

## ON (THE) *SANDHI* BETWEEN THE TAMIL AND SANSKRIT GRAMMATICAL TRADITIONS

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### *Abstract*

This article provides a few observations on some of the theories that the Sanskrit and the Tamil grammatical traditions share about the contexts in which the sounds of words change and which kinds of changes these sounds can undergo. The study shows that even if Tamil grammarians freely rearranged the Sanskrit material and adapted it to their concerns, it is nonetheless plausible to claim that there was a transfer of ideas from the Sanskrit tradition to the Tamil one also in what we could call the field of phonology.

### *Keywords*

phonology, *sandhi*, Sanskrit, Tamil, *Tolkāppiyam*, *Vājasaneyiprātiśākhya*

### *Résumé*

Cet article livre quelques observations relatives à certaines théories que les traditions grammaticales sanskrite et tamoule partagent concernant les contextes dans lesquels les sons des mots changent, ainsi que les types de changements que ces sons subissent. L'étude montre que, même si les grammairiens tamouls réarrangent librement le matériel sanskrit et l'adaptent à leurs préoccupations, on peut néanmoins affirmer qu'il y a eu un transfert d'idées de la tradition sanskrite vers la tradition tamoule aussi dans le domaine que nous appelons « phonologie ».

### *Mots-clés*

phonologie, *sandhi*, sanskrit, tamoul, *Tolkāppiyam*, *Vājasaneyiprātiśākhya*

## INTRODUCTION

Sanskrit and Tamil grammars often share common linguistic models.<sup>1</sup> For the great part, this is the result of the Tamil tradition tapping into the repertoire of ideas

1 The term “grammar” deserves clarification. On the one hand, it is usually employed to translate the Sanskrit word *vyākaraṇa* and, on the other hand, the Tamil word *ilakkaṇam*. These are however the names of two very different disciplines, which overlap only in part. *Vyākaraṇa* studies the formation of correct Sanskrit words (once established the semantic and syntactic context of the sentence in which they will appear). When talking about Sanskrit grammar in this article, it will be therefore necessary to extend the scope of the term grammar to include another discipline called *śikṣā*, which is the study of the articulation of speech-sounds and their modifications in particular contexts (many tenets of *śikṣā* are in fact given for granted in *vyākaraṇa* texts). In the Tamil case, *ilakkaṇam* is a very broad field that not only includes the study of linguistic matters, but also of literary ones, in particular aesthetic conventions (the study of which falls, as far as Sanskrit scholarship is concerned, under a further category called *alankāraśāstra*, “study of embellishments”). The section of *ilakkaṇam* that I cover in this article would correspond to the field of *eḷuttīyal* (“study of sounds/letters”), which is however an anachronistic label if put in relation to the terminology employed in the texts I will take into analysis. At times, I will also include elements from the field of *colliyal* (“study of words”).

developed to describe Sanskrit. However, one should be aware that Tamil grammarians were not at all slavish. It is actually a rather intriguing exercise that of trying to understand not only what was adopted from one tradition to the other and from which source(s), but also to figure out how the *adopted* ideas were in turn *adapted* to account for the peculiarities of Tamil and how these ideas blended with the original thinking of the Tamil grammarians.<sup>2</sup>

In this article, I will offer a few observations on some of the theories that the two traditions share about the contexts in which the sounds of words change and which kinds of changes these sounds can undergo. Borrowing a linguistic parlance that is both modern and Western, I will deal with phonology, and in particular with the conditions of application of phonological rules, i.e. *sandhi* rules, and the categories such rules may be grouped in.<sup>3</sup> Furthermore, I will also try to highlight the fact that although phonological theories are indeed shared by the two traditions under scrutiny, these are in fact embedded in different linguistic frameworks.

The textual sources I will concentrate on in this study are, from the Tamil side, the *Eḷuttatikāram* (“Book on Sounds/Letters”), i.e. the first part of the *Tolkāppiyam* (“The Grammar of Tolkāppiyar”), the foundational grammar of Tamil composed most probably some time during the 1<sup>st</sup> half of the 1<sup>st</sup> millennium CE. I will also take into account the two extant commentaries of the *Eḷuttatikāram* composed by Ḹampūraṇar. (12<sup>th</sup> c.?) and Naccinārkkīṇiyar (14<sup>th</sup> c.?). From the Sanskrit side I will –for reasons that will be made clear later on– mostly focus on the *Vājasaneyiprātiśākhya* (attributed to Kātyāyana), i.e. the Prātiśākhya of the *Śuklayajurvedasaṃhitā*, along with Uvaṭa’s commentary (12<sup>th</sup> c.).<sup>4</sup> *En passant*, I

2 For more case studies on related topics, see D’Avella in this issue, and Vergiani 2013.

3 I offer here what is a recent and, in my view, effective definition of phonology provided by Blevins (2009, p. 325–bold GC): “Phonology is the study of sound patterns of the world’s languages. In all spoken languages, we find sound patterns characterizing the composition of words and phrases. These patterns include overall properties of contrastive sound inventories (e.g. vowel inventories, consonant inventories, tone inventories), as well as patterns determining the distribution of sounds or features of sounds (stress, tone, length, voicing, place of articulation, etc.) **and their variable realization in different contexts (alternations).**” The ideas from the Tamil and Sanskrit texts that I will analyse in this article fall under the scope of the last part of this definition. Furthermore, in this article I use the term *sandhi* in the broad and loose sense that is still commonly accepted in modern Western linguistics. See for instance Matthews’ entry for *sandhi* in his 2007 *Dictionary of Linguistics*: “Ancient Indian term for the modification and fusion of sounds at or across the boundaries of grammatical units. E.g. short *-a + i-* fused in Sanskrit, both within vowels and across word boundaries, to *-e-*.” For some of the issues underling the definition of *sandhi*, see Andersen 1986, p. 1-2. See also fn. 7 for the distinction between internal and external *sandhi*.

4 In a nutshell, Prātiśākhyas are treatises describing the linguistic features of Vedic recitation. For more details on how these texts are described within the traditional Sanskritic scholarship, see for instance Ciotti forthcoming 2018.

will also mention other Prātiśākhya and the *Aṣṭādhyāyī* of Pāṇini (5<sup>th</sup> c. BCE?), i.e. the foundational work of Sanskrit grammar, and its first complete commentary, namely the *Kāśikāvṛtti* of Jāyaditya and Vāmana (7<sup>th</sup> c.).

### THE TAMIL THEORY OF SOUND COMBINATION

Basic information about the context where phonological rules apply and the kinds of rules characterising Tamil is found in a few rules of the *Eḷuttatikāram*, in particular in its sub-section called *Puṇariyal* (lit. “The study of Combination”).<sup>5</sup>

In rule TEn107 we find the expression *puṇar-nilai* (“state of combination”), which is used to define the linguistic state where two linguistic items occur one after another, thus creating the condition for the last sound of the first item to combine with the first sound of the following one:

*uyirū coṇmu nuyirvaru valiyu*  
*muyirū coṇmuṇ meyvaru valiyu*  
*meyyirū coṇmu nuyirvaru valiyu*  
*meyyirū coṇmuṇ meyvaru valiyumē*  
*rivvēna variyak kiḷakkuṅ kālai*  
*nirutta collē kuṛittuvaru kiḷaviyē*  
*rāyī riyala puṇarnilaic cutṭē* (TEn107)

The case in which a vowel occurs after a linguistic item (*col*) ending in vowel, the case in which a consonant occurs after a linguistic item ending in vowel, the case in which a vowel occurs after a linguistic item ending in consonant, the case in which a consonant occurs after a linguistic item ending in consonant – when it is clearly explained that [these four combinations] are such, those two kinds [of linguistic items], namely the standing item (*nirutta col*) and the item that occurs referring [to the standing one] (*kuṛittu varu kiḷavi*), are the mark of a state of combination (*puṇar-nilai*).

In TEn108 we are informed that the items that can be found in a state of combination are nouns and verbs and that their final and initial sounds (may they be vowels or consonants) can undergo four kinds of *puṇar-iyalpu* (“modes of combination”), among which three entail *tiripu* (“change”) and one *iyalpu* (“absence of change”, lit. “natural state”):

*avarru!*  
*nirutta colli nīrā keḷuttoṭu*  
*kuṛittuvaru kiḷavi mutaleḷut tiyaiyap*  
*peyaroṭu peyaraip puṇarkkuṅ kālum*

<sup>5</sup> Hereafter, I refer to the rules of the *Eḷuttatikāram* according to the numeration found in Naccinārkkīṇiyar’s commentary, thus using the siglum TEn (for *Tolkāppiyam Eḷuttatikāram Naccinārkkīṇiyam*). Despite the fact that Naccinārkkīṇiyar and ḷampūraṇar read the same version of the *Eḷuttatikāram*, there is a discrepancy in the way in which they group its rules.

peyarotu toḷilaip puṇarkkuṅ kālun  
 toḷiloṭu peyaraip puṇarkkuṅ kālun  
 toḷiloṭu toḷilaip puṇarkkuṅ kālu  
 mūnrē tiripiṭa nonrē yiyalpeṇa  
 vāṅkan nāṅkē molipuna riyalpē (TEEn108)

Among these [states of combination], as the first sound of the item that occurs referring to the standing item joins with the final sound [of the latter], when one combines a noun with a noun, when one combines a verb with a noun, when one combines a noun with a verb, and when one combines a verb with a verb, there are four modes of combination of linguistic items (*molī*), namely the occurrence of three [kinds of] change (*mūnrē tiripu iṭan*) and one [case of] absence of change (*iyalpu*).

A caveat is here in place. *Tolkāppiyar* employs at least three different terms, which I have for the time being translated as “linguistic item”, namely *col*, *kiḷavi*, and *molī*. These are all used—apparently interchangeably, possibly *metri causa?*—in the rules under consideration: *col* and *kiḷavi* in TEn107, and *molī* in TEn108. Throughout the *Tolkāppiyam* we can observe that these terms can at times correspond to the English words “word” (whatever its actual definition may be) or “morpheme”.<sup>6</sup> TEn108 seems however to induce us to interpret all these terms as meaning (more or less) “word”, since it states that it is nouns and verbs that can undergo a state of combination. In section 3 we will see that terminology allows the commentators of the *Eḷuttatikāram* to tackle with internal *sandhi*, a major theoretical concern that is described – but not overtly theorised – in the *Eḷuttatikāram*.<sup>7</sup>

Reading on in the list of rules, TEn109 specifies that the three changes that sounds can undergo are the modification of a consonant (*mey-pirītu-ātal*), expansion (*mikutaḷ*), and elision (*kunṛal*):

avaitām  
 meypiri tātan mikutaḷ kunṛalen  
 rivveṇa molīpa tiriya mārē (TEEn109)

Modification of consonants, expansion, and elision. They say that such are the ways of changing.

TEn112 further points out that, as far as expansion is concerned, this can consist of a single sound (*eḷuttu*) or a group of sounds (*cāriyai*), despite the two items in combination may or may not share a syntactic relationship:

<sup>6</sup> For a useful lexicon that accounts for the different nuances these terms may assume in the *Tolkāppiyam* (in particular in its second book, the *Collatikāram* or “Book on Words”, with the commentary of Cēṅāvaraiyar), see Chevillard 2008.

<sup>7</sup> The expressions internal *sandhi* and external *sandhi* are established by Müller (1866, p. 9): “For shortness’ sake it will be best to apply the name of *External Sandhi* to the changes which take place at the meeting of final and initial letters of words, and that of *Internal Sandhi* to the changes produced by the meeting of radical and formative elements.” See also fn. 3.

*vērrumai kuritta puṇarmoḷi nilaiyu*  
*vērrumai yalvalip puṇarmoḷi nilaiyu*  
*meḷuttē cāriyai yāyiru paṇpi*  
*noḷukkal valiya puṇaruṅ kālai* (TEn112)

At the time of combination, the state of a linguistic item in combination that is denoted by case relationship and the state of a linguistic item in combination that is without case relationship can manifest itself by means of two characteristics, i.e. a sound or a group of sounds.<sup>8</sup>

A further terminological caveat is in place here. I have translated *cāriyai* as “group of sounds”, but one could also translate it as “morpheme”, in particular in the sense of augment or oblique suffix.<sup>9</sup>

#### THE COMMENTATORS’ INTERPRETATION OF TEn107 AND TEn108

The set of rules that we have just seen tells us that phenomena pertaining to the combination of speech-sounds, i.e. *sandhi* phenomena, happen between two linguistic items, and that these are actually words of two kinds, namely verbs and nouns. However, these rules seem not to take into account the fact *sandhi* phenomena occur also inside words, when roots and affixes combine. Nonetheless, since there are rules that account for these events later on in the *Eluttatikāram*,<sup>10</sup> the commentators felt the urge to engage with this theoretical gap, so apparent in the set of rules that are supposed to outline the general framework for the combinations of speech-sounds.

In this respect, Naccinārkkīṇiyar explicitly remarks that the words that can actually be found in *puṇar-nilai* are also *cāriyais* and *urupus* (“case-endings”). In particular, he mentions the word *viḷaviṇai* (“eagle-wood tree”), which can be split as *viḷa-* (nominal root) + *-v-* (glide *sandhi*) + *-iṅ-* (*cāriyai*, or oblique marker) + *-ai* (accusative ending):

8 As Naccinārkkīṇiyar further points out in his commentary not all linguistic items bear a case relationship with other linguistic items. Nonetheless, this does not prevent phonological rules to apply. For instance, Naccinārkkīṇiyar offers two examples concerning *cāriyais*, i.e. *maka-v-iṅ kai* (“hand of a child”), where the *cāriyai -iṅ* occurs between two items that share a case relationship, and *paṇai-y-iṅ kurai* (“reduction by a *paṇai* [measure]”), where the same *cāriyai* occurs where the case relationship is absent (I assume, very much tentatively, that Naccinārkkīṇiyar understands *paṇai* as the agent of the action of reduction expressed by the noun *kurai*. In this way the two items would not share a case relationship in the *kāraka/verrumai* system shared by the Sanskrit and Tamil traditions; see D’Avella in this issue).

9 Naccinārkkīṇiyar for instance defines *cāriyai* twice. While commenting on TEn112, he says *ēḷuttinār cāriyai yātalāṇum* (“a *cāriyai* is made of sounds”). Later on, while commenting on TEn118, he says *cāriyai yenratāṇ poruḷ, vēṛāki ninra irumoliyun tammir cārtar poruṭtu iyaintu ninratu enravāru* (“[it] stands agreeably in favour of two separate words that join one another”; note that here I translate *moḷi* as “word” on the basis of the examples discussed by Naccinārkkīṇiyar before this very passage, for instance *āṭṭū-v-iṅ kai* “limb of a goat”).

10 See for instance the sub-section called *Urūpiyal* (“The Study of Case-Endings”), which deals with the *sandhi* occurring between nominal bases and case-endings.

*viḷaviṇaik kuṟaittāṇ enṟavaḷic cāriyaiyum urupum nilaimoliyāyē niṟkumenṟpatu  
nōkki ataṇai niṟutta collenṟum muṭikkuñcollaikkuṟittu varukiḷavi yenṟum kūriṇār |  
itaṇāṇē nilaimoliyum varumoliyuṅ kūriṇār |*

When one says ‘he cut (*kuṟaittāṇ*) the apple-wood [tree] (*viḷaviṇai*)’, aware that *cāriyai* and case suffix occur as the standing linguistic items, [Tolkāppiyar] defined those [i.e. the *cāriyai* and the case suffix as] the linguistic items that stands in front and the item that occurs referring to the [preceding] item that it completes. Exactly because of this [Tolkāppiyar] talked about the standing item and the occurring one.

This consideration paves the way to rethink the scope of rule TEn108, which seem to prescribe that the words that can be found in *puṇar-nilai* are verbs and nouns. In this respect, Naccinārkkīṇiyar intends to include also the other two categories of words that are singled out by Tamil grammar, namely, *ṭtai-c-cols* (“particles”, which according to rule 250 of the *Collatikāram* also include *urupus* and *cāriyais*) and *uri-c-cols*<sup>11</sup>:

*ṭtaiyum uriyuntāmāka nillāmaiṟ peyarviṇaiyē kūriṇār | ṭtaiccollum uriccollum  
puṇarkkuñ ceykaippaṭṭuḷip puṇarppuc ciṟupāṇmai |*

[Tolkāppiyar] mentioned nouns and verbs because *ṭtai[-col]* and *uri[-col]* do not occur by themselves. When a [linguistic] procedure occurs in which an *ṭtai-c-col* or an *uri-c-col* are in a [state] of combination, it is less frequent to have a combination [of sounds].

On his part, Iḷampūraṇar at first seems to engage with the same issue more indirectly when commenting upon TEn107:

*viḷaviṇaik kuṟaittāṇ enṟpatu avvurupu kuṟittuvaru kiḷaviyai nilaimoliyuḷ aṭakki  
irumoliṟpuṇarcciyāy niṇṟavāru aṟika |*

One should understand how the sentence ‘he cut (*kuṟaittāṇ*) the apple-wood [tree] (*viḷaviṇai*)’ occurs as a combination of two words, adjoining the item that occurs having targeted that case ending [i.e. the accusative ending *-ai*] to the standing item [i.e. *viḷa*].

Here, we have to understand that the occurrence of the *cāriyai -iṇ-* is a *sandhi* phenomenon that can occur only if there is a state of combination, which in this case does occur, albeit between morphemes and not between words. Furthermore, Iḷampūraṇar’s remarks about TEn108 clearly reveal that he also intended to expand the scope of the rule to include *ṭtai-c-cols* and *uri-c-cols*:

*ṭtaiyum uriyum peyar viṇaikaḷai aṭaintallatu tām āka nillāmaiṟ, peyar  
viṇaikaṭkē puṇarcci kūrapaṭṭatu |*

11 I leave the term *uri-c-col* untranslated following the thoughtful consideration of Chevillard 2013, p. 13, fn. 19. Tentatively, its scope can be approximated to that of the categories of adjective or adverb.

Since *itai*[-cols] and *uri*[-cols] do not occur by themselves without joining nouns and verbs, combination is described only for nouns and verbs.

To summarise, the commentators are making explicit a feature of the *Eḷuttatikāram* that seems to be left unspoken by the text itself, i.e. that both rules of internal and external *sandhi* are accounted for. In this respect, the wording of TEn108 remains puzzling. If we were to read the *Eḷuttatikāram* as an autonomous text, i.e. without the help of its commentaries, one could also think that TEn108 may reflect – or, in other words, be a relic of – an earlier stage of the Tamil grammatical speculation that limited itself to the description of phenomena affecting words, without investigating their sub-components and the phenomena their sounds can undergo (see section 4 for the Sanskrit counterpart of this approach). Alternatively, this rule may just serve as a general introduction, which is then *de facto* surpassed by the concern of the rules dealing with internal *sandhi*. What is certain is that both Iḷampūraṇar and Naccinārkkīṇiyar are rather explicit in moving beyond the apparently restricted scope of TEn108.

#### SIMILARITIES BETWEEN TAMIL AND SANSKRIT THEORIES

I would like now to point at two striking similarities that characterise the Tamil and Sanskrit conceptualisation of sounds' combination, namely the definition of the context in which *sandhi* occurs and the classification of the kinds of *sandhi* rules.

I will try to do so by focusing on the texts that, to the best of my knowledge, are particularly relevant for drawing a comparison with the *Eḷuttatikāram* and its commentaries (in particular Naccinārkkīṇiyar's one), namely the *Vājasaneyiprātiśākhya* and its commentary by Uvaṭa, called *Māṭṛmodaka*.

##### *Puṇar-nilai and saṃhitā*

The expression *puṇar-nilai*, which is used to refer to two words coming one after the other to form the condition of combination of sounds, echoes the Sanskrit term *saṃhitā*. The *Vājasaneyiprātiśākhya* in fact teaches that a sound is combined (*saṃhitah*) to the one preceding it in rule 1.155:

*pūrveṇottaraḥ saṃhitah* (VP1.155)

A following [sound (*varṇa* m.)] is combined with the preceding [sound].

Uvaṭa further specifies that the combining sounds are the last and the first of the preceding and the following words respectively and that such condition of combination is called *saṃhitā*:

*ita uttaraṃ saṃhitocyate | pūrveṇa padāntena uttaraḥ padādih [] saṃhitā yadā kriyate svarato varṇataś ca tadā dvipadasaṃhitocyate | yathā – “iṣé ttvā tvorjé” | kramasaṃhiteyam ||*

From here onwards the state of combination (*saṃhitā*) is mentioned. The preceding word-final [sound] is combined with the following word-initial [sound]. When the state of combination is made by means of pitch-modulations and speech-sounds, then it is called state of combination concerning two words. For instance: *iṣé tvā | tvorjé* (*Śuklayajurvedasaṃhitā* 1.1). This is a *krama* state of combination/recitation.<sup>12</sup>

The resemblance with the instructions of TEn107 and 108 is striking, but the overall approach to this issue adopted by the *Vājasaneyiprātiśākhya* is more complex than what it may appear at first. In fact, the *Vājasaneyiprātiśākhya* contains another rule, namely 1.158, that defines *saṃhitā* as a contiguity of sounds:

*varṇānām ekaprāṇayogaḥ sāhitā* (VP1.158)

The state of combination is the union [i.e. the articulation] in a single breath of speech-sounds.

Uvaṭa indicates a way out from this seeming contradiction between rules 1.155 and 1.158. In fact, he states that the latter does not concern metrical texts (*ṛcs*), but only prose text (*yajus*), i.e. the prose parts of the *Śuklayajurvedasaṃhitā*:

*evaṃ tāvat pādasamhitā ṛkṣu karttavyā | yajuṣṣu tv ayaṃ vidhiḥ [] varṇānām ekocchvāsoccāraṇayogaḥ pade vā vākye viśrāmaḥ [] sā ca prāṇasaṃhitā |*

Thus, in the case of metrical formulas (*ṛkṣu*) one must create a state of combination<sup>13</sup> depending on the verses [i.e. of the words within the verses (as per rule 1.157<sup>14</sup>)], but in the case of *yajuses* [one should follow] the [present] rule. The articulatory employment of a single expiration of sounds [corresponds to] the cessation [of the articulation]<sup>15</sup> for a word or a sentence. And that is the state of combination depending on the breath.

We are therefore presented with two possible models accounting for the context of application of *sandhi* rules: one specifying that the combining items are the sounds found at the edges of words, and one for which the combining items are simply sounds.

Other Prātiśākhyas comply to the former model, as for instance *Ṛgvedaprātiśākhya* 2.1 *saṃhitā padaprakṛtiḥ* (“the state of combination has [individual] words as its raw matter”) and *Taittirīyaprātiśākhya* 24.3 *nānāpadasandhāna-saṃyogaḥ padasaṃhitety abhidhīyate* (“the conjunction of several words is called

12 Here the term *krama* indicates the *krama-pāṭha* (“step-recitation”), which is a particular form of recitation of the Vedic texts in words’ pairs (e.g. *agnīm īle | īle purōhitam | purōhitam yajñāsyā | purōhitam iti purāḥ hitam | yajñāsyā devām | devām ṛtvijām | ṛtvijām ity ṛtvijām*). For more details see for instance Abhyankar and Devasthali 1978.

13 I have translated here *saṃhitā* as “state of combination”, but the same term in the Prātiśākhya context also refers to the continuous recitation of the Vedic texts, namely *saṃhitā-pāṭha*.

14 *Ekapadadvipadatripadacatuṣpadānekapadāḥ pādāḥ ||* “verses are made of one, two, three, four, or many words”.

15 *Viśrāma* indicates the cessation of *saṃhitā*.



state of combination”). The definition of *saṃhitā* that involves only sounds is instead adopted in *vyākaraṇa*, i.e. in what is mostly the tradition inspired by Pāṇini’s *Aṣṭādhyāyī*. Rule 1.4.109 of the *Aṣṭādhyāyī* reads *paraḥ saṃnikarṣaḥ saṃhitā* (“the state of combination is the most immediate contiguity”), concerning which for instance the *Kāśikāvṛtti* comments *saṃnikarṣaḥ* as *varṇānām ardhamātrākālavayavadhānam* (“the intervention of a half moraic lapse among speech-sounds”). It seems therefore possible to argue that the *Eḷuttatikāram* was closer to the theoretical model of describing the condition of *sandhi* application that is relevant for the description of the metrical parts of the Vedas and that is found across the Prātiśākhya and their commentarial tradition.

An idea similar to that of rule 1.158 is later on reiterated in the third section of the *Vājasaneyiprātiśākhya* dealing in detail with the rules of *sandhi*.<sup>16</sup> When the state of combination (*saṃhitā*) occurs (rule 3.1), the sounds of the two consecutive words combine (rule 3.3):

*saṃhitāyām* (VP3.1)

In the [*krama*] state of combination/recitation.

*padāntapadādyoḥ sandhi* (VP3.3)

Combination [occurs] between the final [sound] of a word and the initial [sound] of a word.

In his commentary to rule 3.3 Uvaṭa states that when *saṃhitā* occurs, the sounds of the two consecutive words combine:

*yaḥ kaścid vaidikaśāstrasandhi ucyate sa padāntapadādyor veditavya iti | te sandhayaś catvāro bhavanti – svarayoḥ, vyañjanayoḥ, svaravyañjanayoś ca | svaravyañjanayos tu dviprakāraḥ – pūrvaḥ svaro bhavati paścād vyañjanāni, vyañjanāni vā pūrvāṇi bhavanti paścāt svara iti | svarayor bhavati yathā – ā idam → “edam” | varuṇa iha → “varuṇeha” | vyañjanyor bhavati yathā – sam yaumi → “sāyyaumi” | sam vapāmi → “sāv vapāmi” | svarapūrvo bhavati yathā – iṣe tvā → “iṣe ttvā”, ūrje tvā → “ūrjettvā” | vyañjanapūrvo bhavati yathā – ut enam → “ud enam” | paribhāṣāsūtram etat ||*

Whatever combination concerning the Vedic texts (*śāstra*) is mentioned, this should be understood as [the combination] between the final [sound] of a word and the initial [sound] of a word. Those combinations are four: between two vowels, two consonants, [and] a vowel and consonants. As a matter of fact (*tu*), [the combination] between a vowel and consonants is twofold. There is a preceding vowel followed by consonants. There are preceding consonants followed by a vowel. [The combination] between vowels is as such: *ā idam* →

16 Uvaṭa remarks in the introduction to this section: *adhunā kramaprāptaḥ saṃskāro ’bhidhīyate lopāgamavarṇavikāraprakṛtibhāvalakṣaṇaḥ* (“now the [grammatical] formation (*saṃskāra*) that concerns the *krama* combination/recitation is taught, which has elision, augment, sound change, and natural state as its characteristic”). For more details on the content of this passage, see 4.2.

*edam; varuṇa iha* → *varuṇeha*. [The combination] between consonants is as such: *sam yaumi* → *sāyyaumi*; *sam vapāmi* → *sāvvaṇvāmi*. [The combination] with a preceding vowel is as such: *iṣe tvā* → *iṣettvā*; *ūrje tvā* → *ūrjettvā*. [The combination] with a preceding consonant is as such: *ut enam* → *ud enam*. This is a rule setting the condition (*paribhāṣā-sūtra*).

Because of its reliance on the concept of *pada* (“word”) to define *saṃhitā*, the *Vājasaneyiprātiśākhya* also offers a definition of that term in rule 3.2. This rule is however particularly succinct as it simply tells us that words are defined as those elements having *artha* (“meaning” or “purpose”):

*arthaḥ padam* (VP3.2)

A word has meaning/purpose.

It is thus necessary to rely on Uvaṭa’s understanding of the rule to try to extrapolate its full meaning:

*saṃhitālakṣaṇam uktam* – “*varṇānām ekaprānayaogaḥ s̥hitā*” (VP 1.158) *iti | adhunā padalakṣaṇam ucyate | arthābhidhāyi padam, padyate gamyate jñāyate ’rtho ’neneti padam | yady evaṃ nipātasyānarthakasya padasaṃjñā na prāpnoti | naiṣa doṣaḥ [] upariṣṭād arthabhedanibandhanam padacatuṣṭayam vakṣyati* – “*nāmākhyātopasarganipātās ca*” (VP 8.49) *iti | tatrāsya padasaṃjñā bhaviṣyati yathā* – “*kriyāvācakam ākhyātam upasargo viśeṣakṛt | sattvābhidhāyakaṃ nāma nipātaḥ pādapūraṇaḥ ||*” (VP 8.40) *iti | sūtrakārasya tv ayam abhiprāyaḥ – padapratirūpakasya padāvayavasya padasaṃjñā mā bhūd iti | ato ’rthagrahaṇam | ihaiva padasaṃjñā yathā syāt* – “*govyaccham antakāya goghātam*” | *iha mā bhūt* – “*godhūmās ca me*” ||

The characteristic of the state of combination is told as ‘the state of combination is the union [i.e. the articulation] in a single breath of speech-sounds’ (VP 1.158). Now, the characteristic of the word is told. A word expressing meaning (*artha-abhidhāyin*) [is] a word by which meaning occurs, is received, is understood. If so, the technical term ‘word’ does not include the meaningless particles (*nipāta*). This [here] is not a mistake: later on (*upariṣṭāt*), he will mention a fourfold set of words that is the common basis (*nibandhana*) for the difference concerning meaning/purpose: ‘nouns, verbs, prepositions, and particles’ (VP 8.49). In this respect, the technical term ‘word’ will apply to that [*nipāta*], in fact ‘a verb is an expression of an action, a preposition is a qualifier, a noun is the expression of an item (*sattva*), and a particle is a metrical filler’ (VP 8.40). This is in fact (*tu*) the intention of the author of the rules [of the VP]: the technical term ‘word’ should not apply to the appendix of a word that resembles a word. Thus, the interpretation of the meaning of the [rule] (alternatively: of the [word] *artha*). Here indeed the technical term ‘word’ should be such [to include *go* in] ‘cow-tormentor, for Yama (?) cow-killer’ (*govyaccham antakāya goghātam*). Here, [the technical term ‘word’] will not be [such to include *go* in] ‘and wheat for me’ (*godhūmās ca me*).

The last remark implies that traditionally the word-by-word analysis of the *Śuklayajurvedasaṃhitā*, which in turn is the source for the *krama* recitation of the

same text, considers *go* in *go-vyaccham* to be a word (*pada*), but excludes *go* in *godhūmās*. We will come back later in section 5 to the difference between this definition of “word” and the definition of “linguistic item” we encountered in the *Eḷuttatikāram*.

### *The kinds of combinations*

The categorisation of the kinds of phonological combinations is a further *sandhi*-related aspect that is treated in a similar way by both the *Eḷuttatikāram* and the *Vājasaneyiprātiśākhya* and their commentaries. As mentioned before, TEn108 teaches that there are three kinds of change and one unchanging state ([...] *mūnrē tiripiṭa nonrē yiyalpeṇa* [...]). This passage is paraphrased by Naccinārkkīṇiyar as:

*tiriyum iṭam mūnrū iyalpu onru enru muntainūlir kūriya annāṅku ilakkaṇamumē*

Those four rules that are mentioned in the old treatise(s), namely the occasions of change are three and the [unchanging-]state is one.

Furthermore, TEn109 specifies that the three kinds of change are the modification of consonants, expansion, and elision ([...] *meypiri tātaṅ mikutaḷ kunral* [...]).

This categorisation directly resonates with Uvaṭa’s explanation of the term *saṃskāra*, which appears in *Vājasaneyiprātiśākhya* 1.1:

*svarasaṃskārayoś chandasi niyamaḥ* (VP1.1)

[This Prātiśākhya is] a regulation concerning pitch modulations and [grammatical] formations (*saṃskāra*) in Chandas [= Saṃhitā].

*saṃskāro lopāgamavarṇavikāraprakṛtibhāvalakṣaṇaḥ* |

[Grammatical] formation (*saṃskāra*) has elision, augment, modification of speech-sounds, and their unmodified state as its characteristic.

The similarities are self-evident in terms of the fourfold classification of *sandhi* phenomena and I would venture to hypothesise that the use of the term *ilakkaṇam* in Naccinārkkīṇiyar’s commentary is not by chance, but the result of his familiarity with Uvaṭa’s commentary (note that *ilakkaṇam* is simply the Tamil rendition of Sanskrit *lakṣaṇa*). A possible element that could help corroborate this hypothesis is Naccinārkkīṇiyar’s use of the expression *muntai nūlil* (“in the old treatise(s)”), which explicitly indicates that our commentator thought that this classification was borrowed from other sources.

There is however a difference in the way the word *ilakkaṇam/lakṣaṇa* is used by the two authors: in Uvaṭa’s commentary *lakṣaṇa* is used as the last member of an exocentric compound (*bahuvrīhi*), thus meaning something like “having as its characteristic”. On the other hand, Naccinārkkīṇiyar uses *ilakkaṇam* as a noun, thus the translation “rule”.

## SHARED MODELS, BUT DIFFERENT CONCERNS

As we have seen, the *Eḷuttatikāram* and the Prātiśākhya define *puṇar-nilai* and *saṃhitā* in a similar way, i.e. as the combination of complex linguistic items and not simply as the combination of speech-sounds, as it seems to be instead the case of Vedic prose (as per VP1.158) or *vyākaraṇa*. As a consequence these texts need to define what those complex linguistic items are. When they do so, we have the possibility to observe that the two grammatical traditions answer different linguistic and theoretical agendas. On the one hand, the *Eḷuttatikāram* covers both external and internal *sandhis* (as the *Aṣṭādhyāyī* also does) and, therefore, needs to define the linguistic items in a way that covers the domains of both word and morpheme. In this respect, we meet a fourfold definition of *col* in the rules 158 and 159 of the *Collatikāram* as *peyar* (“noun”), *viṇai* (“verb”), *iṭai* (“particle”), and *uri*, with *iṭai* including both *cāriyais* and case-endings. On the other hand, the Prātiśākhya limit themselves to describe external *sandhi* (arguably, with a few exceptions that are not dealt with here) given that they aim at reconstructing the *saṃhitā*- and *krama-pāṭhas*, i.e. two of the possible recitations of the Vedic texts that are in turn built upon their word-by-word recitation (*pada-pāṭhas*). Accordingly, the *Vājasaneyiprātiśākhya* offers a definition of *pada* (“word”) that includes nouns, verbs, prepositions, and particles, i.e. all the elements that are singled out in the word-by-word recitation of the *Śuklayajurvedasaṃhitā*.

If the concern for internal *sandhi* is a point of convergence between the *Eḷuttatikāram* and the *Aṣṭādhyāyī*, the two differ from one another not only because of the already mentioned word- vs sound-oriented definition of *puṇar-nilai/saṃhitā*, but also for the scope they attribute to this concept for their representation of phonological phenomena. In fact, *puṇar-nilai* is the condition for the application of all phonological rules in the *Eḷuttatikāram*, but the same does not hold true for *saṃhitā* in the *Aṣṭādhyāyī*. In the latter, not all *sandhi* rules fall under the condition of *saṃhitāyām* (“in the state of combination”).<sup>17</sup> Most probably the principle of economy is at the basis of such a difference, since the Tamil phonological phenomena are less variegated than the Sanskrit ones and may be effectively accounted for without postulating a non-*saṃhitā*-related condition for the occurrence of certain *sandhis*.

The difficulty in drawing a clear-cut line between these theoretical approaches to the description of *sandhi* conditions is evidence of the fact that even if Tamil

17 Differentiating between rules that happen under the condition of *saṃhitāyām* and rules that do not allows Pāṇini to ingeniously account for the different outcome of sounds’ modification in similar phonological contexts. For instance,  $\bar{i} \rightarrow i\bar{y}$  in front of a dissimilar vowel in internal *sandhi* (see rule 6.4.77 *aci śnudhātubhruvām yvor iyaṇuvaṇau* of the *Aṣṭādhyāyī*), but  $\bar{i} \rightarrow y$  in external *sandhi* (see rule 6.1.77 *iko yaṇ aci*, which falls under the scope of rule 6.1.72 *saṃhitāyām*).

grammarians were aware of the content of Sanskrit grammars, they freely rearranged that material and adapted it to their concerns. Nonetheless, it seems plausible to claim that there was a transfer of ideas from the Sanskrit tradition to the Tamil one also in what we could call the field of phonology. It is indeed always dangerous to claim that a certain author was aware of someone else's ideas unless this is explicitly stated. In particular, in the case of the grammars that are here under consideration, there are centuries of oral transmission and a potential unknown plethora of lost texts that link our extant sources. As for our specific study, for instance, although it is difficult to prove that Naccinārkkīṇiyar knew specifically Uvaṭa's text, it seems reasonable to think that Naccinārkkīṇiyar had a certain degree of familiarity with some Sanskrit sources dealing with the theory of *sandhi*.

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