

Draft made from Class Notes

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The Metrical Language of Tamil Literature

1. Units of a poem (செய்யுள் உறுப்பு)

1. The metrical language

Language sequences sounds into words and the words into hierarchical syntactic units. There is a potential pause between words. The sound sequence is segmented in another way also in speech, which co-occurs with the segments of sounds in words and with the sequence of words in sentences. It is called supra-segmental or prosodic features of sounds and its kinds include tone, stress, pitch and intonation. Tone and stress operate on words and intonation operates on larger units. Prosodic sound features are as important for human communication (and in grammar such as the relation between word classes and sentence types) as the segmental features are. They are the only features in animal communicative sounds such as bird songs, which do not divide the message into words and phonemes. The above mentioned prosodic features are characteristic of natural languages. Some Tamil examples where some prosodic difference makes semantic difference are பலகை 'plank, board', பல கை 'many hands'; பத்துப்பாட்டு 'name of a Sangam Anthology', பத்துப் பாட்டு 'ten songs'; சொல்லிக்கொடு 'teach', சொல்லிக் கொடு 'tell and give'; நானா சொன்னேன் 'did I say (this)', நானா சொன்னேன் (in speech) 'I said (it) myself'.

The prosodic features play different roles in the natural and metrical languages. For example, pause which plays a role to potentially mark word boundaries does not play a role in making அசை as in a sequence of vowels. பலகை and பல கை

have the same அசை structure in poetry. As the grammar of the meter says, the flow of sound is uninterrupted in the line of a verse (ஒழுக்கிசை). Same is true of intonation. The metrical lines of a poem may have rhythms and melodies that are different in sentences and discourses.

The sequence of sounds is segmented differently into சீர் in the metrical language and it follows the poetic grammar. There are poets who have intuitively acquire this grammar (ஆசை கவி), who can generate a metrical language spontaneously like the generation of the natural language by everyone. But for most, learning the metrical language is like learning a second language. The different ways of segmenting the sound sequence in poetic compositions are called prosody (யாப்பு) and the lines so composed are the meter (அடி).

The prosodic features of the metrical language are overlaid on the sequencing sounds and morphemes and words of the natural language. The former do override the latter. The metrical language so created is a register of language like other registers such as the colloquial, the formal, the legal etc. The metrical language has a mathematical quality as well. It is called the versified language. The versified literary language differs from the prosaic literate language in its difference in the prosodic features.

A crucial difference between the natural language and the metrical language is that the latter obliterates the integrity of words not just by transforming their sounds (புணர்ச்சி, prominently elision of a sound segment and change one into another as in speech) in the natural language, but also by erasing the word boundary. The primary motivation for this change is to create a new rhythm (ஓசை) in the metrical language different from the natural language. This rhythm is not identical with the rhythm of singing (i.e. music), but easily convertible to it. The supra-segmental feature of the metrical language is the rhythm. The metrical language of poetry, of course, could be read with the rhythm of reading of the natural language, but its rhythm would echo silently in the mind of the reader (and the listener) even if it is not articulated by the vocal chords.

1.1 Overarching ஓசை

Thus a distinguishing ஓசை 'rhythm' (இசை 'music' is also used synonymously; it is also called ஒலி 'sound' in யாப்பருங்கலக் காரிகை) is the defining component of the poetic language in Tamil. It determines the prosody of the types of compositions. Tamil grammars of poetry identify four basic ஓசை: செப்பல், அகவல், துள்ளல் and தூங்கல். There are further elaborations of these four. It is, however, difficult to identify at this point in time leave alone, describe, these four rhythms, though etymologically செப்பல் relates to செப்பு 'reply', அகவல் to அகவு 'call', துள்ளல் to துள்ளு 'frolic' and தூங்கல் to தூங்கு 'hang'. But they are important for defining the phonetic textures of the verses. Of the 34 components (உறுப்பு 'body part or unit') of a poem, some (such as மாத்திரை, அசை, சீர், தூக்கு, தொடை and வண்ணம்) directly or indirectly relate to sound patterns or phonetic texture (rhythm and rhyme) of a verse.

1.2 செய்யுள் and its members

செய்யுள் is the term used in தொல்காப்பியம் and in later works for a prosodic, i.e. a versified, composition. This word is derived from the verb செய் 'do, make' with the derivative suffix உள். It is doing something to and with the language, or making a new language. Tamil Lexicon gives literary attestations for this suffix in the words விக்குள் (= விக்கல், அல் a common derivative suffix) 'hiccough' and பாய்த்துள் (= பாய்ச்சல்) 'leap; other words are கடவுள் 'god, being beyond', கவுள் 'jaw, that which holds with teeth', கொப்புள் 'navel', அக்குள் 'armpit'. This derivative suffix is probably related to the stem formative உள் in the verbs such as உருள் 'roll', மருள் 'be bewildered', அருள் 'grace' etc.

செய்யுள் is contrasted with வழக்கு, which refers to the language that is not composed by புலவர் 'those with knowledge' (cf. புலனெறி அறிந்தோர் 'those who know the ways of the mind or knowledge') but used by the ordinary people.

வழக்கு is what has been around in the community (cf. வழக்கம் 'what has been around, custom'). It is not the spoken language contrasted with the literary language, as some linguists claim, but the ordinary language different from the metrical language, which is superimposed on it.

செய்யுள் refers to a poem as well six other forms of prosodic (i.e. versified or stylized) compositions, which are the narrative (உரை, as interspersed in பாட்டு; there are three more), the treatise (நூல், as the grammatical treatise; there are three more including commentary on a poem; இறையனார் அகப்பொருளுரை is an early example of prosodic features in a commentary), the mantra (வாய்மொழி, including recitations to god), the riddle (பிசி), the satire (அங்கதம், that connotes curse and insinuation; when it is a poem it is named as வஞ்சப் புகழ்ச்சி) and the proverb (முதுமொழி, which should include aphorisms) (தொல். பொருள். செய்யுள். 75). செய்யுள் is also used synonymously to refer to the poem alone. பா is one of the types of செய்யுள் AND it is *the* செய்யுள். செய்யுள் refers to the literary composition as a major genre but it is not that alone.

Other words that refer to a poem in the classical period and through the literary history of Tamil are பா, பாட்டு and பாடல், which are attested in தொல்காப்பியம் itself (the word செய்யுள் occurs 34 times in the entire work, பா 11 times, பாட்டு 16 times, all numbers exclude their use in compounds (சீனிவாசன் & சீனிவாசன், தொல்காப்பியச் செய்யுளியல்: புலனெறி இலக்கிய வழக்கு- முன்னுரை, p. 25-27). These three terms are used in the Sangam corpus also. They are used synonymously with செய்யுள், but பாட்டு and பாடல் have the meaning of song also. பா is the preferred collocation with the names of prosodic types of poems (ஆசிரியப்பா etc. rather than ஆசிரியச் செய்யுள் or ஆசிரியப் பாட்டு or பாடல் etc.). The root of these words may be பா 'weave' (Tamil Lexicon; its latter spelling is பாவு, as மா becoming மாவு 'flour'). கவிதை, referring exclusively to the poem, begins to be used from the

bhakti period (Tamil Lexicon gives citation from திவ்வியப் பிரபந்தம், பெரிய திருமொழி 7.2.2). In the modern period, செய்யுள் has come to refer to only to the poems composed using the traditional meters, though கவிதை is also used to refer to these poems (cf. வெண்பாவில் கவிதை). These terms, except பாடல், are used also in the sense of the genre of poems, i.e. poetry, as in செய்யுளியல், பாவியல், பாட்டியல் and கவிதையியல் 'the art of poetry'.

2. செய்யுள் and its components

A செய்யுள் has 34 components (called உறுப்பு 'limb or unit'), which are more than units or building blocks of a larger thing, தொல். பொருள். செய்யுளியல் S1). The term உறுப்பு suggests more than conceptualizing செய்யுள் in a mechanical or biological model. பேராசிரியர் (செய்யுளியல் 1) asks the question what செய்யுள் really is if the list contains only உறுப்பு of செய்யுள். He answers his own question (put in the mouth of an imagined student) this way. If you know the parts, you know the whole. செய்யுள் is what உறுப்புகள் constitute. It is not a pre-given entity; it is constitutional; it is an ideational construct. The problem with the proposition that the whole is the sum of the parts does not arise because what would be missing in the sum is also built in as one of the உறுப்புகள். யாப்பு and பா are both உறுப்பு; they together bind a meaning to the structure and convey the emotion the structure generates. (See later for elaboration).

Not all உறுப்புகள் are applicable to all the seven types of versified compositions. All of them, however, apply to பா, which itself is one of the limbs (in the sense of manifestations) of செய்யுள். But the choice of all உறுப்புகள் is not mandatory for a பா; there could be poems with more or less number of உறுப்புகள். The components are drawn from many aspects of poetry such as its building units, rhythm, taste, techniques, content, interpretation and others. யாப்பு 'metrical structure' using the building units is only one of the components. These 34

உறுப்புys seem classifiable under three broad categories: parts, process or mechanics and product, which are relevant for a composition.

Significantly, உவமை 'simile' is not one of the components suggesting that it does not belong to the mechanics of poetry, but belongs to its functionality; its role is meaning generation. Poetry is a construction of form and meaning; உவமை belongs to the second. Another component of beauty, called அணி in the later period, under which உவமை is placed, is not in the list either of the components செய்யுள். The above explanation for the exclusion of உவமை, as a means of producing meaning and beauty, from the list of poetic components is, however, problematic in the sense that மெய்ப்பாடு 'expression of emotion or emotional impact' is included in the components, unless it is considered the effect of the content like the components திணை 'love situations', கைகோள் 'love phases' and such. மெய்ப்பாடு is a product of poems, nevertheless.

As mentioned above, some of the poetic components are relevant for constructing a poem and others for interpreting it. One could say that some components relate to the formal aspects and some to the conceptual aspects of செய்யுள். This difference is author oriented and reader oriented respectively; but some components are relevant to both. Alternatively, Annie Thomas (1998, யாப்பியல் 'Study of Prosody', p. 5) uses different terms to characterize the similar differences of the poetic components. தமிழண்ணல் (1979, சங்க இலக்கிய ஒப்பீடு: இலக்கியக் கொள்கைகள் 'Comparison of Sangam literature: Theoretical principles of literature', p.8) identifies more than two ways of characterizing the poetic components. They are of form, content, dramatic element, part form and part content, fused form and content. The problem in having a neat sub-classification of the poetic components is that the meaning or function of some components is opaque even for the commentators and are amenable to different glossing. There is, however, no dispute about the understanding that யாப்பு is a formal or architectural component of poetry.

The 34 components are mentioned in the sutra in two groups of 26 and 8. The criterion for the grouping is not clear. இளம்பூரணர் (செய்யுளியல் 1) simply that the members in the two groups are not of the same standing (ஒரு நிகரற்றன). பேராசிரியர் claims that the first group constitutes together a poem while the second group consists of additional individual features that may or may not find a place in a poem. நச்சினார்க்கினியர் claims that the first set are for தனிநிலைச் செய்யுள் and the second set for தொடர்நிலைச் செய்யுள், but there is no textual evidence that தொல்காப்பியம் makes this categorization of poems . A modern claim (வ. சுப. மாணிக்கம் cited in செயராமன், யாப்பியல் ஆய்வுக்கோவை, p. 13) is that the second set, collectively named வனப்பு 'beauty', is about new kinds of poetry, such as பிரபந்தம், based on themes added to the earlier அகம் and புறம். But any of these claims has not been empirically demonstrated. They are not demonstrable because of the opacity of the terms, even for the commentators. This forces some modern scholars to say that the list is not about what a செய்யுள் contains but what செய்யுளியல் contains (சீனிவாசன் op. cit. p. *). It is a sort of table (list) of contents of the chapter (Chevillard ...). But it is not. தொல்காப்பியம் has not given a content list at the beginning of any other chapter; even if it gives a content list to this chapter, it should be the materials of செய்யுள் also, as it is the subject of this chapter. The eight items separated from the list are dropped out from the later works on prosody as part of the separation of prosody and poetics. The separate trajectories of these two in the medieval period are portrayed in யாப்பருங்கலம் and தண்டியலங்காரம்.

2.1 Five basic components

The five components that precede the component யாப்பு as listed in the first group in the sutra, viz., மாத்திரை 'phonetic length', எழுத்து 'phonetic segment', அசை 'sequence of these segments with a vowel', சீர் 'sequence of these syllabic

units', அடி 'sequence of these syllabic clusters', are certainly indispensable components of a poem. The sequencing of each one of these four components in the next higher component follows the convention (மரபு, which is mentioned as the next component after யாப்பு in the sutra) that determines the sequencing possibilities of the elements within each component (for example, the sequencing of எழுத்து in the component அசை into நேர் and நிரை or நேர்பு and நிரைபு and in no other way).

யாப்பருங்கல விருத்தியுரை (S 1) asserts in the first sutra itself (contrasting with the first sutra of செய்யுளியல் in தொல்காப்பியம்) that seven limbs (எழுத்து, அசை, சீர், தளை, அடி, தொடை, தூக்கு) are maximal (இவ்வேழுறுப்பினும் தீர்ந்து யாப்பு உண்டோவெனின் இல்லை) drawing on the analogy of ultimate 32 parts of the human body. It is not true that உறுப்புகள் are immutable, as யாப்பருங்கலம் itself drops some and adds some to the list of similar limbs given in தொல்காப்பியம் or redefines some of them. Such changes are likely to continue to happen after யாப்பருங்கலம். Probably this list means that these seven units are the basic ones, without which யாப்பு cannot be described.

The biological analogy of யாப்பருங்கல விருத்தியுரை suggests a biological metaphor of poetry. This is in contrast to பேராசிரியர்'s view in defense of தொல்காப்பியம் (it could as well be a critique of his immediate predecessors) that the poem is an organic whole and an ideational construct.

The later theory of யாப்பருங்கலம் (which originates with காக்கைபாடினியம்) is however a narrower one of செய்யுள் compared to தொல்காப்பியம். This theory isolates the structural parts of செய்யுள் from it and makes it the prosody proper. யாப்பருங்கலம் separates the prosody from the poetics and puts them in separate sections called உறுப்பியல் and செய்யுளியல் respectively. Poetry has come at its time to be viewed to have two separable dimensions viz., formal and functional.

தொல்காப்பியம் is broader in the prosody part itself and has மாத்திரை in the above basic list and has four அசை (instead of two); at the same time is narrower in some of the basic units: not larger than three அசை in a சீர், no தளை and fewer positions or grounds (நிலம்) in a verse for தொடை. அளவியல், a structural component, is understood as relating to the formal property of the size of a verse in terms of the number of lines or size of a line in terms of the number of சீர் (the latter is the interpretation of நச்சினார்க்கினியர் (செய்யுளியல் *)).

2.2 Components of poetics

The components (உறுப்பு) listed in தொல்காப்பியம் that relate to poetics include யாப்பு, மரபு, நோக்கு and பா, the meanings of some which, however, are subject to differing interpretations. ஓசை, a fundamental concept in the theory of both prosody and poetics, is not in the list of limbs; but இளம்பூரணர் (செய்யுளியல் *) considers தூக்கு to be synonymous with ஓசை (ஓசைதானே தூக்கெனப்படுமே).

These poetic elements are followed by components that relate to the content and texture of a poem: திணை 'theme category' (such as அகம் 'love life' (புறம் 'material and ethical life' is not specifically mentioned, but commentators add it from the theory that புறம் is the converse of அகம்), கைகோள் 'thematic behavior' (such as களவு pre-marital love', கற்பு post-marital love), கூற்றுவகை 'kinds of speeches' (such as by தலைவி 'heroine', தோழி 'her friend'), கேட்போர் 'addressees or interlocutors' (such as தலைவன் 'hero', பாங்கன் 'his friend'), களன் 'landscape' (such as குறிஞ்சி), காலம் 'season and the time of a day' (such as கார்காலம் 'rainy season' and மாலை 'evening') are specific to அகம் poems. Hence these cannot be mandatory components of all poems, though they are in the first group of 26. Other components in the first group of

the list are வண்ணம் ('sound effect'), பயன் ('yield of a poem'), மெய்ப்பாடு ('emotional impact'), எச்சம் ('left unsaid', முன்னம் ('context'), பொருள்வகை ('kinds of content appropriate to பா types'), துறை ('symbolic meaning') and மாட்டு ('connecting meanings across'). Except the first three, others are about getting the meaning of a poem. The sutras meant to explain these words are enigmatic and are focused on meaning in அகம் poetry. தொல்காப்பியம் elaborates these concepts outside செய்யுளியல் in other chapters.

2.3 Components in the second group

The components in the second group are அம்மை, அழகு (probably, beauty of word choice), தொன்மை (opposite of விருந்து; probably the conventions of poetry), தோல், விருந்து (probably innovation or surprise element as in twisted phrase), இயைபு (this is different homonymous with இயைபு as a kind of தொடை that refers to the final rhyme; here it refers to phonetic cohesion ensured by sandhi), புலன் (sensory radiance; தொல்காப்பியம் uses the word சேரி மொழி to refer probably to 'street lingo' charged with sentiments) and இழைபு (it probably refers to refinement or craftsmanship, as the word இழை would suggest, which has come to mean 'ornament'). These concepts are not elaborated elsewhere in பொருளதிகாரம் beyond the enigmatic sutras about them in செய்யுளியல்.

2.4 யாப்பு as a component and as a discipline

யாப்பு is one of the components or units of a poem and it is placed in the first group of the list in தொல்காப்பியம், as mentioned above. It may be understood as referring to the process of sequencing the units to convey meaning (செய்யுளியல் *). This is listed in the sutra after the five building blocks, as

mentioned above. Later from the time of இறையனார் அகப்பொருள், (see the commentary on its பாயிரம், மணிகண்டன், p.27), the term யாப்பு is used in the broader sense of sequencing the building units as well as other components of a poem which should be said to fall under the rubric of poetics, except the ones that go under அணி, which becomes a separate part of செய்யுளியல் from the time of வீரசோழியம் (மணிகண்டன் (2016, தமிழில் யாப்பிலக்கணம்: வரலாறும் வளர்ச்சியும் 'The Grammar of Prosody in Tamil: History and Development', p.27). This extended coverage of யாப்பு is reflected in the coinage யாப்பியல் 'section on யாப்பு', as in களவியல், மரபியல், செய்யுளியல் etc., where இயல் is used in the sense of 'discipline, body of knowledge'. It is in this sense of being an equal part of the grammar யாப்பு becomes self-standing grammar in the designation யாப்பிலக்கணம் 'treatise on யாப்பு' (like the other parts of the grammar, for example, சொல்லிலக்கணம்). This is a journey of 'the discipline of composition' யாப்பு from being a unit செய்யுள் to becoming a discipline itself. செய்யுளியல் 'the discipline of composition', conversely, becomes a sub-part of the discipline of யாப்பியல், as the internal organization of யாப்பருங்கலம் into உறுப்பியல் and செய்யுளியல் would show'

பேராசிரியர் (commentary of செய்யுளியல் 1) points to the later practice of having யாப்பு as a separate part of grammar and calling it யாப்பதிகாரம் on par with the three parts of the Tamil grammar. But he rejects it arguing that this practice should also permit வழக்கதிகாரம் for the study of வழக்கு. If யாப்பு, which in opposition to செய்யுள், gets a separate disciplinary status, வழக்கு, which is in opposition to செய்யுள், must get that. Since வழக்கதிகாரம் does not have legitimate existence, creating யாப்பதிகாரம் cannot have it either, according to him.

The term இயல், however, is used in another sense of category to refer to some components of செய்யுள் listed in the first sutra as in எழுத்தியல், அளவியல் and elsewhere as in முடுகியல் ‘category of quick pace’ and அடக்கியல் ‘category of precis’. The meaning of இயல் is different in these two uses. In எழுத்தியல் above, for example, இயல் is used in the sense of ‘behavior or character’ (cf.இயல்பு ‘nature of character’).

Though the word யாப்பு is used in தொல்காப்பியம் in the first sutra as a component of செய்யுள், as mentioned above, it itself uses the term elsewhere in the larger sense of referring to entire prosody. The meaning of இயல் in its use of யாப்பியல் (செய்யுளியல் *) may be in one of these two meanings. If it is used in the second meaning, it would suggest that யாப்பு was a collective term referring to a distinctive body of knowledge or discipline at the time of தொல்காப்பியம் itself. Then தொல்காப்பியம் uses யாப்பு in two distinct senses: a unit of செய்யுள் and the organizer of various units into a செய்யுள்.

The inquiry of யாப்பு ante-dates தொல்காப்பியம், or is contemporaneous with it. பேராசிரியர் (தொல். பொருள். மரபியல் S 95) claims that அகத்தியம் had an expansive செய்யுளிலக்கணம் and தொல்காப்பியம், in view of the advantage of condensing it (சுருங்கச் செய்தலின் அருமை நோக்கி), gives segments of it (பகுத்துக் கூறினார்). This is perhaps பேராசிரியர்’s answer to the question why தொல்காப்பியம் has left some terms and concepts in செய்யுளியல் unexplained and unused further.

2.5 Study of யாப்பு

The antiquity of the study of செய்யுள் is suggested by the expressions in the sutras of செய்யுளியல் in தொல்காப்பியம் such as யாப்பறி புலவர் (S 74),

நூல்நவில் புலவர் (S 148), தொன்னெறிப் புலவர் (S 230), உயர்மொழிப் புலவர் (S 163), வாய்மொழிப் புலவர் (S 71), நல்லிசைப் புலவர் (S 1), புலன் உணர்ந்தோர் (S 233), என்மனார் புலவர் (S 2), மொழிப (S 17), என்ப (S 18, 19 and other places) (மணிகண்டன் ப. 26). (Incidentally, such great interest in யாப்பு suggests the existence of high literary activity). Other scholars acknowledged in these expressions may have treated யாப்பு as the organizer of components of செய்யுள்; if they have, we will have to conclude that தொல்காப்பியர் takes a different epistemological position, which is that யாப்பு is only one of the components of செய்யுள், while embracing the other position also.

It should be noted that செய்யுளியல் and யாப்பியல் are used synonymously by some even at the time of தொல்காப்பியம். But in யாப்பருங்கலம், செய்யுளியல் is subordinated to யாப்பியல் making it one of its three parts, the other being the formal components (உறுப்பியல்) and the miscellaneous (ஒழிபியல்).

செய்யுளியல் in தொல்காப்பியம் is about poetics and prosody (metrical structures and types of poems) is a part of it (தமிழண்ணல் 1979, p.9). In யாப்பருங்கலம், on the other hand, செய்யுளியல் is about the types of poems (and the content related and interpretation related components are excluded).

யாப்பு grammar is claimed to be unique to Tamil. சிவஞானமுனிவர், who believes that the grammars of Tamil and Sanskrit have the same source, lists யாப்பு to be different from that of Sanskrit along with few other differences of grammar. This claim is endorsed by others as well up to the modern period by Tamil scholars (for example, மு. வரதராசன் in மொழி வரலாறு 'History of (Tamil) Language', p. 378-9), as cited in மணிகண்டன், p.25-6). It is obvious that Tamil and Sanskrit have different forms of poems. Sanskrit, for example, does not have வெண்பா. Whether the two languages differ in prosodic theory relating to

the units of a poem, manifestation of rhythm and the relationship between poetic form and poetic content waits for an investigation by bilingual scholars.

2.6 Conceptualization of யாப்பு

The root of யாப்பு is the verb யா 'tie'. யாப்பு means tying the prosodic units together. An extension of the meaning of this verb is 'bind'. One can see this meaning in யாப்பினுள் அட்டிய நீர் 'water poured into the binding relationship' (திருக்குறள் 1093, Tamil Lexicon). This meaning could also be taken to imply 'binding a sequence of poetic units into a rhythm'. Another word with this sense of யா is யாக்கை (= உடல், Tamil Lexicon), which has reference to 'the body that binds in life'. யாப்பு is that which binds in the poetic spirit. From a generic meaning of 'tie or bind' this verb is extended to the specific meaning of 'compose (a book)' (e.g. சான்றோர் யாத்த நூல் 'the book composed by scholars').

The way the poetic phenomenon யாப்பு itself is conceived by prosodic grammarians has changed over time. This is in addition to the change in the place of யாப்பு, and its relation to poetics, as mentioned above. Prosodic grammars have a long and continuous history starting from the time before தொல்காப்பியம். It is a developmental history with additions, deletions and modifications in the theory as well as in the elements of the theory (I follow மணிகண்டன் *op. cit.* in tracing this history). At the level of theory, a fundamental change is in the relationship between the prosodic forms and the content (பொருள்) of types of poems. தொல்காப்பியம் states the very definition of யாப்பு (poetic forms generated by their components) is to flag the purport of the different types of poems (குறித்த பொருளை முடிய நாட்டல் யாப்பு 'யாப்பு is that which conclusively delineates /establishes the content that is coded / indicated', செய்யுளியல் 74). This is the reason why யாப்பு finds a place in பொருளதிகாரம் as உவமை does. In யாப்பருங்கலம் (S 1), poetic content is absent in the definition of யாப்பு

Separation of the physical units of செய்யுள் and grouping them under யாப்பு while opposing யாப்பு with the other components of செய்யுள் (instead of treating யாப்பு as one of the units that functions in the above way of தொல்காப்பியம்) is likely to be a parallel theory at the time of தொல்காப்பியம் (or even before it), which is explicated by காக்கைபாடினியம் others that follow it. Scholars (Chettiyar *op. cit.* p. *) point out that there is evidence to claim that காக்கைபாடினியம் is a later work and so the above theoretical shift is a later development. But it may be contemporaneous to தொல்காப்பியம் and the legend that the authors of தொல்காப்பியம் and காக்கைபாடினியம் had the same teacher may represent not the physical contemporariness but may represent the theoretical contemporariness even if காக்கைபாடினியம் is a later work.

2.7 Beyond the unit of செய்யுள்

உவமை is not a unit of செய்யுள் in தொல்காப்பியம். This is an inexplicable omission and modern scholars try to explain this in various ways. One explanation is that (Rm. Periyakaruppan, *Tradition and Talent in Tamil Poetry*, p. 48) உவமை is subsumed under கூற்று, a unit of செய்யுள். But கூற்று is a unit of content, which உவமை is not. Secondly, உவமை is a major feature of poetry to have a separate chapter (உவமையியல்) and is unlikely to be subsumed under another. Thirdly, this explanation may apply partially to one kind of உவமை (உள்ளுறை உவமை) but not to others (ஏனை உவமை). Note that மெய்ப்பாடு, which has a chapter, is also mentioned as a உறுப்பு.

Another major feature which is not listed as a உறுப்பு is ஓசை. It is not elaborated either in a separate chapter. உவமை and ஓசை may be said to be on a higher plane. They are the fountain heads of poetry; they are the energy that

drives the poem to be experienced. உவமை gives the visual experience and ஓசை the aural experience.

Before going into the historical changes in the formal elements of poetry, we will see first what these elements are in தொல்காப்பியம் and then the modifications and real innovations that later prosodic grammarians brought.

3. Formal units of யாப்பு (உறுப்பு)

The terms used for the units and elsewhere in the grammar of prosody are the words from the ordinary language, which are used by the grammarian in the technical sense, as pointed out by பேராசிரியர் (செய்யுளியல், கழகப்பதிப்பு பக். 120). The grammarians also have developed an extensive metalanguage to refer to concepts in a short hand. For example, தேமா 'sweet mango' refers to the சீர் to the அசை combination of நேர்+நேர், தேமாங்காய் to refer to the அசை combination of நேர்+நேர்+நேர், காய்ச்சீர் to refer to any combination of three அசை that ends in நேர்.

The technical term for the formal unit is உறுப்பு 'organ or limb' by all grammarians, but its sense differs. They are the building blocks of a poem, as the biological organs build the body. The content is its life. பேராசிரியர் (செய்யுளியல் 1) raises the question of what a செய்யுள் is beyond the list of components and answers it, using the analogy of part and whole, the whole is obtained when the parts are put together, as mentioned earlier. It must be remembered that the components include content also. தொல்காப்பியம் brings in the content explicitly (செய்யுளியல் 74) when it defines யாப்பு (in the inclusive sense of the units and the building with them) in this way: that which establishes a specific (or aimed) meaning (or content) using the units from

எழுத்து to அடி. The tattoos on the body are அணி, the body decoration or beautification. தொல்காப்பியம் lists 34 limbs (called components above) of செய்யுள் 'poetics' including யாப்பு of which the formal ones in the sense of building blocks are six. The later grammarians take these six as belonging to யாப்பு proper. They are மாத்திரை, எழுத்து, அசை, சீர், அடி, தூக்கு, which are in the ascending order of size. In other words, the preceding limb or unit is subsumed in, or is the building block for, the next immediate limb or unit. An analogy of this structural relationship is the collapsing Russian doll. பல்காயம், considered the earliest after தொல்காப்பியம் (but not extant now except the 34 sutras cited in the later poetic grammars) makes the list to have seven limbs or units. This new list drops மாத்திரை and adds தளை 'collocation'. Later grammarians generally adopt the list from யாப்பருங்கலம். But there are exceptions; வீரசோழியம் drops எழுத்து, for example. தொல்காப்பியம் does not define or describe each of the limbs individually in செய்யுளியல், like the later grammars. Information of them may be available in other parts of the grammar. Information of மாத்திரை and எழுத்து, for example, is available in the part on sounds (எழுத்ததிகாரம்).

This argues for viewing the three chapters of தொல்காப்பியம் are integrated and it supports the view of modern scholars that செய்யுளியல், the largest chapter in the whole work with 235 sutras (in இளம்பூரணர்'s counting), is the goal post towards which everything else moves.

4 மாத்திரை

மாத்திரை is the duration of sound segments, measured in traditional wisdom, by the duration of batting the eye lid or snapping of one's fingers. The basic durations are short (குறில்) and long (நெடில்) as in the articulation of vowels (உயிர்), where the long one is double the short one in duration. Thus மாத்திரை is limited to vowels among the sound segments, which form the nucleus of syllables. The consonants with vowels (உயிர்மெய்யெழுத்து) have the same மாத்திரை as the vowels. மாத்திரை is a concept in linguistic grammar for classifying the phonetic segments (or phonemes) into vowels and consonants and the vowels into short and long. It also helps to describe non-phonemic sounds in terms of lengthening and shortening of the duration of vowels and consonants.

4.1 Special durations

மாத்திரை, in metrical grammar, provides the criterion to determine the *kinds* of the next higher unit, அசை. The short and long durations may extend to extra-long (அளபெடை) and extra-short (குறுக்கம்). Thus there are three measurements of duration viz., normal, elongated and shortened; of these, the normal has two measurements, short and long.

The extra-short duration is the result of the linguistic context of the occurrence of a vowel or a consonant; the extra-long duration is a result of binding the sound sequence to melody and it is called by the name (இன்னிசையளபெடை 'lengthening for sonority') or a result of word formation rules

(சொல்லிசையளபெடை 'lengthening in morphology'; e.g. குரீஇ = குருவி 'sparrow'; தழீஇ = தழுவி 'having embraced'). Poets may create lengthening to fill in a rhythmic gap by creating an extra அசை (செய்யுளிசை அளபெடை; e.g. தேளம் 'country'). These are extra-long vowels (உயிரளபெடை). There are also extra-long consonants, which are nasals and liquids that occur after a short vowel. This is called ஒற்றளபெடை (e.g. கலங்ங்கு நெஞ்சம் 'disturbed heart', மெல்லல்

'slowly'). Its primary function in poetry is to intensify the melody. (i.e. being இன்னிசையளபெடை), but semantically it intensifies the sense. This makes however no difference in counting அசை (கலங்கு and கலங்கு are both two அசை). It is sometimes used to make up a desired அசை, in which case the extra consonant gets one மாத்திரை; then it is counted or measured to determine the length of a சீர். The same is true of extra-long vowels. The vowels of உயிரளபெடை will belong to one அசை or to two அசை depending on the function of the extra vowel in the poem whether it is used to create sonority or to meet any சீர் requirement respectively. In the latter case, it gets one மாத்திரை like any short vowel.

Elongation of vowels is mentioned in the linguistic grammar in the communicative context of calling someone at a distance and in the grammatical context of past tense conjugation. In the former, elongation takes place in the vowel in the final position of the noun and in the latter, it is in the final position of the verbal stem. It is considered a change in the noun as in declension (வேற்றுமை) in the former and a form of inflectional sandhi. In prosody, elongation is anywhere in a சீர் and is limited to one extra மாத்திரை. Its function is two-fold to contribute to the melody (இன்னிசை) and to fill in a hole in சீர் (செய்யுளிசை). The same phonetic phenomenon, அளபெடை 'raising the measurement (of duration)', it may be seen, has different formal and functional properties in the ordinary language and in the metrical language.

4.2 The function of மாத்திரை

மாத்திரை plays a role in determining the nature of அசை. Ignoring the consonants, நேரசை has one or two மாத்திரை; நிரையசை has two or three மாத்திரை. அசைs thus differ in the quantum of மாத்திரை or in its weight (கனம், நிரை is heavier than நேர் that contributes to the துள்ளல் ஓசை of

கலிப்பா, according to the editor of கலித்தொகை (கழகப் பதிப்பு) in the Introduction), which will affect the nature of ஓசை produced by சீர்'s that are composed of அசை. மாத்திரை by itself does not correlate with the formation of அசை, but the way of sequencing of the short and long durations correlates. Each of the two words கலாம் and காலம் has three மாத்திரை, but the first word has one அசை and the second one two.

மாத்திரை ultimately contributes to the ஓசை 'rhythm' of பா 'verse' in embellishing the four finite rhythms. This is a feature of வண்ணம், as will be shown later.

மாவா ராதே மாவா ராதே (புறநானூறு 273)

குரங்குளைப் பொலிந்த கொய்சுவற் புரவி (அகநானூறு 4)

The first citation about the hero not retuning from the war has all அசை and சீர் to use the மாத்திரை of long duration. (This is named நெடுஞ்சீர் வண்ணம்). the second citation about the heroine anticipating the return of the hero from the war uses the மாத்திரை of short duration (other than ஐ in குளை in the first சீர், which could be an instance of ஐகாரக் குறுக்கம்). (This is named குறுஞ்சீர் வண்ணம்). They reflect the respective moods of wailing and palpitating under the அகவலோசை.

வண்ணம், which is one of the units of செய்யுள் listed in தொல்காப்பியம், refers to a repetitive pattern of many elements; the above one is of the element மாத்திரை (or எழுத்து). This is for embellishing a poem (as opposed to structuring a poem); another one of embellishment is தொடை. As such it is optional in a poem. Later grammarians raise தொடை (particularly எதுகை, see வீரசோழியம்) to the level of a structural unit.

பேராசிரியர் (செய்யுளியல் 2) illustrates the effect of மாத்திரை on ஓசை with examples where a line with all சீர்'s in நேரசை with short vowels and a line with all சீர்'s in long vowels have different effects on ஓசை. His actual constructed example is நிரைபசை with two short vowels (வரகு வரகு.....) and short and long vowels (பனாட்டு பனாட்டு). He gives an example in which the short vowel (the second one below) gives இன்னிசை 'harmonious rhythm' compared to the long vowel (the first below), even when the அசை formation (நேர் நேர்) of the சீர் is the same.

அம்ம வாழி கேளாய் தோழீ
அம்ம வாழி கேளாய் தோழி

The first line is not harmonious because the rhyme between third and fifth சீர் is not synchronized. தூக்கு (to be discussed later), which balances the rhythm between the lines will probably also attend to balancing the rhyme of சீர் in a single line.

Counting of மாத்திரை is done in the same way in the linguistic and metrical grammars, but its function is different in both. பேராசிரியர் recognizes this in his long commentary of செய்யுளியல் 2, which states that மாத்திரை and எழுத்து in செய்யுளியல் have been described (மேற்பட்டன) earlier (in எழுத்ததிகாரம்). He takes the text to read மேற்பட்டன்ன 'are similar to what has been described earlier'. He demonstrates his point with this reading that the units in the grammars of natural language and metrical language are same but not identical to எழுத்து with regard to its number enumerated in நூன்மரபு of எழுத்ததிகாரம் and செய்யுளியல் of பொருளதிகாரம் (see below).

மாத்திரை, as pointed out above, does not play a role in categorizing அசை, which is done by எழுத்து. நேர் has single vowels of short or long duration, which are one or two மாத்திரை ; நிரை has two vowels either two short vowels or a

short and long vowel, which are two and three மாத்திரை. It is never a sequence of long and short vowels. Note that both அசை could have two மாத்திரை. எழுத்து, however, is defined by duration, viz. குறில் and நெடில். எழுத்து outside the basic alphabet is also defined by duration such as அளபெடை and குறுக்கம்.

மாத்திரை does play a role in measuring or scanning the அசை in a சீர் (அலகிடுதல்). The measurement may be expressed it must be noted, equally by letters. The last ones above are referred to as extra vowel, shortened vowel and shortened consonant. This possibility, probably, helps to obviate the need for மாத்திரை as a உறுப்பு, as யாப்பருங்கலம் does.

5. எழுத்து

எழுத்து is a segmental sound and it generally corresponds with the letter in writing. It is both a sound and its visual counterpart. It provides the criterion, as a phonetic segment, to measure the *length* of the next higher unit, அசை. This unit is determined by the interaction of மாத்திரை and எழுத்து. For example, two vowel letters will determine the *kind* of அசை depending on whether they are long or short and the order in the string (e.g. கலம் 'pot', கலாம் 'a name' are counted as one அசை, காலம் 'time' is counted as two அசை). The Tamil alphabet has 12 vowel segments and 18 consonant segments; the combination of these two sets in theory gives 216 segments. To which is added ஆய்தம், a segment which is created in sandhi and has the phonetic value of velar fricative and fricativizing the following stop consonant.

5.1 Kinds of எழுத்து

எழுத்து in the metrical language is not counted by the characters. The segmental sounds are increased or decreased in duration, which are respectively அளபெடை and குறுக்கம். They are not characters. They are not phonetic

segments per se but are indicators of phonetic processes. More importantly, the metrical grammar does not count the segments individually, but classifies them into phonetic types for their value in measuring அசை. There is overlapping in the classification. For example, குறில் and நெடில் are covered by உயிர்; வல்லெழுத்து, மெல்லெழுத்து and இடையெழுத்து by மெய். உயிர் and உயிர்மெய் do not differ in மாத்திரை. The 11 phonetic types in the metrical language are உயிர், மெய், உயிர்மெய், குறில், நெடில், அளபெடை, வல்லெழுத்து, மெல்லெழுத்து, இடையெழுத்து, சார்பெழுத்து, குறுக்கம். The list is made this way to help in measuring அசை and in describing தொடை and வண்ணம் (to be explained later). This is the alphabet of the grammar of the metrical language, which is different from the alphabet of the grammar of the natural language.

சார்பெழுத்து in the linguistic grammar is a segment (totaling one consonant and two vowels), whose sound value or phonetic weight is predictable from the sandhi that produces it or has a different effect on it. The three are the velar fricative (ஃ, ஆய்தம்) mentioned above, palatalized /உ/ before /ய/ at word juncture (நாகு + யாது – நாகியாது ‘which is the buffalo?’) and centralized, or shortened, /உ/ at the end of a word that ends in a stop consonant and is preceded by more than one syllable or a long vowel syllable (நாகு + எது – நாகெது ‘which is the buffalo?’). These are called சார்பெழுத்து ‘dependent segment’ because their phonetic value is derived from their position in relation to another sound.

குறுக்கம் is a segment (totaling again one consonant and two vowels), whose sound value is predictable from their phonotactic position (co-occurrence in a sequence within a word); they are three (/ஐ, ஒள/ that occur in a word in initial, middle and final positions (ஐவர் ‘five people’, தலைவர் ‘leader’, தலை ‘head’;

வெளவால் 'bat', (the vowel / ஓள/ does not occur in word middle and final positions, and /ம்/ after a pure nasal consonant in an inflected word that has undergone deletion (போலும்>போல்ம்>போன்ம் 'is like', in no other context as in பதின்மர் 'ten people' there is not cluster of two nasals). These are called குறுக்கம் because their phonetic duration is reduced from their duration in other places of occurrence. This reduces their மாத்திரை value by half. (சார்பெழுத்து / உ/ in the situations described earlier is also counted for மாத்திரை as half instead of one). Shortened /ஃ/ (called ஆய்தக் குறுக்கம்) counts for quarter மாத்திரை instead of half, shortened /ம்/ (called மகரக்குறுக்கம்) counts for half மாத்திரை. About the inclusion of this in the shortened segments list, there is strong disagreement among the commentators of தொல்காப்பியம். Shortened /ஐ, ஓள/ count as one and a half மாத்திரை word-initially instead of two (which duration it has only in the alphabet list; in words, they are reduced diphthongs). /ஐ / in the middle and end of a word has the option of being counted for one மாத்திரை like /அ /. Their reduced phonetic value affects the identity of the kind of அசை that has them, and. Consequently, the சீர் and the rhythm

The opposite of குறுக்கம், which is shortening the phonetic duration, is அளபெடை, which is lengthening the phonetic duration. The extended length, i.e. the extra vowel and the extra consonant, will have same மாத்திரை as in their normal occurrence. Thus உயிரளபெடை has three மாத்திரை and ஒற்றளபெடை one. For the formation of அசை there is an option of counting உயிரளபெடை as one vowel or two and ஒற்றளபெடை as two consonants or as one pure consonant and one consonant with the inherent vowel /அ/.

5.2 Relationship of எழுத்து to மாத்திரை

The above description shows that the relationship of value between எழுத்து and மாத்திரை may vary depending on the linguistic contexts in which the எழுத்து occurs. This variation has an effect on அசை in terms of its மாத்திரை value. The first அசை in கலங்-கு will have 2.5 மாத்திரை where it in கலங்ங்-கு will have 3 மாத்திரை. Both சீர்'s have two அசை, or one அசை (நிரைபு), if the final /உ/ is treated as shortened. The second consonant in a prolonged consonant (here ங்) may be counted to have one மாத்திரை, if the formation of அசை requires it. கலங்ங்-கு will then be நிரை-நிரை rather than நிரை-நேர். This illustrates the way மாத்திரை, எழுத்து and அசை interact.

The classes of vowels have relevance for அசை by their மாத்திரை; they and the classes of consonants have relevance for தொடை and வண்ணம். The relevance of எழுத்து to ஓசை through தொடை and வண்ணம் (as mentioned earlier) in addition to its relevance to அசை through மாத்திரை is the justification for having மாத்திரை and எழுத்து as separate units in தொல்காப்பியம். But the post-Tolkappiyam grammarians merge these two roles by defining அசை by எழுத்து delink மாத்திரை from அசை. In this way, குறில் and நெடில் are viewed as letters and not as durations. So மாத்திரை is dropped from the list of units to construct செய்யுள் but are needed to embellish it using devices like தொடை and வண்ணம், which are used in அணியிலக்கணம்.

It should be noted that தொல்காப்பியம் does not list the elements that constitute எழுத்து in செய்யுளியல். He probably would not have listed redundantly under this unit குறில், நெடில், வல்லெழுத்து, மெல்லெழுத்து and இடையெழுத்து, as they are given in the list of the prosodic grammarians who come after him. Their grammars do not have a chapter on the phonetics and phonology, as தொல்காப்பியம் does to draw from for use in the prosody. The

list of எழுத்து under யாப்பு becomes necessary when யாப்பியல் is separated from grammar.

The combined phonetic segment of consonant and vowel (உயிர்மெய்யெழுத்து) are obtainable automatically from the basic consonants and vowels. They do have relevance for மாத்திரை in that they count for one or two மாத்திரை depending on the duration of the vowels in the combination ignoring the half மாத்திரை value of the consonant in the combination. They are included under the unit of எழுத்து because of the merger of மாத்திரை and எழுத்து under one unit by the later grammarians by excluding மாத்திரை. உயிர்மெய்யெழுத்து needs to be included under எழுத்து because their phonetic value cannot be obtained independently when மாத்திரை is not available as a unit to combine with.

The reason for யாப்பருங்கலக் காரிகை to bring down the 15 members of எழுத்து to 13 by dropping the shortened /ஒள, ம்/ may be different. It could be pedagogical as these two are rare in occurrence. The number of எழுத்து that constitutes this unit varies for different grammarians (மணிகண்டன் p. 143, கந்தசாமி *op. cit.* p. 100-101). The difference in the number of எழுத்து between authors comes from dropping either the shortened vowel (ஒளகாரக் குறுக்கம்) and / or the shortened consonant (மகரக்குறுக்கம்) and the elongated consonant (ஒற்றளபெடை). இளம்பூரணர் (செய்யுளியல் *) attributes 15 எழுத்து to தொல்காப்பியம் though they not listed exactly by it (பேராசிரியர் and நச்சினார்க்கினியர் also attribute 15, but they drop மகரக்குறுக்கம் and add ஒளகாரக் குறுக்கம்), while காக்கைபாடினியம் and யாப்பருங்கலம் have 13. The reason for these differences needs to be investigated.

6. அசை

அசை, mentioned earlier, is the next higher unit after எழுத்து and is defined on the basis of it. This noun comes from the verbal root அசை 'to set time' (Tamil

Lexicon). Its role is to set the time for சீர் into two types (நேர், நிரை, see below) by its அசை structure and to have the rhythm move according to சீர் (அசை has also the sense 'move' as in அசையாச் சொத்து 'immovable property').

The question whether the names of this and other prosodic units are motivated by meaningful roots is raised by the old commentators and answered differently. For one answer, see சீனிவாசன் & சீனிவாசன் *op. cit.* The first author in his introductory chapter of the book explains the coining of the words நேர் and நிரை this way. நேர் அசை consists of one short or long vowel; நேர் means 'single' from 'straight' as in நேர் பொருள் 'straight forward meaning' and நேருக்கு நேர் 'face to face'. நிரை அசை consists of a sequence of two short vowels and of a short and long vowel; நிரை means 'row or sequence' as in ஆ நிரை 'row of cattle' and நிகழ்ச்சி நிரல் 'sequence of events in a program'.

If எழுத்து compares in some way with the phoneme in the natural language, அசை compares with the syllable. அசை, however, is not an exact equivalent of the syllable, though both operate on the vowel as the nucleus. It is a metric syllable. For example கல 'mix' is one அசை but has two syllables. It is often translated in English as mora, a unit of prosody based on syllabic weight determined by the duration and the number of vowels and consonants in a syllable. But unlike the mora in English poetry, அசை in Tamil is not the locus to carry stress, but it is a contributor to rhythm. Moreover, diphthongs (ஐ, ஒள) do not contribute to syllabic weight, as in English; they may have reduced duration and so மாத்திரை, as pointed out above. These differences come from the differences in the phonology of Tamil and English.

6.1 இயலசை

தொல்காப்பியம் posits two generic அசை and two specific ones. The generic ones have two canonical forms: 1. (C)V(C)(C), where the vowel may be short or

long. The term for this canonical form is நேர் (meaning 'single'), which is drawn from one of the two possibilities of V. The mnemonic forms (drawn from botanical words) representing நேர் are தே, மா, காய். தேமா represents the அசை sequence நேர்-நேர் in a சீர்; தேமாங்காய் represents நேர்-நேர்-நேர். Examples of words are ஒத்-தல், ஓ-தல், அல், ஆல், பல், பால், பூ, பார்க்க-க (a loan word would be பார்க்க). 2. (C)VCV(C)(C), where the second vowel may be short or long. The term for this canonical form is நிரை (meaning 'sequence'), which is drawn from one of the two possibilities of the second V. The mnemonic forms representing நிரை are கரு, விளம், கனி. கருவிளம் represents the அசை sequence நிரை-நிரை in a சீர்; கருவிளங்கனி represents நிரை-நிரை-நிரை. கூவிளங்காய் represents நேர்-நிரை-நேர். Examples of words are இல 'not (plural)', இலை 'leaf', பல 'many', பலா 'jack fruit', பலர் 'many (human)', பளார் 'sound of slap', வளர்க்க-க 'to raise', டபாய்க்க-க 'try to wriggle out'. These mnemonic forms could generate by combining all possible அசை sequences of any length. Any constraint on the length comes from the next higher unit சீர். In these generic அசைs, vowels and consonants have no restriction regarding their place in the sequence other than the phonotactic restrictions of the natural language.

There are other mnemonic forms that commentators use, but the above became the standard.

The phonological structure excluded from அசை is (C)VCV(C), where the first vowel is long and the second vowel is short. This also has two nuclei and the same மாத்திரை like நிரை. Its hypothetical code would be *நேரி. The reason for its exclusion may be in the weight of the syllable. The syllable with a long vowel is a heavy syllable and the one with a short vowel is a light syllable. The principle is that the heavy syllable is not followed by a light syllable (நெடில்-குறில்

sequence) in an அசை. Two long vowels (*நேரை) do not make an அசை, though it also has two nuclei. The principle is that two heavy syllables do not follow in an அசை. Moreover, this hypothetical அசை will have four மாத்திரை whereas no அசை has less than one and more than three மாத்திரை. The common feature between this (*நேரை) and the previous one (*நேரி) is that an அசை which has double nuclei does not have the first nucleus heavy. So அசை is formed by a combination of duration and weight of the vowel.

அசை of both forms is called இயலசை 'natural அசை' in the sense of being generic with no restriction on the place of their occurrence in a சீர் and are not privileged to any பா. They are differentiated as தனியசை 'அசை of singles or of single nucleus' and இணையசை 'அசை of pairs of or double nuclei' respectively counting the number of vowels in them in காக்கைபாடினியம், which did not find favor with the later grammarians.

These terms suggests that காக்கைபாடினியம் thinks in terms of syllables, which is based on counting the number of nuclei, viz. vowels irrespective of மாத்திரை. They correspond with monosyllable and disyllable respectively. This is a theoretical difference about the basis of delineating அசை. காக்கைபாடினியம் offers in this and in other respects (see below) an alternative theory of analysis of prosody to that of தொல்காப்பியம். யாப்பருங்கல விருத்தியுரை refers to him as வடநூல்வழித் தமிழாசிரியர் 'Tamil author in the tradition of Sanskrit *shastras*'.

6.2 உரியசை

In the specific அசை, called உரியசை, the final phonetic segment in the canonical forms (C)VCu and (C)VCVCu is /உ/. Recall that this சார்பெழுத்து and

has half மாத்திரை. The illustrative words (taken from நச்சினார்க்கினியர்'s commentary on செய்யுளியல் S 45) are வண்டு, மின்னு, நாகு, நாணு, காம்பு, தீர்வு for the first canonical form and வரகு, இரவு, மலாடு, உலாவு, குரங்கு, புணர்வு, மலாட்டு, உராய்வு for the second. The mnemonic forms are நேர்பு and நிரைபு respectively. To count these அசைs in a சீர், அசை boundary must coincide with word boundary.

There is a caveat that the V in the first of the two canonical forms above ((C)V-) cannot be short (examples are தபு, அது). Note that in the linguistic grammar these forms have a rounded /உ/ (முற்றியலுகரம்). Take for example a hypothetical line மடுக்கடுக்கும் 'like the udder'. This will not be parsed நேர்பு-நேர்பு-நேர் even though மடு is a word itself because the final /உ/ மடு is not a shortened vowel both in linguistic and metrical grammars. The pronunciation of /உ/ in மடு is rounded in the natural and the metrical language. The boundary கடு, though it is a verb and a word, does not count as a word boundary because கடுக்கும் is an inflected word. This line will be parsed as நிரை-நிரை-நேர். Linguistic and metrical grammars do not coincide in the treatment of final /உ/ in hard syllabic words; Cu is considered shortened in the former grammar when C is a stop consonant and any consonant (two nasals and two liquids); see the examples above) in the latter grammar.

There is another difference also. The shortened phonetic value of the vowel in Cu is attributed at the end of a word in the linguistic grammar, but it is done at the end of அசை, which is potentially a word boundary, in the prosodic grammar. Cu plays a role in the counting and naming of அசை and consequently of சீர். This takes us to the concept of அலகு 'measuring unit' (அலகிடு is the verb meaning 'measure', which is equivalent to scan). The grammar of prosody requires one to

decide when to scan Cu and when not to. This determination is by the prosodic requirement of சீர் structure.

Cu ending அசை must coincide with a word boundary, as pointed out above. The first அசை சேற்று in 'சேற்றுக்கால் நீலம்' is நேர்பசை and களிற்று in 'களிற்றுக்கணம் பொருத' is நிரைபசை; on the other hand, நோக்கும் is நேர்-நேர் and புரக்கும் is நிரை-நேர்; these two forms have two அசை each. It is always word boundary; it could not be சீர் boundary. In 'பெருமுத் தரையர் பெரிதுவந் தீயும்', as நச்சினார்க்கினியர் shows, பெருமு is not நிரைபசை; it is நிரை-நேர்; if it were பொருமுத் தலையர், பொருமு would qualify to be நிரைபசை. The term used by the commentators for the non-word is 'disfigured word' (சிதைந்த மொழி). If the second part of the example above were பெரிது உவந்து ஈயும், the first two அசை would qualify to be நிரைபசை. Note incidentally that the editions which have sandhi segmented would alter the prosodic determination of அசை. நிரைபசை need not be at the end of a சீர்: in 'அங்கண் மதியம் அரவுவாய்ப் பட்டென்', அரவு is நிரைபசை, though it is in the beginning of சீர். The word boundary may not be just between words but could be between a lexical word and a grammatical word (இடைச்சொல்). If வாய் 'mouth' in the above example happens to be the locative form meaning 'in, with', it does not change the அசை category of அரவு.

6.3 Options in scanning

Let us see cases where a letter is present but is ignored when scanning அசை (கந்தசாமி *op. cit.* p. 103-104). The first example is about counting shortened /உ/ in scanning அசை. The line is from a வஞ்சிப்பா (யாப்பருங்கல விருத்தியுரை S 4 citation): 'எனைப்பல எமக்குத்தண்டாது'. வஞ்சிப்பா does not have more than four அசை in a சீர். The second சீர் has five அசை when the

shortened /உ/ (குற்றியலுகரம்) is counted (நிரை-நேர்-நேர்-நேர்-நேர்). In the அசை system of தொல்காப்பியம், it will have three அசை: நிரைபு-நேர்-நேர்பு. If the shortened /உ/ is not counted, this சீர் will have three அசை (நிரை-நேர்-நேர்). It may be seen that when the theory drops நேர்பசை and நிரையசை it needs the concept of excluding shortened /உ/ from measurement (அலகு) of அசை.

Other examples of not counting some letters do not involve உரியசை. But they are also letters which have shortened phonetic value. This is a line from திருக்குறள், which is in வெண்பா meter: குழலினி தியாழினி தென்ப. Here /தி/ has shortened /இ/ (குற்றியலிகரம்) as it is phonetically conditioned by the following /ய/. If it is considered the normal short /இ/, தியா will be நிரையசை. The resulting collocation (தளை) would be நிரை+நிரை, which is not the appropriate collocation for வெண்பா (see later). If the shortened /இ/ is discounted (which leaves the pure consonant discounted), the resulting அசை is நேர். The collocation நிரை+நேர் is appropriate for வெண்பா. Scanning the shortened /இ/ would lead to the violation of a prosodic requirement.

The following example is about shortened /ஐ/ (ஐகார்க்குறுக்கம்). Its value is one மாத்திரை. This is the phonetic feature of this diphthong in the middle of a word in the natural language. Phonetic shortening except the shortened /இ/ is pronounced that way in speech in the modern period. If this is projected to the past, then அசை measurement in these cases would reflect pronunciation rather than the grapheme. But this is not always the case. Not counting the letters with shortened pronunciation is not universal. They are counted when they do not disrupt the required சீர் formation.

The following lines are from a வெண்பா (யாப்பருங்கலக் காரிகை citation).

கெண்டையை வென்ற கிளரொளி உண்கணாள்
பண்டையள் அல்லள் படி

If the middle /ஐ/ is treated as a short vowel in the first சீர் of the two lines, it will end in நிரையசை, which is followed by நேரசை in the following சீர். This is appropriate for வெண்பா.

With regard to elongated vowels and consonants (அளபெடை), there is no phonetic correlation with speech. Not counting the extra vowel or consonant is purely on the basis of சீர் formation. The following வெண்பா line is cited by பேராசிரியர் (செய்யுளியல் பக். 151) for elongated vowel that is not counted.

உப்போஓ வெனவுரைத்து மீள்வாள் ஒளிமுறுவல்

The extra /ஓ/ is not counted leaving the first சீர் to have two அசை (நேர்-நேர்) as in the preceding line of the verse (not given here). This is followed by நிரையசை in the next சீர் meeting the appropriateness condition of வெண்பா.

The line below of ஆசிரியப்பா, which is cited by பேராசிரியர் (செய்யுளியல் பக். 153) from மலைபடுகடாம் (line 352), has elongated consonant.

கண்ண தண்ணெனக் கண்டும் கேட்டும்

In consonant elongation (i.e. two consonants without a vowel in the second consonant as in வெண்ணெய், which are geminate consonants), the second consonant may have one மாத்திரை; கண்ண may be scanned as நேர்-நேர். It is treated as if it is a consonant with a vowel (உயிர்மெய்யெழுத்து). The elongated consonant stands by itself as if there is a pause after it. -ண்ணெ- in the second சீர் (தண்ணெனக்) of the line may not be scanned as நேர்-நிரை, but can be scanned as நேர்-நேர்-நிரை. Note that the same sequence in the ordinary word

வெண்ணெய் does not have this scanning option. The அசை of the first two சீர் in the above line will have அசை this way when the extra consonant is counted: நேர்-நேர் followed by நேர்-நேர்-நிரை. The structure of the second சீர் in this scanning is not appropriate for ஆசிரியப்பா, which has காய்ச்சீர், but it is appropriate for வஞ்சிப்பா, which has கனிச்சீர். If, on the other hand, the extra consonant is not counted in the second சீர், its அசை structure will be நேர்-நிரை, which is appropriate for ஆசிரியப்பா. The line above is of ஆசிரியப்பா. The extra consonant in the first சீர் must be counted because there cannot be a சீர் with one அசை (except in some special places like the last சீர் of வெண்பா). Its அசை structure will be நேர்-நேர். This additionally ensures the collocation of ஆசிரியப்பா, which is நேர்+நேர். Note that the extra-long consonant is counted for scanning in the first சீர் and not counted in the second சீர்.

This discussion shows that there is some flexibility in scanning of segments with special மாத்திரை value (குறுக்கம் and அளபெடை) and the discussion earlier showed the same flexibility with regard to shortened /உ/. The choice of one scanning over another is decided by the requirements of the சீர் structure of a verse. This means that a conflict between a linguistic fact and a prosodic requirement, the latter wins.

6.4 Four kinds of அசை

நேர்பசை and நிரைபசை are called உரியசை 'privileged அசை' (as opposed to இயலசை), as mentioned above. They are the privileged சீர் of ஆசிரியம் meter and are its உரிச்சீர். They are required in the final சீர் of the last line of வெண்பா. உரியசை makes the number of அசை into four, which தொல்காப்பியம் posits (and much later இலக்கண விளக்கம்). But காக்கைப்பாடினியம், which the legend claims to be contemporaneous, and its

follower யாப்பருங்கலம் do not. They make the theory of அசை and consequently of சீர் simpler. Reduction in the number of அசை makes less permutations of them and so the number of possible சீர்'s. With two kinds of அசை, the number of ஈரசைச் சீர் that could be generated are reduced to four (2^2); with four அசை, the number is sixteen (2^4). It also removes the flexibility in identifying அசை with regard to those that end in Cu. Simplification in the possible structures of சீர் appears to parallel historically with the extensions of the number of சீர்'s in a line.

6.5 Undervaluing உரியசை

The concept of அசை ending in Cu continues to play a role even in the later theory, where it gives an option in counting the number of அசை in a சீர், as shown above, and thus in deciding the சீர் structure of அடி. The two உரியசை are relevant in the position of the final சீர் of வெண்பா. This special use of உரியசை gives birth to these special menonomic terms: காசு (நேர்பு) and பிறப்பு (நிரைபு) in this particular position. Further, in this position உரியசை is always treated to be one அசை whereas elsewhere they have the option to be treated as two அசை (நேர்-நேர், நிரை-நேர்).

A large number of words in Tamil, if not the largest, end in Cu. With உரியசை (நேர்பு, நிரைபு), the cases where the அசை boundary and word boundary will coalesce will be large. In other words, there will be less number of cases where the words are broken. கொங்குதேர் may be parsed as நேர்பு-நேர் நேர்-நிரை; the former retains the integrity of the word கொங்கு 'honey'. பேராசிரியர் (செய்யுளியல் 9) gives the following example. If நீடுகொடி is parsed as நேர்-நிரை-நேர் (நீ-டுகொ-டி), it becomes a மூவசைச் சீர் ending in நேர், which is வெண்பா உரிச்சீர் (வெண்சீர்) but is admissible in ஆசிரியப்பா. He justifies

that this makes the அகவல் ஓசை of ஆசிரியப்பா harmonious, where this line occurs. Note that for him, sound harmony seems more important than semantic transparency. In other words, the musicality of verses takes precedence. This situation will be abundant when உரியசை is dropped from theory.

அசை that is isomorphic with a word (and so a சீர் with one or more அசை), it may be hypothesized, is common in classical poetry. At the later time, particularly at the time of பிரபந்தம், this semantic preference is under-valued for reasons like the preference for சிலைடை, which is felicitated by the possibility of breaking words differently and distribute the parts across சீrs. Setting poems to music, as pointed out above, also does not have a premium on சீர் - word isomorphism.

6.6 உரியசை and special phonetics

-Cu is a குறுக்கம் from the மாத்திரை point of view. But it is different from other குறுக்கம் in that it is much more prevalent and is significant in a large number of words. Hence it is given a special status and is considered to give birth to a new type of அசை (நேர்பு and நிரைபு), as we have seen above. Other குறுக்கம்s do not produce a new type of அசை and they are handled as a variation in measuring or scanning (அலகிடுகை) of அசை. The later, or one may say the alternate, theory is to erase the differential treatment of குறுக்கம் and treat all of them under the options of scanning. Another uniformity the dropping of உரியசை from the theory brings is that நேர்பு and நிரைபு are the only அசை that have மாத்திரை which is not a whole number. When மாத்திரை is dropped out of the list of the units of செய்யுள், அசை with an extra half மாத்திரை is less elegant.

Note that no mnemonic code is used for அசை with elongated and shortend sounds except for the one with shortened /உ/. They are handled through

measuring (or scanning) சீர். However, occasionally one finds codes such as நேளர் and நிரைஇ for vowel elongation. Analogically, the codes for consonant elongation should be நேர்ர் and நிர்ரை, which however are unattested. These four are simply not kinds of அசை.

6.9 Phonetic pause and scanning

Determining the nature of அசை by counting the letters is not a mechanical exercise. There may be a sequence of two short vowels that may count as two நேரசை rather than one நிரையசை. Look at 'அஉ அறியா அறிவில் இடைமகனே' (யாப்பருங்கலக் காரிகை citation): Here அஉ are counted as two நேரசை. There are two reasons for this; first is that these two vowels refer to themselves (தற்குட்டு, i.e. they are mentions) and the second is that there is a pause between the vowels (விட்டிசை). The line that follows the above line is 'நொ அலையல் நின்னாட்டை நீ': Here நொ is not combined with the following அ to make a நிரையசை but is left to stay alone to make a நிரையசை. This verb is in the imperative meaning 'you suffer' and there is a pause after it indicating anger at the shepherd. It must be noted that monosyllabic verbal stems with a short vowel functioning as imperatives are extremely rare unlike the long vowel verbs like வா, போ. The former being a rare it needs to be high pitched to differentiate them from the first syllable of any verbal form. This is probably the reason for its அசை treatment as நேர் rather than the grammatical category of imperative per se (ஏவல்), as prosodic grammarians treat it. The high pitch qualifies it to be of two அசைs (நேர்-நேர்).

The lines below are from a நாலடியார் verse and the first line has அ, ஆ, which are exclamation (expressing குறிப்புப் பொருள்) and have a pause after them.

வழங்கான் பொருள்காத் திருப்பானேல் அஆ
இழந்தானென் றெண்ணப் படும்.

These examples point out that அசை measurement (அலகு) takes into account how a line is spoken (including pauses) and is not done mechanically on how it is written. More than counting letters is necessary for scanning.

An அசை may not even be a word or a part of a word; it may be an imitation of sounds, i.e. sound symbolism or onomatopoea, according to the understanding of sutra 9 by பேராசிரியர். His example is

கஃஃஃ றென்னுந் தண்டோட்டுப் பெண்ணை

The first சீர் is an onomatopoeic expression (called எழுத்தலிசை 'letterless sound' or குறிப்பிசை 'sound whose sense is suggested from it') referring to the noise from the fronds of palmyra trees and it consists of two அசைs. Such onomatopoeic expressions are treated just like words for measuring அசை. கஃஃஃ has ஒற்றளபெடை and two மாத்திரை (the second consonant ஃ measures one). It is a சீர் of நேர்-நேர்.

அசை as the foundation for சீர்s to carry the rhythmic patterns is amenable to couple அசை with the patterns of சந்தம் 'beat'. Theorizing this coupling in சிந்துப்பாடல் is a later development in the history of prosody and this will be discussed later.

7. சீர்

சீர் is the next higher unit or limb of செய்யுள் after அசை. It has the sense of 'making right' (cf. சீர்ப்படுத்து 'making something right') and its role is to harmonize the ஓசை of the அடி. It is the base of ஓசை. In the words of இளம்பூரணர் (செய்யுளியல், கழகப் பதிப்பு பக். 443), சீர் produces ஓசை

(சீர்தானே ஓசையைத் தரும்). A சீர் is a segment of ஓசை that spreads over அடி; there is no break of ஓசை within a சீர். தொல்காப்பியம் describes this as இயைந்து இறுதல் 'cohere and end'. Coherence is of அசை and the end is of the rhythmic flow, which is coterminous with அடி. பேராசிரியர் (செய்யுளியல் *) points out that even when the அசை is a word and a சீர் happens to be a sequence of words, there is no pause between the words, as it would be in a sentence in the natural language.

The constitution of சீர் is by அசை, which is comparable to the word constituted by syllables in the natural language, but சீர் is a rhythmic unit rather than a semantic unit. Sandhi facilitates breaking the word sequences into சீர். சீர் could be meaningful when it is isomorphic with a word or a compound. When a சீர் is isomorphic with a word, it is called சிறப்புச் சீர் 'exalted சீர்'. When it is not, it is called வகையுளி 'that which has division (of word)' (from வகு 'divide', see the sutra cited below).

7.1 சீர் and word

There might be a conflict between semantic flow and rhythmic flow. The commentators point out that it is the rhythm that determines the formation of சீர் even if it is at the cost of breaking semantic integrity provided by the word. The example given is

நிலமிசை நீடுவாழ் வார் (திருக்குறள் 3)

The word வாழ்வார் with a meaning is split into வாழ் வார் where the third சீர் is meaningless but the split ensures harmony in rhythm. This is the meaning of this sutra (செய்யுளியல் 9)

அசையுஞ் சீரும் இசையொடு சேர்த்தி
வகுத்தனர் உணர்த்தல் வல்லோர் ஆறே

This means that அசை and சீர் are delineated (வகு as in இலக்கணம் வகு) by aligning (சேர்த்து) them with the rhythm (இசை) of the line. This is the way the capable poets make one feel (உணர்த்து) a poem. ஓசை and இசை are used synonymously in தொல்காப்பியம் and its commentaries.

பேராசிரியர் extrapolates from the conjunction of அசையுஞ் சீரும் to include the breaking of அடி and gives this example.

நுதல திமையா நாட்ட மிகலட்டுக்
கையது கணிச்சியொடு மழுவே (அகநானூறு கடவுள் வாழ்த்து)

இகலட்டுக் கை 'enemy smashing hand' is a noun phrase representing a concept wherein the relative participle and its head are not split to be in different places in the natural language (called island constraint in Generative Syntax). Here in the metrical language they are split into two lines to maintain the four சீர் of ஆசிரியப்பா and by which to maintain its ஓசை.

பேராசிரியர் goes a step further to say that where there is a conflict between தளை and ஓசை, it is resolved in favor of ஓசை. He gives the following artificial non-poetic line using the சீர் formula.

மாசேர்வாய் மாசேர்வாய் மாசேர்வாய் மாசேர்வாய்

This is a வெண்பா line with four காய்ச்சீர் and வெண்டளை (நேர்+நேர்), but is claimed to have துள்ளலோசை of கலிப்பா by பேராசிரியர். For him, the mutual relation between சீர், தளை and ஓசை is the arbiter to resolve conflicts. The above line could equally have செப்பலோசை. Remember that கலிப்பா also has காய்ச்சீர் and வெண்டளை, though it has also the special கலித்தளை (நேர்+நிறை). To know how one knows the rhythm of a line, பேராசிரியர் says that one should have a sharp ear and fine sense (of poetry) (எஃகுச் செவியும்

நுண்ணுணர்வும் உடையார்) to get the sense of the rhythm. So ultimately it is the subjectivity of feeling the rhythm that might even counter the dictates of the formal prosodic structure.

பேராசிரியர் makes a further point (செய்யுளியல் கழகப் பதிப்பு ப. 142) that a non-lexical சீர் assume lexical properties if conditions are present.

மம்மர் நெஞ்சினன் தொழுதுநின் றதுவே (அகநானூறு 56)

Here தொழுதுநின்றதுவே is split as தொழுதுநின் றதுவே into two சீர். When ஏ is added to நின்றது it will produce நின்றதே as per sandhi; when it is split, அது behaves as if it is an independent word with a rounded /உ/and gives அதுவே by sandhi. Nevertheless, சீர்'s run through the line with no pause (இயைபு).

Whether the line has தொழுதுநின்றதுவே or தொழுதுநின் றதுவே, the rhythm will have no interruption of pause. The point of சீர் break of a line is probably a modulation of the flowing rhythm.

பேராசிரியர் is however wrong in making அதுவே in the line above a special prosodic fact. Prose also permits unrounded /உ/ to behave like a rounded one. One could have என்பதேயல்லாமல் or என்பதுமல்லாமல் as well as என்பதுவேயல்லாமல் or என்பதுவுமல்லாமல். The sandhi under discussion is a problem specific to the neuter pronoun ending அது in verbal nouns (see the reverse in அதே நல்லது as a variant of அதுவே நல்லது as a free pronoun in modern Tamil).

7.2 Length of சீர்

A சீர் may be constituted by one அசை (ஓரசைச் சீர்) and up to four அசை (நாலசைச் சீர்) in later grammars. தொல்காப்பியம் has a limit of three அசை to a சீர். A modern scholar has argued (கோதண்டராமன் 1995, புதிய நோக்கில்

தமிழ் யாப்பு, p. 35) that there is no practical need for a சீர் with four அசை since it could be treated as two சீர் with two அசை each. But this is not always possible because of other conditions (see discussion later under தூக்கு).

Dropping of நேர்பு and நிரைபு (உரியசை) from அசை list and adding a fourth அசை in a சீர் seem to be shared by the same authors. It is not obvious whether there is any connection between these two developments from the point of view of prosodic theory.

சீர் is classified and named on the basis of the number of அசை in it. The name of a சீர் with one அசை is அசைச் சீர் 'அசை that is சீர்'. Another name of it is ஓரசைச் சீர் 'சீர் with one அசை'. It has two possibilities, viz., நேர் and நிரை. Here சீர் becomes coterminous with அசை structurally, which is indicated by its name itself.

The name of a சீர் with two அசை (ஈரசைச் சீர்) is இயற்சீர் 'natural சீர்'. It is natural as it is free in the sense it is not privileged to any particular பா. (Recall இயலசை to have the same property). Mnemonically remembered codes (வாய்பாடு) of the two இயற்சீர் respectively are மா and விளம். மாச்சீர் is ஈரசைச் சீர் that ends in நேர் and விளச்சீர் is ஈரசைச் சீர் that ends in நிரை. இயற்சீர் has four possible combinations of அசை, two of which are made of identical and two are made of different அசை. They are நேர்-நேர், நிரை-நேர், நிரை- நிரை, நேர்-நிரை. Their codes respectively are தேமா, புளிமா, கருவிளம், கூவிளம். If நேர்பு and நிரைபு, which are also single அசை, are included, the combinatory possibilities are sixteen (2^4).

7.3 Privileged சீர்'s

சீர் is classified structurally by its length measured by அசை. Another way of classification is by its functional nature. ஈரசைச் சீர் is considered a natural சீர் to reflect the fact of its commonness in terms of its ubiquitous and generic nature, as mentioned above . A சீர் may be privileged (உரிமை 'privilege, possession of right over (something)') for a specific பா and it is designated உரிச்சீர். (Recall the similar property of உரியசை). An ஈரசைச் சீர் that has only நேர்பு and நிரைபு has four manifestations (2^2) : நேர்பு-நேர்பு, நேர்பு-நிரைபு, நிரைபு-நிரைபு, நிரைபு-நேர்பு). They are privileged for ஆசிரியப்பா and the சீர் made of is called ஆசிரிய உரிச்சீர் or ஆசிரியச் சீர். When the later theory does not have நேர்பு and நிரைபு, ஆசிரியச் சீர் would be considered to be manifest when the phonetic nature of the அசை allows scanning to include Cu in the அசை.

To the above four சீர்'s of ஆசிரியச் சீர் are added two more சீர்'s, which are உரியசை + நிரை (நேர்பு-நிரை, நிரைபு-நிரை). Thus ஆசிரியப்பா has six உரிச்சீர், i.e six சீர்'s that are privileged for it. This is six out of the logical possibilities to make சீர்'s with four அசைs, which is 16 (2^4). So 10 of the possible சீர்'s are not ஆசிரிய உரிச்சீர். Of these ten, four begin with இயலசை and end with உரியசை (நேர்-நேர்பு, நேர்-நிரைபு, நிரை-நேர்பு, நிரை-நிரைபு) and these are not privileged to be ஆசிரிய உரிச்சீர். This means that ஆசிரிய உரிச்சீர் does not begin, for some reason, with இயலசை. Of the remaining four possible சீர்'s are all இயற்சீர் (நேர்-நேர், நேர்-நிரை, நிரை-நேர், நிரை-நிரை), which, by definition cannot be உரிச்சீர் of any பா. The remaining two are சீர்'s that end in நேர் (நேர்பு-நேர், நிரைபு-நேர்). These two are not ஆசிரிய உரிச்சீர். The reason for their exclusion may be this. நேர் has a single nucleus (i.e. a single vowel), unlike நிரை, which has two nuclei. But it is not known why

this should be the case. The answer depends on whether உரியசை has two nuclei, i.e. the shortened /உ/ is counted as a full vowel in spite of its shorter மாத்திரை and thus is equivalent to நிரை

Note that the above exclusion of நேர் extends to மூவசைச் சீர் in வஞ்சிப்பா. வஞ்சி உரிச்சீர் are 60 (see below), which excludes மூவசைச் சீர்'s whose last அசை is நேர். The excluded one is வெண்பா உரிச்சீர். வெண்பா, at the same time, does not include உரியசை in ஈரசைச்சீர் among its உரிச்சீர்'s (as ஆசிரியப்பா does). Remember that வெண்பா has ஈரசைச்சீர் and மூவசைச் சீர் while வஞ்சிப்பா has only the latter and so the question of உரியசை in ஈரசைச்சீர் does not arise in வஞ்சிப்பா. It does arise in வெண்பா but it has the characteristic of being in opposition to ஆசிரியப்பா (another instance of opposition is தளை). This could be the reason why வெண்பா does not have any உரிச்சீர் with ஈரசை. கலிப்பா does not have a சீர் of its own (உரிச்சீர்) and so the question of it having உரியசை in its உரிச்சீர் is preempted.

The relation of complementation and contrast between the four பா types is fundamental to the theory of prosody. One such relation is having a specific உரிச்சீர்.

7.4 Overlap of privileged சீர்'s

A பா could be liberal in admitting the உரிச்சீர் of another பா. ஆசிரியப்பா is one such பா and it admits the உரிச்சீர் of வெண்பா. This is under the condition that the ஓசை of ஆசிரியப்பா is not disrupted (செய்யுளியல் 29: இன்சீ ரியைய வருகுவ தாயின்). இன்னிசை refers to harmonious rhythm, which is sweet. This would suggest that there is an independent way of evaluating of ஓசை without reference to உரிச்சீர். This is ensured by the fact that வெண்சீர் (this is காய்ச்சீர் of three அசை) occurs in the midst of its own ஈரசைச் சீர் in

ஆசிரியப்பா. (It means that the entire அடி cannot have வெண்சீர்). The அடி must have four சீர், the standard length (அளவடி). பேராசிரியர் in his commentary of the above sutra calls it சீர் மயக்கம் 'overlap of சீர் (சீர் மயங்குமாறு உணர்த்துதல் நுதலிற்று is the way he introduces (கொளு) this sutra) .

The example of ஆசிரியப்பா பேராசிரியர் gives is this.

தமிழ்தலை மயங்கிய தலையாலங் கானத்து (புறநானூறு 19)

The third சீர் has three அசை (நிரை-நேர்-நேர்), which is a காய்ச்சீர் privileged for வெண்பா. It is preceded and followed by ஈரசைச்சீர். Note further that this line has ஆசிரியத் தளை (same அசை between சீர்'s, see below)

ஆசிரியப்பா admits the உரிச்சீர் of வஞ்சிப்பா (கனிச்சீர்) also (see below for the description வஞ்சிச் சீர் and வெண்சீர்)). வஞ்சியடி occurs freely in ஆசிரியப்பா. (வஞ்சிப்பா has kin relation with ஆசிரியப்பா; this is discussed later). Such free occurrence is called interspersing (விரவு) of சீர் from one பா to another. This is different form overlapping (மயக்கம்) described above. Both overlapping and interspersing are true of collocation (தளை) between two subsequent சீர்'s (see below), as they are for individual சீர்'s.

7.5 Types of சீர்

மூவசைச் சீர் has eight possibilities of combination (2^3), when the theory has two kinds of அசை. (When they are four, the possibilities would be 64 (4^3). They are நேர்-நேர்-நேர், நிரை-நேர்-நேர், நிரை-நிரை-நேர், நேர்-நிரை-நேர், நேர்-நேர்-நிரை, நிரை-நேர்-நிரை, நிரை-நிரை-நிரை, நேர்-நிரை-நிரை (The list order works like this. Start changing the first நேர் in the base line and move rightward

until before you hit the last one; then start with the middle நேர் in the base line and move rightward in the same way, then go back to the base line and change the last நேர் and then move leftward to change the first நேர் and then the middle நேர் and then restore the first நேர்). Their codes respectively are தேமாங்காய், புளிமாங்காய், கருவிளங்காய், கூவிளங்காய், தேமாங்கனி, புளிமாங்கனி, கருவிளங்கனி, கூவிளங்கனி. The collective code name for the first four சீர் is காய்ச்சீர், for the other four it is கனிச்சீர், as already mentioned.

In the framework of தொல்காப்பியம், which has four அசை (நேர், நிரை, நேர்பு, நிரைபு), the number of types of சீர் is 84, which are distributed like this: ஓரசைச் சீர் 4, ஈரசைச் சீர் 16, மூவசைச் சீர் 64. The mathematical formula is the number of units to the power of the number of combinations: $4^1 + 4^2 + 4^3$. In the framework of later grammars, which has two அசை (நேர், நிரை), the numbers will be reduced progressively to 2, 4 and 8 ($2^1 + 2^2 + 2^3$) giving a total of 14.

7.6 சீர்'s privileged for பாs

All காய்ச்சீர்'s are வெண்பா உரிச்சீர் (வெண்சீர், for short). They are four in number: four இயற்சீர் + நேர். The remaining four மூவசைச் சீர்'s are வஞ்சி உரிச்சீர் (வஞ்சிச் சீர், for short). They are கனிச்சீர் and they are: four இயற்சீர் + நிரை. கலிப்பா has no உரிச்சீர். The above assignment is in the theory with two kinds of அசை (நேர், நிரை). In the theory, with four kinds of அசை (நேர், நிரை, நேர்பு, நிரைபு), there are another fifty six types of சீர்'s after deducing the four வெண்சீர் and four வஞ்சிச் சீர் ($4^3 = 64-8$) to be உரிச்சீர் of வெண்பா or வஞ்சிப்பா. நேர்பு, நிரைபு, however, are not taken into account for வெண்பா (note that நேர்பு, நிரைபு in ஈரசைச்சீர் are ஆசிரியச் சீர் and this may somehow

be related to the exclusion of நேர்பு, நிரைபு in மூவசைச்சீர் from being வெண்சீர்) and so வெண்பா has only four வெண்சீர். நேர்பு, நிரைபு are taken into account for the உரிச்சீர் of வஞ்சிப்பா giving a total of 60 வஞ்சிச் சீர். (One could make an argument using this fact for the anteriority of this பா). Having most kinds of மூவசைச் சீர் as its உரிச்சீர், வஞ்சிப் பா is most open. ஆசிரிய உரிச்சீர் (ஆசிரியச் சீர், for short) is of ஈரசைச் சீர். It includes the permutations of நேர்பு and நிரைபு ($2^2 = 4$) and நேர்பு / நிரைபு + நிரை ($2^1 = 2$). The total of ஆசிரியச் சீர் is six. When நேர்பு and நிரைபு are dropped from the theory ஆசிரியப்பா's உரிச்சீர் would depending on scanning them. Overall, the later period eased the requirement of privileged சீர் for a பா and gave importance to தளை. In theory of தொல்காப்பியம் it is the converse (see below under தளை). This is linked to theory of அசை of the later period

A சீர் is made up of one அசை in certain specified places in the அடி such as the last சீர் of the last அடி of வெண்பா. Otherwise, the minimum number of அசை is two.

7.7 Extending the length of சீர்

தொல்காப்பியம் puts a limit of three அசை in a சீர். பேராசிரியர் finds a rationale for it claiming that no word in the ordinary language exceeds the length of three அசை with a few exceptions (உலகத்துச் சொல்லெல்லாம், செய்யுளியல் கழகப் பதிப்பு பக், 142; உலகம் stands for வழக்கு). He considers the apparent counter examples such as அலங்கரியாநின்றான் 'he is decorating himself' and rejects them claiming that there is a boundary between அலங்கரியா and நின்றான். The first part has three அசை and the second part two.

His claim is empirically invalid for later Tamil even if compound words are excluded. To give an example from modern Tamil, உட்கார்ந்துகொண்டிருக்கிறான் 'he is sitting' has five அசை and if one adds the reportive marker ஆம் and interrogative marker ஆ, the number of அசை will be seven. Such morphologically long verbal strings can be split, however, if the potential pause (space in written Tamil) between the verbal participle and the auxiliary verb is taken into account, as பேராசிரியர் does, and the 'clitics' (emphatic ஏ and interrogative ஆ (உட்கார்ந்துகொண்டேயா இருக்கிறான்) etc.) are excluded from consideration. If this linguistic fact is true of the time of the later grammars of prosody, they have the motivation to have நாலசைச் சீர். Then the insight of பேராசிரியர் is basically right: the length of சீர் does not exceed the morphological length of a word in the natural language.

In spite of தொல்காப்பியம்'s non-recognition of சீர் with more than three அசை, Sangam corpus has seventeen instances of நாலசைச் சீர் and three instances of ஐயசைச் சீர். A majority of the former (10) and all of the latter end in நேர் and all of them occur in வஞ்சியடி. Another fact is that none of the சீர்'s with more than three அசை ends in நேர்பு or நிரைபு (உரியசை). (பிச்சை, சங்க இலக்கிய யாப்பியல், ப. 199-202). This suggests that there is some connection between dropping of உரியசை and adding அசை to சீர்.

Some examples of நாலசைச் சீர் are

கானக்கோழி கதிர்குத்த (பொருநராற்றுப்படை வ. 222)

நேர்-நேர்-நேர்-நேர்

தொல்லாணை நல்லாசிரியர் (பட்டினப்பாலை வ. 170)

நேர்-நேர்-நிரை-நேர்

உடன்றுநோக்கும்வாய் எரிதவழ (புறநானூறு 38:5)

நிரைபு-நேர்-நேர்-நேர்

(The first அசை is நிரைபு)

மனைக்கோழி பைம்பயிரின்னே (புறநானூறு 395:9)

நேர்-நிரை-நேர்-நேர்

(உவேசா பாடம் பைம்பயிரின்னே)

வரைபுரையு மழுகளிற்றின்மிசை (புறநானூறு 38:1)

நிரை-நிரை-நேர்-நிரை

(The last அசை is நிரை)

An example of ஐயசைச் சீர் is

தீமுரணியநீரு மென்றாலும் (புறநானூறு 2:5)

நேர்-நிரை-நிரை-நேர்-நேர்

Note that these examples are வஞ்சியடி (in ஆசிரியப்பா), which are lines with two சீர், where each சீர் is longer than two அசை (இயற்சீர்). It is therefore structurally not possible to divide a seven or eight அசை line into சீர்'s with three அசை, as it would end in வஞ்சியடி with ஓரசைச் சீர் and ஈரசைச்சீர். Such a division may not produce the தூங்கலோசை of வஞ்சிப்பா and the function of mixing வஞ்சியடி with ஆசிரியவடி to mix their two rhythms will not be realized. The above examples suggest that four and five அசை in a சீர் originated in வஞ்சிப்பா. பேராசிரியர் is reluctant to accept this development.

யாப்பருங்கலம் admits a சீர் with four அசை, that is, it admits modification of the rhythmic pattern. பேராசிரியர் mentions this in a tongue in cheek fashion that there are some who employ நாலசைச் சீர் (in their grammar), but those who employ ஐயசைச் சீர் are nowhere to be found. நாலசைச் சீர் is called பொதுச்சீர் 'non-specific சீர்'; it is non-specific in the sense that it is not a

உரிச்சீர் of any பா. For this reason, ஓரசைச் சீர் is also called பொதுச்சீர் by some grammars such as யாப்பருங்கலம்.

The empirical properties of பொதுச்சீர் include the following (யாப்பருங்கல விருத்தியுரை பக். 75). As a நாலசைச் சீர், it cannot be in a வெண்பா; it can be in வஞ்சிப் பா when நேர்பு, நிரைபு are not counted; it may occur just in one line of a பா.

நாலசைச் சீர் is basically adding an extra அசை to மூவசைச் சீர்; the extra அசை may be நேர் or நிரை giving 16 (2^4) possibilities of making சீர் with four அசை. It does not have a mnemonic code, which itself is a post-Tolkappiyam creation; the code is found in யாப்பருங்கலக் காரிகை meant for the learners of யாப்பு to compose verses, and is accepted in யாப்பருங்கல விருத்தியுரை. இளம்பூரணர் picks it up in his commentary (செய்யுளியல் S 52), though there are many other expressions of the formula. If a code is created for நாலசைச்சீர், it could be something like தோல் and சுவை to be added to the codes of மூவசைச்சீர். The grammarians, however, add தண்பூ, தண்ணிழல், நறும்பூ and நறுநிழல் to the codes of ஈரசைச் சீர். They are தேமாந்தண்பூ, தேமாதண்ணிழல், கருவிளந்தண்பூ, கருவிளந்தண்ணிழல் etc. This is probably because காய் and கனி have a special reference value, as mentioned above. Or நாலசைச்சீர் is viewed as made of two ஈரசைச்சீர்.

The grammarians and commentators have discussed the need for நாலசைச் சீர். Their arguments against it include the following (யாப்பருங்கல விருத்தியுரை பக். 430-443). The line could be split in a different way that avoids நாலசைச் சீர், though it will change the length of a line. வகையுளி, which ignores word boundary, allows splitting of சீர் differently by realigning அசை. Another way to shorten a நாலசைச் சீர் is by not counting the shortened the phontic segments

(குறுக்கம்). Another way to treat a part of the சீர் may as தனிச்சொல் (or கூன்), which will shorten நாலசைச் சீர். This option increases when தனிச்சொல் could be placed not only at the end of a line, but also in the beginning, and rarely in the middle, of a line. These options, however, are not arbitrary. They should not violate the ஓசை of the பா.

7.8 Other names of சீர்

வீரசோழியம் names the சீர் differently. All (four) ஈரசைச் சீர் are முதற்சீர் or முற்சீர்; the four மூவசைச்சீர் that end in நேர் are இடைச்சீர்; the four மூவசைச்சீர் that end in நிரை are கடைச்சீர் or பிற்சீர். The motivation for this characterization of சீர் is not clear except that they seem to have been influenced by comparable terms in Sanskrit whose Tamil spellings are உத்தமம், மத்திமம் and அதமம். (மணிகண்டன், p. 146). Each of these three evaluative categories has four kinds of சீர் in it.

7.9 Summary

There are four kinds of சீர் with which the prosodic theory of தொல்காப்பியம் operates. They are:

அசைச்சீர்: This is ஓரசைச் சீர் made of நேர் and நிரை (called இயலசை), and நேர்பு and நிரைபு (called உரியசை). They are 4 in number. The ground (நிலம்) of அசைச்சீர் is வெண்பா ஈற்றுச்சீர் and தனிச்சொல் (see below).

இயற்சீர்: This is ஈரசைச் சீர் and it ends in நேர், நிரை, நேர்பு, நிரைபு. They are 16 (4^2) in number. சீர்'s that end in நேர்பு, நிரைபு (உரியசை) are privileged for ஆசிரியப்பா and are called or ஆசிரிய உரிச்சீர் or, in short, ஆசிரியச் சீர். ஆசிரியச் சீர் are six in number out of the 16 by including only உரியசை ($2^2 = 4$)

to which உரியசை + நிரை (2) are added. இயலசை இயற்சீர் (the one that ends in நேர் is called மாச்சீர் and the one ends in is called விளச்சீர்), on the other hand, is not privileged for any particular பா. In other words, the concept of ஆசிரிய இயற்சீர், வெண்பா இயற்சீர், வஞ்சி இயற்சீர் and கலி இயற்சீர் does not exist.

மூவசைச் சீர் does not have a special name, but it is commonly உரிச்சீர் with regard to வெண்பா (doubling up for கலிப்பா) and வஞ்சிப்பா. They are 64 (4^3). Their நிலம் is these three பாs. They are respectively called வெண்பா உரிச்சீர் or வெண்சீர் (which ends in நேர் and is called காய்ச்சீர்) and வஞ்சி உரிச்சீர் or வஞ்சிச் சீர் (which ends in நிரை and is called கனிச்சீர்). வெண்சீர் are four (மூவசைச் சீர் 8 (2^3) of which 4 end in நேர்). This does not count any மூவசைச் சீர் with உரியசை in it. வஞ்சிச் சீர் are the remaining 60 ($4^3 = 64 - 4$), which includes four சீர்s without உரியசை that end in நிரை.

The total number of உரிச்சீர் is 70 (ஆசிரியப்பா 6 + வெண்பா 4 + வஞ்சிப்பா 60). The total number of kinds of சீர் is 84 (4+16+64 for one, two and three அசைs respectively in a சீர்) in a theory which has உரியசை and has an upper limit of three அசைs in a சீர்.

The number of சீர் in a அடி, which is the next higher unit, can vary from two to five, which is the norm (or the specification in a minimalist grammar, see the meaning of it later); the number may go beyond five as special cases, but the ceiling is placed at eight by இலக்கண விளக்கம். Variation in the number of அசைs in a சீர் and in the number of சீர்s in a அடி is tied to the type of a poem (பா).

8. தளை

தளை (also called பந்தம் in காக்கைபாடினியம்) is about the collocational relation between சீர் in their sequencing in a அடி. It is the condition for placing one சீர் after another. (சீரோடு சீர் தலைப்பெய்வது தளை 'what places one சீர் in front of another சீர் is தளை' யாப்பருங்கலம் 17). One meaning of the root of தளை is 'to chain' (Tamil Lexicon); this technical term is used in the sense of linking or sequencing, not in the root's other sense 'to shackle'. Reading this term in this way, தளை in prosody is not about prohibitions on சீர் sequences, but it is about the chaining preferences. This is comparable with the collocation between words in a sentence in the natural language, which arise from factors that are syntactic and semantic. தளை, along with the nature of the composition of the சீர், enables the ஓசை of each பா. தொல்காப்பியம் (likewise காக்கைபாடினியம்), does not think that தளை is indispensable to enable the ஓசை of a பா (செய்யுளியல் S 52). இளம்பூரணர் interprets this sutra as saying that சீர் alone is enough to enable ஓசை (எனவே சீர் தானே ஓசையைத் தரும் என்றவாறாம்). One does not need to look at the collocation of two சீர்'s to know the rhythm of a poem, if her knows what the சீர்'s are, particularly the உரிச்சீர்.

8. 1 Relationship of மாத்திரை to சீர் and தளை

மாத்திரை does not play a role in defining ஓசை (but it does in embellishing it, see above). The three lines below are வெண்பா அடி (வெள்ளடி) from திருக்குறள் (127, 781, 391) but they differ in the count of மாத்திரை. The lines vary from 12 to 21 மாத்திரை in the examples; சீர்'s vary from 1.5 to 6 மாத்திரை.

யாகாவா (6) ராயினும் (4) நாகாக்க (5) காவாக்கால் (6) (total 21)
சோகாப்பர் (5) சொல்லிழுக்குப் (4) பட்டு (1.5) (total 10.5)

செயற்கரிய (5) யாவுள (4) நட்பின் (2) அதுபோல் (4) (total 15)

வினைக்கரிய (5) யாவுள (4) காப்பு 2.5 (total 11.5)

கற்க (2) கசடறக் (4) கற்பவை (3) கற்றபின் (3) (total 12)

நிற்க (2) அதற்குத் (3) தக (2) (total 7)

Note that in சொல்லிழுக்குப் in the first citation, which is a வெண்சீர், the மாத்திரை of குப் is counted as one for reasons of தளை (rather than half as in நிரைபு); மாத்திரை of அதுபோல் is counted to be four, for the same reasons, (rather than 3.5 with first அசை to be நேர்பு, though the final vowel of the first அசை is not shortened); மாத்திரை of கற்பவை in the third citation is counted as three, in which ஐ is shortnered, for the same reasons (rather than four); மாத்திரை of அதற்குத் is three for the same reasons (rather than 2.5 taking it as நிரைபு).

The role of மாத்திரை in creating the ஓசை of பா is not direct. It plays a role in scanning options that have an effect on the nature of சீர் and consequently to தளை.

8.2 Legitimizing role of தளை for சீர் sequence

The collocation of two சீர், which is தளை, is essential to characterize the ஓசை of a poem along with the types of சீர்'s and their sequencing. தளை is conceptualized in two ways: in terms of sameness of types of சீர்'s and in terms of அசை between சீர்'s. When a verse has its உரிச்சீர் in sequence it is a preferred சீர் for collocation. An example is for a வெண்சீர் (காய்ச்சீர்) to be followed by a வெண்சீர் in வெண்பா. Another example is for a ஆசிரியச் சீர் (சீர் with உரியசை (நேர்பு, நிரைபு)) to be followed by ஆசிரியச் சீர். Recall that வஞ்சி உரிச்சீர்'s number is sixty. It is கனிச்சீர் but காய்ச்சீர் complements it. வஞ்சிப்பா has more numerous உரிச்சீர் and so is more than வெண்பா.

கலிப்பா doesn't have உரிச்சீர் of its own; it uses வெண்சீர் but differentiates itself with கலித்தளை (காய்+நிரை) along with வெண்டளை (காய்+நேர்).

When தளை is described in terms of collocation of அசை it is between the last அசை of a standing சீர் (நின்ற சீர்) and the first அசை of the on-coming சீர் (வந்த சீர்) within one அடி. தளை is named based on the form of these two collocating அசை and the type of the standing சீர். The collocation is cyclic. The on-coming சீர் in the first iteration becomes the standing சீர் in the next iteration and so on until the end of அடி. This means that the first சீர் in a அடி alone will remain always a standing சீர் and the last சீர் in a அடி alone will remain always an on-coming சீர்.

8.4 Theoretical status of தளை

தொல்காப்பியம், though describes the concept of தளை and uses the term, does not elevate it to the status of a unit of செய்யுள். தளை is not a single unit but is a collocation of two units (like தொடை). It can only be defined relating two entities. This could be the reason for தளை not to have the status of one unit (உறுப்பு). Additionally, தளை is the property of an அடி, which is its defining unit. வெள்ளடி and other அடிகள் are defined by the தளை and the nature of the சீர் (உரி and length) in the அடி. When an அடி is characterized as வெள்ளடி etc. the பா with those lines is called வெண்பா etc. and the தளை is named after the பா such as வெண்டளை etc.

Alternatively, the dispensability of தளை, based on சீர், for in the theory of தொல்காப்பியம், could be motivated by the fact that அடி may be measured in terms of எழுத்து rather than சீர். (There is a school of scanning a line by counting the number of தளை, as இலக்கண விளக்கம் does, but it is not the main stream). The grammatical works after தொல்காப்பியம் give more importance to

தளை because of its importance in making the rhythm and so its importance in singing. This could be a motivation for the elevation of தளை to the status of a unit (உறுப்பு) in யாப்பருங்கலம்.

8.5 The problem of உரியசை in தளை

அசை taken into account for stating the collocation are two (நேர், நிரை), not four that would include நேர்பு, நிரைபு. In a theory in which தளை plays a significant role, நேர்பு will probably be treated as நேர்-நேர் and நிரைபு as நிரை-நேர், when the scanning option dictates it; when scanning ignores Cu, they will be treated as நேர் and நிரை respectively. Collocation statements based on நேர் and நிரை will ipso facto apply to நேர்பு and நிரைபு in that case. This needs to be tested empirically with the Sangam corpus. Scanning and options in சீர் and தளை

Let us see the options in scanning and consequently in making சீர் and தளை. This is done by scanning an ஆசிரியப்பா from குறுந்தொகை (2).

கொங்குதேர் வாழ்க்கை யஞ்சிறைத் தும்பி

நேர்-நிரை¹ நேர்-நேர் நேர்-நிரை நேர்²-நேர்

நேர்பு-நேர் நேர்-நேர் நேர்-நிரை நேர்²-நேர்

காமஞ் செப்பாது கண்டது மொழிமோ

நேர்-நேர் நேர்-நேர்-நேர்³ நேர்-நிரை நிரை-நேர்

நேர்-நேர் நேர்-நேர்பு நேர்-நேர்பு நிரை⁴-நேர்

பயிலியது கெழீஇய நட்பின் மயிலியற்

நிரை-நிரை-நேர்⁵ நிரை-நிரை⁶ நேர்-நேர் நிரை⁷-நிரை

நிரை-நிரைபு நிரை-நேர் நேர்-நேர் நிரை⁷-நிரை

செறியெயிற் றரிவை கூந்தலின்

நிரை-நிரை நிரை-நேர் நேர்-நிரை

நறியவு முளவோநீ யறியும் புவே.

நிரை-நிரை⁸ நிரை-நேர்-நேர்⁹ நிரை⁸-நேர் நேர்-நேர்

This is ஆசிரியப்பா by initial postulation, which is suggested by the last சீர் ending in -ஏ (that suggests அகவலோசை, the calling rhythm, by the shorter penultimate line with one சீர் less and preponderance of ஈரசைச் சீர். This initial postulation will be confirmed if the collocation (தளை) requirements of ஆசிரியப்பா are met.

Let us assume நேர்=நேர்பு, நிரை=நிரைபு for தளை. The red marked ones are problematic for ஆசிரியப்பா. This has the condition of homogenous தளை between சீர்'s.

1. Parsing நேர்-நிரை as நேர்பு-நிரை by measuring /உ/ in கொங்கு as short removes the problem. In a theory without நேர்பு, நிரைபு, short /உ/ is ignored in measuring.
2. There is no alternative way to measure here. What we have is தளை of வெண்பா. ஆசிரியப்பா allows வெண்டளை.
3. ஆசிரியப்பா avoids சீர் with three அசை. If-பாது is measured as நேர்பு, the சீர் has two அசை and the problem is avoided.
4. டது cannot be measured as நேர்பு because து is preceded by a short vowel and so is not a shortened /உ/. In a theory with நேர்பு, நிரைபு, /உ/ is not measured as short in contrast to 1 above.
5. Treatment is same as 3.
6. கெழீஇய has elongated vowel. The extra vowel is not measured.
7. Treatment is same as 2
8. -யவு cannot be measured as நிரைபு because this அசை does not coincide with word boundary. யறியும் cannot be நிரைபு because /உ/ is not at the end of அசை.
9. This சீர் has three அசை, which is not favored in ஆசிரியப்பா. This is a சீர் privileged for வெண்பா. This is handled by allowing வெண்பா உரிச்சீர் in ஆசிரியப்பா. This சீர் will have வெண்டளை. So ஆசிரியப்பா permits சீர் and தளை of வெண்பா.

In this poem, 3 சீர் out of 23 are ஆசிரிய உரிச்சீர்

In a theory which does not have நேர்பு, நிரைபு (where நேர்பு is நேர் and நிரைபு is நிரை), the four சீர்'s நேர்-நேர், நேர்-நிரை, நிரை-நிரை, நிரை-நேர் are all இயற்சீர் and common to all verse types. Then ஆசிரிய உரிச்சீர் is identifiable out of the result of measuring (அலகிடு), i.e. சீர் with அசை whose final /உ/ is not measured.

Note that தொல்காப்பியம் prefers the alternative of determining ஓசை by உரிச்சீர் - the சீர் that is privileged for each verse type. But ஆசிரிய உரிச்சீர் in this poem is statistically low.

நேர்பு, நிரைபு system is revived by இலக்கண விளக்கம் (This needs to be double checked, though). The two systems of two and four அசை are theoretical differences as well, not just chronological differences.

Alternate Parsing with பாட பேதம்

The சீர் கண்டது footnoted 4 cannot be நேர்-நேர்பு because the அசை அது does not allow குற்றுகரம், as noted. This question does not arise with the variation reading கண்டன. This variation is noted by Saminathiar in a footnote and Wilden finds it in two manuscripts and a citation. The two readings do not make any difference to parsing.

The சீர் முளவோநீ footnoted 9 is a வெண்சீர் with three அசை. Sowriperumal Arangan and Raghava Aiyangar have in their editions the சீர் like this: முளவோ நீயறியும் பூவே. In this, நீயறியும் is வெண்சீர். This is parsed நிரை-நேர் நேர்-நிரை-நேர் நேர்-நேர். There is ஆசிரியத் தளை between first and second சீர் as well as between second and third சீர்.

This shows that there is option in making சீர்.

8.5 Possible தளை

There are four logically possible தளை when the theory has only இயலசை. They fall into two types, viz., one which matches in the அசை of the standing சீர் and of the on-coming சீர் (நேர்₁ + நேர்₂, நிரை₁ + நிரை₂) and the one which does not (நேர்₁ + நிரை₂, நிரை₁ + நேர்₂). The first one is called homogenous or similar தளை (ஒன்றிய தளை) and the second is heterogeneous or dissimilar தளை (ஒன்றாத் தளை).

A blind permutation of collocations between சீர்'s ignoring the prosodic restrictions by the nature of the composition and length of சீர் specified for verse types will give 144. The first column below is நின்ற சீர் and the second column is வந்த சீர்.

ஈரசை($2^2 = 4$) and ஈரசை (4) give 16

ஈரசை (4) and மூவசை ($2^3 = 8$) give 32

மூவசை (8) and ஈரசை (4) give 32

மூவசை (8) and மூவசை (8) give 64

This gives a total of 144. But the collocations are not blind and they are tuned to the characteristics of verse types.

The permutations of potentially occurring collocations between *śīrs*, given the kinds of *śīrs*, are seventy, according to இளம்பூரணர், who calls them புணர்ச்சி வகை. These are தளை in its generic sense, not in the sense of collocation specified for a particular verse type. The kinds of *śīrs* are five: இயற்சீர், ஆசிரிய உரிச்சீர், வெண்பா உரிச்சீர், வஞ்சி உரிச்சீர், அசைச் சீர், which play a role in defining a தளை. The first and the second one in the above list are composed of two அசை, the last one with one அசை and the rest with three அசை. Each of these five kinds of *śīrs* may end in நேர் or நிரை அசை. When these two final அசை of standing சீர் (நின்ற சீர்) in the five kinds of *śīrs* above collocate with the two of the first அசை of the on coming சீர் (வந்த சீர்) in these five *śīrs*, it yields the number 50 (2x5x5). Additionally, நேர்பு or நிரைபு may be the final அசை of நின்ற சீர் in the case of ஆசிரிய உரிச்சீர் and வஞ்சி உரிச்சீர்; this adds 20 (2x5 + 2x5). Together we get a total of 70. Of this tool kit of logically possible collocations, seven are specified for specific பாட as definitional.

The possibility of actual realization of the seventy தளை gives rise to naming these variants such as நேரீற்று இயற்சீரடி, நிரையீற்று இயற்சீரடி etc. etc. and within each இயற்சீர் நேரீற்று நேர்முதல் இயற்சீர், இயற்சீர் நேரீற்று நேர்முதல் வெண்சீர்; இயற்சீர் நிரையீற்று நிரைமுதல் இயற்சீர், இயற்சீர் நிரையீற்று நிரைமுதல் வெண்சீர் etc. etc. (See கந்தசாமி *op cit* p. 174-178 for a full set of variants and their names).

The seven துளை below, it may be noted, are stated in terms of the theory of two அசை (ignoring உரியசை). They do not come into play by their equation with இயலசை (நேர்பு = நேர், நிரைபு = நிரை, see above).

Based only on two அசை (இயலசை) and not taking into account the internal composition of சீர் (i.e. arrangement of அசை within a சீர்) but taking into account the length of a சீர் by the number of அசை (which are limited to ஈரசைச் சீர் (இயற்சீர்) and மூவசைச் சீர் (the உரிச்சீர் of it), there are eight collocations possible. The first column below is the last அசை of standing சீர் and the second column is the first அசை of on-coming சீர்.

ஈரசை: நேர் / நிரை (2) and நேர்/நிரை (2) give 4 collocations

மூவசை: நேர் / நிரை (2) and நேர்/நிரை (2) give 4 collocations

The total collocations are 8 (2x2x2). வஞ்சி உரிச்சீர் is a மூவசைச் சீர் ending in நிரை (கனிச்சீர்) and it does not include collocation either with நேர் or with நிரை. This free variant is counted as one துளை. So there are seven (8-1)

These are துளை at the theoretical level.

8.6 Actual துளை

Their actual realization when the kinds of சீர் are taken into account yields 70, as shown above. The seven operational துளை are below.

வெண்பா: மா+நிரை, விளம்+நேர், காய்+நேர் (3)

ஆசிரியப்பா: மா+நேர், விளம்+நிரை (2)

வஞ்சிப்பா: கனி+நிரை / நேர் (1)

கலிப்பா: காய்+நிரை (1)

The distribution of core தளை over four பா types is as follows. Note that all the four types do not have all சீர்'s. For example, வெண்பா does not have கனிச்சீர் and வஞ்சிப்பா பா does not have காய்ச்சீர்; ஆசிரியப்பா favors ஈரசைச் சீர்.

Distribution: two (இயற்சீர் வெண்டளை, வெண்சீர் வெண்டளை) in வெண்பா, two (நேரொன்று ஆசிரியத்தளை, நிரையொன்று ஆசிரியத் தளை) in ஆசிரியப்பா, two (ஒன்றிய வஞ்சித்தளை, ஒன்றா வஞ்சித்தளை) in வஞ்சிப்பா and one in கலிப்பா. இயற்சீர் வெண்டளை does not have homogenous (ஒன்றிய) தளை; ஆசிரியத்தளை does not have heterogenous (ஒன்றா) தளை. Note that வெண்பா and ஆசிரியப்பா contrast and recall that தொல்காப்பியம் puts them as majorly differentiated verse types.

To describe the distribution of தளை, சீர் has a set of mnemonic codes. The code is based on the last அசை of a சீர் in its different sequences. Thus மாச்சீர் and விளச்சீர் are two names of ஈரசைச்சீர் (shorthand for தேமா, புளிமா; கூவிளம், கருவிளம் respectively) depending on its segment (எழுத்து) composition; காய்ச்சீர் and கனிச்சீர் are two names of மூவசைச்சீர் (shorthand for தேமாங்காய், புளிமாங்காய்; கூவிளங்கனி, கருவிளங்கனி respectively).

8.7 Illustrating the seven தளை

ஆசிரியத்தளை

These are illustrative lines for the seven தளை (from யாப்பருங்கல விருத்தியுரை, 18-21)

ஆசிரியப்பா: மா+நேர் (நேரொன்று ஆசிரியத்தளை)

உள்ளார் கொல்லோ தோழி முள்ளடை (ஐங்குறுநூறு தனிப்பா)
திரியாச் சுற்றமொடு முழுதுசேண் விளங்கி (புறநானூறு 2)

In the first citation, all சீர்'s of the line exhibit one kind (நேர்+நேர்) of ஆசிரியத்தளை. In the second citation, ஆசிரியத்தளை is of both kinds. The first two சீர்'s exhibit நேர்+நேர் and the last two சீர்'s exhibit நிரை+ நிரை. The middle two சீர்'s will exhibit நிரை+ நிரை when சுற்றமொடு is scanned நேர்-நிரைபு. If it is scanned நேர்-நிரை-நேர், it is காய்ச்சீர். This makes a வெண்சீர் in ஆசிரியப்பா, which is admissible but the following அசை must be நேர்; it is நிரை (முழு), which is not admissible. If முழுது is alternatively scanned நிரைபு, தளை (நிரைபு+ நிரைபு) is appropriate for ஆசிரியப்பா. But the second அசை (சேண்) is நேர், which violates ஆசிரியத்தளை being followed by நிரை (விள).

So, சுற்றமொடு is நேர்-நிரைபு (or டு is left out of scanning (அலகிடாது)) and முழுதுசேண் is நிரை+ நிரை, Cu is treated differently. Ignoring the optionality in scan, the two citations show ஆசிரியத்தளை. The first citation has same தளை occur through out the line and so is better in comparison with the second citation where the two kinds of தளை are mixed in a line. The constancy of தளை in a line is called exalted or ideal தளை (சிறப்புத் தளை).

When a name is given to a line by தளை such as நேரொன்று ஆசிரியத்தளை, but the line has mixed தளை, the name is from the first தளை in the line. This is the reason the second citation is said to have நேரொன்று ஆசிரியத்தளை. The first சீர் in a line has some freedom of choice since it does not entertain any தளை with the last சீர் of the preceding line. Hence probably the first தளை in a line assumes some importance.

ஆசிரியப்பா: விளம்+நிரை (நிரையொன்று ஆசிரியத்தளை)

திருமழை தலைஇய இருள்நிற விசம்பின் (மலைபடுகடாம் 1)
ஆர்கலி உலகத்து மக்கட் கெல்லாம் (முதுமொழி 1)

The first citation has the ஆசிரியத்தளை நிரை+ நிரை throughout the line. In the second citation, the ஆசிரியத்தளை is mixed; the first two சீர்'s have நிரை+ நிரை and the remaining சீர்'s have நேர்+நேர்.

வெண்டளை

வெண்பா: மா+நிரை, விளம்+நேர் (இயற்சீர் வெண்டளை)

பாலொடு தேன்கலந் தற்றே பணிமொழி
வாலெயி றூறிய நீர் (திருக்குறள் 1121)

Note that *பாலொடு* in the first line is scanned as நேர்-நிரை and not as நேர்-நேர்பு. வெண்டளை has ஒன்றாத் தளை, also called தளை விகற்பம். In the above verse, the italicized சீர் (நின்ற சீர்) illustrate நிரை+நேர் and the rest நேர்+நிரை.

வெண்டளை is the opposite of ஆசிரியத் தளை with regard to இயற்சீர்.

வெண்பா: காய்+நிரை (வெண்சீர் வெண்டளை)

குன்றேறி யானைப்போர் கண்டற்றால் தன்கைத்தொன்
றுண்டாகச் செய்வான் வினை (திருக்குறள் 785)

Of the seven சீர், five are வெண்சீர் (காய்ச்சீர், மூவசைச் சீர் ending in நேர்).

தளை of வெண்சீர் is நேர்+நேர், which is ஒன்றிய தளை (and thus differs from the தளை of இயற்சீர்). Consistent occurrence of the same சீர் in a line like the வெண்சீர் in the above ones is considered exalted (சிறப்புச் சீர்).

சீர்'s in a line may be mixed (விரவுதல்), as in the following examples. Recall the mixing of தளை illustrated earlier.

கல்லாதான் சொற்கா முறுதல் முலையிரண்டும்

இல்லாதாள் பெண்காமுற் றற்று (திருக்குறள் 402)

This verse begins with வெண்சீர் but is followed by two இயற்சீர். Note that the final is நேர்பு (its code is காசு). The first line in following example begins with

இயற்சீர் but is followed by a வெண்சீர், which is followed by two இயற்சீர்.

இருநோக் கிவளுண்கண் உள்ள தொருநோக்கு

நோய்நோக்கொன் றந்நோய் மருந்து. (திருக்குறள் 1091)

Note that the final சீர் is நிரைபு (its code is பிறப்பு). தொருநோக்கு, the last சீர் in the first line could be scanned as நேர்-நேர்பு, which is இயற்சீர் or as நேர்-நேர்-நேர், which is வெண்சீர். The choice between them would be in favor of வெண்சீர் because it would maintain a balance in mixing:

இயற்சீர்+வெண்சீர்+இயற்சீர்+வெண்சீர்.

Note incidentally that if sandhi is removed, scansion will give a different result. To have sandhi of கிவளுண்கண் உள்ள as கிவளுண்கண் ணுள்ள, there will be no difference in the result of scanning, but cohesion (இயைபு) will be lost as consonant plus vowel will have a pause unlike the combined consonant and vowel. This will affect the flow of ஓசை.

வஞ்சித் தளை

வஞ்சிப்பா: கனி+நிரை / நேர் (வஞ்சித் தளை)

வஞ்சிப்பா has மூவசைச் சீர் and வஞ்சி உரிச்சீர் ends in நிரை (it is கனிச்சீர் and it is the converse of வெண்சீர்). Scansion of வஞ்சித் தளை does not extend to the final segment of the verse after தனிச்சொல் called சுரிதகம் (see below). Since வஞ்சித் தளை encompasses either of the two அசை, it is treated as variations of the same தளை. Hence வஞ்சித் தளை is counted as one தளை in

the total of seven. Homogenous (ஒன்றிய) and heterogeneous (ஒன்றா) வஞ்சித் தளை are two manifestations of one தளை.

யாப்பருங்கல விருத்தியுரை (S 21), interestingly, gives an analogy for the treatment of homogenous and heterogenous வஞ்சித் தளை as the same தளை. This is analogous to தொல்காப்பியம்'s treatment of உரியசை; unrounded and rounded /உ/ do not count them and do not have four உரியசை.

புனல்பொழிவன சுனையெல்லாம்

பூநாறுவ புறவெல்லாம்

வரைமூடுவ மஞ்செல்லாம்

தேனாறுவ பொழிலெல்லாம்

எனவாங்கு

நாறுகுழற் கொடிச்சியர் தம்மலைச்

சீறார் வாழிய செல்வமொடு பெரிதே (Un sourced)

The third line in italics is heterogeneous தளை (நிரை+நேர்) and the rest are homogenous.

கலித்தளை

கலிப்பா, which has மூவசைச் சீர், does not have its உரிச்சீர். But காய்ச்சீர், which is the உரிச்சீர் of வெண்பா, has a different collocation and it makes கலித்தளை. This collocation is காய்+நிரை. This is ஒன்றாத் தளை.

செல்வப்போர்க் கதக்கண்ணன் செயிர்த்தெறிந்த சினவாழி

The entire line exhibits this தளை. Such a manifestation of கலித்தளை is exalted (சிறப்புத் தளை). It is not exalted, but admitted, when காய்ச்சீர் is followed by இயற்சீர் with நிரையசை as its initial place.

முற்றொட்டு மறவினை முறைமையான் மாறாதார்

The second சீர் in the above line is இயற்சீர். This is possible because கலிப்பா admits ஈரசைச் சீர் also. கலித்தளை is the converser of வெண்சீர் வெண்டளை.

It may be seen from the above that five of the seven தளை are heterogenous.

The தளை specific to a verse type (பா வகை), which is a feature defining it, is called தன் தளை 'collocation with self'. When the தளை specific to another verse type, it is called பிற தளை 'collocation with other'. When an entire line has பிற தளை it is the அடி of another verse type that is mixed (see later).

8.7 The role of தளை in ஓசை

தளை is one of the factors that shape the ஓசை 'rhythm' of a பா. Others are சீர், தூக்கு, தொடை and வண்ணம். The last two embellish ஓசை. The சீர் ssequence of அடி provides the template of ஓசை. தளை may be conceived to modulate the flow of rhythm towards certain quality. It is like different knobs that control flow. It is done by the phonic nature of the அசை in collocation and the recurrence of one kind of collocation. A collocation of நேர்+நேர் running through all சீர்'s in an அடி is different from a collocation of நிரை+நிரை running through all சீர்'s. A third possible collocation flow is to have the recurrence in an alternating way. That is, both நேர்+நேர் and நிரை+நிரை collaction will be mixed in a line. ஆசிரிய அடி may employ all three possibilities to effect three kinds of quality of the rhythm. They are called respectively, ஏந்திசை, தூங்கிசை and ஒழுக்கிசை. இசை these terms mean ஓசை or quality of ஓசை. The first one may be conceived to be referring to rising, falling and balancing qualities of the rhythm in அகவோலோசை. The equivalent quality modulators in வெண்பா would be recurrence of நேர்+நிரை, நிரை+நேர் and mixing the two. With வஞ்சிப்பா it is with homogenous and heterogenous collocations. கலிப்பா with one தளை does not have such modulating possibilities.

The grammar admits the use of the entire அடி of one பா in another பா as well as the தளை of one பா in another. An automated scanning of தளை used in all poems of குறுந்தொகை shows that for every 100 ஆசிரியத் தளை more than 60 வெண்டளை (Ollett: p.c.). The effect of such mixing on modulation needs to be investigated. To do this, the different ஓசை must be defined independently by some musical notation rather than defining them by தளை and other prosodic factors, as is normally done.

8.7 தளை மயக்கம்

When poets occasionally allow a தளை to disrupt the modulation of the rhythm it would be a blemish or fault (குற்றம்; in descriptive terms, it is தளை தட்டு 'the collocation bumps'; cf. the use தலை தட்டியது 'the head bumped against (something)'). தளை is a potential fault line in Tamil poetry. But a பா, except வெண்பா, may have a தளை not appropriate for its rhythm (தளை விரவுதல்); this shows general flexibility in Tamil prosody. This acceptance of the overlap of தளை is theorized with the concept of தளை மயக்கம், which is non-occurrence of a தளை which is required to create a particular rhythm but occurrence of another தளை (see its similarity with வேற்றுமை உருபு மயக்கம் 'occurrence of a case marker that is not sanctioned by the grammar of sentence' or திணை மயக்கம் 'occurrence of a கருப்பொருள் 'ecological element that is not sanctioned for a land by the grammar of the love poetry').

தளை மயக்கம் raises questions about identifying and naming the type of a பா. Though தளை plays a crucial rule in this (see below), it is not the only means. The பா type may be determined by the nature of சீர் and அடி. Any discord with தளை will be accommodated with the proviso that the particular பா has an overlap of another தளை. As the grammarians of prosody are obsessed with

naming every variation, they will describe this disagreement as பா_m is mixed with தளை_n. This will not be a problem if there is only one discordant தளை, but this description will be problematic when there is multiple discordant தளை. The solution is to maintain a qualifying description of a verse using the first discordant தளை in the poem (விருத்தியுரை of S 532 of யாப்பருங்கலம்). An example is வெண்டளை வந்த ஆசிரிய அடி.

வெண்டளை in ஆசிரியப்பா

கோபாலையர் (தமிழ் இலக்கணப் பேரகராதி, பொருள்: யாப்பு vol.1. p. 301) gives this unsourced verse to illustrate தளை மயக்கம்.

நெடுவரைச் சாரல் குறுங்கோட்டுப் பலவின்
விண்டுவார் தீஞ்சுளை வீங்குகவுட் கடுவன்
உண்டுசிலம் பேறி ஓங்கிய இருங்கழை
படிதம் பயிற்றும் என்ப
மடியாக் கொலைவில் என்னையர் மலையே

This is ஆசிரியப்பா by the சீர் and அடி, but has the தளை of வெண்பா (நிரை+நேர், நேர்/நேர்பு+நிரை in line 1), of கலிப்பா (in line 2, if the third சீர் is scanned as நேர்-நிரை-நேர் and not as நேர்பு-நிரை) and of வஞ்சிப்பா (in line 3, the first சீர் may be scanned as நேர்பு-நிரை (not as நேர்-நிரை-நேர்); நேர்பு-நிரை is one of the sixty வஞ்சி உரிச்சீர்). Since வெண்டளை is in line 1, this verse is described as வெண்டளையால் வந்த ஆசிரியப்பா 'ஆசிரியம் verse with the தளை of வெண்பா'. But if the other scanning is opted in line 2 and 3, it is வெண்டளை in all three lines. This is a verse in which the modulation of அகவலோசை is mixed with the modulation of செப்பலோசை.

There are many other examples of மயக்கம் of கலித்தளை and வஞ்சித்தளை in ஆசிரியப்பா (பிச்சை *op. cit.* p. 74).

The following is an example of கலித்தளை in ஆசிரியப்பா.

கடுஞ்சினத்த கொல்களிறுங் கதழ்பரிய கலிமாவும்
நெடுங்கொடிய நிமிர்தேரு நெஞ்சுடைய புகன்மறவரும் (புறநானூறு 55:7-8)

These lines have மூவசைச்சீர் that ends in நேர் (வெண்சீர்) but is followed by நிரை in the next சீர் (except the second சீர் in the first line). This is கலித்தளை. Occurrence of கலித்தளை presupposes the occurrence of மூவசைச்சீர் in ஆசிரியப்பா which is a நின்ற சீர். Since this is not a favored சீர் ஆசிரியப்பா, mixing கலித்தளை and வஞ்சித்தளை in it is less frequent than வெண்டளை.

The following is an example of வஞ்சித்தளை in ஆசிரியப்பா

வளிதிரிதரு திசையும் (புறநானூறு 30:3)

In this line, the first is a மூவசைச்சீர் that ends in நிரை (வஞ்சிச்சீர்). It is followed by நிரை in the next சீர் (which happens to be a ஈரசைச்சீர்). This is homogenous வஞ்சித்தளை.

The following are examples of தளை மயக்கம் in பாs other than ஆசிரியப்பா illustrated above (பிச்சை *op. cit.* p. 87, 101).

வஞ்சிப்பா's உரிச்சீர் is கனிச்சீர் and its தளை may be homogenous or heterogenous (i.e. வந்த சீர் could begin with நிரை or நேர் அசை), as pointed out. வந்த சீர் could be கனிச்சீர்(of வஞ்சிப்பா), காய்ச்சீர் (of வெண்பா) and இயற்சீர் (of any பா).

எருத்துவவ்விய புலிபோன்றன (புறநானூறு 4:9)

மழையுருவின தோல்பரப்பி (புறநானூறு 16: 2)

கோடுமுற்றிய கொல்களிறு (புறநானூறு 17:17)

Both சீர்'s are வஞ்சி உரிச்சீர் and the தளை is ஒன்றிய வஞ்சித் தளை (நிரை முன் நிரை) in the first citation, the second சீர் is வெண்சீர் and the தளை is ஒன்றா வஞ்சித் தளை, and the the second சீர் is இயற்சீர் and the தளை is ஒன்றா வஞ்சித் தளை (நிரை முன் நேர்) in the third citation. Note that this second the second சீர் is இயற்சீர் only when its second அசை is scanned நேர்பு. It, however, makes no difference to even if this அசை is scanned நேர்-நிரை-நேர், but it will be the inappropriate காய்ச்சீர் in வஞ்சிப்பா.

வெண்பா does not admit any தளை other than வெண்டளை.

பேராசிரியர் (செய்யுளியல் 59) discusses an unusual example where there is ஆசிரியத் தளை in a வெண்பா. அசை violates the requirement of சீர், and consequently of தளை. This violation is not admissible, as indicated by the very name of this verse type, as pointed out by பேராசிரியர், which is வெள்ளை that stands for purity. He gives the analogy of a marble being colored by a red object near it and the red object needs to be removed to have the natural color of the marble. It can be done by அளபெடை, which may not be present graphically but can be produced orally.

தூஉத் தீம்புகை தொல்விசம்பு போர்த்ததுகொல் (வெண்பா at the end of மலைபடுகடாம்)

Here தூஉத் is நேர்-நேர், which is followed by நேர். This violates the தளை requirement of வெண்பா, which is heterogenous அசை. When the vowel is prolonged to give தூஉஉ it becomes the அசை of நேர்-நிரை, which meets the தளை requirement. Caminathaiyar's edition makes the correction graphically and has தூஉஉத் தீம்புகை. This gives rise to அளபெடை with four மாத்திரை.

In பேராசிரியர்'s time, the verses were recited following the rhythm and so he did not need to edit the text. The required சீர் may be created orally. Saminathaiyar points out in his autobiography that his teacher did not recite the verses as per their rhythm. It is likely that the rhythmic rendering of the verse types in public such as classroom was replaced by musical rendering drawn from devotional and classical music. This, if true, is a big shift from the folk to the classical.

கலித்தளை in ஆசிரியப்பா

கலிப்பா's உரிச்சீர் is காய்ச்சீர் and the தளை is ஒன்றாத் தளை unlike வெண்சீர் வெண்டளை (but is like நிரை ending இயற்சீர் வெண்டளை). The preferred காய்ச்சீர் is the one that begins with நிரை அசை.

நாமில்லாப் புலம்பாயின் நடுக்கஞ்செய் பொழுதாயின் (கலித்தொகை 27:23)

அடங்காதார் மிடல்சாய அமரர்வந் திரத்தலின் (கலித்தொகை 2:2)

மரல்சாய மலைவெம்ப மந்தி யுயங்க (கலித்தொகை13: 5)

All four are கலி உரிச்சீர் in the first citation, the fourth சீர் is இயற்சீர் in the second citation and the last two சீர் are இயற்சீர் in the third citation above. The தளை is ஒன்றாத் உரிச்சீர் (நேர் முன் நிரை) in all three citations when the collocating சீர்'s are the உரிச்சீர் of the பா. தளை of the பா may (citation 2, where it is ஒன்றாத் தளை or may not be (citation 3, where it is ஒன்றிய தளை (நேர் முன் நேர், which is வெண்சீர் வெண்டளை) the தளை of the பா. When both சீர்'s of the collocation are not the உரிச்சீர் of the பா (citation 3), தளை has the option of having a different one as in the case of last இயற்சீர்'s of citation 3 (நேர் முன் நிரை, which is இயற்சீர் வெண்டளை).

The above illustrations show that verses other than வெண்பா admit தளை's of other verse types. This is தளை மயக்கம், where one தளை another தளை is

anticipated. கலித்தளை in ஆசிரியப்பா may be an example of this. When a particular kind of மயக்கம் is sanctioned, may be because of the frequency of its occurrence, it is தளை விரவல். வெண்சீர் in ஆசிரியப்பா is an example of this. The frequency may be due to the fact that that if the உரியசை of ஆசிரிய இயற்சீர் is scanned as நேர் / நிரை-நேர் (rather than நேர்பு / நிரைபு), the resulting சீர் will be மூவசைச் சீர் ending in நேர், which is வெண்சீர். வெண்சீர் in ஆசிரியப்பா is an example of this. Each verse's உரிச்சீர், however, ensures that the தளை of the verse is appropriate. When this is broken it is தளைக் குற்றம் or வழி.

8.8 தளை and பாடபேதம்

Fault in தளை is an alert to suspect a wrong text and to decide on one variant when there is textual variation (பாடபேதம்). It is also a factor in choosing between different readings of a line in a verse. The better choice is the one that meets the preferred meter including தளை. The following example is not about preferred தளை for rhythm but about preferred சீர் for rhyme. பரிமேலழகர் explicitly chooses, for திருக்குறள் 1058, the reading இரப்பாரை of மூவசை (in spite of the grammatical difficulty it creates) in the first line instead of இரப்பவர் of ஈரசை, which some commentators have. This choice, he justifies, is to rhyme with மரப்பாவை of மூவசை in the second line (சண்முகம் பிள்ளை, திருக்குறள் யாப்பு அமைதியும் பாட வேறுபாடும், p. 141).

இரப்பாரை இல்லாயின் ஈர்ங்கண்மா ஞாலம்
மரப்பாவை சென்றுவந் தற்று

9. அடி

அடி is the next higher unit or limb and it is the highest. It is also the largest unit of a verse. The role of அடி in a verse is twofold. One is the length of அடி in a

verse and the other is the quantity, i.e. the number, of அடிs in a verse. The first is the horizontal dimension and the second is the vertical dimension. Both are included in the limb called அளவு that தொல்காப்பியம் lists as one of the thirty four limbs of செய்யுள். Both dimensions of அடி are defintional in the sense that they are two of the factors (the other two are தளை and உரிச்சீர்) that differentiate one பா from another.

The word அடி is probably derived from the verbal root அடு 'to follow one after another' (cf. அடுக்கு 'to arrange, commonly vertically'). The running sequence of சீர் is broken and arranged one after another vertically. This is different from the other units which are arranged horizontally. This is translated as a 'line' in a poem. அடி is different from வரி 'line' used in prose to refer to the break of the string of words, which is not a factor in rhythm. This is however translated as 'foot' (some grammars use பாதம் as a synonym). This is derived from the meaning 'foot' for அடி (from its sense 'bottom' that metaphorically refers to the bottom most limb) and its semantic extension 'step' (referring to the the step in walking and the related sense of the measurement 'foot'). அடி in prosody then is imagined to be the steps in walking ahead as the poem progresses.

9.1 அடி as the unit of rhythm

அடி is the highest level unit of ஓசை. It marks the end of one sequence of சீர்s (சீர் இறுதல்) and the beginning of another sequence. It marks the coda of rhythm before the rhythm is repeated in the next அடி. It is thus the divider of of the assembly of rhythms of a verse. It is therefore important where one அடி breaks (the technical terms used is அறு or துணி, which is used to refer to shearing a textile piece) and another begins. Textile is the anology for the texture of the whole poem. There could be an option in some situations about where to make the line break. For example, a நாற்சீரடி could be broken into two இருசீரடி provided the சீர் and தளை requirements of the verse are met. It is however hard

to have all the conditions met. Some illustrations of such problems will be discussed later under தூக்கு.

Breaking a verse into அடி is by a principle of balancing the rhythm and length of the அடி by the number of சீர்'s. Meaning makes an optional role to make the line isomorphic with a sentence, which is a proposition. This is on the production side to create a sentence for each line. Recall that a சீர் may optionally be isomorphic with a word within an அடி. The possibility that அடி could be a standalone proposition opens up the possibility of reordering the lines in a verse without disturbing the சீர் structure or the sentence structure. This is called அடிமறி 'another arrangement of lines'; மறி from மறு 'another'. This contributes to variations in a பா that leads to creating a sub-type of பா (discussed later under kinds of verses).

9.2 Defining அடி

அடி is defined by the nature of உரிச்சீர் and the தளை in it that are specific to a பா such as வெண் சீர், வஞ்சிச் சீர் etc. and வெண்டளை, வஞ்சித்தளை etc. The line then is called வெள்ளடி, வஞ்சியடி etc. A வெள்ளடி, for example, is line that has வெண் சீர் and வெண்டளை, both of which in turn are defined by the nature of composition of அசை and the collocation of அசை between சீர்'s. This will then help to identify the type of பா; வெண்பா is a பா that has வெள்ளடி; வஞ்சிப்பா is a பா that has வஞ்சியடி etc.

9.3 Measuring the length of அடி

அடி is classified by the number of சீர்'s in it (இரு சீரடி or குறளடி, முச்சீரடி or சிந்தடி, நாற்சீரடி or அளவடி etc.). The line measured by the சீர்'s in it is சீரடி. Its length is also measured by the number of தளை's which the sequenced சீர்'s

have. A தளை requires two சீர், as described above. A measurement of two தளை will have three சீர் (i.e. the number of தளை + 1, since the last சீர் the sequence will not have தளை). The line defined this way is called தளையடி. இலக்கணவிளக்கம் uses this method and terminology. குறளடி etc. will be so called by the number of தளை in the அடி.

9.4 Alternate measure of அடி

Yet another way of measuring the length of அடி is by the number of எழுத்து in it. The phonetic segments that have not less than one மாத்திரை are counted and the counted ones are not weighted for their duration, short and long. Short and long segments get the same count. In measuring a line by எழுத்து, pure consonants do not count (செய்யுளியல் 42). It must be noted that the final Cu in உரியசை, having half மாத்திரை, is not counted in measuring the length of அடி by எழுத்து. இயலசை (நேர், நிரை) and உரியசை (நேர்பு, நிரைபு) become virtually identical in the method of counting. Recall that in counting by சீர் also dropping of Cu from measuring (அலகிடுதல்) is permissible. The அடி defined by எழுத்து is called கட்டளையடி 'அடி commanded (by எழுத்து'; the etymology could be கள் + தளை + அடி 'the line measured with தளை tha is stealthy' (= masquerading as in கள்ளக் காதலன் 'paramour'). The different ways of measurement using different units are relatable to one another.

The correspondence between the two ways of counting is as follows.

(செயராமன், யாப்பியல் ஆய்வுக்கோவை, p. 22). 2 சீர் is 4-6 எழுத்து; 3 சீர் is 7-9 எழுத்து; 4 சீர் is 13-14 எழுத்து; 5 சீர் is 15-17 எழுத்து and 6 சீர் is 18-20 எழுத்து. The numbers indicate the spot (நிலம்) for the countable letter and the lower and upper numbers indicate the limit of variation depending on the size of each சீர்.

தொல்காப்பியம் (செய்யுளியல் 41) makes a further points out that if the letter count is a little more or less, it does not alter the status of the சீர் the count represents, according to the interpretation of this sutra by இளம்பூரணர், though he gives no example. The point is that counting by எழுத்து or சீர் gives the same result regarding rhythm.

Counting by எழுத்து was probably the way to define the line length before தொல்காப்பியம் and began to be replaced by counting by சீர். தொல்காப்பியம் talks about both. பேராசிரியர் speculates that கட்டளையடி was the common practice at the time of first two Sangams (as he does about the உவம உருபு listed in தொல்காப்பியம் but not attested in Sangam poems).

Counting the length of அடி by எழுத்து continued after தொல்காப்பியம். Some specific prosodic structures such as கட்டளைக் கலித்துறை count the length of line by எழுத்து. But கட்டளையடி in this later period is restricted to the அடி of 4-6 எழுத்து (i.e 2 சீர்). சந்தம் meter of the later period, whose rhythm follows beat is measured by எழுத்து that represents the beat, as we will see later.

9.5 Extended length of அடி

The number of சீர்'s an அடி has may vary from two to five standardly. But the upper limit may exceed five. தொல்காப்பியம் fixes it at seven and says that to go beyond it will have no finality to the number (செய்யுளியல் *, விரிப்பின் அளவிறந்தன). காக்கைபாடினியம் fixes the number at eight; யாப்பருங்கல விருத்தியுரை at ten, but lets it to go beyond. The numbers are even numbers; there is line with an odd number of சீர்'s. The need for extending the length of the line instead of breaking it into shorer lines where possible is not clear.

The lines have names depending on their length defined by சீர், தளை or எழுத்து, as described above. Line is the unit of ஓசை (rhythm), as mentioned above and

hence the length of a line is not merely a matter of size but also is the indicator of the nodal points of the rhythm.

The general pattern is that the number of சீர் in a line will be the same in all lines of a poem, but there are special patterns that do not make the general pattern universal. To maintain the linear order of the same type of சீர் (with regard to its construction type viz., மாச்சீர், விளச்சீர், காய்ச்சீர் and கனிச்சீர்) in a line is the ideal, but it is not in practice. For example, for all the சீர்'s of an அடி to be மாச்சீர் or விளச்சீர் or காய்ச்சீர் or கனிச்சீர் has high value in appreciation than an அடி mixing the kinds of சீர்'s subject to the constraints of admissible சீர்'s and their sequence. The reason for the higher appreciation may derive from the difficulty of maintaining uniformity or from the kind of flow of rhythm it ensures.

9.6 Different sizes of length

The sequence of two சீர் with one தளை is named குறளடி 'shortest line', three சீர் with two தளை is named சிந்தடி 'shorter line' (taking சிந்து to be a variant of சித்து 'small', cf. சித்துப் பிள்ளை 'girl of small frame'), four சீர் with three தளை is named அளவடி 'right-length line' (cf. அளவுக்கு மிஞ்சினால் 'if you exceed the right amount') or 'the standard-length line' (in the sense that the length of other lines are measured with this as the base; this is also called நேரடி 'straight-length line'), five சீர் with four தளை is named நெடிலடி 'long line', above five சீர் (இலக்கண விளக்கம் specifies the number to be 6-8; in terms of தளை 5-7) is named கழி நெடிலடி 'extra-long line'.

An அடி must have more than one சீர் except the தனிச்சொல் in கலிப்பா and வஞ்சிப்பா. Each சீர் in a line may not have the same அசை composition; different சீர்'s may represent different variants of அடி. Taking a line with four சீர்'s (அளவடி) as the standard and the five kinds of சீர்'s (see above),

தொல்காப்பியம் computes 625 variations (called விகற்பம்) of அடி (5x5 after the first சீர் (25), which is 25x5 after the second சீர் (125), which is 125x5 after the third சீர் (625). A பா can have more than four சீர்'s in a line. With seven சீர்'s taken as the maximum in a line, the variations of அடி amount to be 78125 (See கந்தசாமி *op cit* p. 180-181 for the calculation). This is the number of logical possibilities of அடி types but empirically the variations are less in the poetic corpus of Tamil. It is an empirical question for reearch on the practical limits of அடி விகற்பம் in the Tamil literary corpus.

According to தொல்காப்பியம், 4-6 எழுத்து make குறளடி (செய்யுளியல் S 35) and so on in the sutras following it (see below). Counting by சீர், குறளடி includes the following forms of சீர் (excluding உரியசை): நேர்-நேர், நேர்-நிரை, நிரை-நேர், நிரை-நிரை. The lowest எழுத்து count of these by மாத்திரை is 4 (நேர்-நேர்) and the highest count is 6 (நிரை-நிரை). But there is no convention of measuring அடி by மாத்திரை. Therefore, there is nothing to be lost regarding அடி measurement by dropping மாத்திரை from the list of limbs.

Recall that தொல்காப்பியம் does not raise தளை to the status of a poetic unit and does not recognize any indispensable role for it in determining the rhythm of a poem. சீர் will do for it. At the same time, தொல்காப்பியம் uses மாத்திரை to aid determining the rhyme (see above) and this is one of the elements of another limb வண்ணம் (described later). This is shifted in the later grammars to the aesthetic part of செய்யுள் from the structural part and placed under அணியிலக்கணம். தளை in these grammars, continues to have a significant place in the structure of செய்யுள் and so is kept in யாப்பிலக்கணம்.

9.7 Length of a பா

Any பா has a lower and upper limit on the number of அடிகள். This is how a பா is differentiated from other types of செய்யுள், which do not have அடி limit, upper and lower (அடிவரை இல்லன, செய்யுளியல் 157). The size of a poem by its number of lines is a unit or limb called அளவு of பா, as mentioned earlier. The lower limit is two lines (சாமிநாதம், a grammar of the 19th century, considers a single line aphorisms such as அன்னையும் பிதாவும் முன்னறி தெய்வம் in ஆசிரியம் meter is one line ஆசிரியப்பா (கந்தசாமி op. cit. p. *); this raises the question whether aphorism has the status of a poem or it is a non-poetic composition. For தொல்காப்பியம், aphorism would probably not be a பா but a முதுமொழி. The upper limit is flexible and varies over time and between verse types; வெண்பா is different from ஆசிரியப்பா and கலிப்பா. It may even be open ended, as some commentators point out that it is dependent on the imaginative mind of the poet (discussed later under verse types). Later day காப்பியம், which are organized by stanzas rather than by lines, make the idea of upper limit superfluous. But there is a limit conceptually in that the grammars talk about upper limit and it is relevant for தனிப்பாடல். This is not the case with the other செய்யுள், i.e. compositions that do not qualify to be a பா, such as நூல் 'treatise' on a subject like grammar.

9.8 அடி மயக்கம்

The poems exhibit two variations; one is in line length and the other is mixing of one பா's specific அடி in another பா. The former could be independent or a consequence of the latter. An example of variation in the length of a அடி in a பா is having a முச்சீரடி amidst நாற்சீரடி. It was mentioned earlier that the hypothetically ideal pattern or the minimalist grammar in the sense that the grammar that is optimally describable with minimum variability) is for all lines in a

verse to have the same length, i.e. the same number of சீர் (or தளை or எழுத்து). The length of each சீர் (in terms of அசை) may vary but their number in a line will be the same in this pattern. Each பா has permissible lengths of சீர் and permissible number of சீர்'s in a line. But these two conditions are permissive. When a பா has less or more number of சீர்'s, it is one kind of அடிமயக்கம் (செய்யுளியல் 27). (Variations from the ideal pattern in சீர் length is சீர் மயக்கம் (see above)). When lines of varying lengths are found in a verse, which are sanctioned or legitimized in the definition of a verse, it is interspersing of அடி (அடி விரவு). If it is occasional or random, it is அடிமயக்கம். Both will be illustrated when we describe verse types later.

9.9 Mixing metrical lines

Another kind is when the அடி in the meter of one பா appearing in another பா that has a different meter. This is not the சீர் of one verse appearing a line of another verse. The entire line will have all the சீர் and தளை appropriate for another verse. This also will be discussed in detail later.

The overlaps are similar in effect to the overlap of melodies in music or of colors in a painting. The concept of மயக்கம் helps legitimizing innovation.

A couple of illustrations here will help to understand the concept of மயக்கம் of metrical line of one verse mixed with another. (These are also, incidentally, illustrations for a line having same kind of சீர், which is of higher value) (see earlier description under சீர்).

கடல்பா டொழிய இனமீன் முகந்து
நிரை நேர் நிரை நேர் நிரை நேர் நிரை நேர்
(அகநானூறு 30, இளம்பூரணர் citation)

எறும்பி யளையிற் குறும்பல் சுனைய
நிரை நேர் நிரை நேர் நிரை நேர் நிரை நேர்
(குறுந்தொகை 12, பேராசிரியர் citation)

These two lines are வெள்ளடி with வெண்டளை (heterogenous) occurring in ஆசிரியப்பா, whose தளை is different (homogenous). We have already seen வெண்சீர் occurring in a line of ஆசிரியப்பா. It needs to be investigated what rhythmic effect is brought by the introduction of வெள்ளடி in ஆசிரியப்பா, which relates to the aural sensibility of the poem. It will also be interesting to see what difference is there in rhythmic effect between the case of விரவுதல் and the case of மயங்குதல் at the level of அடி.

10 தூக்கு

தூக்கு '(measuring) balance' is another unit of செய்யுள். It is another term for ஓசை 'rhythm' in தொல்காப்பியம் for இளம்பூரணர் (தூக்கெனினும் ஓசையெனினும் ஒக்கும் 'using தூக்கு or ஓசை is the same', செய்யுளியல் *). ஓசை, however, is about ensuring evenness in the pattern of the rhythm in a poem. As pointed out above, தளை has a role in ensuring the flow of rhythm. தூக்கு determines the length of the string for the operation of a particular rhythm. it helps to break a sequence of சீர்'s into an அடி. ஆசிரியப்பா, for example, can have two to five சீர் in an அடி. A string of seven சீர் could be split into two அடிகள் with two and five or three and four சீர்; a string of eight சீர் could be split into four and four or three and five. But the other requirements such as the சீர் size and தளை of the verse will have a bearing on the split. தூக்கு recommends a particular split that helps the operation of rhythm of the given பா.

புறநானூறு 235 illustrates this. This is the poem cited in யாப்பருங்கல விருத்தியுரை (செய்யுளியல் S 72) for ஆசிரியப்பா to have இருசீரடி, which is a characteristic of the அடி of வஞ்சிப்பா (called வஞ்சியடி), intermingled in it.

.....

பெரியகட் பெறினே
யாம் பாடத் தான்மகிழ்ந் துண்ணு மன்னே

.....

நரந்தம் நாறும் தன்கையாற்
புலவு நாறு மென்றலை தைவரு மன்னே

.....

(கோபாலையர், தமிழ் இலக்கணப் பேரகராதி: பொருள்: யாப்பு: பகுதி 2, p. 14-15).

The first two lines above could be split into three and four சீர் instead of two and five சீர், as given above. The above is legitimate depending on whether தொல்காப்பியம் recognizes five சீர் for ஆசிரியப்பா; இளம்பூரணர் thinks it does. There is lack of consensus on this, though; இளம்பூரணர் might be reading a later characteristic into தொல்காப்பியம். The second two lines above could be split into four and four சீர் instead of three and five as given. The given split as above, it is claimed, preserves அகவலோசை in both places.

10.1 Multiple options of split

The choice of any split of அடி is an exercise of தூக்கு. There are multiple possible splits of the above poem as preferred by commentators and editors, which can be seen by the variation in the number of lines they have for this poem. இளம்பூரணர் presents this poem in full to exemplify மன்னைக் காஞ்சி in 20 lines (in his commentary on புறத்திணையியல், S77 in the edition of V.O.

Chidambaram Pillai and S. Vaiyapuri Pillai). இளம்பூரணர் in another citation of this poem to exemplify ஆசிரியப்பா with lines of varying lengths (செய்யுளியல் 103, மண்டிலங் குட்ட மென்றிவை யிரண்டுஞ்....) says that this verse (without reproducing it) has 17 lines, of which 7th and 12th lines have முச்சீர்; 3rd, 4th, 5th, 6th and 14th lines have ஐஞ்சீர்; 2nd and 11th lines have அறுசீர் and rest of the lines have நாற்சீர். The above editors point out that this line break is not maintainable in the version of the text he gives in புறத்திணையியல் and இளம்பூரணர்'s text for the above line split could have been different. This split is unmaintainable because one of the remaining lines would be the tenth line and it cannot be accommodated in நாற்சீர் (மு. அருணாச்சலம், இளம்பூரணர், 1981, p. 101). This is because, if the eleventh line, which has முச்சீர் in the other splitting, has to have அறுசீர், the tenth line, which has நாற்சீர் in the other splitting, has to be split to increase the number of சீர்'s of the eleventh line from three to six; this will leave the tenth line with one சீர், which is inadmissible. இளம்பூரணர்'s split, however, is affirmed, with regard to the first two lines (நாற்சீர் and அறுசீர் respectively), in yet another citation of his (செய்யுளியல் 61, அறுசீ ரடியே யாசிரியத் தளையொடு.....) to exemplify that ஆசிரியப்பா can have அறுசீர். This splitting is different from the way the lines are split in the above citation with 20 lines. It is not clear why இளம்பூரணர் himself has two ways of splitting this poem into 20 lines in புறத்திணையியல் and 17 lines in செய்யுளியல், which is problematic as shown above.

யாப்பருங்கல விருத்தியுரை (செய்யுளியல் S 72) has 21 lines for this poem in one printed edition (Kazhagam edition) but தொல்காப்பியம் செய்யுளியல் edition of Madurai Tamil Sangam mentions that யாப்பருங்கல விருத்தியுரை has 25 lines for this poem, which may be from another edition or another manuscript. The edition of தொல்காப்பியம் செய்யுளியல் by Madurai Tamil Sangam has 19

lines and உ. வே. சாமிநாதையர் has 22 lines in the first edition of புறநானூறு and 20 lines in its second and in the subsequent editions of it (it is not clear if the the verse in the old commentary, which is included in the edition, has 22 lines; it is possible that the difference palm leaf manuscripts used had different lines). This text and splitting is adhered to by other editors such as ஓளவை துரைசாமி பிள்ளை (கந்தசாமி, தமிழ் யாப்பியலின் தோற்றமும் வளர்ச்சியும், p. 307).

உ. வே. சாமிநாதையர் பதிப்பு with the old commentary (second edition)

1. சிறியகட் பெறினே யெமக்கீயு மன்னே
2. பெரியகட் பெறினே
3. யாம்பாடத் தான்மகிழ்ந் துண்ணு மன்னே
4. சிறுசோற் றானு நனிபல கலத்தன் மன்னே
5. பெருஞ்சோற் றானு நனிபல கலத்தன் மன்னே
6. என்பொடு தடிபடு வழியெல்லா மெமக்கீயு மன்னே
7. அம்பொடு வேனுழை வழியெல்லாந் தானிற்கு மன்னே
8. நரந்த நாறுந் தன்கையாற்
9. புலவு நாறு மென்றலை தைவரு மன்னே
10. அருந்தலை யிரும்பாண ரகன்மண்டைத் துளையுரீஇ
11. இரப்போர் கையுளும் போகிப்
12. புரப்போர் புன்கண் பாவை சோர
13. அஞ்சொனுண் டேர்ச்சிப் புலவர் நாவிற்
14. சென்றுவீழ்ந் தன்றவன்
15. அருநிறத் தியங்கிய வேலே
16. ஆசா கெந்தை யாண்டுளன் கொல்லோ
17. இனிப் பாடுநருமில்லைப் பாடுநர்க்கொன் றீகுநருமில்லைப்
18. பனித்துறைப் பகன்றை நறைக்கொண் மாமலர்
19. சூடாது வைகியாங்குப் பிறர்க்கொன்
20. றீயாது வீயு முயிர்தவப் பலவே.

The total number of lines may be same for this poem, but the lines may split differently in more than one place. இளம்பூரணர் has lines 14 and 15 as one line, but splits line 17 into two with றீகுநரு மில்லை forming the next line with two சீர்'s. யாப்பருங்கல விருத்தியுரை criticizes இளம்பூரணர் for treating this verse

to have 17 lines (three less than the modern printed edition). 17 lines are possible when some lines have six சீர்'s, which தொல்காப்பியம் does not recognize for ஆசிரியப்பா, but later grammarians do. யாப்பருங்கல விருத்தியுரை also splits line 17 into two but makes பாடுந ருக்கொன் றீகுநரு மில்லை the next line and splits it to have four சீர்'s. புலியூர்க் கேசிகன் has 22 lines and splits the last two சீர்'s of line 7 into a separate line as well as the first சீர் of line 17. The second split makes 'இனிப்' as a சீர் of one அசை constituting a line, which makes it a தனிச் சொல் or கூன்; this is a characteristic of வஞ்சிப் பா, not of ஆசிரியப்பா.

The different splits of this verse as above makes it mixed with ஆசிரிய அடி and வஞ்சி அடி. It may be noted that this poem is likely to a spontaneous outpouring of அவ்வை at the death of her patron probably suddenly and in a battle field and her emotions are tumbling. This is reflected in the mingling of different kinds of அடி and their ஓசை in the different versions of this poem as its citationists saw fit.

10.2 Other means of splitting அடி

The commentators take the rhythm to determine the line break. In other words the guiding principle of தூக்கு is ஓசை. Nevertheless, there could be other guiding principles too; one of them is தொடை, especially எதுகை, which is limited to a line (not extended to the entire verse, i.e. முற்றெதுகை; see below); another could be meaning (i.e. a proposition codified in a sentence; see அடிமறி described above). Using எதுகை for splitting lines gives it a functional role beyond aural aesthetics. இயைபு எதுகை, which has எதுகை in the fourth சீர் and ஒருஉ எதுகை, which has it in the first and fourth சீர்'s (see discussion above under சீர்), gain in significance as a signal for line split. Using எதுகை may be taken to be a rule of thumb rather than a theoretical principle because this is not its primary function and poets do not compose to help line break. This may be a practice followed by scribes and editors in spite of the potential of this to give a wrong

result. One example of ambiguity is that எதுகை in the third and fourth சீர்'s. If it is taken to be இணை எதுகை, it may warrant a split after the third சீர், or if it is as இயைபு எதுகை, it may warrant a split after the fourth சீர். Choosing one over the other will be consequential to அடிமயக்கம். All this points to the fact that line splits are not mechanical.

பேராசிரியர் (செய்யுளியல் *), following him நச்சினார்க்கினியர் take, contrary to the understanding of இளம்பூரணர் and others, that தூக்கு 'to lift (from flow)' to mean interruption of flow by stopping, pausing or stretching the flow (நிறுத்தலும், அறுத்தலும், பாடலும்). This is a totally a different understanding of தூக்கு. This is probably in relation to singing the line of a பா following a music system. This reflects the time when இயற்பா 'normal verse' becomes இசைப்பா 'musical verse'; when poetry had moved from being இயற்றமிழ் to இசைத் தமிழ்.

11.தொடை

தொடை is derived from the verb தொடு 'string together', as stringing flowers together, which makes a garland (தொடை means 'garland' as well). If தளை is the string of a garland, சீர்'s are its multiple strands and அடிகள் are its multiple steps in the garland's height, தொடை's are the various designs on the strands and steps.

11.1 The grounds for தொடை

The structural units of a poem, மாத்திரை, எழுத்து, அசை, சீர், அடி, are called நிலம் 'ground' for தொடை and வண்ணம், which can only be described with one

or more of the structural units. The last two of the above, சீர் and அடி, are the primary grounds for the distribution of தொடை and the first three are specifications in these two. These grounds are the locations or spots to create a pattern of sound in a verse. This pattern adds to aural aesthetics of a poem. சீர் and அடி are also the determiners of the ஓசை of பா. The interaction of தொடை and வண்ணம் with ஓசை is an important question that needs exploration.

தொடை however is not limited to creating phonetic texture but extends to creating a semantic texture such as employment of antonyms and synonyms and multiple lexical splits of a homophonous சீர் for சிலேடை (see below).

11.2 Kinds of தொடை

தொடை may manifest across அடிகள் or across சீர்கள் or both in a verse. The first is the vertical manifestation and the second is the linear manifestation. They are called respectively அடி(வகை)த் தொடை and சீர்(வகை)த் தொடை. There are three spots in a சீர், where தொடை could manifest. They are located in the initial and final சீர் of அடி. They are specified as the first and second letter in the first சீர் and the last letter in the final சீர். This means that எழுத்து fills the slots. They are respectively called மோனை, எதுகை and இயைபு. These names have come to mean the letter that manifests in the slot rather than the slots themselves. Though the manifest is called எழுத்து, it is conditioned as எழுத்து with same மாத்திரை. This is a preferred manifestation, but deviations are admissible as below.

There are two more தொடைகள், which are not slots but the manifestations in the slots. One is அளபெடை, which are like எழுத்து but have மாத்திரை of extra duration. Another is முரண் 'contrasting sound sequences ending up as a word'.

தொல்காப்பியம் states first there are four kinds of தொடை (தொடை வகை),

which are மோனை, எதுகை, இயைபு, முரண், in one sutra (செய்யுளியல் 84) and adds அளபெடை to these four in the next sutra making a total of 5 kinds of தொடை. These five will be described in detail below. With regard to manifests or fillers of the slot, there are only three: normal duration (short and long), extra-long duration and sequence in a word.

A verse with அளவடி (நாற்சீரடி) is taken as the standard or base to state the slots or position of தொடை. Hence the combined number of slots and fillers, collectively called தொடை, are 20 (5 தொடை x 4 சீர்) (செய்யுளியல் 203, which, however, says it with regard to வண்ணம்). Nevertheless, the சீர் that prominently participate in தொடை slot are the first and last சீர் of அடி. தொடை slots are called தொடை விகற்பம். They are the slots for the variations (விகற்பம் 'differential of தொடை').

11.3 Manifestation of தொடை in a line

The slots are with reference to அடி sequence in a verse (செய்யுளியல் 88: அடிதொறும்) particularly with regard to மோனை and எதுகை of the first சீர். They do not have to manifest in all lines; they may manifest every two lines or in alternate lines; there is thus variation. தொல்காப்பியம் extends the slots to சீர் sequence also (செய்யுளியல் 86). The slots come in pairs: first and third சீர் (called பொழிப்பு) and first and fourth சீர் (called ஒருஉ). This shows that the preference of அடி for manifesting தொடை is not a prohibition or non-recognition of empirical facts about its manifestation in சீர், but just prioritization of it in a scale of poetic value. There is a scale of poetic value to order the numerous தொடை. Some are more essential and some are more ornamental.

This extension of தொடை to சீர் sequence is expanded in later grammars by replacing the pair of occurrence to the pattern of occurrence. This gives seven

possible தொடை விகற்பம் in a line of four சீர். The pattern is: 1-2-3-4, 1-3-4, 1-2-4, 1-4, 1-2-3, 1-3, 1-2. Note that தொடை's favorite சீர் is the first one and it is constant in the permutations. Any of the pattern may repeat in two or more அடி. Each of these seven விகற்பம் has a name; the names of some are opaque to indicate their meaning to describe the particular விகற்பம். They are respectively முற்று 'full fill', மேற்கதுவாய் 'blank on left', கீழ்க்கதுவாய் 'blank on right', ஒருஉ 'middle blank', கூழை 'final blank', பொழிப்பு even blank', இணை 'adjacent fill'. The English translation of the terms has no connection with the Tamil terms and they indicate the position of சீர் for தொடை (i.e. slot) and some or all slots will manifest or fill a தொடை. When these seven விகற்பம் are multiplied by five kinds of தொடை, one gets 35 தொடை விகற்பம். The function of the template of தொடை விகற்பம் is to describe the interaction between சீர் and தொடை, which is the basis for the description of rhyming in poetry.

When all அடிகள் have the same தொடை it is named after that தொடை. For example, மோனை in every அடி is அடி மோனை; when all சீர்'s in a line have மோனை, it is called சீர் மோனை. When both அடி and சீர் have மோனை it is described by the word முற்று 'total' and is called முற்று மோனை. When there is no தொடை at all in a versr, it is called செந்தொடை 'straight தொடை' like an arrow shooting straight (cf. the poetic phrase செந்தொடைப் பகழி).

தொல்காப்பியம் (செய்யுளியல் 84-99) gives primacy only to மோனை, எதுகை, முரண் and இயைபு in தொடை. He adds on three more (பொழிப்பு, ஒருஉ and செந்தொடை) in one sutra (செய்யுளியல் 85) and mentions another two (நிரல்நிரை and இரட்டை) in another sutra (செய்யுளியல் *) with no

description of them. The later grammars define them and elaborate them (see below).

However, தொல்காப்பியம் (செய்யுளியல் 97) mentions a large number of (13699 to be exact) possibilities of தொடை, which is questionable given the small number of kinds and slots of தொடை and the priority of the first சீர் in a line for their manifestation. It should be noted that தொல்காப்பியம் (செய்யுளியல் S 90) mentions that எழுத்து would include not only independent vowels and the consonants with the inherent vowel /அ/ but with all vowels (ப, பா, பி, பீ etc.) to count as மோனை and எதுகை. These kindred letters are called கிளையெழுத்து (கிளை 'kin') and later வருக்க எழுத்து. தொல்காப்பியம் itself opens up the category of தொடை this way but it is the later grammars that blow up the manifestations of தொடை enormously. இளம்பூரணர் interprets the above sutra (97) in the light of the elaborated category of தொடை prevalent in his times and calculates the number by the permutations of vowels and consonants and their kindred letters. He brings the number (13699) in the sutra to align with the later grammars. For example, for the மோனை slot in the first சீர், the fillers could be twelve vowels + eighteen basic consonants +198 (11x18, since the vowel /அ/ is inherent) vowel- consonants with the other vowels; this goes on with the three non-initial சீர்கள் and on with all non-initial அடிகள். (பேராசிரியர்'s number of தொடை is 13708, நச்சினார்க்கினர்'s number is 19291). For the numerical count of all possible kinds of தொடை, and of a specific தொடை, see கோபாலையர், *op. cit.* vol. 2 p. 19-24).

Though ten kinds of தொடை (five in மோனை and five in எதுகை positions, see above) are thought of by poets and recognized by grammarians as the preferred ones, thousands of variations that arise out of enlarged தொடை in terms of its

kinds and slots are left to the imagination of poets. தொல்காப்பியம் recognizes the open endedness of தொடை when it says that the expansion when pursued is limitless (செய்யுளியல் 98: தெரிந்தனர் விரிப்பின் வரம்பில் ஆகும்).

எதுகை is considered the most basic தொடை. The poems without it are considered inferior in aesthetic value. Because of its importance, வீரசோழியம் (S*) defines an அடி by தொடை (which is எதுகை for this grammar) just like defining அடி by சீர் or தளை. It calls it தொடையடி.

11.4 Elaboration of தொடை

தொடை becomes very important in post-தொல்காப்பியம் and so in later metrical grammars. This gaining in importance goes along, one could hypothesize, with verses being set to music (see above) and with verses embellishing themselves with அணி, which is elaborated farther than தொல்காப்பியம். The importance of தொடை can be gleaned in தொல்காப்பியம் itself, where தொடை seems to be used in the sense of the whole of யாப்பு (செய்யுளியல் 66: 'தொடையுணர்ந்தோரே'). தொல்காப்பியம் gives தொடை, unlike தளை, the status of a unit. It is an aesthetic unit, not a prosodic unit; தொல்காப்பியம் does not differentiate between these two kinds theoretically as units of செய்யுள், as we saw earlier.

It is prudent to look at the phenomenon of elaboration, though it is historical, as a difference between a minimalist theory and a maximalist theory. This is because it is hard to pin point the temporal sequence of the elaboration as the commentators of தொல்காப்பியம் read into this text all their contemporary understandings. Minimalist theory is the same as the ideal or the standard theory because it is not a goal every poet strives to aspire and is expected to adhere to. Minimalism is used in the sense of the base line against which others are measured and treated as variants. Maximalism is to exploit the logical possibilities

to the maximum. This is true not only of தொடை but also to the variants of a பா (discussed later under the types of verses).

11.5 Explaining individual தொடைs

(See the illustrative verses for individual தொடைs in the Annexure 1)

The தொடை which is the first phonetic complex or எழுத்து of the first சீர் of a line of the poem (which cannot be a pure consonant, as it is not allowed in the word initial position), is called மோனை (probably related to the noun முகனை 'front' and முனை 'edge' (Tamil Lexicon) referring to the beginning of a line. The தொடை, which is the second phonetic complex or எழுத்து (which cannot be a vowel by the rules of Tamil phonetic sequencing) is எதுகை. This term probably is from the verbal root எதிர் 'face (something)' (Tamil Lexicon; see for எதிர் (எது-இர்) -> எது in எதுக்களி 'retch' from எதிர்-) referring to the second letter in அசை facing the first letter. There is a condition that there is a match of the மாத்திரை of the recurring மோனை or எதுகை. That is, if the first segment in the first அடி or சீர் of மோனை or எதுகை is a short vowel (குறில்), then the vowel must be short in the second (i.e. following) அடி or சீர்; if it is long (நெடில்) in the first அடி or சீர், it must be long in the recurring அடி or சீர் also. This condition is relaxed and adherence to this condition becomes a matter of preference when எழுத்து is extended to include kindred letters.

எதுகை could be in the first அசை if it is நிரை and in the second அசை if the first அசை is நேர். In such cases, the second அசை will also be நேர். This condition is laid down by யாப்பருங்கல விருத்தியுரை (S 37) citing a sutra of an unknown author.

The second phonetic complex that recurs may not just be எழுத்து; it may be whole அசை or the remainder of the entire சீர். The சீர் may be coterminous with

a word in the language. Such words in different சீர்'s or அடி may be homonyms, which open the possibility of சிலேடை.

After மோனை and எதுகை, another தொடை is இயைபு, which is about the தொடை slot in the last சீர். It is not about the logical possibility of the final எழுத்து in சீர்'s being the same (This is the opposite of மோனை). It is about the same final எழுத்து in the final சீர் of அடி's. This is rhyming at the end of the lines. As with எதுகை, தொடை may extend to be an அசை or a சீர் or a word.

The next தொடை is அளபெடை, which, as pointed out above, is not a slot but the filler of the slot. It could fill in any slots as எழுத்து does. அளபெடை is more than one எழுத்து and has more than two மாத்திரை. Some அளபெடை's are treated prosodically as a sequence of a long vowel and a short vowel and so are two அசை's (செய்யுளிரை அளபெடை); they may not be counted as the same தொடை as the அளபெடை of extra length (இன்னிரை அளபெடை). The அளபெடை's of different vowels count as same for தொடை.

11.6 தொடை of contrast

The next தொடை is முரண் 'contrast' and it is called முரண் தொடை (செய்யுளிரை 91: மொழியினும் பொருளினும் முரணுதல் முரணை). This is based on contrast unlike the other ones that are based on similarity. This is a தொடை of not one எழுத்து but a sequence of எழுத்து's, which are coterminous with words. This may manifest in the சீர் sequence and in the அடி sequence. தொல்காப்பியம், according to இளம்பூரணர், talks only of the latter (அடிதொறும்). Unlike the தொடை of same words mentioned above, these words differ phonetically in one letter or in their entirety. This results in the words contrasting semantically. So this தொடை has a semantic component also. The

above sutra could be interpreted to mean that a தொடை may be a contrast lexically and semantically and both are the same முரண்.

This sutra gives rise to a semantic constrast independent of a lexical contrast. This takes தொடை beyond sound pattern and aural aesthetics. It strengthens the place of தொடை in அணி. யாப்பருங்கலக் காரிகை, probably for reasons of simplicity for the pedagogical purpose, restricts முரண் to lexiccal contrast whether there is a semantic contrast or not (S *, மறுதலைத்த மொழியான் வருதல் முரண்). It ignores the complexity in the relation between word and meaning, which others are concerned with, as below.

துன்புறாஉம் துவ்வாமை இல்லாகும் யார்மாட்டும்
இன்புறாஉம் இன்சொ லவர்க்கு திருக்குறள் 94

In this verse, துன்புறாஉம் and இன்புறாஉம் are instances of lexical contrast in which these two words differ only by the first letter and are semantic opposites. Additionally, this verse has two different மோனைத் தொடை, one in the first two சீர்'s of the first அடி and another in the first two சீர்'s of the second அடி; it has அளபெடைத் தொடை across the two அடி's.

அடக்கம் அமரருள் உய்க்கும் அடங்காமை
ஆரிருள் உய்த்து விடும் திருக்குறள் 121

In this verse, அடக்கம் and அடங்காமை are lexical contrast in the sense one is the negative of the other, both of which are derived from the same root. As such, they are semantic contrast also. Additionally, there is மோனைத் தொடை in the first, second and fourth சீர் of the first line; it is found across lines also.

செவ்வேற் சேளய் திருமண மறுத்த
கருவிற் கானவன் வரிவல ரிலரே பேராசிரியர்'s example unsourced

In this verse, வேல் and வில் are instances of a semantic contrast in the sense that they both belong to the semantic class of weapons. Their modifiers செவ் and கரு are lexical contrast both being color terms, but are not a semantic contrast as they do not mean color but have the derived senses of perfect or blood-stained (spear) and fearsome (bow), which do not relate semantically. Additionally, there are different மோனைத் தொடை in the first two சீர் of each அடி. This verse has both பொருள் முரண் and சொல் முரண்.

The following verse is the converse of the above. There is no semantic or lexical contrast of the head noun, but the modifier has both. Because the head noun (குடி and கண்) does not contrast, this is an example of சொல் முரண் of the modifier. The fact that the modifier has semantic contrast is not sufficient to take this verse to exemplify பொருள் முரண். The principle is that for a modifier phrase to indicate பொருள் முரண் the modified head, i.e. the referent, must have a semantic contrast.

சிறுகுடிப் பரதவர் மடமகள்

பெருமதர் மழைக்கணும் உடையவாம் அணங்கே காரிகை 18

Another example of semantic contrast without lexical contrast is the following. Here the lexical contrast is deceptive because of the homonymy of the word.

தண்ணிய லற்ற தயங்கறற் கானத்து

வெந்நீர்ப் பொருணசைஇ முன்னிச் சென்றோர் Unsourced

Here the deceptive contrast is between தண்ணியல் 'cool nature' and வெந்நீர் 'hot nature'. It is deceptive because வெம் from which the second word is derived has two meanings, viz. hot or desire; the meaning in the verse is 'desire', which does not contrast with 'cool' semantically. The apparent lexical contrast fails to match with a semantic contrast.

The above examples show that there can be சொல் முரண் without பொருள் முரண்; பொருள் refers to the intended meaning of the contrasting words in the particular verse. But there could not be பொருள் முரண் without சொல் முரண் because, from a linguistic point of view of antonyms, a lexical contrast is the contrast of senses as antonyms are defined; their phonetic similarity is just an additional feature of antonyms.

The following example is given by பேராசிரியர் to exemplify the case of semantic contrast without a lexical contrast. தீநீர் 'harming water' refers to the poison that Shiva swallowed from the ocean and உவரி 'ocean of salty water'. Both refer to two different aspects of the ocean, viz. the harm and the size and as such there is a semantic contrast, but the words used are unrelated. They are not clearly antonyms and hence do not represent a lexical contrast. For the prosodic theory, two contrasting aspects of an object qualify to be பொருள் முரண் and they need not be represented by a pair of words that bear formal similarity.

தீநீர் நஞ்சந் திருமிடற் றொடுக்கிய

வுவரி அன்ன உடைப்பெருஞ் செல்வர் Unsourced

This is possible in Tamil prosodic theory because semantic contrast and lexical contrast are treated to be independent of each other. To state a contrast, one should have a minimum of two words and two senses. The logical contrasting possibilities are: +W, +M; +W, -M; -W, +M, where W is Word, M is Meaning, + is for having contrast and – is not having contrast. This is what யாப்பருங்கல விருத்தியுரை (S 38) posits (சொல்லான் முரணுதலும், பொருளான் முரணுதலும், சொல்லும் பொருளும் தம்முள் முரணுதலும்). It points out that other grammarians have five possibilities of contrast. The later commentators பேராசிரியர் and நச்சினார்க்கினியர் adopt this position.

This position splits the last one above into three. One is both lexical and semantic contrast being together; the first two examples illustrate this. Another example

given in யாப்பருங்கல விருத்தி uses a semantic contrast in two modifier phrases whose head has some shared features and a contrasting feature in a different way. The contrasting feature is not inherent but is drawn from the modifier itself.

செங்குரல் ஏனற் பைங்கிளி இரியச்

சிறுகுடித் ததும்பும் பெருங்கல் நாடனை காரிகை 43

The modifiers செம் 'red' and பைம் 'green' are lexical contrast with reference to color; the head nouns குரல் 'ear of millet' and கிளி 'parrot' contrast in color- the red color of the millet and the green color of the parrot, which is reinforced by the modifiers. Thus these lines demonstrate both சொல்முரண் and பொருள்முரண். This is different from the verse திருக்குறள் 94 cited above, which has contrast between single words unlike the above verse which has contrast between phrases.

The second one of the three is the case where there is a lexical contrast but the semantic contrast is missing. This happens when one of the pairs is a phrase and another is a single word. This is different from the காரிகை 18 citation verse above where the head nouns are not comparable whereas in the one below one head noun is missing.

நெடுநீர்ப் பொய்கைக் குறுநர் தந்த

தண்பனி அவிழ்மலர் நாறுநின்

unsourced

நெடு in நெடுநீர் 'deep water' has lexical contrast with குறு in குறுநர் 'weed removers'. The phrase நெடுநீர் has a meaning together with its modifier, but குறுநர் is not a phrase and so there is no scope for a semantic contrast. Recall that head noun of both phrases must belong to one semantic class to produce a semantic contrast.

The third one of the three is the case is the converse of the above; there is lexical contrast but there is no semantic contrast.

செந்தீ யன்ன சினத்த யானை

நீர்நசை பெறாஅக் கானல்

unsourced

தீ in செந்தீ is a semantic contrast of நீர் in the second line, but this head noun does not have modifier to lexically contrast with செம் in the previous line; there is semantic contrast, but there is no lexical contrast.

In முரண்தொடை, the ideal one is the contrast between two words and their meanings. There could be a lexical contrast when the words differ phonetically in one letter (கலம், காலம்; மரம், மறம்) but the meanings may not be contrastive. This would actually be covered under மோனை and எதுகை and therefore need not be treated under முரண். Lexical and semantic contrasts conflict only when both forms are phrases or when one of the forms is a phrase and other is not. Hence the five kinds of முரண்தொடை is overkill.

(For a modern linguistic differentiation to aid literary appreciation, see சண்முகம் முரண்தொடை in தொல்காப்பியப் பாவியல் கோட்பாடுகள் p. 95-118).

11.7 Factors in the multiplication of தொடை

The multiplication of kinds of தொடை, to some extent in தொல்காப்பியம் and to a great extent in the later grammars, comes in two respects. One is variations in the place of occurrence or slot and the other is inclusion of elements to fill the slots. Take the நாற்சீரடி of a line and நாலடி of a poem (அளவடி). Regarding the first, தொடை may recur in all அடிகள் or சீர் of a verse, or in some of them such as subsequent ones, alternate ones, designated ones etc. Regarding the second, the slot accepts kindred elements (இனவெழுத்து or கிளையெழுத்து). They are a consonant with all vowels, other consonants of a group such as வல்லினம்.

The சீர் filling a slot may coincide with a word, which may either be a synonym or a homonym. Homonyms, allow for சிலேடை. Or it may be simple repetition of the

same word. This தொடை is called இரட்டைத் தொடை. (இரட்டு 'double', here 'multiply').

தொடை may be iterative. The final அசை of the standing சீர் is repeated in the first அசை of the on-coming சீர். This chaining may go through across lines also.

The special case of chained repetition is for the last சீர் of the last line of the poem being a repetition of the first சீர் of the first line of the poem. This தொடை is called அந்தாதி 'the end being the beginning' or அந்தாதித் தொடை.

தொல்காப்பியம் does not mention these two. These are neither the slot nor the filler, but a process to account for repetition of fillers and linking of fillers. Adding these two to the five mentioned earlier, the total number of தொடை becomes seven. It may be noted that some of these தொடை are not for the pleasure of the ear but for the display the verbal skill of the poet.

There are two other elaborations. One is to have a slot of the third letter in addition to first and second letters. This and the following did not get traction and remain in the periphery. Another is semantic pairing when a சீர் is a word. The relation between two words in a slot will be paired with two words in another slot.

முலைகலிங்கம் மூரி நிலமா மகட்கு
மலைபரவை மாரிமென் கூந்தல்

In the first line, the words in the first சீர் have the relation of a garment wrapping the breasts, which is reciprocated in the first சீர் of the second line by the relation of ocean wrapping the mountain. This is called நிரல்நிரை. This is the only other தொடை after முரண்தொடை. There is nothing phonetic in this தொடை even the little phonetics in the lexical contrast in முரண்தொடை. (This illustration is from கோபாலையர் தமிழ் இலக்கணப் பேரகராதி பொருள் 2, p. 36-38; நிரல்நிரைத் தொடை may be in the சீர் of a line).

The possibilities of permutations and combinations at the level of each slot and between slots are the mathematics of prosody. They give room to poets to fill in blanks so far not considered and make an innovation. Grammarians then give names to them. Though தொல்காப்பியம் does not recognize all of possibilities (for the obvious reason that many are later innovations), its commentators attribute them with their names to it through their interpretive ingenuity.

11.8 Poetic license to generate தொடை

It must be noted that the poets might create distorted words to ensure தொடை. This is called செய்யுள் விகாரம் 'poetic distortion', i.e. poetic license. Take his example from தேவாரம், which has the recurrence of எதுகை. Note that it is recurring first சீர் from recurring எழுத்து (second, third and fourth letters).

குனித்த புருவமும்.....

பனித்த சடையும்.....

இனித்தங் கசிய.....

மனித்தப் பிறவியும்.....

இனித்தம் in the third line is a created word for இனிப்பு; மனித்தம் in the fourth line is an invented spelling for மனிதம். Both are done for rhyming.

12. வண்ணம்

(See illustrative verses in Annexure 2)

வண்ணம் means colors; there is a metamorphic transfer of the visual to the aural giving this word the meaning of sounds. It is like the saying 'paint with sounds'.

Like தொடை, it is a concept relating to rhyme and it is evocative. It embellishes a verse and is a phenomenon of அணி. தொல்காப்பியம் (செய்யுளியல் 203)

specifies that there are 20 வண்ணம் and lists an assorted list of 20 with no more than a cryptic description of them (செய்யுளியல் 205-226). இளம்பூரணர் (செய்யுளியல் 226) trying to make a sense of these sutras, which seem to be talking about different things, says that this number of 20 வண்ணம் is made up of three kinds of consonants, two kinds of vowels and four kinds of rhythm (ஓசை) (3+2x4). He further points to another counting of வண்ணம் into 100, as later grammarians do, with another set of five (unrecognizable, see below) ஓசைs (20x5). This is a game of permutations. The 20 வண்ணம் could be 5 kinds of letters that play a role in தொடை, as identified by இளம்பூரணர் (see above), multiplied by four சீர்'s for them to occur.

12.1 Relation between வண்ணம் and தொடை

வண்ணம் seems to be superimposed on the சீர் structure for sound effect but it goes beyond தொடை. It is optional. It has to have the effect of totality affecting all சீர்'s in a line or in the whole poem, or minimally affecting தொடை விகற்பம். If தொடை gives the pattern of slots, what fills the slots is வண்ணம்.

Metaphorically, the slots have the same color of the paint. This increases the brightness of the color and, in verses, the intensity of the sound.

Not all தொடைs are capable of exhibiting வண்ணம். For example, பொருள் முரண் has no phonetic value.

12.2 Kinds of வண்ணம்

The element that has phonic quality and is the unit of வண்ணம் is எழுத்து. It is grouped into hard stop consonants (வல்லினம்), nasal stop consonants (மெல்லினம்), liquid consonants (இடையினம்), short vowels (குறில்), long vowels (நெடில்), or extra-long vowels or consonants (உயிர் and ஒற்று அளபெடை) or ஆய்தம். They are called respectively as வல்லிசை வண்ணம்,

மெல்லிசை வண்ணம், இயைபு வண்ணம், குறு வண்ணம், நெடுவண்ணம், இன்னிசை வண்ணம் and நலிபு வண்ணம். The difference between மோனை or எதுகை and வண்ணம் is the intensity of the latter. While மோனை or எதுகை is recurrence of same letters, வண்ணம் is the recurrence of whole சீர்'s with the same class of letters.

12.3 Assorted list of வண்ணம்

தொல்காப்பியம் (செய்யுளியல் 204), however, does not require total presence (all சீர்'s and all அடி's) for வண்ணம். It admits recurrence of சீர்'s in every other line and alternation between short and long vowels. It includes under வண்ணம் not just the recurrence of சீர்'s with same class of letters. Any சீர் formation that is unusual such as தனிச்சொல், listing names, mentioning of a letter or a word (i.e. letters and words that refer to themselves as in treatises (நூல்) of grammar, mentioning the alphabet, the grammatical forms). It introduces four kinds of ஓசை of வண்ணம் different from the four ஓசை of பா. (ஒழுக்கு, ஏந்தல், தூங்கல், முடுகு and துள்ளல்; two of them appear to be identical in name with the ஓசை of பா). It introduces inexplicably two that relate to anticipation, viz. giving the sense of closure of the message but not actually closing it in புறம் poems, and giving the sense of non-closure by actually having it closed in அகம் poems. The common thread running through this assorted list may be some phonetic or poetic effect by different means. This needs detailed investigation.

13. ஓசை

There are four ஓசைs: செப்பலோசை, அகவலோசை, தூங்கலோசை, துள்ளலோசை and each one is associated with a specific பா. These names come by analogy from modes of communication or movements of things in the real world. It is about rhythm, which can be heard independent of the actual words

used. பேராசிரியர் (செய்யுளியல் 101/105) makes a perceptive observation that ஓசை helps a person who is far away or illiterate to recognize the பா type.

13.1 The status of ஓசை

ஓசை is not one of the units of செய்யுள் listed in தொல்காப்பியம், but is a relevant parameter for பா, not for the other six kinds of non-poetic செய்யுள்.

(தொல்காப்பியம் describes the nature of these six in nine sutras of செய்யுளியல் (157-165); but the later grammars do not describe these under யாப்பு).

இளம்பூரணர் (செய்யுளியல் *) clarifies that ஓசை is inapplicable to sutras of works of knowledge such as grammar (நூல் 'treatise'), which, though might belong to ஆசிரியப்பா, do not have அகவலோசை.

The relation between பா and ஓசை is intrinsic. One way to look at the relationship is generative and to say that the stucturation of a line in a poem creates a specific ஓசை. சீர் and தளை are the template of ஓசை. Another way to look at is to see the relationship as correlational and to say that ஓசை pre-exists and is matched with the structure. The first seems to be the view of commentators and connoisseurs of poetry when they say that there is a bump in சீர் sequence (தளை தட்டுதல்). The second seems to the view when they say that the right ஓசை is not forthcoming even when the சீர் sequence is right (ஓசை பிழைத்தல்). In the first view, poems create rhythms to resemble the flow of sounds in the natural world such as the rolling of a cart, galloping of a horse etc or singing in the vocations of carpenters, ploughsmen and others. In the second view, the poems imitate such sound flows in the external world.

13.2 Differentiation ஓசை

செப்பல் is the rhythm of answering a question or explaining a point ; it is like driving on a road on the plains. It has a matter of fact style. It thus has a pedagogical quality. This is the ஓசை of வெண்பா.

அகவல் has the rhythm of calling somebody or something (like god). The fortune teller is called அகவன் மகள், who calls the supernatural to divine the life of her customer. It is also the call in a dyad (tit tot, உறழ்ந்துரை) for response as between two players of a folk game or song (பேராசிரியர், செய்யுளியல் 82, 81; for the latter, he gives the examples of the song of dual carpenters, farmers or dice players); it is like playing ping-pong. This rhythm has the quality of pouring out the heart without constraining, as in folk songs and thus is in contrast to the restrained செப்பலோசை. This is the ஓசை of ஆசிரியப்பா.

தூங்கல் is the ஓசை of வஞ்சிப்பா, which is aligned with ஆசிரியப்பா. But this ஓசை is the opposite of the ஓசை of ஆசிரியப்பா. It is hanging or sliding ஓசை (தூங்கு 'hang'). The rhythm slides down the சீர் of an அடி. இளம்பூரணர் (செய்யுளியல் *) describes that it flows ignoring சீர் breaks (சீரற்று). Some give the analogy of a boat sliding through the down the flow of a river. Another interpretation of இளம்பூரணர்'s description is the opposite of it; this ஓசை pauses at the end of each சீர் (சீர் அற்று = சீர் அறுத்து). The analogy is the drum beat. This shows that there is ambiguity in the understanding of ஓசை among commentators. The latter is the predominant understanding in the modern scholarship.

துள்ளல் is the ஓசை of கலிப்பா, which is aligned with வெண்பா. But this ஓசை is the opposite of the ஓசை of வெண்பா. It has the feel of being unruly. It is imagined from the frolicking or bouncing up and down of a calf (இளம்பூரணர், செய்யுளியல் 79, ஒழுகு நடைத்தன்றி இடையிடை உயர்ந்து வருதல்). It is like

surfing on the wavy sea. கலிப்பா has internal units unlike other பாs, which allow bouncing.

Each of the ஓசை has three dimensions of tone or melody, which are high, low and low called respectively ஏந்திசை, தூங்கிசை and ஒழுகிசை. Recognition of the tone or melody dimension is found in latter grammars and it probably reflects the fact that இசை aspect of செய்யுள் gained more credence. இசை is incorporated into ஓசை.

Each ஓசை has sub-divisions based on minor variations in the rhythm of a பா. This is the result of interspersing of metrical features between பா. This is விரவல், not மயங்கல். கலிப்பா has three variations of துள்ளலோசை viz., அகவல் துள்ளல் 'துள்ளலோசை mixed with அகவலோசை', ஏந்திசைத் துள்ளல் 'rising துள்ளலோசை' and பிரிந்திசைத் துள்ளல் 'paused துள்ளலோசை'. The sub-divisions probably correlate with the kinds of கலிப்பா, which is the only பா composed of multiple units of its own. These sub-divisions are mentioned only by the commentator of யாப்பருங்கலம் (விருத்தியுரை), not by the authors of any grammatical text before this commentary.

There is no பா மயக்கம் in the theory because a பா is a fixed entry and has a unique identity, which is given by its ஓசை. One cannot have one ஓசை for the other, i.e. fusion, but can have flashes of the other. மருட்பா is not fusion producing a new fifth ஓசை, but is a grafting of தூங்கலோசை and அகவலோசை. As there is not fifth ஓசை there is no fifth பா. சாமிநாதம் alone is an outlier in this theorization and counts மருட்பா as the fifth பா. It considers நூற்பா 'sutra' as another பா contrary to the established principle that it is a non-poetic செய்யுள் by its lack of ஓசை of பா.

14. Beyond the meter

The list of limbs or units of செய்யுள் in தொல்காப்பியம் contains some limbs that are not structural units as the above ones. It includes in the list structural parts (such as அசை, சீர், அடி), the mechanics of combining these parts (such as யாப்பு, தளை, தூக்கு) and the product (பயன்) of the combination (such as தொடை, வண்ணம், ஓசை, பா). It also includes under it the content or substance (such as பொருள் (திணை, கைகோள்) and schema (களன் 'space', காலம் 'time', கேட்போர் 'interlocuters'). It finally includes the effect (மெய்ப்பாடு 'emotion'). All these make செய்யுளியல் a theory of metrics as well as of poetics. This is about the body and mind of poetry. The substance and effect parts of the theory of poetry are heavily drawn from அகம் poetry.

Some of these relate to poetic content and some to poetic effect. There are some which are neither of these. They are broader concepts about abstract dimensions of poetry. Three of them are given below.

14.1 மரபு

மரபு, as one of the limbs of செய்யுள் in தொல்காப்பியம், is not a physical unit, but is the convention regarding the delineation of the physical units and the way there are used. This is called புற உறுப்பு. This limb is comparable to guidelines to write poetry in Tamil. It is about lexical conventions, according to the commentators of தொல்காப்பியம். The relevance of lexical conventions is not mentioned in the later grammars. It refers to செய்யுளீட்டச் சொல் 'the words that make up or produce செய்யுள்' (சொல். எச்சவியல் 1); they are இயற்சொல் 'natural or unmarked words', திரிசொல் 'deviant words (synonyms and

homonyms, or abbreviations), திசைச்சொல் 'regional words', வடசொல் 'alien words'.

மரபு also includes spelling conventions such as naturalizing the alien sounds (சொல். எச்சவியல் 5: வடவெழுத்து ஒரீஇ, which would include aspirated consonants, for example), which is important for the harmony of அசை and ஓசை. Another is alien syllables. When ப்ரகாசமாய் 'brightness' (அருணகிரிநாதர்) is used in a verse instead of the Tamilized spelling பிரகாசமாய் Tamil prosody will have to introduce a new phonetic form of அசை that has two consonants preceding a vowel. This மரபு of spelling applies to செய்யுள் and not to the inscriptions contemporaneous to தொல்காப்பியம்.

மரபு is paying attention to special vocabularies such as different words for the young ones of animals, the male and female of animals etc (மரபியல், which has been placed after செய்யுளியல். பேராசிரியர் and நச்சினார்க்கினியர் (செய்யுளியல் 76) add two more to the convention. One is using the words in use at the time of composing a poem and in the meaning in which it is used at that time. This is particularly important for culture words referring to food, dress etc. The other is not using the word and its meaning specific to one domain in another domain such as place, religion and art. Pointedly, they say that those who speak another language should follow the Tamil conventions when they write poetry in Tamil. For example, a Prakrit poet should use a word common in Prakrit and Tamil in Tamil spelling and meaning in Tamil poetry.

14.2 யாப்பு

யாப்பு is used in multiple senses ranging from the structural to the semantic. As a limb of செய்யுள், it is about the form of the seven kinds of செய்யுள், which vary in the formal features such as boundedness in terms of the number of lines, rules of splitting a line, collocational restrictions in sequencing the formal units etc. Each kind of செய்யுள் has its own யாப்பு in this way. As there is பா (வெண்பா

யாப்பு etc. within it), there is பிசி யாப்பு, முதுமொழி யாப்பு etc. This uniqueness of யாப்பு of every kind of செய்யுள் is referred to as a limb.

The commentators find another explanation also for this limb யாப்பு. It is the quality of expressing meaning in a way that does not require any extra material to get the meaning. It is self-contained. The end of a செய்யுள் declares that it is the end of the meaning that it intended to convey. A செய்யுள் cannot end earlier or cannot hang to be ended. This exactness in the relation between form and meaning is what this limb யாப்பு refers to. It presumes that there is a meaning in every செய்யுள். A perfectly composed poem satisfying all the requirements of prosody will not be a செய்யுள் if it does not carry meaning. (Chomsky's 'Colorless green ideas sleep furiously' is well-formed syntactically, but is meaningless). The meaning is more than a factual statement or imparting information of ordinary language (வழக்கு). பேராசிரியர் (*op. cit.*) gives this example to demonstrate this point. சாத்தனுண்டான் கொற்றனுண்டான் is in ஆசிரியம் meter, but it does not qualify to be a line of poetry.

யாப்பு binds not only எழுத்து into அசை into சீர் into அடி it binds a verbal structure to meaning. It makes a verse a poem.

14.3 பா

தொல்காப்பியம் speaks about பா in 54 sutras (செய்யுளியல் 101-155). These are all about the various formal properties of all kinds of பா. பா as a limb of செய்யுள் may refer to the four பாய் with these properties. But the problem is that all limbs of செய்யுள் listed are true of பா in the sense of 'poem'. பா cannot be a limb of itself. It is constituted with other limbs. We may speculate that as a limb பா is about the indescribable aesthetic sense one gets from poetry. பா is not just a form that meets the conditions of its prosody described in those sutras. There is something beyond the structure of a பா. It is something not found in the

other six kinds of செய்யுள். பா unique and it gives a is feel to its listeners / readers.