) Discussion on irregular monosyllabic stems, with special reference to formation of past tense /nt/ and deletion of /c/. v) Notes on the derivational verb – formation of verbal participles and relative participles.

structural compositions. In short, the two chapters have a wealth of information on word-formation and the alternation taking place between them, and their involvement with strata.

The Basic Structure: Stem – Plural Marker – Case Marker – Clitics

The significant contribution of this study is, arguably, the verification of strata order and the number of levels involved in Tamil morphophonology. The study proposes that 'two lexical levels are adequate to handle the morphological processes of Tamil' (Christdas 1988: 365). The author claims that all phonological exercises found within the phonological structure of the language must belong to one of the two stratums as in (16). In other words, all derived nouns and verbs or inflected nouns or verbs in Tamil involve no more than two levels, as shown below.

I. Oblique
Apical-final stems Level 1
All other stems Level 2

II. Plural
a. V-final stems Level 1
b. All other stems Level 2
c. Nominative Level 2
d. Cliticization Level 2 (Christdas 1988: 365)

The point made by Christdas must be examined thoroughly. Previously we have seen the argument put-forth by Vasanthakumari (2000: 120) who claims that the language involves more than two levels, especially in cases where affixation leads to palatalisation. Vasanthakumari points out that palatalisation involves as a minimum three level orderings in the Madurai dialect, but Christdas claims that palatalisation involves no more than two levels in the Kanyakumari dialect. Although this raises doubts on the generalization of both studies on level ordering, Vasanthakumari's explanation that palatalisation must involve at least three levels seems convincing and acceptable.

Another controversial contribution of Christdas is classification of epenthesis which challenges 'the rule of majority' in Tamil. The epentheses have been classified numerically into four main groups: epenthesis 1, 2, 3 and 4, with no explanation for the chosen classification. Besides offering a range of significant contributions to Lexical Phonology of Tamil nouns and verbs[14], it also consists of some over-generalization. Perception on UR and epenthesis classification is one of them.

Christdas claims that 'all noun stems are consonant final in UR' (Christdas 1988: 349), a statement whose validity can be questioned. The claim can be reinterpreted as the language not having vowel-final stems. The truth, however, is quite the opposite. This can be verified with the help of the following examples ending with vowels: *valai* 'net', *talai* 'head, *kai* 'hand', and *malai* 'mountain'. Examining these examples through the given lens would produce the following underlying representations; *val, *tal, *k, and *mal, and these nominal stems must be grammatically sound.

[14] Harold Schiffman (1993) concedes that the thesis has missed some pertinent linguistics issues, such as deletion of intervocalic vowels. Schiffman claims that intervocalic -v- deletion in Tamil, an important phonological process that systematically takes its course in inflectional phonology, has eluded proper investigation among the researchers. He trusts that Lexical Phonology framework has the capacity of capturing these environments, but a study carried out within this framework such as Christdas (2006) failed to do so.

Unfortunately these bases neither qualify as minimal words in the Tamil[15] nor meet the condition of minimal phonological necessities defined by the prosodic phonology, especially the /*k/. The grammar argues that all stem words must be FOOT-BINARITY. Therefore, the given forms are ill-formed.

One may argue that the binary requirements of these stems could be filled through various phonological strategies when they fill the 'prominent' (stem) environment. The question of repairing is not an issue at all because the inherited phonological defects would simply deter them from being considered as stems in the first place. Having seen that the items have not met the minimal phonological requirements, it is apparent that the original assumption of Christdas, 'all noun stems are consonant final in UR', does not stand as a valid premise.
The classification of epentheses[16] especially that related to epenthesis /u/ and /i/ given by Christdas must also be questioned. It is important to note that Christdas classifies /u/ and /i/ as two different classes of epentheses (Christdas 1988: 88) showing different phonological roles without any crossover. A classification of epenthesis irrespective of individuality and context sensitivity may produce an ill-formed structure, simply because the /i/ is not an independent epenthesis, because the emergence of epenthesis /i/ in a particularly sensitive context is related to epenthesis /u/, at least in Tamil.

The following example elaborates on this in detail. The compound word, *ka:du+ya:nai* > *ka:ddiya:nai* 'forest elephant'[17] shows that the stem final /u/ is dropped and replaced with epenthesis /i/, indicating that they are in complementary distribution. In fact, the epenthesis /i/ is not an independent epenthesis form in Tamil, and it may only take place in a given context. The question needing clarification at this point is whether or not two epentheses share the same context. If, the answer is yes, we may accept Christdas's claim.

Accepting her assumption that all word-final /u/ are epenthesis and epentheses /u/ and /i/ in Tamil do not share the same context may lead to some practical problems. According to her, the epenthesis /u/ is applied to every word ending with obstruents: /p, t, d, ɽ, c and k/. On the other hand, the same epenthesis also appears between a monosyllable base and a suffix, as in *val-u-nar.* > *vallunar.* Christdas's assumption can also be attested to in another way. Attaching epenthesis /u/ to lateral /l/ before attaching the stem to the suffix may give the following output, /*valu*/. Attaching the stem to the suffix yields to an ungrammatical form, *valu-nar.* > **valunar*. The output incurs defects for not having a moraic coda, (/l/) which is automated when they appear in the stem/word-initial syllable within intervocalic positions. The author provided neither information nor distinctions regarding such irregularities which lead to perception troubles.

[15] The term stem in Christdas refers to both - the root and the stem. What has been referred to as stem in Christdas is known as '*adiccol*' and '*ve:rccol'* in Tamil. Literally the former gives the meaning base and the latter, root. Any individual sound segment or combination of them that may qualify as stem or root, literally, must denote a semantic sense (Nannu:l, 214). The term stem in Christdas refers to both, the root and stem.
[16] The language has a well-established set of epentheses - 33 epentheses (in the classical grammar, *Tolka:ppiyam* (Ilakkuvanar, 1994). The number was reduced to nine during the 11th century, (*Nannu:l*, (ka:ndikavurai, 1997). The following are the same set of epentheses that are also applied widely in present-day Tamil; /*a, u, ku, attu, ittu, aRRu, iRRu, an, in/.* These epentheses (known as empty morphs) perform special duties such as avoiding unnecessary conflict between segments, avoiding complex coda structures and so on. Hence, their emergence is motivational based – epenthesis cannot emerge without triggering motivation. Grammar of the same language, too, did not offer any account of studies, claiming that epenthesis may occur at the word final position.
[17] This example is taken from the grammar of classic Tamil.

It is worthwhile to refer back to Caldwell and Samuel, at this point, who believe that the word final /u/ in Tamil should be treated as a euphonic element. Since accepting this point of view may solve the problem, the present study accepts them as euphonic elements but not epenthesis.

1.4.5 The Constraint based study

There are two constraint-based studies[18] by the same author, Jill Beckman, found in Tamil. One of them is *On the Status of CODACOND in Phonology* (2004), and the other is a thesis entitled *Positional faithfulness* (1997). These studies have depended heavily upon secondary data from Christdas (1988).[19]

Beckman established that the language provides encouraging evidence to support the study on Positional Faithfulness, a crucial element that claims to determine the directionality of morphophonological activities. Beckman's analysis also accounts for a range of repairing strategies aiming at harmonising Onset/Coda asymmetries, such as nasal place assimilation, lateral assimilation (when necessary), no assimilation to non-coronal segments, and lastly, epenthesis in an obstruent-obstruent cluster. One significant piece of the analysis is reviewed here.

Beckman (Beckman 2004) argues that epenthesis insertion in a bid to satisfy CODA-CONDITION within Onset/Coda Asymmetries in Tamil is not generated due to interaction between Markedness and Faithfulness constraints, but is motivated by interaction between 'independently motivated faithfulness and syllable well-formedness constraints'. Epenthesis insertion between obstruent + obstruent cluster, as in */kaṯap + kal/ → [ka. ɖʒ. vu. xʒ],* which reflects a classical CODA-CONDITION pattern, is not 'an overt prohibition on Coda Place, but rather the low priority given to place faithfulness outside the onset position', claims Beckman (2004: 114). In terms of positional faithfulness, the emergence of an epenthesis is retained because of the necessity to retain a privileged position over the weak.

Details of this explanation are as follows. In the following example, */kaṯap + kal/ → [ka. ɖʒ. vu. xʒ]*[20] 'doors', a nominal stem is attached with an onset initial plural marker. Upon the interaction, the

[18] There are altogether four studies which fall into this category. Two of them, which are analysed here, have been done by Beckman. Another work by Abigail Kaun, Input Constraint in Tamil, is inaccessible. Another study is Mathew Gordon's (1999), Positional Weight constraint in OT, which has explored the status of stress in Tamil, which is irrelevant for the current study.

[19] Other than that, Beckman has also relied upon Christdas for phonological information on Tamil to draw her conclusion.. C.F Vasanthakumari, who has the same point of view, but Caldwell and Samuel have different views regarding the /u/ at the word final.

[20] Beckman's study on the status of epenthesis has a fundamental problem, which does not originate from her analysis, but from the secondary data used for the analysis. The dialect of Tamil, which is spoken in the district of Nagarcoil in Tamil Nadu seemed to employ uncommon practices. The term /*katavu*/ is composed of two lexical items; the stem /*kada*/ and nominal suffix /*vu*/. When these terms are combined, the coronal /d/ lenite becomes dental /t/. This is how this combined term; /*katavu*/ is derived in the literary Tamil. Certainly, any Tamil speaker with a fair knowledge of the word formation theory of the language would not accept the stem /katap/ as the base or derived term of /*katavu*/. As a dialect whose lexicon originates from the main language, the concerned dialect is expected to respect the fundamentals of word formation rules. If we accept this truth, (then input involved in the combination should be, /*kaṯavu/ + kal*/ and not /ka*ṯap*/ + *kal*/; this doubt whether the lengthy argument delivered by Beckman has been built upon a baseless foundation.

voiceless obstruents /t̪/ and /p/ were replaced with their voiced counterparts, /d̪/ and /p/, respectively, while the /p/ underwent further lenition, and became labio-dental fricative, /ʋ/. Beckman believes that the motivation for the alternations is triggered by the highly-ranking constraints such as SCL and MAX-IO against IDENT-ONSET and IDENT (PLACE), which have helped the onset and coda to preserve their places with the help of an epenthesis. It is the structural constraints which favoured the preferred output but not the interaction between (coda and onset,) as in tableau (13), says Beckman.
Epenthesis in obstruent + obstruent sequence

/kaṯap + kaḷ/	MAX-IO	SCL	ID-ONS	* LAB, *DOR	* COR	NOCODA	DEP-IO	IDENT (Place)
⇨ a.ka. d̪ʒ. ʊɯ. xɜ				k, ʋ, x	d̪		*	
b. ka. d̪ʒp. kɜ		*!		k, p, k	d̪	*		
c. ka. d̪ʒ. xɜ	*!			k, x	d̪			

(Beckman 2004)

The analysis shows that SCL and MAX-IO, two higher ranking constraints, are the decisive factors and are attributed to epenthesis insertion. The winner output sustained few changes; the dental /t/ altered to voiced counterpart, bilabial /p/ turned into labio-dental fricative, /ʋ/, the final and antepenultimate low vowels raised to /ɜ/, and insertion of an epenthesis. Subsequently, the candidate that allows lenition of /p/→/ʋ/ and epenthesis has been selected as the winner. In other words, the failure of the losers confirmed by their inability to promote such flexibility originated from positional faithfulness constraints.

Beckman's contributions to Tamil constraint-based phonology are simply enormous. However, the study also runs on some weak assumptions, and over-generalisations. For example, the study generalised all root-initial syllable coda of the language retaining their place features, but in non-initial positions they undergo place assimilations (Beckman 2004: 102). This is not always true, as the codas in non-initial stems were still allowed to retain their place feature by relinquishing their sonority, as in the following, */mutal-mai → mutanmai/* 'chief'. Although, most of the foundational information delivered in Beckman's emergent study will maximise the success of this study for certain, the present study also challenges some of the pertinent conclusions offered in Beckman (Beckman 1997).

1.4.6 Studies by Extended Grammar Studies (EGS)

Apart from these core literatures, there are few studies which have analysed the characteristics of the morphophonological mechanism in Tamil. These studies have argued for various morphophonological issues, including, the role of empty morphs and their irregularities, participating sound segments, the crucial role of the voiceless obstruents at the intersections, and historical inconsistencies of certain morphophonological processes. For their extended application of morphophonological norms of the classical grammar, we call them Extended Grammar Studies (EGS). It appears that the aim of these studies is to draw a correlation between MP of classical Tamil and the present-day Tamil, instead of giving them a fresh methodological perception. The following are reviews of selected research papers offering significant contributions.

1.4.6.1 Empty Morphs

Meenakshisundaram (1959) has offered two noteworthy contributions. One is the analysis of the emergence of empty morphs, which are commonly inserted within inflected forms. He is of the opinion that augments are conditioned by syntactic values rather than morphological and phonological requirements. He argued that case markers triggering various phonological changes within morpho-syntax and the derived augments[21] have close connections. The latter is believed to originate from the former in the course of language development. Interaction between nominal stem */vaal/* 'sword' and a case-sign, /aal/ produces an output with epenthesis such as */vaal-in-aal/*[22]/. He claims that the result is generated by interacting voiced retroflex lateral, /l/ and the instrumental case-sign. He also adds that augment */attu/,* which surfaces after all words ending in /m/ and other nouns ending in '*a'* or *'aa'* denoting plants when they are added to a case marker, is due to the fact that the open-ended lexical terms have bilabial nasal either /am/ or /m/, (underlyingly.)?

His second contribution revolves around augment */a:n*/. Originally, it meant 'that place' (T.P.Meenakshisundaram 1959: 129), but connotes a different meaning in the latter stage of language development. He argues that case-sign which occurs after the names of stars or days, has now changed its functional role, and is known as an augment, */a:n/.* Overall, the paper has argued for a syntactic relation between the case-markers and the appearance of augments more than others. His argument for underlying /m/ is rather interesting; unfortunately, it has not received a good reception within the present-day analysis.

Kothandaraman (1982: 79) which argues for epenthesis insertion between stem and case markers, concludes that Tamil has two 'empty-morphemes', obligatory and non-obligatory. Empty morphs like *attu* are obligatory augments, and commonly applied to conjoin suffixes and words ending in 'am'. The non-obligatory empty morph may or may not occur within two words, as in the following examples, *u:r + ai > u:rinai* and *u:rai, and nuul+ ai > nu:linai* and *nulai*. Though, both output representations are grammatically sound, it is the latter which receives popular acceptance in present-day Tamil, with predictable occurrence within nominal and verbal inflection, claims the author. It is interesting to note that Kothadaraman and Meenakshisundram's point of view on /*attu*/, coincides, verifying that the augment has a rather enormous functional role in the language.

Another study by Arangkaraasan (1992: 162) reports that Tamil has a series of empty morphs whose behaviour is conditioned by the participating morphemes, a similar point of view to morphologists. His elaborates on the functionality of empty morphemes in Tamil, i.e., the usual merging between the nominal stem and case marker (it is called *collurupu* in Tamil), especially the empty morph /*anru*/. Accordingly, the special augment appears between every case marker, except for two, namely the second and fourth, (ai and ku, respectively) and (nominal that denotes temporal) meaning in present-day Tamil a situation which differs from pre-Modern Tamil.

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[21] He added that these augments are called 'inflexional increments' by Caldwell and '*ca:riyai'* by Tamil grammarians.

[22] Most of the scholars differ in verifying the origin of these forms in Tamil. He assayed that Caldwell is of the opinion that they are old case-signs[22], while Tamil grammarians recognise some connection between them and the case-markers; they did not call them case signs. The latter were keen in discussing their relation to the sandhi rules governing the declined nouns.

Samuel (1996) is of the view that empty morphemes are inserted to regulate the perceptual order of surface forms. He argues that epentheses within the following situations are performing such a function- the numerals ending in /*u*/ which tend to have augments /an/ and /in/, demonstrative pronouns such as *atu, itu* which prefer augment /an/, the collective nouns that receive /*aɽɽu*/ and /*iɽɽu*/ augments and the nouns ending in /n/ which prefer an augment of /u/. When a structure ending with obstruents or other stops is attached to an onset, phonotactic conflicts encountered by the structure may block articulatory flexibility; the irregular contact between the involved segments is regulated by an augment insertion. He believes that every empty morph emerging at the intersections has individual properties and therefore must be determined on a case by case basis, but not categorically., (Samuel 1996: 148). In fact, Samuel's point of view contradicts Kothandaraman's view (Kothandaraman 1982), which says that empty morphs have fixed and predictable occurrences. Samuel's perception on the occurrence of augment is defended thoroughly in this thesis.

1.4.6.2 Vowels, Hiatus and its permutations

Harold Schiffman (Schiffman 1971: 6-7) in his published book, entitled, *A Reader for Advanced Spoken Tamil, Volume 2,* suggests a number of compulsory morphophonemic rules for spoken Tamil. It includes three categorical explanations: glide insertion, MP of oblique forms and vowel harmony, for which he provides simple and straightforward explanations along with supporting examples.

Vowel Harmony (VH), a phenomenon which has not been greatly recognised within the Phonology of Tamil receives significant attention by the author. VH referred to as a phenomenon where a noun stem and suffix are attached, or inflected to a case marker, and the quality of the vowels of the suffixes are harmonised according to the final vowel of the noun to maintain harmony between participating vowels across morpheme boundaries. He claimed that this is an automatic process in Tamil, and covers both native and loan words, as in the following examples.

i. /-ukku/ 'dative' becomes /ykki/ after
Native word
/mature/' the city of maturai': /matureyki/ 'to maturai'/ this is an automatic process
Loan word which happens irrespective of whether the noun is 'native' or 'borrowed' so that /laybreeri/ + /-ukku/ becomes /laybreerikki/ 'to the library'

Also after /i/ and /e/, the suffix /-le/ 'locative' becomes /-yle/. /vazi/ 'way' + /-le/ → vaziyle/ 'on the way' (Schiffman 1971: 6-7). Samuel (1996) also argued for vowel lengthening and shortening in present-day Tamil. He argued that vowel sounds might be lengthened or shortened when monosyllable stems are inflected, as in the following; *ka:n + da:n > kanda:n*. The moraic quality of vowels in the stem is reduced. Besides, vowel shortening is also common in numerals, such as in, *o:r > oru,* and *i:r > iru.* Some verbal stems also tend to be realized as verbal nouns without the help infusions or suffixation, confirms Samuel (1996:81). He also indicated that vowel lengthening is common within word internal changes as in, *kedu > ke:du, cudu >cu:du.*[23], where the first syllable of the terms undergo lengthening. Overall, his work highlighted the presence of both vowel lengthening and shortening in Tamil, but he did not elaborate on this.

[23] Vowel metathesis, though not so prevalent in Tamil, can still be seen, as in the following example, vowel metathesis; civiRi> viciRi and tacai>catai.

Another of Samuel's noteworthy contributions is that of justification for the misconception of vowel hiatus in Tamil by Caldwell (Samuel 1996: 86). Vowel hiatus is not a troublesome phenomenon for many languages; it is accepted without resistance. Tamil resists it forcefully with insertion of glide, while some Indo-European languages employ different methods, such as insertion of /n/. Based on this prior knowledge, Caldwell (1987: 174) assumed that the boldfaced /n/ in the following examples; /*ka:ddina/, /poruLana*/ as an epenthesis tends to avoid hiatus conflict. Unfortunately, the /n/ is part of the large composition of augment /an/ and /in/, which generates (a) crisp edge – in other words, it is another form of euphonic morphs, claims Samuel. This argument, in fact, is a major contribution to the theoretical assumption of hiatus resolution in Tamil; it involves no epenthesis other than glides.

Pandurangam (2004: 35-48) in his study tracing back the historical evolution of vowel hiatus in Tamil claims that morphophonological rules evolve from time to time; that evolution leads to application changes. For instance, glide insertion was non-obligatory in the era of classical grammarians. Unruly application of the glides is common during that period, where the glide /v/ and /y/ has never been used systematically. Pandurangam claims that the non-systematic application must be due to its acceptance as a non-obligatory device. He adds that this trend began to change in the 11th century, in *Veeracooliyam*[24], where application of glide was formalised, and was treated as an obligatory apparatus. This finding verifies that morphophonological rules also evolve along with the progress of the language.

1.4.6.3 Word-Final shortened /ʉ/

Samuel (1996: 63-73) demonstrates some statistical and empirical evidences arguing for the significant behaviour of shortened /ʉ/ at interfaces, proving that application of shortened /ʉ/ is still relevant in present-day Tamil. The shortened /ʉ/ a word-final has a significant functional role in Tamil. Caldwell (1987: 130-134) refers to it as euphonic sounds.[25] The segment is added to hard consonants to ease the pronunciation: the same behaviourism is also reflected in application of /ɨ/, as in *naay* → *naayi*. Therefore, Samuel has concluded that the /ʉ/ performs a euphonic role but not a grammatical function; hence, this is why it tends to lose its positional value easily when adjoined to others at junctures. The barred /ʉ/ makes a significant contribution to the morphophonemic studies of Tamil; those unaware of it might recognise this as epenthesis, as in the case of Christdas (1988).

1.4.6.4 Gemination

Ramasami (1992: 48-51), in a paper on the behaviour of the word-initial consonants and their gemination nature[26], stresses that gemination of obstruents at the intersections is closely related to the semantic property of the lexical rather than to phonology. It is common to see voiceless obstruents in

[24] He claimed that the emphasis given by *Veeracooliyam,* a manual from the 12th century, claims that Tamil grammar and Sanskrit grammar are not two different entities but one, and has an influential contribution in changing the perception of scholars towards, *udampadumey* 'glides'.

[25] Telugu is the only Dravidian language that employs this rule strictly and assures that every word must end in /u/. But, this is an optional act in Tamil.

[26] He has included Tamil in this list which has the respective sound segments at word-initial positions; /k,c,(s), t, p, m, n, ng, v, y/. He claimed that Tamil (and Malayalam) represents a conservative state of affairs in Dravidian where divergence is maintained between the speeches and written form due to historical causes.

Tamil (this includes affricate /c/) geminate when they are preceded by a structure ending with NOCODA. In certain cases, the non-plosives also suffer gemination to meet the contextual need. Though Ramasami's perception on the inclination between semantic and morphophonology could not be undermined in Tamil, it is also apparent that his hypothesis runs foul. It has been proven in the present thesis that gemination is a purely phonological phenomenon in Tamil, which can be explained without referring to semantic revelations.

In general, the studies that fall within the category of extended grammar studies have offered relatively limited but significant contributions to the morphophonology of Tamil from various perspectives. Although some of them appear to offer explicit findings, a few generalisations offered by these studies still warrant a proper and full analysis.

1.5 General Studies

Unlike the previous literatures, the general studies have discussed various but less sublime issues, including the pedagogical grammar (linguistics), classification of *sandhi*, error analysis, and standardization of MP. This section reviews some of such noteworthy studies in order.

1.5.1 Classification of sandhi

It seems that most of the research papers have conflict in reaching consensus over the classification of *sandhi*. Subrahmanya (Subrahmanyan 1980: 54-55) stressed that the *sandhi* in Tamil might be classed as internal *sandhi* and external *sandhi*: the former is referred to as phonological processes that operate between two or more sound segments within a word, and the latter *sandhi* is that which operates between two words.

Internal sandhi (orumolippunarcci) relating to the sandhi of morphemes within a word or morphological sandhi, and
External sandhi (panmolippunarcci) relating to the sandhi of morpheme of two words (compound or phrase) or syntactical sandhi- both- same in fusion and change – so- the rules relating to the internal sandhi is applicable to the external sandhi in the same environment or sequence and vice versa (Subrahmanya, 1977:109)

Subramanya firmly believed that phonological processes are belonging to speech and literary: it only takes place in rapid speech, but not in the slow pronunciation, though it is an integral property of literary Tamil. For the first time, probably, the study has highlighted that 'the conditioning factors of *sandhi* rules also must be referred from the properties of the sound segments, but not include the semantic values.' This is a naturalistic view, which seemed to be adopted by many of its precursors.

Israel (Israel 1973: 29, 41) also endorsed that *sandhi* is classified into two groups: internal and external *sandhi*. The former operates between two bound forms or a free form and bound form, and external *sandhi* occurs between two free forms or word. Kumaraswami (Kumaraswami 1980) also has adopted the same classification method, and verified that the former involves cohesiveness between the involved terms; hence, it also might be referred to as 'relatively tight construction', while the external *sandhi* operates within a relatively loose constructions. Nevertheless, he was firm

in the view that changes at the intersections are divided along two major classifications, as illustrated in (21).

i. Phonologically motivated sandhi; naaddu + peey > nadduppey 'x'

Gemination of the plosive /p/ is due to the preceding sequence of sound – the geminate plosive /dd/ followed by /ʉ/. These MP changes are defined as purely conditioned by morphophonological processes

ii. Semantically motivated sandhi; pidi + kay > pidikkay
varunar + paar > varunarppar 'look for the passer by'

Because it was initiated by syntactic relations, the insertion of /k/ within the compound term /*pidikkay/* is not triggered by phonological reactions, and has led to semantic changeability in this case assays Kumaraswami. He believes that there is a possessive relation between the involved terms giving rise to compound word, hence the gemination has been attributed as possessive marker, and at the same time, it is also attributable to underlying (possessive) case relation (Kumaraswami 1966:214). However this is not always true. Although his nomination is worth of consideration, the gemination occurred within the given compound terms still can be justified sufficiently within phonology without reviewed by semantic reference, as proved by Balasubramaniam (1989).

Kothandaraman (1972) offered a different form of classification: case-relational *sandhi* and non-case relational *sandhi* by believing that morphological relation between words has a crucial role in classifying majority of the morphophonological processes in Tamil. He claimed that the relationship between the terms includes; appositive, attributive, and co-coordinative.

Casal
nay + kut > naaykkutty
Non-casal
kaay + kani >kaaykani

Renganathan (1983:13-19), on the other hand, has offered what can be considered as a comprehensive classification of Tamil MP, which has taken into account the previous discussion in order.

i. Phonological structure and sandhi
Which is abide to the own phonological structures and explanation: Example is gemination is nasal consonants
Min + anu > minnanu 'nucleus power plant'

Vowel clusters are prohibited in Tamil – glides are introduced; kudi + aracu > kudiyarasu 'republic'
Clusters of /mk/, /mc/ and /mt/ are not permissible in Tamil

All of these rules must be given importance while drafting the rules of sandhi in Tamil, otherwise it would be impossible for us to draw the wholeness of sandhi system of Tamil

ii. Syllabic structure and sandhi
Tamil forms with #(C) V C_1 – type – changes into #(C) V C_1 C_1 - When they are followed by a vowel – otherwise the final vowel remains the same

maN + ay > maNNay ‘soil-accus.’

iii. Morphological structure and sandhi

There are certain situations is Tamil, where we need exactly to predict the first member of the given combination o- whether it is a noun or verb or something else, it is not possible for us to predict the resultant forms
kedu + ay > keduvay ‘ instalment’
ked + a > keda ‘to spoil’

In the above examples neither phonemes nor syllabic structure is responsible for the differences found in the sandhi variations-behaviour. In these cases it is the morphological structures-factors that play a crucial role. The given example shows mixture of noun and suffix in the former and verb plus suffix in the latter. It is clear from these examples that morphological aspects are also playing a vital role in defining the sandhi effects in Tamil

iv. Syntactic structure and sandhi
It can be broadly classified into casal and non-casal relation – the study of sandhi needs a clear understanding of syntax and the relation of the member in the given combination
kaay + kani > kaaykani
Non-casal relation
viidu + vaasal > viiddu vaacal
Casal relation

The resultant only can be studied from the syntactic relations but not from the morphological ground or on the phonological ground. He has explicitly confirmed four essential types of morphophonological processes found in Tamil, and claimed that a comprehensive study on morphophonology of Tamil must, therefore, necessarily account these classifications.

1.5.2 Error analysis
Literatures belong to the category of error analysis are fairly few. Altogether there are four literatures which fall within this category. Among them three were obtained from Malaysia (Balasubramanian 1996, Dass 2005, Kanthasamy 2006) - contains analysis of morphophonological error and its impact upon the language and learners at various levels, and a study from India.

Balasubramaniam’s (1996) analysis on frequently made morphophonological error by the students at higher educational institutes concluded that the failure is closely connected to the ability of the student in apprehending the proper application of the morphophonological rules. The study has used written materials belong to special interest group comprises of higher educational institutes and pre-university students in Malaysia. Balasubramaniam discovered that his samples have been inconsistent in applying these rules, where they have been used properly in some instance and mistakenly in another. He also suggested that the weaknesses among the students could be reduced if they were to apply these rules in real-world context. He speculated that inconsistencies in applying these rules within public written media might be one of the contributively factors, influencing the adult learners to repeat the same errors.

Dass’s (2001) analysis of misconception and misapplication of morphophonemic rules among the undergraduates revealed that the problem is due to linguistics and non-linguistics factors. As for the

first, the educators and language planners have been criticised for not being able to account the contemporary needs. And for the second, the irresponsibility of the students has been condemned. He also did not deny the possibility of complexity and the quantity surrounding the application of morphophonemic rules for prolonging dilemma. The paper suggested for proper research verifying appropriateness of the natural and unnatural morphophonemic rules that may reduce substantive amount of the rules.

The error analysis by Kanthasamy (2006: 482-488) established that the misapplication of morphophonemic rules is one of the main cause influencing the quality of written essays. The study surveyed the application of morphophonemic rules within essays written by lower secondary school students, and have identified nine types of recurrent errors. Among the nine common errors, the following three were the highly misapplied rules:

i. Did not know where to apply and not to apply the addition of /k,c,t,p/ elements
ii. Did not know or have knowledge to identify places where to apply addition and not
iii. Basically have trouble in knowing and applying alternation, deletion, addition in writing

Another study on the error analysis of MP rules on application of morphophonology in printed Mass Medias in Tamil Nadu, India is Renganathan (1983). He identified that the attitude of the language user towards the writing system as a main reason for ongoing dilemma in application of sandhi rules. The space conscious editors tend to avoid an 'additional' property of the structures purposely without having any serious concern over the effect, stressed the study. This form of continuous applications has become a trend, and established a trendy writing system, in which the application of the sandhi application has become non-obligatory and taken for granted (Renganathan 1982: 289-290).

1.5.3 Standardization of MP

Calls to promote language standardization especially that related to Morphophonology have been raised for some time in Tamil. Nonetheless, Nirmala (1997: 90-93) probably the only study that has put forth radical proposals to confine all morpho-phonological rules within limited edition. She suggested that Morphophonology of Tamil should be limited to 9 basic rules, ultimately. Her call for challenging the conventional norms of Tamil morphophonology was been raised in her study on developing software packages for teaching Tamil as second language for non-Indians. Having noted that the target groups are facing difficulty in absorbing these rules, the author has nominated 9 fold-rules[27], which might solve the problem and transform the language to become 'more IT friendlier'. Nirmala believes that these rules are presumably natural and have recurrent application than others.

[27] Rule 1: With the exception of words consisting of two short syllables when all words ending with the vowel 'u' are combined wit a suffix or a word beginning with a vowel, the final 'u' is dropped.
Example: ooTu + in + aan → ooTinaan - 'u' dropped
Rule 2: When words ending with 'u' consist of two syllables each consisting of a single short vowel or of a single compound letter with a short vowel, are combined with a suffix or a word beginning with a vowel *'e', 'o', 'a', 'u'* the consonant '*v*' will be inserted.
Example: *naTu + il* → *naTuvil*- 'v' insertion
Rule 3 : Only used in word formation. When noun and case markers are inflected some changes are initiated in between them. When a word ending with 'i' or 'ii' or 'ai' combined with a suffix or a word beginning with a vowel the consonant 'y' is inserted in between those two words.
Example: *kai + yil* → *kaiyil* - 'y' inserted
Rule 3a : This rule is applicable for those words structurally ending with 'ee'. When 'ee' ending words is combined with a suffix or another word beginning with a vowel the consonant 'y' is usually inserted in between those two words.
Example: *tee + iail* → *teeyilai*- 'y' inserted
Rule 3b : When a word ending with 'a', 'aa', 'uu', 'e', 'o', 'oo' 'au' is combined with a a suffix or another word beginning with a vowel the consonant 'v' is usually inserted after the first word.

The 9 fold-rules solution provided by Nirmala runs on numerous defects. First and foremost, is neglecting most of fundamental information that have close-correlation to Morphophonology. The second problem is that it has not covered a single inflectional Morphophonology, another 'dark' area of the Tamil Morphophonology. Overall, it is not obvious to claim that this study is full of imperfections, and her suggestion is just an 'academic joke'.

Krishnamoorthy Badriraju (2003: 60-63) highlighted four major phonological processes of Tamil in his study on Dravida n Linguistics. One might have the opinion that he is suggesting a concise form of Tamil morphophonological framework, because his illustrations have been stranded without necessary explanations. The highlighted processes are:

i. loss of word –final short vowel, especially the non morpheme /u/ before another vowel either within the same word or between words

ii. where there is no sandhi (hiatus between vowel + vowel across a morph or word boundary) a glide /y/ or /w/ is inserted, predictable in terms of qualities of the preceding and following vowels;
pala + -v- in → pala-v-in
mozi + -y- in → mozi-y-in
katti + -v- a:l → kattiya:l (Modern Tamil)

a number of assimilation a=changes take place among the consonants
ke:L + ttu → ke:ddu ' having heard'
kal + RRu → kaRRu ' having learnt'
a:L + ntu → 'having ruled'

the other type of is germination of CVC to CVCC when followed by a vowel
kal + a:l → kalla:l

Example: *vara + illai → varavillai* - 'v' inserted
Rule 4: When a monosyllabic word, which has a short vowel ends with consonant is combined with another syllable or word beginning with vowel, the ending consonant of the first word will be doubled.
Example: *kal + il → kallil* - 'l' (mute) consonant gets doubled
Rule 5 : The words which come under the above rules, when the other words which a mute consonant take a syllable or word beginning with a vowel will not undergo any change and joints directly with the initial vowel of the second word or following syllable.
Example: *kaN + il → kaNNil*- 'v' insertion
Rule 6: When a word ending with a vowel is followed by a word beginning with one of the consonants, 'k', 'c','t', or 'p' that consonant will be doubled. This is to ensure that the initial 'k', 'c', 't', or 'p' of the second word is pronounced.
Example: *veekamaaka + poo → veekamaakappoo*- 'v' insertion
Rule 7: When a word or suffix which begins with consonants, 'k', 'c', 't', or 'p' is added after the word, The final 'l' of the first word becomes 'R'.
Example: *culal + kuTai → culaRkuTai* -

i. The final 'L' of the first word becomes 'T'
Example: *naaL + kaL → naaTkaL*

ii. The final 'N' of the first word becomes 'T'
Example: *maN + paNTam → maTppaaNTam*

iii. The final 'in' of the first word often becomes 'R'
Example: *pon + cilai → poRcilai*

Rule 8: When all the words ending with 'in' take the word beginning with consonants, 'k', 'c', 't', or 'p' the final 'in' of the first word will be changed as 'ng' and 'nd'. On the other hand, if the 'm' ending word takes a word which begins with 'm', and '' is lost.
Example: *maram + kaL → marangkaL*
iranTaam + taaram → iranTaantaaram
mutal +maatam → mutalaammaatam
Rule 9 : When the demonstrative marker 'a' and 'i' or the interrogative marker 'e' are prefixed to a word beginning with a consonant, the consonant is doubled.
Example: *antha + paiyan → anthappaiyan*
antha + ceTi → anthacceTi

(Lehman 1989:60-63)

Krishnamoorthy reported that these rules, which he has obtained from Lehman (1998) and Stever and Annamalai (1998) (Lehman 1989:60-63), have considerable importance in the applied Tamil. Though it is unknown why Krishnamurthy has provided such shallow and superficial information of Tamil morphophonemic, it is apparent that the ambitious move to confine the complexity of morphophonemic heritage of the language within fourfold classification has done nothing but injustice.

1.6 Discussion and conclusion

In general we have reviewed a number of literatures related to intersection based studies found in three different regions (Tamil Nadu, India, Sri Lanka and Malaysia) under two main paradigms, as follows.

I) Non-Research literatures
i) Classical Grammar

II) Research literatures
Linguistics Studies
a. Descriptive studies
b. Generative studies
c. Derivative studies
d. Lexical Phonology
e. Constraints based analysis

Extended Grammar Works
Classification of morphophonology
On empty morphs
On Vowel, Hiatus, and its permutations
Barred /u/
Other Studies
Error Analysis
Standardization of Morphophonology

Within the first category were classical grammars, which have narrated the full list of morphophonological rules and pedagogical grammars that have shown continuous interest in elaboration of the classical morphophonological rules. These literatures remained the main source of reference for many literatures that have been produced in this language.

The research-based literatures appeared to have offered better insight to morphophonology related mechanisms in a number of ways. Different forms of research interests shown by the studies were well represented by the studies fall within sub-categories. Some of these studies have analyzed the behaviour of spoken language and identified the inherited merits of different morphophonological mechanisms, which were unrecognized in the morphophonology of literary Tamil. Among the other theoretical frameworks such as Generative, Lexical Phonology and Optimality frameworks within these studies, in fact, have established morphophonological gaps found within literary and spoken Tamil.

The foregoing review shows that over the past few decades research-based literatures have offered encouraging insight into morphophonology related mechanisms, in a number of ways. The literatures engaged in the debate relating to morphophonology have clarified selective issues casting recurrent applications. Misconceptions relating to augments such as */an/, /in/, /arru/ /ittu/, /attu/* and */a:n/* and their applications, their relevance and their locality preference, have been widely discussed. Whilst only a few of the research papers have shown interest in analysing selected augments, such as the */a:n/* and its origin.

Other than this, word-final shortened /ʉ/ also gained sufficient attention. Though studies believe that word final /ʉ/ is applied to ease articulatory flexibility, they have failed to reach a consensus confirming the exact nature of this eminent form. Some assume it is epenthesis, while others assume it is a mere euphonic element. After considering the phonological contribution of the element and the fact that the language has a 'real' /u/ epenthesis, the conclusion could be reached that treating the word-final shortened /ʉ/, as a euphonic segment may render more benefits. However, the misconceptions and misinterpretations of word final /u/ and its role play within morphophonology of Tamil can only be verified by an empirical study.

Same sort of misconception can also be found within classification of epentheses and their utilities. Morphophonology of Tamil is closely related to the application of various augments: they are applied within a selective context to perform selective phonological roles, including filling segmental gaps, filling prosodic gaps and providing crisp edges. Unfortunately, most of the studies recognise epenthesis as space filler by neglecting its proper functions which differ from one context to another. Epentheses also face some over-generalised classifications, as in the case of Christdas, who believes that Tamil has four different forms of epentheses. Though Vasanthakumari and Kothandaraman did not disclose the number, they are of the opinion that there are more than four, in conceding the point of view of the classical grammarians. Epenthesis insertion, a crucial repairing strategy in this language, clearly needs an empirical revisit.

Another crucial point of discussion within the body of the literature evolved around the vowels at the intersections. The classical grammar has not offered distinguished outlook on the issues related vowels at the intersections and the extended grammarians who have adopted the same nominated research paths. To some extent, though, the same approach was adopted within the Vasanthakumari and Christdas, Kothandaraman, Balasubramaniam, Subramaniom, the research papers have offered substitute findings. Among them, Pandurangam (2004) who has tracked the evaluation of vowel hiatus confirmed that application of verified hiatus resolution is a 'recent development' but not classical one. Confusion over the application of epenthesis within hiatus also preceded the discussion to some extent. On top of these discussions, Schiffman's substantial finding of vowel harmony is a new arrival that has never been highlighted in the language before. All of these relevancies show that the vowel morphophonology remained as an understudied field in the contemporary research enterprise of the language, and they are evolving.

Another important issue which has captured the interest of researchers is level orderings. Generative and Lexical Phonologists believe that phonological alteration/changes within structures may involve a few stages. Believing that these concepts are well suited to Tamil, Vasanthakumari and Christdas for example, have carried out pioneer explorations and claimed that Tamil involves three and two levels, respectively. Beckman who joined in the same pursuit did not anticipate this claim; the framework and the data applied by Beckman did not involve any level ordering requirements. This raised the question as to whether the language involves level orderings in the first place. If yes, then, the quest

would be to determine the number - two or three, as suggested by the forerunners or four as suggested for Malayalam, another Dravida n sister language (Mohanan 1989). The unsettled dispute is crucial for the present-study, because the chosen framework, Optimality Theory, denies the existence of level-ordering. This is another research question which will eventually be addressed in the present study.

Last but not least, the unsettled dispute over classification of morphophonology warrants our attention as well. At least four major domains of linguistics believed to have stake of morphophonology in Tamil; the phonology, morphology, semantics, and morpho-syntax (Subrahmanyan 1977, 1982, Renganathan 1983). Although the relevant studies have substantiated the arguments with empirical claims, there is a fundamental problem in their claims, because none of these studies have verified their intensity of the influence of one opposed to others. Subramanion (1998), for example, has notified that alternation between /kal/ plural suffix and stem warrants phonological treatment than allomorph. Without stressing this necessity, Thilagawathy (1995) has demonstrated that the plural suffix /kal/ behaves differently from other suffixes belonging to different classes, which highlighted the possibility of phonological contribution in stem versus /*kal*/ suffix marker, in return. Overall there has been growing concern that what has been argued for morphological and allomorphic changes in Tamil might be answered from the point of view of natural phonology (Thilagawathy 1995). The call is yet answered within the Optimality Theoretic framework in the Phonology of Tamil, wholly.

Overall we could accept that the literatures we have seen so far have added impressive input to the advancement of field, directly and indirectly. Compared to the non-research related studies, the research-literatures contribution covered most of the mechanism related to morphophonology in-depth. Major phonological studies such as Vasanthakumari and Christdas deserve credit for their phonological insights on almost every lexical level morphophonology. The research papers, on the one hand, have occasionally argued for individualistic nature of the selected utilities. As for the classical grammar and extended grammar studies, they were aimed at highlighting the vastness of the morphophonological phenomenon and binding them with related domain. The sociolinguistic studies on the other hand, added another venue for extended studies on Morphophonology and applied context. It is undeniable that all of these studies have responded to the call of the time and filled the gap accordingly, and have added research worth qualities to studies related to Juncture in this language.

However it should be pointed out that until now, no empirical research on Morphophonology of spoken Tamil has been carried out within present-day advanced theoretical frameworks. Except for a few, most of the previous studies have ignored spoken Tamil and have concentrated on pre-determined language. Having using the same methodology of the predecessors appeared to be the main factor limiting their explanation capacity, in explaining the individualistic of the morphophonology. The available literatures, Vasanthakumari (1989) and Christdas (1988) which have directly involved spoken Tamil, also lapsed in term of time frame. In the past 20 years spoken Tamil might have acquired various dynamic aspects, which appeared to be ignored by most of the studies produced after Vasanthakumari (1989) and Christdas (1989). Hence a research concerned to cover essential changes that have taken place in the area of spoken Tamil over the time is a need of the time.

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