Viewing Proto-Dravidian from the Northeast

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Continuing Pfeiffer 1972, Pfeiffer 2018 examines inherited Dravidian etyma of Kurux, one of the most northerly Dravidian languages. After an overview of the book, we discuss problems involved in Pfeiffer’s arguments, methods, and materials. Then we try to narrow down the conditions of some of the sound changes Pfeiffer proposes, in conformity with the Neogrammarian hypothesis of regularity. We also point out that closer study of word-final phonology would answer some of the pending questions of Kurux-Malto morphology. Finally, we argue that phonological and morphological reconstruction can unveil more features to help revise the subgrouping of Kurux-Malto in the Dravidian family.

1. HISTORY OF KURUX HISTORICAL PHONOLOGY

Kurux (also written Kurux, Kūrux, Kurukh, and Kunrukh) is a Dravidian language spoken by about two million people on the Chhotanagpur Plateau, in the Indian states of Jharkhand, Chhattisgarh, West Bengal, and Odisha, where the local variety of the language is called Kisan. The speakers are called Oraon (Hindi urāv) by other communities. Since it is one of the three most northerly Dravidian languages along with Malto and Brahui, it was once grouped as North Dravidian together with these two languages. While Kurux and Malto form a close subgroup, Kurux-Malto and Brahui share few innovations. Studies such as Andronov (2003: 21) did not adopt the subgroup, and McAlpin (2003: 545) proposed to give up the subgroup “North Dravidian.” Kurux is described most extensively by the grammar and dictionary of the Belgian Jesuit missionary André Grignard (Grignard 1924a, 1924b), who took over Ferdinand Hahn’s earlier work on the language. Recent treatments include Ekka 1971, Gordon 1976, Misra 1996, and Kobayashi and Tirkey 2017.

Based on his doctoral dissertation submitted to Freie Universität Berlin, Martin Pfeiffer published Elements of Kurux Historical Phonology in 1972. After this influential work, the second edition of Burrow and Emeneau’s Dravidian Etymological Dictionary (abbreviated DEDR) appeared in 1984, incorporating Pfeiffer’s etymologies. The work under review is a result of the author’s longstanding effort to update etymological materials related to Kurux ever since and to rework the problems of Kurux historical phonology. Both Pfeiffer 1972 and Pfeiffer 2018 are based only on published materials. While Pfeiffer makes meticulous references to previous studies until the 1980s, some more recent works on Kurux, such as Misra 1996, McAlpin 2003, and Kobayashi and Tirkey 2017, are not consulted.

This is a review article of Kurux Historical Phonology Reconsidered. By Martin Pfeiffer. Norderstedt: PUBLIATION, 2018.

Author’s note: This article is based upon work supported by JSPS grant 18K00524. Abbreviations: C: consonant; DEDR: Burrow and Emeneau 1984; excl.: exclusive; incl.: inclusive; Krx.: Kurux; Mlt.: Malto; N: nasal; nm.: non-masculine; PDr.: Proto-Dravidian; PKM: Proto-Kurux-Malto; pl.: plural; sg.: singular; T: stop; V: vowel.

Transcription: Kurux ă, ē, ô, ĩ, ū are long vowels, ā, ē, ā, ĩ, ū nasalized vowels, t, d, r, n retroflex consonants, and x a velar fricative. ň and ņ are velar and nasal nasals respectively. Aspirated consonants are written with h as in hth and jh. We write final vowels long. For Proto-Dravidian phonemes, we use *[^t] for the retroflex approximant instead of *r in Pfeiffer, to avoid confusion with the Kurux retroflex flap r. *[^t] is an alveolar stop.
2. OVERVIEW OF THE WORK

In Pfeiffer 1972 cognate sets are arranged by reconstructed Proto-Dravidian sounds and sound sequences, with an index arranged by Kurux phonemes. This work also has separate sections for etyma with non-Dravidian etymology (pp. 168–71), re-borrowing of originally Dravidian etyma (pp. 172–74), problematic etymologies (pp. 175–83), etyma with reflexes only in Kurux and Malto, and/or Brahui (pp. 184–95), and onomatopoetic words (pp. 196–97).

In contrast, Pfeiffer 2018 lists Kurux words including loanword items, with cognates from Malto and other Dravidian languages, drawing primarily on the materials of the DEDR, which constitute two-thirds of the book (pp. 27–339). This list is followed by those cognate sets not listed in DEDR, labeled “N” (pp. 340–51). Since the entries are arranged by the etymon numbers of the DEDR, the unique numbering system of Pfeiffer 1972 was given up. But the book does not contain a Kurux index to the cited words, and readers must first look up the Kurux index of the DEDR (pp. 746–51) to locate Kurux words.

After presenting cognate sets, Pfeiffer gives a list of correspondences of forms in Kurux and Proto-Kurux-Maldo, arranged by phonemes and their position from the word initial, with reconstruction of Proto-Dravidian forms (pp. 353–431); lists of regular sound changes from Proto-Dravidian to Proto-Kurux-Malto (pp. 432–35), conditioned sound changes (pp. 435–37), and sporadic sound changes (pp. 437–40); and lists of regular sound changes from Proto-Kurux-Malto to Kurux (pp. 441–43), conditioned sound changes (pp. 443–45), and sporadic sound changes (pp. 445–47).

In “Proto-Kurux-Malto and Proto-North Dravidian” (pp. 448–53), Pfeiffer points out that Proto-Kurux-Malto *q- and Brahui *x-, on the one hand, and Proto-Kurux-Malto *k- and Brahui *k-, on the other, show mostly regular correspondences, and concludes that the Proto-Kurux-Malto contrast between *q- and *k- in initial position can be posited for Proto-North Dravidian, and that both phonemes originate from Proto-Dravidian *k- (p. 451). Pfeiffer considers the contrast between these phonemes to be a shared North Dravidian innovation, resulting from a split of Proto-Dravidian *k to *k and *q before [+high] and [−high] vowels respectively (see also Pfeiffer 1972: 149–50). In the Appendix (pp. 460–62) Pfeiffer finds the same distribution of velars and uvulars in Kusunda and suggests contact between Proto-North Dravidian and Kusunda.

The sound changes from Proto-Dravidian to Kurux are summarized in “Overview” (pp. 454–59). In his “Conclusion” (pp. 463–67), Pfeiffer admits the existence of unexplained irregularities and isolated etyma, and citing the long-standing discussion on the putative migration of Kurux speakers from the west coast to Chhotanagpur via Rohtas Kurux “loan-words” in Nihali, and the development of Proto-Dravidian *v to *b, which Kurux shares with the Kannada-Kodagu-Tulu group in Karnataka, mentions the possibility of borrowing from extinct language families during the migration.

3. CRITIQUE

3.1. Scope of the Work

Pfeiffer reconstructs Proto-Kurux-Malto and Proto-Dravidian forms for items with cognates. Since the DEDR does not give Proto-Dravidian reconstructions, Pfeiffer’s reconstructions are of tremendous help for historical linguists. Etymologies such as Kurux oṇṭā ‘one’ from ōnd ‘one’ and oṭa ‘unit, head’ on the grounds of the absence of the combination *ōnd-oṭa (p. 81) are superb examples of philological investigation. However, the sound changes between Proto-Dravidian and Kurux are not easy to trace, for the posited sound changes are
listed without overt explanation or labels for cross-reference, and the lists are not always exhaustive. Systematic presentation of the sound changes of word-final sounds would also have been useful, for the suffixing morphology of Dravidian is best reconstructed from final sounds.

Since Kurux is generally more innovative in its phonology than its sister Malto, discussing history based on Kurux forms entails potential problems. For example, Malto kank ‘firewood’ and cungq- ‘to kiss’ retain heterorganic NC clusters, while the nasals are assimilated in the places of articulation in their Kurux cognates kank and conkkh- (Kobayashi and Tirkey 2017: 63–64). Malto morphology is often more conservative than Kurux. For example, Kurux nouns and adjectives in -ā seldom have bare stems without -ā, while corresponding Malto nouns and adjectives in -e regularly have e-less short forms as in megc ‘tall’ vs. mecg manu ‘tall tree’, sarṅge ‘sky’ vs. sarṅg-gadi {sky-car} ‘airplane’, showing the suffixal origin of Kurux -ā. In the cognate pair Krx. bijj-bīnkō ‘airplane’ and Mlt. bijn-binđke ‘id.’ not mentioned in Pfeiffer 2018, the first element of the Malto form, bij- ‘to dawn’, is extended with n, which might reflect the Proto-Dravidian oblique stem increment *-an/*-in (Krishnamurti 2003: 224). When Proto-Dravidian is discussed primarily based on Kurux lexical items, such morphological and lexical peculiarities of Malto might be overlooked, and we need to be careful about Proto-Dravidian features Kurux lost by innovation.

3.2. Data

While Pfeiffer pays meticulous attention to collecting forms from published sources, his work would have benefited from direct access to the language by interviewing native Kurux speakers, many of whom are now reachable by telecommunications and some of whom major in Kurux at colleges. Even though fieldwork on lexical items is time-consuming and one cannot expect to find unreported Dravidian etyma in just a few interviews, there are still things to discover in fieldwork, as the Kurux saying okkoy na xakkhoy, kuddoy na beddoy “Sit down and you will meet, walk around and you will find” suggests. For example, Grignard (1924b) gives many word forms with long vowels in the initial syllables, such as kōr- ‘enter’ (p. 151), kōha ‘great, big’ (p. 150), cited by Pfeiffer as such. However, in present-day Kurux spoken in Gumla and Lohardaga districts some of these words are pronounced with short vowels, in this case kor- and kōha. In fact, Gordon (1976: 23, 82) also reports forms with short vowels in his description of Nepali Kurux, and even the gramophone recording of the Parable of the Prodigal Son in the Linguistic Survey of India (Grierson 1906: 420–22) recorded between 1913 and 1929 gives kercas ‘he entered’, khe’ālagdan ‘I am dying’, and be’edan ‘I am’ instead of kercas, khe’ālagdan, and be’edan with the long ē and ő that Grignard (1924b, s.v.) gives (’=ʔ). Similarly, ārs- ‘reach’ (p. 34) and ēt- ‘to assist a woman in raising a load to her head’ (p. 210) should rather be ārs- and ēt- respectively. Grignard might have simply followed the spelling of Hahn’s Kurukh-English Dictionary (Hahn 1903), and since we do not know to what extent Hahn’s spelling reflected the actual pronunciation in Lohardaga in the late nineteenth century, it is even possible that these words did not contain long vowels in the first place.

Following DEDR 4898, Pfeiffer lists mūxā as a word for ‘edge, brink, margin’, but the word means ‘frog, toad’, and it is rather mukhā that means ‘mouth (of an earthen vessel)’ according to Grignard (1924b). īwh- or īnh-, which Pfeiffer glosses ‘to cough’ (p. 47), now means ‘to sneeze’, while ‘to cough’ is expressed by khokhʔ-.

1. There are graduate and undergraduate Kurux programs in colleges in Ranchi, Gumla, Lohardaga, Sisai, and Bero, and many other BA courses in and around Jharkhand now.
When citing Malto words, dialect or source should also be noted if their use is limited to certain areas. For example, Malto qade ‘son’ (p. 107) cited from Droese (1884) is not heard except in the northwest (northern Godda District, Jharkhand), while numa or mage is used in other places. geqe or gqeq ‘hand’ (p. 139) never occurs in my data, while ṭeṭu is used for ‘hand’ in all areas.

3.3. Phonological Representation

Many Kurux verb bases, like korʔ- ‘to enter’ (Malto kor-), ēdʔ- ‘to show’ (Malto ēd-), and xandṛʔ- ‘to sleep’ (Malto qandṛ-), end in the glottal stop ṭ, a phoneme which Gordon (1976: 65) traces back to a reduced vowel. It is suppressed in infinitives in -nā such as kornā, ēdnā, and xandrnā, but surfaces before suffixes beginning with a vowel, such as infinitive -ā or imperative -āl-ay. Since Grignard (1924b) lists verbs in the -nā infinitive, one cannot judge about the presence of ṭ from Grignard’s entries, but it is a lexical property of the verb and should be considered a part of the verbal base for descriptive purposes. Representation with ṭ also helps in judging the verb class, for a base-final ṭ alternates either with -c (“Class 2” in Kobayashi and Tirkey 2017: 122) or with zero (Class 3c) in the past stems, while many bases without final ṭ have past stems in -y, as in ēr-/ ɪr- ‘to see’ (Class 1). In Class 3c pairs such as xaṇjʔ- / xaṇj- ‘to bear fruit’ (p. 110), ṭ is the only difference between the present and past stems. However, following Pfeiffer 1972, Pfeiffer 2018 lists verb bases without ṭ; e.g., xar(ʔ)- ‘to steal’ (p. 104), xandṛ(ʔ)- ‘to sleep’ (p. 106), except those ending in a vowel plus ṭ such as hoʔ- ‘to take’ (p. 79). Moreover, this practice is not followed consistently, as in ġunʔ- / ġunč- ‘to worry one’s mind about’ (p. 123) vs. ġund(ʔ)- / ġundc- ‘to reduce to powder’ (p. 124).

As mentioned above, the arrangement of Kurux words by the DEDR entries sometimes makes it difficult to find the Kurux words. Following the DEDR, the same word occurs under different entries, which are hard to trace without a cross reference. For example, teldg- ‘to tuck up’ under DEDR 3428 (p. 208) and telg- ‘to disclose, uncover’ under DEDR 3433 (p. 209) should be cross-referenced, for they probably belong to the same etymon, judging from the Southern Malto cognate telg- ‘to open (as doors).’

3.4. Dravidian Etymologies

Since this work treats only words covered by DEDR or those with Malto cognates, Kurux words that look inherited but do not have cognates, such as xard- ‘to be tired’, heber- ‘to throw away’, and cēp ‘rain’, are not discussed. Even though omitting such words is understandable as a working principle, there might be room for further analysis by internal reconstruction or the “Wörter und Sachen” approach. To take an example, Krx. palxaṇjā ‘cucumber’, Mlt. palɢanje is reconstructed *palganja (p. 243), but since *ganja is obviously related to the verb *qañj-, Krx. xaṇj- ‘to bear fruit’ (p. 110), one can at least extract a morpheme *pal, even though the word might be a “cranberry” compound. Pfeiffer does not analyze the word tuppalxō ‘saliva’ (p. 202), of which tupp- means ‘to spit’ and DEDR 2249 connects -xō with Tamil kōḷai ‘phlegm’, etc. It might be the same morpheme as in xaṇjalxō ‘tears’, xarxō ‘bile’, and umbalxō ‘liver’. pacbā ‘aged, stricken in years’, which is related to pacčā ‘old’ (p. 244) but not listed under it, might originally be a bahuvrīhi compound made of *paẓc- ‘old’ (DEDR 3999) and *vāẓ ‘life’, as in Malayalam vāḷu ‘life’ (DEDR 5372), i.e., ‘whose life has become old’. Krx. xarxā ‘pungent’, Mlt. qaṛqe ‘id.’ (p. 92), and Krx. ṭaṭxā ‘mango’, Mlt. ṭaṭge ‘id.’ (p. 186) might also be compounds, of *qaṭ- (Malayalam kaṭu ‘pungent’, etc.,
DEDR 1135) and *qāz (Tamil kāl ‘to be pungent’, etc., DEDR 1492), and of *ṭāṭ- (possibly the same morpheme as ṭāṭ- ‘to lick’) and *qāy (Tamil kāy ‘unripe fruit’, etc., DEDR 1459).

While the etymological notes Pfeiffer adds are generally useful, they are too brief in some cases. For example, under em(-)T, emc- ‘to take a bath’, Pfeiffer comments “*a- > e- in em- is not clear” (p. 36). Gordon (1976: 69–70) explains this change as the fronting of *a triggered by the following stem-formative *-i (Proto-Kurux-Malto *am-i-a from *am ‘water’ > *em-i-a > Kurux emʔ-a), and it would have been more helpful if Pfeiffer had discussed the plausibility of this fronting umlaut based on the vast materials he covered.

Pfeiffer lists all possible Proto-Dravidian forms, and his reconstruction is sometimes too inclusive. For Krx. nuṛʔ- ‘to hide’ (p. 228, DEDR 3714), Pfeiffer first gives related forms nul u g- ‘to insert a thing into another by a sliding push’, nūx- ‘to hide’, and nūxrʔ- ‘to hide oneself’, and after citing cognate words from DEDR, reconstructs *nūẓ-/nūl-, *nuẓ-/nu-/*nuẓ-/*nuḷ-/*nuṇ-, *nuẓVkV-, *nuẓVmV-, and *nuV for Proto-Dravidian. It is not mentioned which sound change, *ẓ > ṛ /V̆ (p. 376) or *ṭ > ṛ /V̄ (p. 380), applies to which reconstructed form, and it is not clear which sister language Pfeiffer considers to have a reflex close to Kurux.

3.5. Munda Etymologies

Pfeiffer attributes more than fifty words to Munda origins, while there were only eighteen in Pfeiffer 1972. The Kurux believe that they once lived in Rohtas in what is now Bihar and migrated south to the Chhotanagpur Plateau, where they came in contact with the Mundas, who speak the Austroasiatic (Munda) language Mundari. While it is not surprising that Kurux borrowed Mundari words through contact, like the animal names geṛe ‘duck’ and ūrū ‘beetle’, it is far from certain that Proto-Kurux-Malto was also in contact with Munda languages.

Some etymologies are convincing, such as Krx. poṭom ‘bundle, package, parcel’ from Mundari poṭom ‘rice bale’ (p. 273); Krx. coṭṭō ‘mouse’ from Mundari cuṭu, etc. (p. 170); Krx. kicrī ‘cloth, garment’ from Mundari kicĭri, etc. (p. 114, DEDR 1521); Krx. kuhō ‘kernel of the mango stone’ from Mundari (Hasādāʔ) kubu, (Naguri) kuhu, Kharia kuhō (p. 150); Krx. lenḍā ‘earth-worm, intestinal parasite’ from Mundari lenḍaq (p. 350). Others are highly possible, such as Krx. Ṽrā ‘bird’, Mlt. āre ‘quail’; cf. Santali ore ‘bush-quail’, etc. (p. 85, DEDR 1040); Krx. lidum, ludʔū ‘soft’; cf. Santali lidu, lidūr ‘very soft’, etc., Sadri ludū ‘soft’ (p. 51, DEDR 513); and Krx. oṭhā ‘burden; heavy’, Mlt. ote ‘heavy’; cf. Santali ota ‘to press down’, Mundari ota ‘to cover and press with the hand’, etc. (p. 78, DEDR 977).

However, some others are open to question. In Krx. xollā ‘razor’, Mlt. qole, attributed to Santali holaʔt, Mundari holaʔd ‘id.’ (p. 149), we are not sure if the precursor of Kherwarian h was phonetically similar enough to Proto-Kurux-Malto *q. ali ‘hailstone’ from Santali arel ‘id.’, Mundari and Ho aril, etc. (p. 44, DEDR 384), and isng ‘oil’, Malto isṇu, from Santali, Mundari, Ho sumum ‘id.’, etc. (p. 47, DEDR 422) look phonetically too divergent. While Pfeiffer connects arg- ‘to be yet in the process of’ with Santali auri ‘not yet’ (p. 341), this auxiliary verb has a unique present-preterite inflexion (Grignard 1924b, s.v.), which would be quite unusual for a loanword.

3.6. Expressives

Onomatopoeia and echo-words are often regarded as transient and marginal constituents of the lexicon in historical reconstruction. However, Kurux has a rich variety of more than 900 expressives, and Pfeiffer does them justice by discussing quite a few of them. Since we do not have a uniform framework or even terminology for this category, and since different
languages use similar sounds for forming expressives, the explanations unavoidably involve some inconsistency. For example, Pfeiffer attributes *kabkub*r- ‘to curve the body forward’ (p. 102) and *pahpahr* - ‘to dawn’ (p. 234) to Munda origins (Santali *kabaˀc kubuˀc* [cf. Mundari *kabaeˀ kubuiˀ*, Osada and Badenoch 2019, s.v.], Santali *pah pahao*, Sadri *pahpahāek*), while he labels *xaṛaṛ-xaṛaṛ* ‘the sound of articles loosely packed and playing against one another’ (p. 90) and *kusmusaʔ* - ‘to whisper’ (p. 118) simply ‘onom.’, which seems to mean original onomatopoeia.

4. DISCUSSION

4.1. Pfeiffer’s Reconstruction of Proto-Dravidian and McAlpin’s “Three-dorsal” Model

Expanding the view mentioned in Pfeiffer 1972 (pp. 65, 102), Pfeiffer (2018: 432) argues that Proto-Dravidian *k-* became Proto-Kurux-Malto *k-* before high vowels and *q-* before non-high vowels; e.g., Kurux *kiyā* ‘beneath’, Tamil *kīl* ‘underneath’, etc. < Proto-Dravidian *kiẓ* (p. 118) vs. Kurux *xes* ‘paddy’, Kannada *key* ‘crop’, etc. < Proto-Dravidian *key*(*VcV*) (p. 132). In medial position Pfeiffer considers that Proto-Dravidian *-k* and *-kk* became Proto-Kurux-Malto *-q* and *-k* respectively. On this “split” of Proto-Dravidian *k* to Proto-Kurux-Malto *q* before non-high vowels, McAlpin (2003: 528, 533) points out that “*q has cognates with high vowels elsewhere in Dravidian,” citing forms such as Kurux *xōṇḍ-* ‘to bring together’, Tamil *kūṭu* ‘to come together’, etc., and explains the apparent complementary distribution by the lowering of original *i* and *u to *e* and *o after *q* in Proto-Kurux-Malto. Based on sound correspondences McAlpin (2003: 543) posits Proto-Dravidian *k* and *q*, which became Proto-Kurux-Malto *k* and *q* respectively, and Proto-Dravidian *k*, which became *k* in Proto-Kurux-Malto but a palatal stop in other languages; e.g., Kurux *kur-* ‘to grow warm’, Tamil *cuṭu* ‘to be hot’, etc. (<DEDR> 2654); Kurux *kē ̃s-* ‘to winnow’, Mlt. *kēs-* ‘id.’, Malayalam *cēṟuka* ‘id.’, Kannada *kē-* ‘to lie down’, etc. (<DEDR> 1990). Pfeiffer labels the last correspondence “divergent” (p. 356).

If we stick to the traditional single-dorsal reconstruction of Proto-Dravidian, some Kurux and Malto facts are left unexplained. Pfeiffer derives medial *x* from *VkV* as in Krx. *nunx-* ‘to swallow without chewing’, Mlt. *nun*- ‘to swallow’ from PDr. *nuṇVkV*, Tamil *nuiku*, etc. (p. 227); and Krx. *berxā* ‘cat’, Mlt. *beroe* ‘id.’ from PDr. *verVkV*, Tamil *veruku* ‘tomcat’, Kannada *berku*, etc. (p. 332). In contrast, medial *k* in *bālkā* ‘turmeric, yellow’ is explained from PDr. *valVkV/ *valVkkV* (p. 248), without discussing how the latter reconstruction is supported by the sole cognate, Tamil *vallikam*, *valliyam*. And the same context *VkV* is given for explaining *-g* as well as in *telg-* ‘to disclose’ from *teleVkV* (p. 209), *basg-* ‘to peel’ from *vacVkV* (p. 323), and *bāg-* ‘to scrape’ from *vārVkV-* (p. 325). Pfeiffer labels both “regular reflexes” (p. 384) and “alternative” (p. 456), and it is not explained how the different reflexes *-x*, *-k*, and *-g* are conditioned. McAlpin’s reconstruction gives a more consistent explanation of the distribution of Kurux and Malto dorsals, even though it requires us to revise the traditional Proto-Dravidian phonemic inventory and posit three dorsal stops instead of one.

4.2. Development of Medial Vowels in Proto-Kurux-Malto

In both Pfeiffer 1972 and Pfeiffer 2018, Pfeiffer gives Proto-Dravidian reconstructions always with a *V* (an unidentified vowel) between a root and a suffix, or between suffixes, as in *vor-V-k-* > *curx-* ‘to pour’ (Pfeiffer 1972: 37) and *ūt-V-t-V-r-* > *udt*r-* ‘to lean upon a walking stick’ (p. 38), following the view that “[v]owels in second syllables which have to
be reconstructed for P[proto-]Dr[avidian] because of the evidence from S[outh]Dr[avidian] have been lost in Kur[ux] as well as in the other N[orth]Dr[avidian] languages” (Pfeiffer 1972: 13; cf. McAlpin 2003: 528). Pfeiffer considers that the vowels were lost in medial syllables between Proto-Dravidian and Proto-Kurux-Malto (Pfeiffer 2018: 383, 454), but more could have been said about the consequences of the vowel loss, especially for the change in syllabic structure. For example, Pfeiffer (1972: 38) posits the alternation *pūṇ- vs: *puṇ-V-t- to account for the short vowel in (1):

1. Krx. pūndʔ- ‘to yoke’ vs. pūn ‘necklace’; cf. Mlt. pund- ‘to put on another’s neck’ vs. pūn- ‘to put on one’s own neck (as a necklace)’; Tamil pūn ‘to put on’, Telugu pūnu ‘to undertake, wear’, etc. (DEDR 4361)

with the comment “[s]hortening of vowel due to following suffix beginning with a vowel,” but without adducing similar examples. On the same word Pfeiffer (2018: 369) labels the shortening of ā as “divergent.” In this section we will examine cases of shortening that Pfeiffer calls divergent and explore the possibility of explaining them as regular phonological developments (cf. Caldwell 1956: 215f., Krishnamurti 1961: 123, Andronov 2003: 92f.).

Kurux and Malto have pairs like the following in which originally long vowels appear to be shortened before a consonant cluster (Kobayashi and Tirkey 2017: 63). In (5) to (10), Kurux and Malto show different length alternations:

2. There are also inherited words in which the root vowel appears to be lengthened in Kurux and/or Malto, e.g., Krx. ēl- ‘to burn’ vs. Telugu ēlki ‘funeral pile’, Parji ēlp- ‘to char, scorch’ (DEDR 1001). In addition, Malto has a few roots with lengthened vowels, e.g., Mlt. ēnr- ‘to drink’, ond- past 3sg. masc. vs. Gadaba un-, und- ‘to eat, drink’, etc. (DEDR 600). In Southern Malto vowel lengthening often occurs in disyllabic words of two open syllables.
On the grounds of these examples we might be able to extend the explanation by pre-cluster shortening to *pūṇ- by positing *pūṇ-t(t)- for Proto-Dravidian and the rule (11) (following Zvelebil [1970: 37]):


The reason most of the examples are from the alternation of present and past tenses is that the past suffixes begin with a consonant (if we reconstruct the PKM Class 1 suffix as *-y) while derivative suffixes are often reconstructed with an initial formative vowel. Another reason is that derived words do not always make alternating pairs. For example, the short vowel in Kurux *put- ‘(of sun) to set’ might also be a result of pre-cluster shortening from *pūẓ-tt- judging from Malayalam *pūzuka ‘to be buried’ ~ *pūttuka ‘to press into, bury’ (p. 262, DEDR 4376), but we do not find an etymologically related Kurux word with long ū.

Since Kurux and Malto have many words with VCC, this shortening rule needs to be restricted to a pre-Proto-Kurux-Malto period and in derived environments, and not in tauto-morphemic sequences or in inflection as in xēnd- ‘to buy’, kīndā ‘palm tree’, and cōc-kan ‘I got up’. While Pfeiffer’s argument to attribute the shortening to a suffix-initial vowel is well grounded in evidence from other Dravidian languages,3 pre-cluster vowel shortening is attested in Kurux and Malto anyway, and it would be simpler to reconstruct *pūn- ~ *pūṇ-t(t) without an intervening vowel for Proto-Dravidian (Krishnamurti 2003: 282) and explain the shortening with a common shortening rule.

Proto-Dravidian is reconstructed with consonant-initial suffixes as well as vowel-initial ones, in both inflectional and derivational morphology, e.g., the tense suffixes, past *-tt and future *-pp, and deadjectival suffix *-may, as in Tamil ciṅ-mai ‘smallness’ from cil ‘small’ and Telugu pēr-mi ‘greatness’ from pēru ‘great’ (Zvelebil 1970: 178, Krishnamurti 2003: 200). If we set up the distinction between *C-VC and *C-C in Proto-Dravidian boundaries of roots and derivational suffixes, we might also be able to explain differential consonant assimilation. For example, Kurux and Malto oblique pronominal bases, first person singular eng- and second person singular ning-, can be explained as reflecting Proto-Dravidian dative, *en-k(k) and *nin-k(k),4 with place assimilation of *nk to *ṅk. In contrast, the above-mentioned Malto word kank ‘firewood’ (Krx. kaṅk ‘id.’) resists place assimilation and voicing even though it also results from medial vowel loss, and we can explain the difference by reconstructing PDr. *kaṇakk-, based on reflexes such as Tulu kaṇaku ‘firewood’ (p. 95 *kaṇVkkV, DEDR 1165).5

4.3. Loss of Liquids in LC Clusters

If, unlike Pfeiffer’s reconstruction, we posit heterorganic consonant clusters without an intervening vowel in the derivational morphology of Proto-Dravidian or of the earliest stage of Proto-Kurux-Malto, we might also be able to explain the sound change of liquid-stop (LC) clusters in Kurux and Malto. Loss of liquids in LC clusters is reported for other Dravidian

3. Krishnamurti (2003: 96): “All Dravidian languages carry evidence of alternation between heavy and light root syllables, when a ‘formative’ vowel follows as V₂, or when a monosyllabic root becomes disyllabic.” This alternation was originally pointed out in Krishnamurti (1961: 123) and is known as Krishnamurti’s Law.
4. *-kk or *-k depends on how we reconstruct the Kurux-Malto dative suffix (cf. Krishnamurti 2003: 232, 244). For (13)(15) odʔ- and (21) ēdʔ-, the standard Proto-Dravidian reconstruction of the transitive-causative suffix is *tt (Krishnamurti 2003: 280). Andronov (2003: 159) traces the g of eng- and ning- to the plural suffix *-k.
5. The difference in place assimilation might be due to difference between *n and *ṅ, which merged in Proto-Kurux-Malto.
languages such as Kannada and Koḍagu (Emeneau 1967: 386, §3.13, 14), and Kota and Toda (Subrahmanyam 1971: 12–15, 116–24). Kobayashi and Tirkey (2017: 62) discuss that in Proto-Dravidian sequences of a liquid (*l, *ḷ, or *r) and a stop, the liquid sometimes drops in Kurux and/or Malto reflexes, as in the following examples:


15. Krx. *odʔ- ‘to set fire, to kindle’, Mlt. *od- ‘to burn (as fuel)’ < *old- < Proto-Dravidian *ol-t- (DEDR 978, 1001, Pfeiffer 2018: 79: “probably a variant of Kuṛ. o[d]- ‘to set fire to, scorch’”). We posit a short root vowel *o based on Parji *olip- (olit-) ‘to char, scorch’


18. Krx. *nāx ‘four’ < *nāl-< PDr. *nāl-V-q ‘four’, Tamil nāl, nālku, etc. (DED 3655)


22. Mlt. *eju ‘bear’ < *elj- < PDr. *el-Vc-, Tamil eṇku, elu, Gadaba (Ollari) ilij, Gondi erj, etc. (DED 857)

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6. We should probably treat separately the loss of *r before a nasal as in Krx. ēr, ēnd, Southern Mlt. ēnd, Tamil irṇu, Toda e′d, etc. (DED 474); Krx. *mann ‘tree’, Mlt. *manu ‘id.’, Tamil maram, Toda me n, Telugu mṛjāṇa, Konda maran, etc. (DED 4711). In this context, *r might be lost between vowels, especially when the second vowel is *a. Cf. a similar intervocalic loss of *r in Toda (Zvelebil 1970: 146). Krx. *mandar ‘medicine’, Mlt. *mandru, Tamil marantu, etc. (DED 4719) is explained as a result of the metathesis of *r and *nt in PDr. *marunte- (Pfeiffer 2018: 279).

7. Since PDr. *nil-t- becomes Tamil and Malayalam niru ‘to set, place’ by Krishnamurti’s “apical obstruent formation” (*l + *l → *l), Krishnamurti 2003: 94), if *nil-t- > *nit- took place in Proto-Dravidian, it would become *iss- in Kurux. A possible example of the apical obstruent formation is Krx. *xos- (xot-), past stem *xott- ‘to chop, to cut by striking’, Mlt. *qōh-, past stem *qōt- ‘to cut down, to fell’. If this is connected with DEDR 2132, Tamil kol- ‘to kill’, Telugu kollu ‘id.’, etc., *qot-t- would have become *qot- already in Proto-Dravidian. PDr. *qot- and *qōt-t- would regularly become Krx. *xos- and *xott-, from which *xot- was backformed. Zvelebil (1970: 178) connects this word with Tamil koluttu ‘to peck’, Kannada kotta ‘to hoe, peck’, etc. (DEDR 2148), with the development *lt > *tt.

While Pfeiffer (2018: 382) considers *LC > C to be a divergent development, it is worth exploring if the liquid was lost by a once regular simplification of *LC clusters. In that case we also need to explain the difference between the many LC clusters present in Kurux and those that underwent simplification before Proto-Kurux-Malto. Firstly, we can exclude labial stops from the structural description of the rule, for liquids seem to be retained before Kurux p and b, e.g., kharpu ‘straps crossed over and worn round the ankle’, Tamil ceruppu ‘sandal’, Kannada kera, keravu, kerahu, kerpu ‘id.’, Parji cerup, cerpu ‘id.’, etc. (DEDR 1963); Krx. nalb- ‘to clean by rubbing’, Telugu nalapu ‘to crumple (flowers, etc.)’, Konda nalp- ‘to squeeze, crush’, etc. (DEDR 3611). Secondly, there is a group of verbs ending in a liquid and a palatal stop. Unlike (13) āj-, cognate forms of these verbs in other Dravidian languages do not have a palatal stop traceable back to Proto-Dravidian, and we can treat the final -c as an addition in Proto-Kurux-Malto, where LC simplification was no longer active. Even though we cannot identify the exact function of Proto-Kurux-Malto *-c, -c is analyzable as a suffix in the verb-noun pair bīlc- ‘to shine, to glitter’ and billī ‘light’. There are a few more verbs ending in a liquid and c: Krx. irc- ‘to scratch and turn over’, Mlt. irc- ‘to scratch the ground’ (DEDR 493); Krx. elc- ‘to fear’, elgt- ‘to frighten’, Mlt. elc- ‘to fear’, elkr- ‘to frighten’, Tamil elku ‘to fear’, Kannada elṭ ‘fear’ (DEDR 858); Krx. karc- ‘(of food) to be tough’, Tamil karatu ‘roughness’, Telugu karusu ‘rough’, etc. (DEDR 1265); Krx. xerc- ‘to rub well off’, Mlt. gerc- ‘to scrape’, qēr- ‘to shave’, Tamil cirai ‘to shave’, Naiki (Chanda) ker- ‘to shave’ (DEDR 1564); above-mentioned Krx. bīlc- ‘to shine, to glitter’, billī ‘light’, Mlt. bilpu ‘moon’, Tamil vel ‘white, pure, shining, bright’, Telugu velayu ‘to shine’, etc. (DEDR 5496); Krx. murec- ‘to twist and break’, Tamil muri ‘to break’, Telugu muriyu ‘to break off’ (DEDR 4975).

Explanation is not as easy for the remaining cases of retained LC clusters, but we might be able to explain Krx. oltā ‘hiding’ as an effect of the related word olā ‘resting place of a wild beast’. Krx. erx- ‘to have a motion’, Mlt. erc- ‘to go to stool’, Tamil eruku ‘to have loose motions’, Telugu erugu ‘to go to stool’, etc. (DEDR 813), Krx. bālkā ‘yellow, turmeric’, Mlt. bālko ‘yellow’, bālko ‘turmeric’ (DEDR 4102), and Krx. corg- ‘to move or crawl on the ground’, Mlt. corg- ‘to creep’ (DEDR 2854), might be due to avoidance of homophony with Krx. ēx- ‘to lose heat’, Mlt. ēc- ‘id.’, Krx. bāk- ‘to brew’, Mlt. bāk- ‘to take up’, and Krx. cōg- ‘to trot along with up and down jerks’ respectively.

4.4. Development of Proto-Dravidian *ẓ and *y

Also relevant in this context is the development of Proto-Dravidian *ẓ before consonants. After a short vowel Pfeiffer (2018: 376) posits two “regular” developments, *ẓ > PKM *ṛ > Kurux r as in nargā ‘bug’, and *ẓ > PKM *y > Kurux y as in kiyā ‘beneath’, and one “divergent” development, *ẓ > Proto-Kurux-Malto *0 > Kurux 0, e.g., massā ‘axe’. However, Pfei-
Pfeiffer gives more examples of *ẓ > 0 than the former two “regular” developments. As Burrow (1968: 67–68) considered *ẓ > 0 to be a regular development in Kurux and Malto, there might be room to pursue the possibility that *ẓ > 0 was in fact phonologically conditioned.

24. Krx. uss-, past stem of uy- ‘to plough’, ugtā ‘a plough’, Mlt. us-, past stem us(y)- ‘to turn up the soil’, Tamil ālu ‘to plough’, Parji ur- ‘to plough’, etc. (DEDR 688)


26. Krx. pīx- ‘to squeeze, press out’, Mlt. pīq- ‘to wring or squeeze out, to milk’, Tamil piḷ ‘to squeeze’

27. Krx. pūxʔ- ‘to boil’, Mlt. pūɢ- ‘id.’, Tamil puḷukku ‘to boil before husking’, Kannada purgu ‘to burn’ (DEDR 4315)


8. Krx. pā̃n-, pañj- ‘to ripen’ (see above)

The loss of PDr. *ẓ is quite similar to the loss of PDr. *y before consonants. Pfeiffer (2018: 379) gives sixteen cases of *y lost after a short vowel (compared to six cases of retention), such as Krx. nuñj- ‘to ache’ < PDr. *noy-nc-. In fact, PDr. *ẓ and *y trace the same course of development in the following pairs:


31. Krx. xañjʔ- ‘to bear fruit’ < *kāy-nc- or *kāy-nt- (DEDR 1459) vs. (8) pañj-, past stem of pāṅ- ‘to ripen’ < *paz-nc- or *paz-nt-.

Proto-Dravidian medial *ẓ and *y both undergo deletion before a consonant while they are reflected as *y before a vowel, at least in uy- and kiyyā ‘beneath’. We do not have a sufficient number of examples reflecting final *ẓ and *y, and Pfeiffer does not discuss the development of final consonants, but judging from (32), (33), and (34), it is possible that final *ẓ and *y were also lost in Kurux.

32. Krx. xāxā ‘crow’, Mlt. qāqe < *qāqqāy, Tamil kākkai, kākkāy ‘id.’ (DEDR 1425)

33. Krx. xekkhā ‘hand’, Mlt. qeqe (Droese 1884) < *qay, Tamil kai, Parji key, etc. (DEDR 2023)

34. Krx. tātxā ‘mango’, Mlt. tātge < *qāy (section 3.4)

PDr. *ẓ and *y might have undergone deletion independently. Since the reflexes of *ẓ and *y are usually the same, we might be able to dispense with the development *ẓ > 0 by positing a merger of PDr. *ẓ with *y before a consonant or pausa in Proto-Kurux-Malto. We

12. Subrahmanyam (1971: 204) and Krishnamurti (2003: 296) derive this verb from *nōy-nt-, with the Proto-Dravidian rule palatalizing *tt and *nt after *i/*y. Since Kurux also has palatal suffixes where there is no preceding *i/*y reconstructed, e.g., mañj- past stem of man- ‘to become’, I posit *-nc as the suffix here.

13. However, final *y appears to be preserved in the monosyllabic noun Krx. bāi ‘mouth’, Tamil vāy ‘id.’, etc. (DEDR 5352).
cannot decide whether *\(\ddot{z}\) and *\(y\) were deleted independently, or merged first before they were lost.

35. Merger of *\(\ddot{z}\) and *\(y\): *\(\ddot{z}\) > *\(y\) / {C, #} (Proto-Kurux-Malto)

36. Loss of *\(y\): *\(y\) > 0 / {C, #} (Proto-Kurux-Malto). Ordered after (35).

4.5. Development of Word-Final Consonants

In addition to etymology, understanding the development of Proto-Dravidian final consonants in Kurux and Malto also helps in reconstructing the agglutinative morphology of Dravidian. Especially, the development of sonorants, which occur in many functional morphemes and were not protected from sound change by the enunciative *\(u\) in many Dravidian languages, is crucially important for reconstructing the original person-number-gender agreement of Kurux and Malto verbs. The current agreement markers or pronominal suffixes are partly similar to personal pronouns, but they might not necessarily be markers inherited from Proto-Dravidian. Southern and Central dialects of Malto have long and short inflecting converbs, the latter of which show person-number-gender agreement different from the personal pronouns (Kobayashi 2012: 71). The Kumarbhag dialect of Southern Malto (Paderkola B, Pakur District) still has the full paradigm as in (37).

37. Long and short inflecting converbs of oy-, oc- ‘to take’ in Kumarbhag Malto:

<table>
<thead>
<tr>
<th></th>
<th>long verb</th>
<th></th>
<th>short verb</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>singular</td>
<td>plural</td>
<td>singular</td>
</tr>
<tr>
<td>oc-akan 1sg.</td>
<td>oc-akanm 1pl.excl.</td>
<td>oc-a(n) 1sg.</td>
<td>oc-a 1pl.excl.</td>
</tr>
<tr>
<td>oc-ake 2sg.m</td>
<td>oc-akay 1pl.incl.</td>
<td>oc-e 2sg.m</td>
<td>oc-a 1pl.incl.</td>
</tr>
<tr>
<td>oc-aki 2sg.nm</td>
<td>oc-aker 2pl.</td>
<td>oc-i 2sg.m</td>
<td>oc-e 2pl.</td>
</tr>
<tr>
<td>oc-akeh 3sg.m</td>
<td>oc-akar 3pl.</td>
<td>oc-ah 3sg.m</td>
<td>oc-a(r) 3pl.</td>
</tr>
<tr>
<td>oc-aki 3sg.nm</td>
<td>oc-aki 3sg.nlm</td>
<td>oc-i 3sg.nlm</td>
<td></td>
</tr>
</tbody>
</table>

Unlike the finite past paradigm, where the first- and second-person forms are doubly marked by the past-stem suffix and the past suffix, these short converbs have the same tripartite structure of the verb base, the past-stem suffix, and the agreement marker, found in most other Dravidian languages. If the vowel-final agreement markers originate from -VC# sequences with the loss of the final consonants, it is possible that they reflect the original agreement system of Proto-Kurux-Malto, while the current agreement markers were remade from the personal pronouns after the original markers became indistinct due to sound change. In previous discussions on the past forms of Kurux and Malto, the past suffix -k (-t in non-Northern Malto) attached after the past stem in the first and second persons has been focused on as deviation from the original Dravidian past formation with the suffixes *-t, *-tt, *-nt, and *-in. But if the past forms of Kurux and Northern Malto in -k were originally inflecting long converbs, which are in fact past participles with the adjective suffix -k and agreement markers, we lose one of the arguments for grouping Kurux, Malto, and Brahui as North Dravidian.15

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14. In Southern and Western Malto the past suffix in the first and second persons is -t, which is explained from PDr. *-tt.
15. Kurux and Malto actually have verbal adjectives in -k: Krx. -kā as in xaykā ‘dried’ and Mlt. -ke as in pañjeke ‘ripe’.
4.6. Reconstructing the Proto-Kurux-Malto Infinitive Suffix

By understanding the development of final sonorants, we are in a better position to tackle some difficult problems in Kurux-Malto morphology. Krishnamurti (2003: 342–46) reconstructed the Proto-Dravidian infinitive suffix *-an based on Old Telugu -an, etc., and considered the Kurux infinitive suffix -ā to be its reflex. While Kurux -ā is used as a complement of modal verbs and is functionally similar to Old Telugu -an, its Malto cognate -e is a verbal noun suffix and we are not sure what the function of their ancestral form in Proto-Kurux-Malto was. In fact, if final *l was lost in Proto-Kurux-Malto as in (29) Krx. mūkā ‘knee’ < PDr. *-kāl ‘leg’, it could also come from *-al as in the Old Kannada verbal noun (Caldwell 1956: 543), or from *-ay as in Sangam Tamil deverbative noun in -ai (Rajam 1994: 695) if final *y was lost in Kurux as in (32) (33), and (34) above.

This case of the Proto-Kurux-Malto infinitive might not simply be a matter of sound correspondence but have implications for the verb system. While Kurux has a single past participle suffix -kā, Malto has two functionally corresponding suffixes, -ke ‘having Xed’, a long converb suffix that shows concord, and -ko ‘when one Xed’, which forms a non-concord adverbial converb; for the Kurux verbal noun suffix -pā as in xañjpā ‘fruit’ from xañjʔ- ‘to bear fruit’, Malto has -pe ‘Xed’, a productive verbal adjective suffix with passive or perfective meaning, and the gerundive suffix -po ‘to be Xed’. Since the Malto verbal noun suffix -e and the infinitive suffix -oti, which has a short allomorph -o, similarly correspond to the single Kurux infinitive suffix -ā in function, we suspect that Malto had a two-way system of suffixes contrasting in vocalism, and the verbal noun in -e and the infinitive in -oti are a part of that system. We are tempted to posit the contrast of *e and *o for Proto-Kurux-Malto, but if we explain Kurux -ā and Malto -e from Proto-Dravidian *-a(n), *-al, or *-ay, we face the problem of where the -o of the Malto infinitive came from. The infinitive in -o might be cognate with the -u infinitive in Parji (Burrow and Bhattacharya 1953: 61), if Parji final u corresponds to Kurux-Malto final o. However, Malto and Kurux have agentive participles in -u (Mahapatra 1979: 179, Kobayashi 2012: 51, Kobayashi and Tirkey 2017: 164), and it is difficult to explain how *-u would split into two different morphemes. Another possible origin is the Kurux imperfect participle in -ō (Kobayashi and Tirkey 2017: 161).17 It is homophonous with the Kurux future third-person singular non-masculine ending -ō, to which the subjunctive suffix -o corresponds in Malto (Droeze 1884: 58, Kobayashi 2012: 69). Parji also uses the third-person singular neuter form as a verbal noun (Burrow and Bhattacharya 1953: 61), and a similar extension might have happened in Proto-Kurux-Malto. To sum up, Proto-Kurux-Malto had suffixes *-a, which might be traced back to the Proto-Dravidian infinitive suffix *-an, etc., and *-o, which had future or subjunctive meaning and might be traced back to Proto-Dravidian future suffix *-um. The former became Malto -e and Kurux -ā, and the latter Malto -oti and Kurux -ō. As mentioned above, better understanding of the development of Proto-Dravidian final sounds would help us judge about the connection of Proto-Dravidian *-an and Kurux -ā on the one hand, and of Proto-Dravidian *-um and Kurux -ō on the other.

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16. -oti is probably analyzable into -o and -ti, for there are verbs such as bed- ‘to want’ that take only the infinitive in -o, and -o serves as the base of the present negative inflection. -ti is an optional instrumental suffix (Kobayashi 2012: 24, 61).

17. Final vowel length is not contrastive in Kurux or Malto, and traditionally Kurux final vowels are written long and Malto final vowels short.
5. CONCLUSION

In this review article, we discussed the possibility to give exact conditions on the sound changes Pfeiffer presented as alternative, following the Neogrammarian principle of the exceptionlessness of sound changes. In the work reviewed Pfeiffer presents all data available, and even though his analysis may sometimes be too inclusive and his argument difficult to trace due to the lack of cross-reference, he presents his explanations and reconstructions in a conscientious and falsifiable manner.

On the basis of Pfeiffer’s work, we can develop the study of Dravidian historical linguistics in two ways. One is the better understanding of the final sounds of Proto-Dravidian in Kurux and Malto. By studying what changes occurred in the final syllables, we can reconstruct Proto-Kurux-Malto morphology and understand morphological changes better.

The other is identifying the innovations that Kurux-Malto shares with other subgroups. Since Grierson (1906: 284), a long-standing issue has been to which subgroup of Dravidian Kurux and Malto are closest. Kurux-Malto does not appear to share much of the reconstructed Proto-Dravidian morphology. In inherited Dravidian words Kurux-Malto typically share only the root part, as in Krx. pard- ‘to grow’, Mlt. padr- ‘id.’ (with metathesis), of which only *par- occurs in cognate forms such as Tamil paru ‘to become large’, Tulu pariya ‘plenty’, etc. (DEDR 3972). In verb morphology the intransitive suffix *-r is productive in Kurux-Malto (Emeneau 1975: 2–3), but the contrast of intransitive-transitive suffix pairs *t-*t and *p-*pp is apparently not shared. In derivational morphology too, there are very few shared suffixes, such as b of xalb ‘thief’, which seems to correspond to -avu in Tamil kalavu ‘theft’, etc., -v in Tamil kalvav ‘thief’, etc. (DEDR 1372). Of the scanty traces of shared morphology, shared innovation is even scantier. Kobayashi (2012) argued that Kurux-Malto past stems reflect the suffixes *-t, *-c, *-cc, *-i, and base-final reduplication, but they are mostly retentions, which do not contribute to subgrouping.

At first sight Kurux-Malto appears to share more features with South-Central Dravidian than with other subgroups. For example, it appears to share the past stem in *-c and *-cc with South-Central Dravidian, as in Pengo and Kuvi mac- past stem of man- ‘to be’ (DEDR 4778; <*tti according to Krishnamurti 2003: 164–65); the past stem in *-i(n) with South and South-Central Dravidian; masculine and non-masculine gender dichotomy in the singular with South-Central and Central Dravidian; and the word *pun- ‘new’ with *n with South-Central and Central Dravidian (Krishnamurti 2003: 392). On the other hand, curious coincidences are found between Kurux-Malto and Parji of Central Dravidian, such as the past stem in zero, and the past stem in *-nt/*-nc, which is also found in South Dravidian (Caldwell 1956: 496f.). There are features Kurux-Malto shares with other languages, e.g., the adjective or genitive suffix *-ta shared by Brahui; and the geminating past stem shared by South Dravidian. At present, our data fall short of deciding which group is closest to Kurux-Malto. Historical phonology is the most promising field where we can expect to find innovations contributing to a more precise subgrouping of Kurux-Malto, and we are now in a better position thanks to Pfeiffer’s work. 18

18. Even though we could not discuss it in this article, there are many other sound changes with unclear conditions, such as lowering of high vowels, as in Krx. on-, Mlt. ön- for PDr. *un- (DEDR 600); Krx. xosgā ‘thigh’, Mlt. qosae ‘id.’ for PDr. *qū-, Telugu kurava, etc. (DEDR 1840); Krx. embā, Mlt. emb for PDr. *in-p-, Tamil inpam ‘delight’, etc. (DEDR 530); and Krx. pellō ‘young woman’, Mlt. pel ‘id.’, Tamil pillai ‘child’, Telugu pilla, etc. (DEDR 4198).
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