A Vowel-Lowering Rule in Kui-Kuvi
Author(s): Bh. Krishnamurti

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via http://linguistics.berkeley.edu/bls/.

The Annual Proceedings of the Berkeley Linguistics Society is published online via eLanguage, the Linguistic Society of America's digital publishing platform.
A VOWEL-LOWERING RULE IN KUI-KUVI*
Bh.Krishnamurti
Osmania University, Hyderabad, India

§1.1. The South-Central (SC) branch of the Dravidian (Dr.) family consists of seven languages whose genetic subgrouping can be represented by the following tree diagram:

Each of these languages has essentially a five vowel system /i e a o u/ with contrastive length /ɪ ə ɐ ɔ ʊ/. A comparative study of the vocabulary of Kui and Kuvi shows that, at some point in the history of the pre-Kui-Kuvi stage, long mid vowels /ə ʊ/ merged with long low vowel /ɔ/, i.e.

Rule C. \{ɛ, ɔ\} \= ɐʩ(C) ... (Pre-Kui-Kuvi)

This is called Rule C, since it operates only on the output of two older rules, viz. the Vowel Contraction Rule (Rule A) and the Apical Displacement Rule (Rule B)

Rule A. (C₁) [e, o]C₂-a- \= (C₁)[ɛ, ɔ]-
(C₁) = Any permissible PDr consonant in word-initial position: /p t c k m n ŋ w/; for PSCDr. we can set up /p b t d c j k g m n w/ as (C₁).
(C₂) = Any glide or glide-like continuant derived from PDr. *γ, *w, *k [-γ-].

Rule B. (C₁) [e, o]C₂-a- \= (C₁)C₂[ɛ, ɔ]- (PSCDr.)
(C₁) = same as above; C₂ = as apical non-nasal consonant derived from PDr. *t [-r], *l, *r, *t̪, *l̪, *z.

Rules A and B seem to share certain common features, viz. (a) the shape of the root as (C)VC; (b) the presence of a low vowel /a/ as the nucleus of the formative suffix; (c) contraction of root and formative vowels into a long vowel with the quality of the root vowel. However, the phonological processes yielding long vowels in the two rules are quite different and their relative chronology is also different. Rule A involves contraction of two syllabics across a weakly articulated glide into a long vowel, i.e. V₁C-a > V₁. Rule B is an idiosyncratic development characterizing only the SCDr. sub-group. Whatever the underlying phonological process, the resultant sequences of this rule have either an apical as initial consonant if the underlying root begins with a vowel, or have an apical as C₁ in C₁C₂ if the underlying root begins with a consonant.

Rule A is found to operate at all stages and in all branches of Dravidian at different points of time, whereas Rule B is specifically a Proto-SCDr. rule (for details, see Krishnamurti 1978:18-19).

§1.2. The following 18 cases drawn from [DED(S)] show the operation of Rule C in Kui fully and in Kuvi partially.  

(1) PSCDr. *ker-a-, *ger-a/* kər-, *grə- 'to scoop up'. Kui grəpa (grə-t-): Konda ker (ker-t-) 'take handfuls collect into a heap and pick up': Kui grəpa(grə-t-), Kuvi grec-(grə-t-) Pe. grə, Manda grepa, (BRR) grə- (§ 290).

(2) PDr. *el-a-, PSCDr. *el-a/* lə- 'young, tender'. Kui lāvenju 'grown-up boy, young man', ləa 'grown-up girl'; Kuvi ra'a, lə'a, ra'a 'young woman, virgin': Te. ela, lə adj. 'tender, young'; Go. raiyōl 'adult boy', raiyə 'adult girl', layor, leyor 'young male', leyə 'young female'; Kui let 'soft'; Konda ləŋa 'calf', ləta 'tender'; cf. Ta. Ma. ila, Kô: el, To. el, Ka. ela, Tu. ele, 'young, tender'; Pa. iled 'young man', ile 'young woman'; Gad. ilənd 'bridegroom', iled 'bride' (436).

(3) PDr. *il-a/* el-a, PSCDr. *el-a/* lə- 'silk cotton tree'. Kuvi dəkən̥gi: Go. leke, Konda lēka maran, Kuvi lēko; cf. Ta. ela, ilavam, iləv, Ma. ilavam, ilavu, Ka. elavu (421).

(4) PDr. *cup, PSCDr. *cup:* cow-ar, PSCDr. *sowar/*sör 'salt'. Kui sāru, Kuvi hāru, Manda jər, Indi jər: Go. sovar, hovar (savor, havor by vocalic
(5) PDr. et-ə-, *et-ank, PSCDr. *er-a-/ *re-, 'to descend'. Kuî jāpa (jā-t-), v.int./n., jāppa (jāp-t-) caus.: Go. rey, ray, Konda re- v.int., rep-caus.; Kuvi rek- re- v.int., repḥ-caus., Manda, Indi jē, jēp (439).

(6) PDr. *kil-a, PSDr. *kel-a-, PSCDr. *kel-a-/ *kēl- 'to crow, lament'. Kuî klāp (klā-t-), 'to crow, coo, lament'. OTe. celāgù 'to sound, cry loudly'; Go. kilft- 'weep loudly'; Kuî klirī inba 'to shriek' Kuvi kilerī kf 'to shout', klirī in 'to yell'; cf. Ta. cilai 'to roar, sound', cil 'sound'; Ma. cilekka 'to chatter, chirp', Ko. kilc 'to utter shrill cry'; To. kis 'to crow'; Ka. kele 'to cry', Tu. kulepîn 'to crow' (1311).

(7) PDr. *kuz-a, PSDr. *kız-a, PSCDr. *kız-a/ *küz- 'pit, hollow'. Kuî krāu (pl. krānga), n. 'pit, hole, cave'; Kuvi graiyū, grayū, gladū, Manda kray, (BRR) krāy: OTe. krēlu, krēvi 'tube', grocu 'to dig', groyyī 'pit'; Go. kori 'ditch, hole'; Konda kurī 'to be hollowed out', kurk 'to make pits'; Kuî krōdu (pl. krō outbound 'tube, quiver'; Pe. kroy 'pit'; cf. Ta. kuzał 'pipe', kuzi, kužumpu 'pit', Ma. kuži 'hollow', etc. (1511).

(8) PDr. *kut-a, PSDr. kot-a [kor-a]; PSCDr. *kor-a/*kū- 'to cut'. Kuî krāp (krā-t-) 'to cut, saw', n. 'act of cutting': cf. Ta. kuraî 'to cut, reap'; kura 'a piece'; Ma. kurekka, Ko. korv-, To. kwarf v., Ka. korē 'cut wood with a saw', Tu. kudupunī 'to cut, reap'; Pa kud/kuq (kutt-/kutt-) 'to cut' (1544).

(9) PDr. *kel-a, PSDr. *kel-a-, PSCDr. *kel-a/ klē- 'family'. 'family, kindred'. Kuî klēmbu (pl. klēmbka) 'family, lineage, kin, tribe': cf. Ta. kel 'kindred, friend'; kilai 'to ramify, to multiply', n. 'kindred, relations', flock, herd, family'; Ko. kel, To. Ḳa, Ka. kele, gele, gene 'friendship'; Tu. gene 'coupling' (1678).

(10) PDr. *tet-a, PSDr. *tet-a [ter-a], PSCDr. *tera/*tre- 'to open'; Pre-Kuî...Manda *re- by loss of t- (see below). Kuî dāp (dā-t-) (≠ jē- 'to open a door, clear a passage'; n. 'act of opening'; OTe. teracu, MTe. teruc- 'to open'; Go. tarīt-, ter, tēr-, reh-, Konda re-, tere-, Kuvi de- (de-t-), Pe. je (-t-); Manda jē (-t-), (BRR) jēp ā 'to be opened'; Indi jē; cf. Ta. tira, Matırakka, Ko. terv, To. ter, v.; Ka. tere v., tere n.; Kod. tora, Tu. terapu n. (2667).

(11) PDr. *nil-a/*nel-a, PSDr. *nel-a-; PSCDr. *nel-anj-/*nλenj- 'moon'. (*nl- > 1 in all SCDr.
languages except Te. in which nl- never occurred.)
Kui dānju (pl. dāska) 'moon, month, season' (In
Winfield Kui l/ḍ vary dialectally; here, ḍ < l):
Te. nela, Go. nāleγ, nelenj, lēnj, Konda nela (pl.
nelen), lēnju, Kuvi lēnju (pl. lēska), 'Pe.-Manda-
Indi lēnj; cf. Ta. nilavu, nilā, Ma. n(i)lāvū
'moon'; To. nē∂ of 'moonlight'; Kod nela 'moon,
moonlight' (SDR. has lost the meaning of 'month';
cf. 'tinkal 'moon, month', DED 2626); Kol. Nk.
nela 'moon'; Pa. nelīγ (pl. nelīnil) 'moon, month';
Oll. nelīγ, Gad. nelling 'moon', nela 'month'
(3113).

(12) PSCDr. *por-α/prā 'to sell'. (words meaning
'to sell' which occur only in SCDr. are mixed up
with 'spread' words in this group, because of the
'a' vowel in Kui. It appears reasonable to
separate the two groups in this entry). Kui prāpa
(prā-t) 'to sell', n. selling; Kuvi prah-, pra'
(pra-t-); Konda por (por-t-), Pe. pro- (pro-t-),
Manda (BB) pre-, (BRR) prē 'to sell' (3255).

(13) PDr. *pet-α, PSCDr. per-ukk-, PSCDr. per-akk,
per-ukk- 'rice'. Kui prāγu 'rice, husked paddy';
prāma 'a grain of boiled rice'; Te. prālu 'rice':
Go. parāγ, perek 'husked paddy', Konda perkā,
Pe. prēγi, Manda preyi 'rice'; cf. Ta. perukkal
rice; Nk. (Ch.) perku id. (3286).

(14) PDr. *pic-ar, PSCDr. *pec-ar/ *pey-ar/ *pər-,
PSCDr. *pər 'name'. Kui (K) pəru 'name': Te. pəru,

(15) PSCDr. *moz-αl/ 'məzol 'hare'. Kui məzəγu,
Kuvi məzəlu, məzəl 'Indi məzol: Pe. məzəl, Indi məzəl;
cf. Go. malə; Konda moroc (4071).

(16) PDr. *mut-α/-mot-α, PSCDr. *mot-α - [mor-α-],
PSCDr. *mor-α/ *mər- 'rope'. Kui mərəγu 'rope made
of hide', Kuvi marca 'rope attaching bullock to
plough': Go. marəŋ, maronj 'bark'; moros, məros,
'rope made of fibre of paur tree'; cf. Ta.
murarc 'a cord'; Ta. muraje 'rope made of straw'
(4079).

(17) PDr. *mez-α, PSCDr. *mez-α, PSCDr. *meza/-
*məz- 'to plaster', Kui mənəda 'to plaster, smear'
n. 'plastering': Te. mənəγu 'to plaster'; Go.
mərhuṭṭ-; cf. Ta. mezuγu v./n. (4169).

(18) PDr. *nit-yəŋt, PSCDr. niz-ənd/niz-ənd
'last (completed) year'. Kui. rəndu 'last year';
Kui. rəndu 'last year': Go. yənd, hənd 'year
before last', Konda nfruŋd 'last year', Kui
rəndu 'in a previous year, year before last',
cf. əndu 'a year'; vərəndi 'next year'; Pe.
iyondiŋ 'this year' (4230, 8567).
§1.3. Of the above 18 items the operation of Rule C is found in the following language(s):
Kui only 1, 6, 8, 9, 10, 11, 13, 14, 17;
Kuvi only 3 (no cognate in Kui);
Kui and Kuvi 5, 7, 12, 15, 16, 18;
Kui, Kuvi and Manda 2, 4.
Kui shows the operation of Rule C in all the 18 cases (100%); Kui alone shows the change in as many as 10 out of the 18 items (56%); Kui–Kuvi share the change in eight items (45%); Manda shares the change with Kui–Kuvi in two cases (11%). It is clear that the sound change is commonly initiated at the Proto-Kui–Kuvi stage (in view of 8 shared items) and has spread more widely in Kui than in Kuvi through lexical diffusion. There is one exclusive case where Kuvi shows the change, but Kui has no known cognate. It is not clear if the Manda change is sporadic or if it carries a trace of the innovation shared presumably at the proto-
Kui–Manda stage. The difficulty in holding this assumption is that Pengo, the nearest sister of Manda, has not a single case attesting the vowel-
lowering rule.

The following analysis shows the sources of the mid vowel /ə/ by the application of Rules A and B which constitute the input to Rule C.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule A</td>
<td>14</td>
</tr>
<tr>
<td>Rule B</td>
<td>1, 2, 3, 5, 6</td>
</tr>
<tr>
<td></td>
<td>9, 10, 11, 13</td>
</tr>
<tr>
<td></td>
<td>17, 18</td>
</tr>
</tbody>
</table>

From the above distribution, there can be little doubt regarding the application of Rule C on the output of Rule B since there are 16 etymologies testifying to apical displacement resulting in long mid vowels. It is also clear that Rule B had operated in the entire subgroup, though less widely in Gondi and Konda than in the other languages. The word-initial consonant clusters formed by Rule B were subsequently simplified by the following rule, which I call Rule B':

\[ \text{Rule B'}: C_1 C_2 V > C_1 \emptyset V/\# \text{ (Telugu)} \]
\[ > \emptyset C_2 V/\# \text{ (Gondi–Konda–Kui–Kuvi–Pengo–Manda)} \]

Out of the above cited 18 cases, there are at least two which attest the operation of B' in SCDr.:


B’ is also an oâder Rule which predates Rule C since it involves many more languages than does Rule C.

In our data, there are only two examples for Rule A which constitute input to Rule C. Item 4 is the clearest case showing vowel contraction: *sowar > sœr as a shared innovation of Konda-Kui-Kuvi-Pengo-Manda. This is attributable to a common stage of these five languages rather than to PSCDr. since Gondi dialects preserve the uncontracted form *sowar (with metathesis of vowels *swor in some dialects). The Proto-Dravidian form is *cuwar (< *cup + ar) which becomes *cowar in PDr. by the regular sound change *u>*o before Ca in the next syllable. This change is shared by both SDr. and SCDr. The descendants of PSCDr. (except Telugu) have lost the derivatives of the root *cup ‘salt’. Item 14 is not a clinching case since only Kui (K) has pœru, while Konda has pœru. The rest of the languages have no cognates. There is another case where one would expect the vowel-lowering rule to operate in Kui-Kuvi but it does not, viz.

(19) PSDr. *tokal/*tōl, PSCDr. *tōl, PCDr. *tōl. Ta. Ma. Ko. Ka. Te. tōl(u) ‘skin, hide’; also Ma. tukal, Ka. togal, toval, Tu. tugali, Te. togalu id.; Go.-Konda-Kuvi tōl(u); Kol. Nk. Pa. tōl. Here the contraction is found in all but the North-Dravidian group which has no clear cognates. From the above evidence, it appears that the output of Rule A is not subjected to vowel-lowering as widely as the output of Rule B. Secondly the vowel contraction rule goes back to the PDr. stage in 19 whereas in 4, Rule B belongs to SCDr (Pre-Konda...Manda stage).

§1.4. Contrasting with the above developments is the absence of vowel-lowering in cases where PSCDr. œ œ are traceable to PDr. œ œ or to contractions resulting from [e, o] C-Vœ- where Vœ is a high vowel /i u/ and not a low vowel /a/ as in Rules A and B. Examine the following examples:

(21) PDr. *yast 'river, water', PSCDr. *ər: Go. ər, Konda. ēru, Kui ēju, Kuvi ēyu, Pe. əzųŋ, Manda ey (4233).§

(22) PDr. *ər/*ər-v-, PSCDr. *ər/*ər-v- v. int. 'to burn, blaze': OTe. eriyu: v. int. 'to burn', ērcu v.t., ēru n. 'ache'; Go. ərōt- 'to hurt'; Konda er- 'to kindle fire'; Kui ērpa (ə-ə-) 'to light, ignite', n. 'lighting'; Kuvi er- v. (694).

(23) PDr. *kōl; PSCDr. *kōl 'stick' Go. əl, Konda kōl, Kui kō (pl. kōkā), Kuvi kōla (pl. kōkā), Pe. kōl, Manda kūl' (1852).

There are many more cases of the type where PSCDr. *ə *ə (< PDr. *ə *ə) do not merge with PSCDr. *ə (< PDr. *ə) in pre-Kui-Kuvi.

§1.5. The question is how does one explain the different treatment given to ə ə derived from Rules A B from that given to continuing ə ə from the PDr. stage. When PSCDr. /ə ə/ derived from Rules A B had merged with /ə ə/ (< PDr. *ə *ə), how was it possible that the former set underwent vowel-lowering and not the latter set? A solution to this should lie in one of the following assumptions: (a) The derived pair of long vowels from Rules A and B was not really /ə ə/ in quality, and therefore, there was no real merger of this pair with /ə ə/ (< PDr. *ə *ə) in SCDr.

Then, the derived set was phonetically mid way between the mid vowels and the low vowel leading to a subsequent merger with one /ə ə/ or the other /ə/. In other words, the derived vowels failed to produce new height contrasts in view of the small number of instances involved; subsequent changes were governed by the typological pressure exerted by the five vowel system. (b) A rule can 'look back' at the derivational history of the forms to which it applies. Here Rule C could apply only to derived long mid vowels but not to underlying long mid vowels. This kind of rule, then, would be similar to what generative phonologists call 'a global rule' in synchronic phonology, which introduces derivational constraints on the application of certain rules (Kenstowicz and Kisseberth 1977: 197–229, Kiparsky 1973).

I would rule out the second alternative because it does not make sense in historical linguistics. How would the speakers of SCDr., at whatever stage, be endowed with the historical knowledge of the sources of the two sets of *ə and ə so that they would give one type of treatment to one set (*ə *ə > ə) as opposed to the other (*ə *ə > ə ə).
Secondly notice that Kui and Kuvi retain the qualities of *ə *ʊ even if they are derived from contraction rules (modified Rules A and B), provided that in the underlying environment there is no low vowel in the second syllable, i.e.

Rule A'. (C) [e, o] C-/> (C) [ə, ʊ] -
Rule B'. (C) [e, o] C-/> (C) C-/>[ə, ʊ] -
There are several examples for Rule B' (see Item 20 above), e.g.
(24) PDr. *kəz-uw, PSCDr. *kəzuw/*kəzəw 'fat'.
Go. kərvinj, Konda kərvu, Kui krəga, Küvi kərva,
kəwə; Pe. krə 'to be fat', kərva 'fat'; Mandə (?)
kəu (1784).
The underlying environments of A and A' are complementary and they can be collapsed into a single rule; so can be B and B'. It is only /ə ʊ/ derived from Rules A, B that have undergone lowering and not those derived from Rules A/B'. Vowel-lowering in Kui-Kuvi etc. should then be related in some way to the lowering influence exerted by /a/ in Rules A and B.

§1.6. Krishnamurti (1958) has explained how PDr. *i, *u merged with *e, *o before C-a in PSCDr. This is a clear case of vowel harmony or 'umlaut' which is one of the most widely discussed and recognized sound changes in Dravidian. It is now clear that the SCDr. group also shows the sound change (high-vowel-lowering). Therefore, both SDr. and SCDr. must have inherited this sound change from a common ancestor. All South Dravidian languages retain PSCDr. *e *o before C-a whereas Tamil and Malayalam shifted these to i u at an older stage, and again changed them later to e o. These developments, therefore, show neutralization of PDr. vowels *i *e on the one hand, and *u *o on the other, in two of the major branches, SDr. and SCDr.

Bright (1966) has extensively examined the spread of the high-vowel-lowering phenomenon even outside the Dravidian linguistic area. Apart from a possible areal drift, we are dealing here with specific cases where the qualities attested by the SCDr. languages represent the merger stage, i.e. *e *o before C-a even where PDr. has clearly *i *u (see particularly Items 4, 6, 7, 14, and 18 above).

In most of the Southern languages that have retained PSCDr. *eC-a and *oC-a, the mid vowels are pronounced opener in the environment C-a, than when they are followed by a closed vowel (Bright 1966; 316-19). The forms which constituted the input to Rules A B could therefore be expected to have had
low mid vowels allophonically before contraction took place, somewhat as follows:

(C)[e, o]C-a > (C)[e, o]C-a-

The resultant long vowels after contraction would be [ə] and [ɔ] or lowered /ʊ ʊ/, which would normally have become contrastive with /ʊ ʊ ʊ/, since the conditioning environment -a was obscured in the process of contraction. The process is similar to what has happened in standard modern Telugu (Kelley 1963), e.g. ɡoːru+лу [goːru+lu] /gollu/ 'nails', ɡoːda+lu [goːdala+lu] /gollu/ 'walls'.

Telugu speakers do not cognitively perceive two phonemes /ʊ ʊ/ here; both are treated as variants of /ʊ/ with different phonetic realizations in different underlying phonetic environments. In coastal dialects the openness of the vowel in the environment C-a is much more than it is in Telangana and Rayalasima dialects.

It appears that the resulting lowered vowels [ə ɔ] of PSCDr. had merged in most of the descendant languages with ʊ ʊ. In Kui-Kuvi they were further lowered to merge with ʊ dialectally. The contraction cases are naturally too few to destabilize the five-vowel system. It appears that, when allophones become 'phonemic' through secondary split, the number of cases involved in such a split would be a potential factor in determining whether the resultant 'transient phonemes will enlarge the phonemic system or will conform to the existing system by merging with the established phonemes. For instance, Emeneau (1970: 146) shows how PSCDr. root vowel *e merges with /a/ when followed by a retroflex consonant + a (derivative vowel) in Kodagu.

The fact that this change is found in Kui-Kuvi and Manda (also Indi), it is reasonable to assume that the underlying long vowels had lowered articulations in the entire subgroup that inherited the contracted forms. For instance, all languages (except Te. and Go.) viz. Konda-Kui-Kuvi-Pengo-Manda might have inherited *[ɔːru] (*[ɔːwar]) 'salt' in which the [ɔː] vowel merged with ʊ in Konda, but remained as *[ɔː] at a common stage of Kui-Kuvi-Pengo-Manda. Then *[ɔː] > /ʊ/ in Pre-Kui-Kuvi, but proceeded as [ɔː] to the common stage of Pengo-Manda. In Pengo [ɔː] > ʊ, but in Manda [ɔː] > ʊ.

Notice that there are doublets in a few cases dialectally even in Kui and the other languages of the subgroup: Kui ɡr̥̂pa/ɡr̥̂pa 'to scoop up' (§ 290), Kuvi d̥̂kəŋgi/lḁko 'silk cotton tree' (421), Kui kr̥̂u 'pit', kr̥̂du 'tube' (1511), Indi m̥̂nu/m̥̂nolu 'hare' (4071).
In (1511) the two Kui lexical items have developed different meanings. This state of affairs suggests that the change is relatively recent and is an ongoing one.

§1.7. There are a few counter examples to Rule C, i.e. items which fulfill the structural conditions of Rule C for vowel-lowering still have not undergone it in any of the SCDr. languages.

(24) PCDr. *cir-a, PSCDr. *ser-a/*sr- 'Chironji tree, Buchanania latifolia': Go. sarēka, rēka, Kui srēko, Kuvi rēko, Pe. rēka maran, Ma. rēko (2160).

(25) PSCDr. *pezan/*pzan 'bone': Go. perka, perēka, pen?ka, pēreka, pareka, Konda perēn, prēnu (pl. perek, prēku), Kui prēnu (pl. prēka); Kuvi prēnu, plēnu, Pe. prēnu, Pe. prēn (prēku), Ma. prēn (pl. prēke) (3619).

Such apparent exceptions can be explained in one of the following ways: (a) All SCDr. languages merged the underlying *e *ə in these with ə ə; (b) The environments in the non-contracted forms had a high vowel and not a low vowel; (c) Since vowel-lowering in Kui-Kuvi is still an ongoing change, there still are residual forms which may undergo the change in the future. It would be interesting to see if any of such residual forms have lower mid-vowels phonetically. The fact that a few exceptions exist will not disprove Rule C as formulated here.

§1.8. Conclusion: The vowel-lowering rule which merged PDr. *i *u with *e *o in PSDr. included not only the Southern group (Ta. Ma. To. Ko. Ka. Kod.) but also the South-Central group (Te...Manda). By this observation, we can say that the two branches, SDr. and SCDr., had a common stage of development which can still be called Proto-South-Dravidian. There are other types of evidence that would support the realignment of SCDr. as a branch of PSDr. (Krishnamurti 1976,§1.7). The mid vowels e, o preceding C-a in almost all the languages had opener allophones, somewhat like e and o. Consequently, the vowels resulting from Rules A, B could be [ə] and [ɛ̃]. These subsequently merged with /ə/ mostly in Kui and in quite a few cases in Kuvi, but to a much less extent in Manda (and Indi). This change is based on the following postulate: Surface phonetic contrasts which develop through merger or loss of conditioning factors (i.e. secondary split) will develop into new phonemes, if a sufficiently large number of lexical items are affected by the sound change; otherwise, they will merge with the phonemes already established in the system. Toda and Koḍagū have developed new
vowel phonemes through such secondary splits because a large number of morphemes are affected by such splits.

**NOTES**

*Professor Emeneau's publications have significantly contributed to comparative Dravidian phonology in addition to other areas, during the past three decades. If this short paper which is based on the data provided by the Dravidian etymological dictionary (DED) (1961) and its supplement (DEDS) (1968) can advance our knowledge of this area by another inch or so, I am sure my Guru will be happy to look at it as a small flower tucked in the bouquet of papers being presented to him by the BLS. I am grateful to the BLS for inviting me to join in their tribute to this great scholar and teacher.*

The theme of this paper was conceived during my Fellowship year (1975-76) at the Center for Advanced Study in the Behavioral Sciences, Stanford, and a short mention of the underlying idea occurs in my review of Zvelebil's Comparative Dravidian Phonology (Krishnamurti 1976: 144-5). However, this is a more detailed treatment of the problem with fuller data and a discussion of all the theoretical implications. Professor Emeneau himself had encouraged me in 1976 to write it up into a full paper.

1. Modern Telugu has developed /ɔː/ as a phoneme which arose from morphophonemic iə. [ɔː] can still be treated as a phonetic realization of underlying /iə/ in most of the native words.

2. The abbreviations used in the following etymological groups are taken from DED(S) (See References). My colleague at Osmania, B.Ramakrishna Reddy, recently did field work on Manda and also reported about another related dialect/language (?) called 'Indi'. I am grateful to him for supplying me with cognates from his unpublished field data. Lexical items preceded by (BRR) are furnished by him.

3. Burrow and Emeneau derive the Kui-Kuvi words with ə from PDdr. *a₁-a 'strength' in 248, but, in the light of the sound change discussed in this paper, Kui-Kuvi forms clearly go with 436.

4. This rule provides a shared innovation in Gondi... Manda as against Telugu. The full form of the rule is not stated here, for instance, Modern Telugu loses C₁ if it is /w/ and the following vowel is [+low], e.g. OTt. *wᵽɾy.u > MTe. ṩᵽy.u 'to write'.

5. The cluster formation rule (Rule B) has died out in Gondi but it should have operated in Pre-Gondi; otherwise, there is no way to explain forms resulting
from the operation of Rule B in Gondi. Note that Rule B simplifies the consonant clusters created by Rule B.

6. PDr. *yə% develops to PSCDr. *ə% and is treated like PDr. *ə% (PSCDr. *ə%).

BIBLIOGRAPHY

Bright, William. 1966. Dravidian metaphor. Lg. 42. 311-22.
Kelley, Gerald B. 1963. Vowel phonemes and external vocalic sandhi in Telugu. JAOS 83. 67-73.
Krishnamurti, Bh. 1958. Alternations i/e and u/o in South-Dravidian. Lg. 34. 458-68.