Appendix A: *Bujikeda* ‘Mother cat’ (reference y)

1. *Yarne=dha* *a...rakba=wiya, yirr-ikalharu-kwa* *ena* *angura.*
   1a.this=TRM already=PRG 1a/NEUT-burnt.off.bush=FACT.PST NEUT.this NEUT.fire
   ‘Long ago we lit a fire to burn off the bush.’

2. *Ena* *bujikeda* *nvngv-rrvngka-ma.*
   NEUT.this cat(NEUT) 1/NEUT-see.PST-za
   ‘I saw a cat.’

3. *Yirr-ikalharu-kwa* *enee=ka* *angura.*
   1a/NEUT-burnt.off.bush=FACT.PST NEUT.this=FOC NEUT.fire
   ‘We lit the fire.’

4. *M-adhvrrungwarnee=ka* *mamarika* *nv-v-mangkarrv-na.*
   VEG-big=EMPH VEG.southeast.wind VEG-run-p2
   ‘A big southeast wind was blowing.’

5. *Yirr-ikalharukwa* *ena.*
   1a/NEUT-burnt.off.bush=FACT.P2 NEUT.this
   ‘We lit it.’

6. *Nvngu-wilyaka* *ebina* *bangkilya,*
   1/NEUT-take.PST NEUT.that.same tomahawk(NEUT)
   ‘I was carrying a tomahawk’

7. *akwa* *nvng-arjiyinga* *adhalyyma-manja* *a-kiyak-bidjina.*
   and 1-stand-P1 NEUT.river-LOC NEUT.river-beside
   ‘and I stood up beside a river.’

8. *Ngalhjee=ka* *angura* *adhvrrungwarnee=ka* *nv-v-arvmbvnadvh-v-na.*
   NEUT.PRO=EMPH NEUT.fire NEUT.big=EMPH NEUT-spread-p2
   ‘The fire got really big.’

9. *Ne-kalharv-dhv-na* *erribaba.*
   NEUT-burnt.off.bush=INCH-P2 to.here
   ‘It burnt towards us.’

10. *Nvng-andheeyv-ma* *yirukuyilhangwu-wa* *iya* *yimarndakuwabu-wa* *nvng-akina=dha.*
    1-look-P2-ma MASC.bandicoot-ALL and MASC.blue-tongued.lizard-ALL 1-that=TRM
    ‘I was looking for bandicoots and blue-tongued lizards.’

11. *Yirr-abavvmnee=ka* *yirruwa,* *yurnungkwarba.*
    1a- many=EMPH 1a.PRO 1a.man
    ‘There were a lot of us men.’

12. *Bi...ya* *ngalh-aja* *akina* *a-rnd-arringba* *na-rrvngka* *dhukwa*
    and NEUT.PRO-CofR NEUT.that NEUT-mother-3a.KIN NEUT/NEUT-see.PST maybe
    angura ebina
    NEUT.fire NEUT.that
    ‘After a while maybe the mother cat saw the fire’

13. *akwa* *ne-ngbaja* *dhukwa.*
    and NEUT/NEUT-smell.P1 maybe
    ‘or smelt it maybe.’

14. *Nuw-angkarree=ka* *erriberriba-lhangwa.*
    NEUT.run.P1=EMPH NEUT.bush-ABL
    ‘It ran from the bush.’

15. *Ngayuwa* *nvngv-kwu-arjeeya* *a-kiyak-bidjina* *nvng-en=dha.*
    1.PRO 1-body-stand.P2 NEUT.river-beside 1-this=TRM
    ‘I was standing beside by the river.’

16. *Nvng-engkirrika* *arakba* *nv-v-akadha-ngv-ma* *amarda.*
    1-hear.P1 already NEUT-make.own.sound-P2-ma NEUT.grass
    ‘I heard the grass crackling now.’
to.here=EMPH NEUT-make.own.sound-p2=EMPH NEUT.ALP-times-alone
‘It kept on crackling towards us all the time.’
18. “Yirukajithangwa=bu”
MASC.bandicoot=MIST.TH
“’It’s a bandicoot’”
19. nvngi-yama=dha.
1-say/do.PST=TRM
‘I thought [but it wasn’t].’
20. Nvng-anndeeya
1-look.p2
‘I watched’
21. akena ngalh-aja ne-ngbijangv-na,
and NEUT.PRO-CofR NEUT-jump-p2
‘and it jumped’
22. erribaba nuw-angkarrv-na.
to.here NEUT-run-p2
‘It ran towards us.’
23. Ena arvma bujikeda,
NEUT.this NEUT.big.cat(NEUT)
‘It was a big cat,’
24. a-rukumungwenimalhvba akina.
NEUT-wild NEUT.that
‘a wild cat.’
25. Nuw-angkarrv-na,
NEUT-run-p2
‘It ran,’
26. nuw-angkarrv-na.
NEUT-run-p2
‘(and) ran.’
27. Mu-wilyaba mamarra nvmv-lhvangaku-warbrarry-nv-ma m-akina,
VEG-one VEG.small.leaved.paperbark VEG-long.and.tall-split-p2-ma VEG-that
‘There was a paperbark that had fallen down,’
28. nvm-iki-lyangbadhv-nga-ma adhalyvma-manja.
VEG-tree-go.across-p1-ma NEUT.river-LOC
‘(and) it was lying across the river.’
29. Dhukwa m-akina ngalha-lhangwa mamvrukwa=baba=dha.
maybe VEG-that NEUT.PRO-POSS VEG.path=REAS=TRM
‘Maybe it was the cat’s path.’
30. Nuw-angkarra,
NEUT-run.p1
‘It ran off,’
31. m-ibina-lhangwiya mamarra ne-yaku-warrukwa ebinu...wa.
VEG-that.same-ABL.PRG VEG.paperbark NEUT/VEG-river-cross.PST NEUT.that.same...XTD
‘it crossed over the creek along the paperbark.’
32. A-yaku-warra.
NEUT-river-other.side.
‘[It reached] the other side.’
33. Na-lyiba eyija,
NEUT-go.fast.p1 footsteps
‘It ran fast,’
34. **nuw-angkarree=ka erribaja-bu...wa.**
   NEUT-run.P1=EMPH away=EMPH...XTD
   ‘it ran further away;’
35. **naree=ka amiyerra-bu.**
   NEG=EMPH further-MIST.TH
   ‘I thought it was going to keep on going, but no.’
36. **Jangkawu.**
   swift.action.of.birds.etc./down.and.up.to.grab.something
   ‘Pounce!’
37. **Akwa yingv-ma-mvrrk-alybalya memvrrma abvrra-dhikba-manja.**
   and 3f-VEG-back.of.neck take.in.mouth.P1 VEG.back.of.neck NEUT.offspring-3f.kin-loc
   ‘It grabbed a kitten by its neck.’
38. **Nuw-angkarra.**
   NEUT-run.P1
   ‘it ran off.’
39. **Nara ambaka-hangwa kuw-angkrrv-na,**
   NEG later-ABL IRR.NEUT-run-P2
   ‘It didn’t run slowly,’
40. **yeeya-mvrra=wiya nuw-angkrrv-na.**
   footstep-INSTR=PRG NEUT-run-P2
   ‘it ran fast.’
41. **Nuw-angkarra,**
   NEUT-run.P1
   ‘It ran,’
42. **nuw-angkarra,**
   NEUT-run.P1
   ‘(and) ran,’
43. **nuw-angkarra.**
   NEUT-run.P1
   ‘(and) ran.’
44. **Ne-yaku-warrukwa ebina adhalyvma m-ibina-hangwiya**
   NEUT/NEUT-river-cross.PST NEUT-that.same NEUT.river VEG-that.same-ABL.PRG mamarrra.
   VEG.paperbark
   ‘It crossed over the river along the paperbark.’
45. **Bi...ya nuw-akuma-rna adhalyvma-manja a-kiyak-bidjina mamvdhangkw-a-manja.**
   and...XTD NEUT/NEUT-put-P2 NEUT.river-LOC NEUT.river-beside VEG.sand-LOC
   ‘Then it put the kitten down beside the river on the sand.’
46. **Ngarningka na-lhawurradha**
   again NEUT-return.P1
   ‘It went back again’
47. **nuw-angkarra.**
   NEUT-run.P1
   ‘it ran off.’
48. **Nuw-angkarru...wa.**
   NEUT-run.P1...XTD
   ‘It kept on running.’
49. **Engka na-rndarrka.**
   NEUT.other NEUT/NEUT-take.PST
   ‘It grabbed another.’
Na-lhawurradh ha ebina-lhangwiya nga...wa,
NEUT-return.P1 NEUT-that.same-ABL.PRG cont.act...XTD
‘It came back along the same way,’

nuw-akuma-rna ebina-manja angalya.
NEUT/NEUT-put-p2 NEUT-that.same-LOC NEUT.place
‘it put the kitten down in the same place.’

Na-lhawu-lhawurradha,
NEUT-RDP-return.P1
‘It kept going back,’

nuw-angkarra.
NEUT-run.P1
‘it ran off.’

Nuw-angkvdhvkarrv-nu...wa.
NEUT-RDP.run=p2...XTD
‘It kept running.’

Na-ma-nga.
NEUT/NEUT-take-p2
‘It took another.’

Naree=ka amiyerra-bu kuv-andeeya,
NEG=EMPH further=EMPH IRR.NEUT.look.p2
‘It didn’t look around very far,’

abukwaya na-rrakby-rrakbi-yuwiyidhv-na.
NEUT.that.coming NEUT-RDP-forehead-RDP.straight-INCH-P2
‘it went straight on.’

Na-ruku-lyangba-dha ebina angariya.
NEUT-body-cross-INCH.P1 NEUT.that.same NEUT.young
‘The kitten laid down sideways.

Na-lhavurradhv-na akina ngawa,
NEUT-return-p2 NEUT.that cont.act.
‘It came back’

biya ebina nuw-akuma-rna.
and NEUT.that.same NEUT/NEUT-put-p2
‘and put the kitten down.’

Abiyakarbiya arakba.
NEUT.three compl.act.
‘(That was) three now.’

Ngarningka nuw-angkarra.
also NEUT-run.P1
‘It ran off again.’

Nuw-angkarru...wa.
NEUT-run.P1...XTD
‘It kept on running.’

Na-lhawurradha,
NEUT-return.P1
‘It went back,’

biya na-ma-nga.
and NEUT/NEUT-take-p2
‘and took another.’

Na-lhavurradhv-na ebina-lhangwiya ngawa.
NEUT-return-p2 NEUT.that.same-ABL.PRG cont.act.
‘It came back along the same way.’
   NEUT/NEUT-put-p2
   ‘It put the kitten down.’

68. Abiyarbuwa.
   NEUT.four
   ‘(That was) four.

   NEUT.PRO-CoFR NEUT.fire NEUT.coming NEUT-near-INC-h-p2-TRM
   ‘The fire was coming closer.’

70. Enee=ka a-rnd-adhikba.
   NEUT.this=EMPH NEUT-mother-3f.KIN
   ‘Here was the mother.’

71. Bi...ya naree=ka,
   and.XTD NEG=EMPH
   ‘And no,’

72. ambaka-lhangwa nara kuw-angkydhvkarrv-na akina,
   later-ABL NEG IRR.NEUT-RDP.run-p2 NEUT.that
   ‘it didn’t run slowly,’

73. na-lyibi-ny-mvrru=wiyee=ka eyija akina ngawa nuw-angkarra,
   NEUT-go.fast-p2-ma=PRG=EMPH footsteps NEUT.that cont.act. NEUT-run.p1
   ‘it ran very quickly,’

74. nuw-enjirrika-ja ngawa,
   NEUT-hurry-RECP.p1 cont.act.
   ‘it kept on hurrying,’

75. bi...ya jangkawu!
   and.XTD swift.action.of.birds.etc./down.and.up.to.grab.something
   ‘and in one fell swoop’

76. Na-rndarrka.
   NEUT/NEUT-take.pST
   ‘It grabbed another.’

77. Nvngu-ngwarndvrra-nka na-ma-ngy-ma akina,
   1-not.know-p2 NEUT/NEUT-take-p2-ma NEUT.that
   ‘I didn’t see it take that one,’

78. biya yandha ngawa nvg-andeeyv-ma nvg-akina,
   and nothing.special cont.act 1-look.p2-ma 1-that
   ‘I just kept watching,’

79. nuw-eketirrarji-na-ma warenja=ba=wiya=baba.
   NEUT-come.and.go-NP2-ma quickly!-EMPH=PRG=REAS
   ‘because it was coming and going so quickly.’

80. Na-lhawurradhv-nu...wa.
   NEUT-return-p2...XTD
   ‘It came back.’

81. Ebina ne-yaku-warrukwa mamarra.
   NEUT.that.same NEUT/NEUT-river-cross.pST VEG.paperbark
   ‘It crossed over the creek along the same paperbark.’

82. Akwa ngawa, nuw-akuma mamvdhangkwa-manja.
   and cont.act. NEUT/NEUT-put.p1 VEG.sand-LOC
   ‘And that was it,’ it put the kitten down on the sand.’

83. Biya nuw-arrv-mvndukwnee=ka a-mvndak-akina e-yukwayuwa
   and NEUT/NEUT-small.and.round-gather.pST=EMPH NEUT-many-that NEUT-small.PL
   ‘It gathered the kittens together,’
she was sick.

Ngal-ajee=ka angura erribaba,
NEUT.PRO-COFR=EMPH NEUT.fire to here
‘The fire came towards us,’

bi...ya naree=ka,
and...XTD NEG=EMPH
‘and it didn’t (stop)’

nuw-akadha-ngnee=ka.
NEUT-make.own.sound-PST=EMPH
‘it crackled loudly.’

Bi...ya nvgni-yama,
and...XTD 1-say/do.PST
‘And I said,’

“Ena=bu ngawa amangbalha=bu a-bvrra-dha”
NEUT.this=EMPH cont.act NEUT.five=EMPH NEUT-RDP-offspring-3f.KIN
‘that’s all, five babies’

nvgni-yama.
1-say/do.PST
‘I said.’

“Kembirra nuw-erriminja”
so NEUT-be.still.PL
‘Now it’s stopped’

nvgni-yama nganja.
1-say/do.PST 1.PRO.COFR
‘I said.’

Ebina angura nuw-angkarrv-nee=ka,
NEUT.that.same NEUT.fire NEUT-run-P2=EMPH
‘The fire burned on,’

angwarree=ka ena,
NEUT.smoke=EMPH NEUT.this
‘there was a lot of smoke.’

bi...ya naree=ka.
and...XTD NEG=EMPH
‘but it didn’t (get to us).’

Biya ebina-manja adhalyvma ngawa nuw-erriminjv-ma akina angura=dha.
and NEUT.that.same-LOC NEUT.river still NEUT-be.still.PL-1-ma NEUT.that NEUT.fire=TRM
‘It stopped at the river.’

Ngalh-aja ebina e-yukwayuwa akwa dhv-rnd-arrrngba,
NEUT.PRO-COFR NEUT.that.same NEUT-little.PL and 3f-mother-3a.KIN
‘There were the kittens and their mother,’

na-mungkuhi-jee-yi-nv-ma ebina e-yukwayuwa,
NEUT-sleep-CAUS-RECP-P2-ma NEUT.that.same NEUT-little.PL
‘the kittens were sleeping together,’

ngalh-aja dhv-rnd-arrrngba ying-ang+maku+lhalhv-ma
3f.PRO-COFR 3f-mother-3a.KIN 3f?-chin+?place+be.upright.P2-ma
‘their mother was sitting’

yingv-nyak-arjeev-ma
3f-chest-stand.P2-ma
‘she was sitting up’
101. yingv-rrvngka-ma angura-wa dh-akina.
   3f/NEUT-see.PST-ma NEUT.fire-ALL 3f-that
   ‘watching the fire.’
   1.PRO=EMPH 1-be.sorry-P2-ma=EMPH
   ‘I felt sorry for her.’
103. Akena dhv-rnd-arriingba dhukwee=ka awilyikerra yingu-ngurrkwe-nv-ma,
   but 3f-mother-3a.KIN maybe=EMPH a.long.way.off 3f-hunt-P2-ma
   akwalyu-wa=dha
   NEUT.meat-ALL=TRM
   ‘Maybe the mother had been hunting a long way for meat,’
104. narrv-nga-mv-abvrangka-ma wurr-abvbrra=dha.
   3a.O-3f.S-BENE-look.for.PST-ma 3a-RDP.offspring-3f.KIN=TRM
   ‘looking for something for her babies.’
105. Akena
   but
   ‘But (she didn’t get any)’
106. akina angura=baba
   NEUT.that NEUT.fire=REAS
   ‘because of the fire’
107. akwa dhukwa ying-eyiji-na,
   and maybe 3f-eat-P2
   ‘maybe she had eaten,’
108. yingu-warda-nga,
   3f/NEUT-kill-P2
   ‘(and) killed something,’
109. dhukwa nara=dha,
   maybe NEG=TRM
   ‘maybe she hadn’t,’
110. mvrvmvreeya dhukwa=dha,
   hungry maybe=TRM
   ‘maybe she was hungry,’
111. ying-enjirrika-jv-ma ngawa=dha.
   3f-hurry-RECP-P1-ma cont.act.=TRM
   ‘she had been hurrying so much.’
112. Enena kemba nvngarra-maka-ma wurrw-kwalha warnungkwarba=dha, nara
   NEUT.this then 1/3a-tell.PST-ma 3a-some 3a.man=TRM NEG
   ngakurruwa=mvrra, wurrv-mvn-arvma angalya Darwin, akina bujikeda
   12a.PRO=EMPH 3a-BENE-big NEUT.place D. NEUT.that cat(NEUT)
   nvngv-rrvngka-ma.
   1/NEUT-see.PST-ma
   ‘Then I told some other men, not our men, others in Darwin, (about) the cat I had seen.’
113. Akina=bu ngawa=dha.
   NEUT.that=EMPH cont.act.=TRM
   ‘That’s all.’
## Appendix B: List of recordings (see accompanying CD for recordings)

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<th>Track on CD</th>
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<td>[ˌdiˈmirmaː]</td>
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<td>19</td>
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<td>[a.məŋəna]</td>
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<td>19</td>
<td>amarnhvnha ‘NEUT.ashes’</td>
<td>[a.məŋ̊əŋa]</td>
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<tr>
<td>5</td>
<td>20</td>
<td>ngwadhvn ‘cry!’</td>
<td>[ŋwəɭəna]</td>
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<td>6</td>
<td>25a</td>
<td>ningenv-ndvrkka nuwarda ‘I grabbed the dog’</td>
<td>[niŋɛntrka ~ niŋɛŋərka nuwaɾa]</td>
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<td>[jiˈiɾja ~ iˈiɾja]</td>
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<td>8</td>
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<td>[jina ~ ijina]</td>
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<td>9</td>
<td>32</td>
<td>wi-njawudhe-na ‘put it on your head!’</td>
<td>[wiŋcawu.əna]</td>
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<td>10</td>
<td>34</td>
<td>eminda ‘NEUT.nose’</td>
<td>[ɛ.mi.nte]</td>
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<td>11</td>
<td>34</td>
<td>akambvmbarrvnga ‘sit down!’</td>
<td>[a.ka.mpə.mpə.ɾəəna]</td>
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<tr>
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<td>[ˈa.ɭma]</td>
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<td>14</td>
<td>50</td>
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<td>50</td>
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<tr>
<td>16</td>
<td>52a,b</td>
<td>errikbi-na ‘throw it!’ errekbi-na ‘vomit!’</td>
<td>[ɛ.ɾɪ.ˈkpi.na] ~ [ɛ.ɾə.ˈkpi.ņa]</td>
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<td>[jiŋənəna]</td>
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<td>yuwarlkurra ‘MASC.knee’</td>
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<td>[mołkwa]</td>
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<td>amvnrndha ‘NEUT.shoulder’</td>
<td>[a. manganese]</td>
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<td>21</td>
<td>126a</td>
<td>dhvnhvn ‘FEM.mosquito’</td>
<td>[ŋənəna ~ ɭŋənə]</td>
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<tr>
<td>22</td>
<td>126b</td>
<td>mvnhrnga ‘VEG.burrawang’</td>
<td>[maŋəŋəna ~ maŋəŋa]</td>
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</tr>
<tr>
<td>23</td>
<td>127</td>
<td>marrvngmvrdha ‘VEG.bush currant’</td>
<td>[marəŋməɾəa]</td>
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</tr>
</tbody>
</table>
Appendix C: Stop clusters and long stops

Although Enindhilyakwa (like Wubuy) does not contrast phonetically long (or fortis) and short (or lenis) stops - its stops generally being short/lenis - occasionally a long/fortis stop can be heard. The only observation regarding long stops in the previous work comes from Leeding (1989: 25), who notes that “[a] sequence of two identical stops occurs in a few words, most of which are unassimilated loanwords. The first consonant is unreleased and triggers the fortis articulation of the second”. Her examples include (original orthography and phonetic transcription):

(1) *yilharrpa* [jiɭɛɾpa ~ jiɭɛɾpa]¹ ‘MASC.Livingstone Palm’ (VL1 p.26)

*napipa* [nepɪpa ~ nepɪpa] ‘m.mother’s brother’

*thakatjarrarra* [ˈtakaθjaɾaɾa ~ ˈtakaθjaɾaɾa] ‘FEM.nut sp.’

Leeding furthermore notes that the heterorganic cluster [kp] (section 2.5.7) can vary freely with [pp], and that some speakers are aware of this variation (1989: 26). Younger speakers may pronounce the di-cluster as a single stop [p]. The following is the only example she offers of this variation (original orthography and phonetic transcription).

(2) *athikwalyi(k)pwa* [ɐɭɛkʰwikaɪpwa ~ aɭɛkʰwikaɪpwa]² ‘NEUT.Crinum Lily’ (VL1 p.26)

These long stops are interesting because a contrast between phonetically long and short stops is an areal feature of the Top End: most languages in Arnhem Land, including the Maningrida family, the Yolngu subgroup of Pama-Nyungan and virtually all Gunwinyguan languages, have two stop series, which otherwise is a rare feature in Australia (Dixon 1980; Evans 2003b; Harvey 2003a; see Austin 1988 for a survey of Australian languages with a stop contrast).³ This stop contrast does not exist in Wubuy (Heath 1978b, 1984), and, as I argue in sections 2.5 and 9.2.1.2, neither in Enindhilyakwa. However, Enindhilyakwa does have some long stops in addition to those mentioned by Leeding. These are represented as heterorganic stop clusters in Heath’s (n.d.) sketch grammar, and in a variety of ways in the other works. They are listed in (3) (note that Leeding’s symbol *ij* represents [ɛ], while Heath’s *dj* stands for [tc]):

---

¹ I recorded this example with a singleton stop: [jiɭɛːɾpa] ‘Livingstone Palm’ (anin2_pw_au_002).
² In my orthography this word is *adəvkaɭiiba*, and I recorded it as [aɭɛkʰaɭipa] (anin2_pw_au_002) (I have never heard a rounded /pw/, which Leeding argues contrasts with /p/, and I do not hear the second vowel as [u] but rather as [ə]). Thus, my informant produced this word with a single stop [p], whereas Leeding’s informants produced either a geminate stop or a heterorganic di-cluster (disregarding the rounding in Leeding’s transcription).
³ Since two stop series are an areal feature of the Top End, the untangling of genetic and areal features is particularly complex here (Evans 2003b: 15).
Since I adopt the Stokes/Waddy orthography in this thesis (with some modifications, outlined in section 2.1.2), and since the phonetic realisation is variable and needs more research, I represent these stops as Stokes/Waddy do (with the exception of \( r/d \), which is \( rdh \) in this thesis). However, I describe them here because they may relate to long stops in GN, and therefore may be a sign of shared retention.

- **kb** \([kp ~ pp ~ p]\)

The \( kb \) cluster was described in section 2.5.7, where I argued it to be a phonemic complex segment, for the reasons outlined. The initial velar [k] is unreleased and is barely audible. Its constriction occurs very late so that it is co-articulated with the following [p] (which is one of the reasons for regarding it as a complex segment). The unreleased initial velar may trigger a labio-velar fortis articulation of [p], which is of longer duration than its normal form. See examples in section 2.5.7. The following are examples of [kp] varying with, or being realised as, [p:].

(4) a. *yingynakbvrang* \([jiŋəŋap:uraŋa ~ jiŋəŋa ɭpuraŋa]\) ‘she found one’ (anin1_dl_au_001)
b. *mekberrkuna* \([mɛːp:ɛrkuna]\) ‘it(VEG) was soaking’ (anin2_pw_au_005)
c. *Yadhikba* \([jæ̞ ti ɭp̞a ~ jæ̞ tɪp:a]\) ‘place name’ (LL Book 1 audio CD)

In (4a), the speaker first pronounces the word with a long bilabial stop, then repeats it slowly with a clear [k] followed by [p]. The word in (4b) is clearly pronounced with a long stop, although in the orthography it is represented as \( kb \). In (4c), a silent [k] can be heard when pronounced at normal speed, but when spoken slowly only \([p:]\), or perhaps [p], can be heard.

This variation occasionally shows up in the written data of the previous work. Some examples of the \( kb ~ b \) variation are given in Table C.1 (data from the dictionary unless indicated otherwise).

<table>
<thead>
<tr>
<th>Data involving ( kb )</th>
<th>Data involving ( b )</th>
</tr>
</thead>
<tbody>
<tr>
<td>to hide - ( akbuwarra )</td>
<td>- ( abuwarra )</td>
</tr>
<tr>
<td>to jump - ( abijanga )</td>
<td>- ( abija) (VL2 p.239)</td>
</tr>
<tr>
<td>to blow away - ( lyibi )</td>
<td>- ( lyibi)</td>
</tr>
<tr>
<td>to be afraid - ( akbardh )</td>
<td>- ( abadh) (VL1 p.425)</td>
</tr>
<tr>
<td>flat area ( ekbu)</td>
<td>- ( abal) (Ansec2; VL2)</td>
</tr>
<tr>
<td>desert ayilkbijilka ([a’jil(k)pijilkpa]) (VL1 p.28)</td>
<td>ayilkbijilba</td>
</tr>
<tr>
<td>wild plum mangkarrkba</td>
<td>mangkarrba (JS1 p.173)</td>
</tr>
</tbody>
</table>

Table C.1: Heterorganic cluster \( kb \) varying with \( b \) in written data of previous work
It should be noted that not all $kb$ clusters exhibit this variation, as far as I am aware. I have for instance heard $alhakba$ ‘leg’ only as $[a\text{-}\text{a Kpa}]$ (with an unreleased $[k]$), never as $[a\text{-}\text{ap:a}]$, nor have I encountered this word as $alhaba$ in the written data.

The $kb$ cluster contrasts with a singleton $b$, as shown in the following near-minimal pairs.

(5) $alhakba$ ‘NEUT. leg’ $awilyaba$ [awiˈapa] ‘one’  
$alyelyikba$ ‘NEUT. lips’ $ariba$ [aˈipa] ‘NEUT. land’  
$mangkarrkba$ ‘VEG. wild plum’ $-adharrba$ [aˈarpa] ‘short’

As in other languages with a stop contrast (e.g. BGW, Evans 2003a; Ngalakgan, Baker 2008), the stops only contrast intervocally and following continuants.

The $kb$ cluster occurs intra-morphemically, as in the above examples, but also across morpheme boundaries. This can happen with noun incorporation, as in the following Dictionary examples:

(6) $-wurak-baja$- [pipe-hit] ‘to knock ashes from pipe’  
$-mak-bvridha$- [ground-shake] ‘ground shaking’

As argued in section 2.5.7, the intermorphemic $kb$ cluster is syllabified in the onset, behaving as a single segment.

Taking notice of this cluster, and its variation with a long stop, is important because it corresponds to $bb$ in the Gunwinyguan languages, and to Wubuy $b$ (see Table 9.11 in section 9.2.1.2.1).

$• rdh$ $[\text{ʈ} \sim \text{ʈ}: \sim \text{ʈ}]$

The cluster $rdh$ also shows assimilation to a geminate, its phonetic realisation varying between $[\text{ʈ} \sim \text{ʈ}: \sim \text{ʈ}]$. Heath (n.d.) treats this cluster as consisting of two stops. Leeding represents it as $rth$, i.e. a retroflex glide followed by a lamino-dental stop, while Waddy/Stokes use $r/d$ or $r.d$, i.e. a retroflex glide followed by $d$, which can stand for a lamino-dental stop or an apico-alveolar stop (the forward slash or full stop are used to differentiate the retroflex stop $rd$). The following examples illustrate the variation $[\text{ʈ} \sim \text{ʈ}:]$, using my orthography and transcriptions.

(7) a. $n\text{-}ardharrvma$ $[n\text{aɾʊma}]$ ‘he speared it(MASC)’ (JH Tape 70)  
b. $n\text{-}ardharrvma$ $[n\text{aɾʊma}]$ ‘he speared it(MASC)’ (nin4_md_au_001)  
c. $n\text{-}ardharrvma$ $[n\text{aɾʊma}]$ ‘he speared it(MASC)’

(8) a. $n\text{-}ardharrvma$ $[n\text{aɾʊma}]$ ‘he speared it(MASC)’ (JH Tape 70)  
b. $n\text{-}ardharrvma$ $[n\text{aɾʊma}]$ ‘he speared it(MASC)’ (nin4_md_au_001)  
c. $n\text{-}ardharrvma$ $[n\text{aɾʊma}]$ ‘he speared it(MASC)’

(9) $marrvngmvrdha$ $[məŋməɾːa]$ ‘bush currant’ (nin2_pw_au_002)
In (7a) we hear some r-colouring on the preceding vowel, while the stop appears to be a cluster. This r-colouring is absent in (7b), pronounced by the same speaker. The same can be said of the examples in (8): in (8a) there is some r-quality on the vowel, which is completely absent in (8b) and where the stop is long. The same word can also be realised with a regular, singleton, stop (8c). The orthographic rdh cluster in (9) is likewise realised as a long lamino-dental stop.

The lamino-dental stop of the following words appears to be always pronounced as long:

\[
\begin{align*}
(10) \; \text{engbvdha} & \quad [\text{eŋpə} \text{ɻa}] \quad \text{‘NEUT.strong’} \\
\text{ekbvdha} & \quad [\text{ɛk}pə \text{ɻa}] \quad \text{‘NEUT.strong’}
\end{align*}
\]

The previous scholars write this word as involving a simple stop (original orthographies): engbuda \sim ekbuda (Stokes/Waddy); angpwitha \sim akpwitha (Leeding 1989).\footnote{Leeding (1989: 49) has one example in her data with a rth cluster which could be related angpwitha ‘strong’: angpwidtha ‘White waterlily’ (polysemy involving plant names and other items is very common - see section 3.6.1).}

The heterogonic/geminate cluster contrast with a singleton dh intervocalically, as shown by the following (near-)minimal pairs:

\[
(11) \; \text{-yardha-} \quad [\text{jə} \text{ɻa} \sim \text{ja} \text{ɻa}] \quad \text{‘arrive, get married’} = \text{yadha} \quad [\text{ja} \text{ɻa}] \quad \text{‘PURP clitic’} \\
\text{-mvdra-} \quad [\text{mə} \text{ɻa} \sim \text{mə} \text{ɻa}] \quad \text{‘be dark’} = \text{vmdheeyi-} \quad [\text{mə} \text{ɻe} \text{ji}] \quad \text{‘to paddle’}
\]

Leeding notes a variation in the phonetic realisation of the ‘spear’ verb in (8), but she claims the variation is between [ɻa] and the simple stop [ə], and attributes it to loss of retroflexion (1989: 128).

Otherwise this variation has not been described in the previous work. It does however occasionally show up in the textual data:

<table>
<thead>
<tr>
<th></th>
<th>Data with rdh</th>
<th>Data with dh</th>
</tr>
</thead>
<tbody>
<tr>
<td>to go walkabout</td>
<td>-kubardha-</td>
<td>-kubadha-</td>
</tr>
<tr>
<td>to arrive, be married, claim</td>
<td>-yardha-</td>
<td>-yadha-</td>
</tr>
<tr>
<td>to put onto</td>
<td>-jawurdha- (anin4 mm_002)</td>
<td>-jawudha-</td>
</tr>
<tr>
<td>to be/get dark</td>
<td>-mvdhv-</td>
<td>-mvdhv-</td>
</tr>
</tbody>
</table>

Table C.2: Enindhilyakwa rdh ~ dh

It is important to take notice of the rdh cluster, and its potential variation with long dh:, because the latter is present in the GN languages (save Wubuy) and reconstructed for pGN. I did however not find any correspondences of Enindhilyakwa rdh ~ dh: ~ dh in other languages.
• *rj [\(\eta c \sim c: \sim c\)]

The heterorganic cluster *rj also has a long stop variant, ranging from [\(\eta c \sim c: \sim c\)]. Heath treats this cluster as consisting of two stops: *rdj. Leeding represents it as *tj (tj stands for [c] in her system), and Stokes/Waddy as *rj - i.e. a retroflex glide followed by a lamino-palatal stop.

The following examples illustrate the variation of *rj between [\(\eta c \sim c: \sim c\)], using my orthography.

(12) a. yuwarjerra [ju.wa.ɛ.ɾa] ‘MASC.skink’ (anin2_pw_au_002)
b. yuwarjerra [ju.waɭ.ɛ.ɾa] ‘MASC.skink’ (anin4_dl_au_002)

(13) a. angmakarjiya [aŋ makəc:ija ~ aŋ makəc:ija] ‘sit down!’ (anin4_dl_au_003)
b. rrakarjiya [ɾakəc:ija ~ rakəc:ija] ‘sit down!’ (anin2_pw_au_004)

The noun in (12) is listed as ‘yuwarjerra’ in the Dictionary, but the speaker realises the cluster as a long [c:] in (12a), but as the cluster [\(\eta c\)] in (12b). Likewise, the ‘sit’ verb in (13) is listed as ‘-arjiya-’ in the Dictionary, but the cluster *rj varies between [\(\eta c \sim c: \sim c\)].

Although the various realisations of the *rj cluster have not been noted before, some variations do occasionally show up in the written data of the previous work. Some examples are given below.

<table>
<thead>
<tr>
<th>Data with *rj</th>
<th>Data with *j</th>
</tr>
</thead>
<tbody>
<tr>
<td>to be upright</td>
<td>-arjiya-</td>
</tr>
<tr>
<td>to wash</td>
<td>-arjirra-</td>
</tr>
<tr>
<td>to hit</td>
<td>-barja-</td>
</tr>
</tbody>
</table>

Table C.3: Enindhilyakwa *rj ~ *j

The first two examples come from Leeding (1989: 128), who attributes the variation to a loss of retroflexion.

The *rj cluster contrasts with a simple stop, but only intervocalically:

(14) -arji-na [aɭɛina ~ æɛ:ina] ‘be.upright-NP2’
    -ngamba-ji-na [ŋampaɭɛina] ‘bathe-CAUS-NP2’

The Enindhilyakwa reflex of the pGN root *-badja- receives various transcriptions in the previous work, ranging from +barja- (WD), to +baja- (WD), to +badja- (Heath n.d.). In this thesis I represent this word as +baja-, recognising that the lamino-palatal stop may have a fortis realisation.

AEH (p.336) reconstruct this root with a word-medial cluster *dj for pGN. They propose that this cluster assimilated to a geminate jj in Ngandi, BGW and Ngalakgan (i.e. *-badja- > -bajja-).

---

5 The meaning of the verb -arjiya- actually is ‘be upright’. This is not as controversial as it may seem: the meaning of ‘sit down’ is composed of angmak+arjiya ‘chin+be.upright’ in (13a) and rrak+arjiya ‘forehead+be.upright’ in (13b).
Wubuy and Rembarrnga retained the heterorganic cluster.\(^6\) In Enindhilyakwa the cluster possibly varies with a long and with a short stop. I will leave it up to further research to find out the phonetics of this word, and the other rj clusters.

**Conclusion on long stops**

Enindhilyakwa has phonetically long realisations of the stops b, dh and j - though further research may bring to light long stop counterparts for other stops also. These long realisations are often represented as heterorganic consonant clusters in the previous work.

The existence of long stops in Enindhilyakwa is important in the investigation of the genetic relatedness of this language to other languages, because two contrastive series of stops occur in virtually all the Gunwinyguan languages, except Wubuy and Mangarrayi. There is some debate in the literature as to how this stop contrast is to be interpreted phonologically. Although there is general agreement that the principal phonetic parameter involved in the contrast is length, the contrast has been analysed in terms of voicing, fortis/lenis, and geminate/singleton, where the voiceless/fortis/geminate stops are considerably longer than the voiced/lenis/singleton stops (Baker 2008a; Evans 2003a: 81; Harvey 2003a; Hamilton 1996: 37. See also Gabina 2001 for a reconstruction of the contrast in proto-Maningrida). Harvey (2003a) reconstructs two stop series for proto-Gunwinyguan, interpreting the contrast as geminate versus singleton: the long stops are analysed as geminate clusters of two identical stops. Baker (2008a) comes to the same conclusion, based on the parallels between heterorganic and homorganic clusters in terms of their distribution. I have followed the geminate/singleton analysis in sections 9.2.1.1 and 9.2.2.2, recognising that the precise nature of the contrast remains controversial.

In Wubuy the long/geminate stops descend as short/singleton stops (Heath 1978b, 1984). In Chapter 9 I argued that this scenario can also account for the Enindhilyakwa short/singleton stops. However, as shown above, there may be some lingering traces of the old long/geminate stops. However marginal, they may indicate retention of the archaic long/geminate stops reconstructed for pGN.

---

\(^6\) Heath notes that his proposed lenition chain (section 9.2.1.1) is somewhat oversimplified in the case of *jj > j. This is because the root -wadja- ~ -badja- maintains the old *jj also preserved in Ngandi bajja (1978b: 37). He interprets this sound in terms of the derived Wubuy consonantal system as the cluster dj. However, the AEH reconstruction indicates that the original sound was a heterorganic cluster, which did not lenite to j in Wubuy.
Appendix D: Hardening of continuants to stops

As mentioned in sections 9.2.1.1 and 9.2.1.2, Wubuy has a productive process of continuants hardening to their stop counterparts when following a stop or nasal. For example, the Wubuy lamino-dental lateral \( lh \) is a reflex of \( *dh \) (preserved in Ngandi and reconstructed by Harvey 2003a for proto-Gunwinyguan). The lateral synchronically hardens back to \( dh \) when following a stop/nasal. For example, in \( nga-lharrma-ni \) ‘I chase it’ \( lh \) is preserved after a vowel, while in \( ngam-dharrma-ni \) ‘I will chase it’ \( lh \) hardens to \( dh \) after a nasal (Heath 1984: 63).

There are some traces lingering of this hardening process in Enindhilyakwa, although here it is not synchronically productive and can only be found in frozen structures.

• Bilabial nasal

The bilabial nasal alternates with its stop counterpart in some frozen reduplicated and complex stems. This hardening happens after a stop or nasal and was also noted by Leeding (1989: 132). The examples in (1) are frozen complex stems (Chapter 5). The \(+mv\)- thematic in (1c) and \(+mi\)- in (1d) are not attested as independent verbs, but only occur in complex stems. Since the complex stems composed of \(+bv\)- and \(+bi\)- have a common semantic element, they could be hardened variants of \(+mv\)- and \(+mi\)-, respectively. In (2) we find a frozen reduplicated stem.

(1)  

a. -\( maka \)- ‘to tell’  
   -\( lharrk+baka \)- ‘to tell the truth’

b. -\( malya \) ‘soft’  
   -\( a-mvrrk+balya \) [NEUT-breast+soft] ‘newborn baby’

c. -\( lhvlhvl+mv \)- ‘to blow fire till it lights’  
   -\( mvdhilyak+bv \)- ‘to cough’

d. -\( edhvrre+mi \)- ‘to deny’  
   -\( errek+bi \)- ‘to vomit’

(2)  

-\( marrang+barrnga \)- ‘to cut tree until it falls’

In these frozen complex stems the \( m \) hardens to \( b \) when following a stop or nasal. As mentioned in section 9.2.1.2.1, this hardening does not occur at active morpheme boundaries: here, an epenthetic vowel is inserted between two consonants (rule P-2) and no hardening occurs.

• Lamino-dental lateral

Traces of hardening of the lamino-dental lateral to its homorganic stop counterpart can be found as well, as also noted by Leeding (1989: 135). This hardening only occurs in frozen compound and reduplicated stems:

(3)  

a. -\( lharrma \)- ‘chase’  
   -\( manh+dharma \)- [hand+chase] ‘to point’  
   (Ansec1)

b. -\( lharrma \)- ‘chase’  
   -\( lharrmvnh+dharma \)- [RDP+chase’] ‘keeping on chasing’

c. -\( lharrka \)- ‘send’  
   -\( yenh+dharrka \)- [word+send] ‘ask’
d. *-hangwa* ‘POSS case’  
\[ dhv+m+arnvnh+dhangwa \]
\[ \text{FEM+INALP+pointed+POSS} \]
\[ \text{‘fem.spotted eagle-ray’} \]

The nasals in these examples have assimilated in place to the following stop. Again, this hardening does not apply at active boundaries between affixes and stems, where an epenthetic vowel occurs between the consonants that meet across a morpheme boundary (section 9.2.1.2.2).

**Alveolar tap**

No traces of hardening \( rr > d \) are not attested in the data. This hardening is also rare in Wubuy and found only with two morphemes (Heath 1978b: 39, 1984: 63).

**Labio-velar glide**

There are some lingering traces of \( w \) hardening to \( b \) in frozen constructions:

\[ \text{(4)} \]

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>-wilyik+bilyik-</td>
<td>‘to warm up on ashes’</td>
</tr>
<tr>
<td>b.</td>
<td>-rrak+biyu+wiya-</td>
<td>[forehead+RDP+straight] ‘go straight ahead’</td>
</tr>
<tr>
<td>c.</td>
<td>-lhvngak+baihu+walha</td>
<td>‘wide and tall’</td>
</tr>
</tbody>
</table>

In other cases, the alternation that is productive Wubuy appears to have developed into individual stems in Enindhilyakwa, with different but related meanings. One example is *-baja* ‘hit’, which can be conceived of as the hardened form of *-waja* ‘brush away’. These are listed in Table D.1. The Enindhilyakwa \( w \) and \( b \) stems belong to the same conjugation, which correspond to the conjugation of the Wubuy verbs (Chapter 9).

<table>
<thead>
<tr>
<th>Wubuy ( w )-</th>
<th>Enindhilyakwa ( w )-</th>
<th>Enindhilyakwa ( b )-</th>
</tr>
</thead>
<tbody>
<tr>
<td>-warda- ( \sim ) -barda- ‘tap, break’</td>
<td>-warda- ‘hit, kill’</td>
<td>-mawilyak+barda- ‘cut steps in tree’</td>
</tr>
<tr>
<td>-warrka- ( \sim ) -barka- ‘sew’</td>
<td>-warrka- ‘sew’</td>
<td>-lyang+barka- ‘sweep’</td>
</tr>
<tr>
<td>-wa nga- ( \sim ) -ba nga- ‘bite’</td>
<td>-lyelyu+wanga- ‘chew’</td>
<td>-angv+banga- ‘RDP+bit’</td>
</tr>
<tr>
<td>-wadj- ( \sim ) -badja- ‘hit’</td>
<td>-waja- ‘brush away’</td>
<td>+baja- ‘hit’</td>
</tr>
<tr>
<td>?</td>
<td>-warrukwa- ‘cross over’</td>
<td>-barrukwa- ‘change ownership’</td>
</tr>
</tbody>
</table>

Table D.1: Stem-initial Wubuy \( w \sim b \) : Enindhilyakwa \( w \) and \( b \)

These data suggest that the hardening \( w > b \) may have occurred at some stage in the language. In addition, frozen complex stems such as those above often do not display vowel epenthesis between two consonants, i.e. rule P-2 does not apply. Instead, codas are avoided by bonding of the two consonants across the morpheme boundary, and syllabification in the onset (section 2.5.7). This would suggest the following diachronic scenario:

---

7 Wubuy: marnindhangu ‘eagle ray’.

8 The nga-element is an augment that only occurs in certain tense/aspect categories of this conjugation. This element has been incorporated into the verb stem in Enindhilyakwa; see section 9.3.4.6.
Thus in frozen complex stems codas are circumvented not by vowel epenthesis, but by syllabifying certain consonant clusters as onsets.

As mentioned in section 9.2.1.1, Wubuy has a second distinct \( \text{w} \) phoneme, which hardens to \( \text{k} \) when following a stop/nasal. This \( \text{w} \) seems to have disappeared in Enindhilyakwa (see Table 9.9 in section 9.2.1.2).

• Lamino-palatal glide

Some traces of \( \text{y} \) hardening to \( \text{j} \) can also be observed:

\[
\begin{align*}
\text{a. } & \text{yirrma- ‘swim’ } \quad \text{yirrmin+jirrma- ‘RDP+swim’} \\
\text{b. } & \text{yama- ‘do’ } \quad \text{yamvn+jama- ‘RDP+do’} \\
\text{c. } & \text{yawudha- ‘to carry’ } \quad \text{lyan+jawudha- [head+carry] ‘carry on head’} \\
\end{align*}
\]

Again, this hardening does not synchronically occur between stems and affixes, or in productive reduplication patterns (section 9.2.1.2.5).

These archaic hardening processes are important because they are shared with Wubuy, and no other Arnhem Land language. In Wubuy, the hardening of continuants to stops is very productive. The continuants are reflexes from old stops, so in fact the synchronic continuants harden back to their historical source. Since traces of the same process are visible in Enindhilyakwa, this supports the hypothesis that the Enindhilyakwa continuants are reflexes from old stops as well. The old stops are preserved in the other Gunwinyguan languages, and their lenition to continuants is an innovation shared between Wubuy and Enindhilyakwa.

---

9 The incorporated nominal \( \text{lyang} \)- ‘head’ presumably refers to the head of a broom, and -\( \text{warrka} \)- to a repetitive linear motion.
### Appendix E: Free pronouns and pronominal prefixes (based on VL1; WD; GED)

<table>
<thead>
<tr>
<th></th>
<th>Free pronouns</th>
<th>Prefixes on nominals</th>
<th>Subject prefixes on intransitive verbs</th>
<th>Second order subject prefixes on trans. verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ngayu-wa</td>
<td>nvng- ~ ng-</td>
<td>nvng- ~ ng-</td>
<td></td>
</tr>
<tr>
<td>13 m du</td>
<td>yi-nu-wa</td>
<td>yi-n-</td>
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<tr>
<td>13 f du</td>
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<td>yi-rrv-ng-</td>
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<tr>
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<tr>
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<td>yi-rrv-bkvv-rru-wa</td>
<td>yi-rrv-bkv-</td>
<td>yi-rrv-bkv-</td>
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</tr>
<tr>
<td>12 du</td>
<td>ya-ku-wa</td>
<td>y-</td>
<td>y-</td>
<td></td>
</tr>
<tr>
<td>12 tri</td>
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<td>nga-rru-buk-</td>
<td>nga-rrv-bvk-</td>
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<tr>
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<td>nga-rr-</td>
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<td>nvngk-</td>
<td>nvngk-</td>
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</tr>
<tr>
<td>2 m du</td>
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<td>~</td>
<td>kv-n-</td>
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</tr>
<tr>
<td>2 f du</td>
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<td>nvngkv-nu-wa</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>2 tri</td>
<td>nvngkv-rrv-bkv-rru-wa</td>
<td>kvvrr-bkv-</td>
<td>kvvrr-bkv-</td>
<td></td>
</tr>
<tr>
<td>3 m</td>
<td>enu-wa</td>
<td>n-</td>
<td>n-</td>
<td>en-</td>
</tr>
<tr>
<td>MASC</td>
<td>(yi-)ngalhu-wa</td>
<td>y-</td>
<td>n-</td>
<td>en-</td>
</tr>
<tr>
<td>3 f</td>
<td>/nga-/ngalhu-wa</td>
<td>dh-</td>
<td>ying-</td>
<td>nga-</td>
</tr>
<tr>
<td>FEM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 m du</td>
<td>abv-rru-wa ~ abv-nu-wa</td>
<td>wu-n-</td>
<td>ne-n-</td>
<td>b-</td>
</tr>
<tr>
<td>3 f du</td>
<td>abv-rrv-ngu-wa</td>
<td>wu-rrv-ng-</td>
<td>na-rrv-ng-</td>
<td>b-</td>
</tr>
<tr>
<td>3 a</td>
<td>abv-rrv-wa</td>
<td>wu-rr-</td>
<td>na- ~ nuw-</td>
<td>b-</td>
</tr>
<tr>
<td>COLL</td>
<td>abv-rrv-bkvv-rru-wa</td>
<td>wu-rrv-bkv-</td>
<td>narrv-bkv-</td>
<td>b-</td>
</tr>
<tr>
<td>VEG</td>
<td>(mv-)ngalhu-wa</td>
<td>m(a)-</td>
<td>nvm-</td>
<td>m-</td>
</tr>
<tr>
<td>NEUT</td>
<td>(a-)ngalhu-wa</td>
<td>a-</td>
<td>na- ~ nuw-</td>
<td>k-</td>
</tr>
</tbody>
</table>

The following recurrent morphemes can be identified:

- **-wa**: pronoun stem formative (Leeding 1989)  
  - **b-** ~ **w-**: 3 augmented  
  - **n-** ~ **en-**: masculine gender  
  - **ng-**: feminine gender  
  - **rr-**: augmented  
  - **bvk-**: trial  
  - **nvngk-**: FEM noun class  
  - **y-**: MASC noun class  

---

10 The prefixes in brackets in this form and in the VEG and NEUT forms are only used by the older generation of speakers and are not known by younger speakers (Leeding 1989: 328). Hence in modern Enindhilyakwa there is only a contrast in third person pronouns between 3m enuwa, 3a/COLL abvrruwa and ngaalhuwa used for 3f and the other noun classes.

11 Leeding (1989: 328): the prefix nga- has disappeared due to haplology.
Appendix F: Demonstrative roots (based on VL1, JW1, WD)

- *akina* ‘that there (near addressee)’
- *ena* ‘this here (near speaker)’
- *angaba* ‘that over there (distant from speaker) (sg and pl)’ ~ *angakba* (du and trial)
- *bukaya* ‘this one approaching speaker and addressee’
- *ibi*na ‘that (not visible)’
- *angamba* ‘which?, what?’

The demonstrative root *-ena* is irregular. It has a long and a short form:

1sg: \( \text{nvng-ena} \quad \text{nvng-enena} \)
2sg: \( \text{nvngk-ena} \quad \text{nvngk-enena} \)
3msg: \( \text{n-aka} \quad \text{n-akaka} \sim \text{n-anaka} \)
3fsg/FEM: \( \text{dh-aka} \quad \text{dh-akaka} \sim \text{dh-adhaka} \)
3a/COLL: \( \text{warna} \quad \text{warnarna} \)
MASC: \( \text{y-aka} \quad \text{y-akaka} \sim \text{y-eyaka} \)
NEUT: \( \text{ena} \quad \text{enena} \)
VEG: \( \text{mema} \quad \text{memema} \)
Appendix G: Kinship possession suffixes (based on VL1, VL2; WD; GED)

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>-arrka ~ -irrka</td>
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<tr>
<td>2</td>
<td>-ena</td>
</tr>
<tr>
<td>3m</td>
<td>-enikba</td>
</tr>
<tr>
<td>3f</td>
<td>-adhikba</td>
</tr>
<tr>
<td>1a</td>
<td>-anyungwa</td>
</tr>
<tr>
<td>2a</td>
<td>-enungwa</td>
</tr>
<tr>
<td>3a</td>
<td>-arriingba</td>
</tr>
</tbody>
</table>

Kinship terms have a nominal prefix that represents the ‘possessed’ kin and a suffix representing the ‘possessor’. The prefixes are sometimes followed by an additional gender prefix, as in the last example (Leeding 1996: 229).

Some examples are:

- nu-ngw-arrka
  - wurr-abvrr-enikba<sup>12</sup>
  - wurrvng-adhadhv-ngiy-enungwa
  - 3m-father-1.KIN
  - 3a-daughter-3m.KIN
  - 3fdu-RDP.f-spouse-2a.KIN
  - ‘my father’
  - ‘his daughters’
  - ‘your wives’
  - etc.

(1) Ki-yamv-nee=ka nungkw-aja wubvrra ngayuwa=dha nvngv-rnd-ena=dha,
  iRR.2-do-NP2=EMPH 2.PRO=CofR like 1.PRO=TRM 1-mother-2.KIN=TRM
  k-engkirra-ja=dha eningaba=wiya kajungwa nvngki-yekirrra k-ambilyi=yadha=dha
  iRR.2-hear-NP2=TRM NEUT.good=PRG so.that 2-happy iRR.2-be.NP1=PURP=TRM
  ‘You should do as I your mother, you should only think about good things so that you will be happy’
  (‘Mother’s advice’ j20-3)

See GED p.243-7 for lists of kinship roots.

<sup>12</sup> Note that the ‘3msg’ kinship possession suffix -enikba formally consists of the masculine inner gender prefix en- and DENIZ case -kba. Similarly, the ‘3fsg’ kinship suffix -adhikba consists of the feminine gender suffix adh- and DENIZ case -kba.
Appendix H: Purposive =yadha

Enindhilyakwa has an array of clitics that can follow the case suffixes on nominals and verbs. Some of these clitics only occur on the last word of the clause, whatever that is, such as the terminative clitic =dha. Others can be added to any word in a clause and they supply further information about the referent of that word, such as emphatic =ika. See Leeding (1989) for more details. The purposive =yadha clitic is discussed here in more detail, because it has a case-like meaning on nominals (and has consequently been included with the other cases by both Leeding 1989 and Waddy n.d.-a), but its distribution differs from that of the case suffixes. Firstly, it can attach to any type of word, whereas the distribution of case suffixes is more restricted. Secondly, it can follow inflectional case suffixes. Thirdly, whereas case suffixes on verbs have a subordinating function, the =yadha clitic can also attach to verbs in a main clause.

The PURP clitic is especially common on nominalised verbs, as in (1), whereas case suffixes are not at all common in that context (section 3.4.6). But the clitic can also attach to nominals (2) and to main verbs (3) (Leeding 1989; Waddy n.d.-a). The clitic expresses purpose, goal or intent. On nominals, it is interchangeable with the ALL case.

(1) Neni-lyangki+yama wun-alh-akina wun-env-kv-lhvki=yadha adhalyymu-wa
3mdu-head+say.p2 3mdu-du-that 3mdu-m-NSR-go=PURP NEUT.river-ALL
wun-env-ky-ngamba-ji=yadha.
3mdu-m-NSR-get.wet-CAUS=PURP
‘The two of them were thinking to go to the river to swim.’ (VL1 p.488)

(2) a. nuw-andheeyv-ma eningaba eeka miyangi=yadha
3a-look.P2-ma NEUT.good NEUT.tree VEG.fire.stick=PURP
‘they were looking for the right wood for fire sticks’ (GED p.198)

b. nv-mvn-akarrnv-va-na-ma akungwa env-lhangwi=yadha
IMP.2/3m-BENE-get.water-NP2-ma NEUT.water 3m.PRO-DAT=PURP
‘get water for him!’ (VL1 p.306)

(3) kv-me-ni=yadha eeka akwa kvn-ngaji=yadha yvrukudhv-hangwa
IRR.1/NEUT-take-NP2=PURP NEUT.tree and IRR.1/MASC-kill.NP1=PURP MASC.bandicoot
‘I plan to grab a stick and to kill bandicoot.’ (VL1 p.488)

The clitic often co-occurs with the particle kajungwa ‘so that’, which is always clause-initial. The PURP then occurs on the predicate.

(4) Kemba yakujina ngarnvngka kvn-lhv-kakb-rua ngarnvngka kajungwa
then at.there again NEUT.squeeze-NP2 again
yi-mungu-kungi=yadha.
MASC-soft.and.round-fresh.water=PURP
‘Then you will squeeze it [stingray(MASC)] there again so that it won’t be too salty.’ (Lit: ‘so that it will be fresh water’) (‘Yimaduwaya’ b23-4)
One of the reasons to assume that -yadha is a clitic rather than a suffix, is that it can follow grammatical case markers, as in (2b) and (5).

(5) ngv-mvn-akarrngv-na ma akungwa nganyangwi=yadha
    3f/1-BENE-get.water-NP2-ma NEUT.water 1.PRO.DAT=PURP
    ‘she is getting water for me’

Another argument for its clitic status is that =yadha can occur on verbs in the main clause, as in (3) above, which case suffixes cannot. Finally, it has a wider distribution than case suffixes. In the following examples, the clitic occurs first on the nominalised verb, then on the nominal, and then on the nominalised verb again.

(6) Ningi-lyengki+yema ngayuwa akina env-kv-dhaki=yadha damba. [...]  
    1-head+say-p2 1.PRO NEUT.that NEUT.m-NSR-cook=PURP damper(NEUT)  
    Kembirra akina angura nara dambi=yadha env-kv-dhaka, vmba then NEUT.that NEUT.fire NEG damper(NEUT)=PURP NEUT.m-NSR-cook but  
    yi-nv-kv-dhaki=yadha yimadhuwaya!  
    MASC-m-NSR-cook-PURP MASC.stingray  
    ‘I thought it was to cook damper. [...] So the fire was not to cook damper, but to cook stingray!’

The fact that =yadha is common on nominalised verbs may confirm its clitic status, because case suffixes do not appear on nominalised verbs in my data. This lack of case suffixes is remarkable, because case-marking is assumed to be a defining property of verb nominalisation in Australian languages (Nordlinger 2001 and the references therein). The reason for this may be that nominalised verbs are mainly used to express intent; other meanings that subordinate clauses may have, such as time adverbials ‘if...’, ‘after...’, ‘before...’ and so on, are expressed by case suffixes on finite verbs in Enindhilyakwa (section 8.11).
Appendix I: \textit{rr+en} contraction

In some frozen number+gender combinations, the augmented number prefix \textit{rr-} contracts with the masculine gender prefix \textit{en-} contract to become \textit{rn}.

\begin{enumerate}
\item \textit{rr + en > rn} (archaic)
\end{enumerate}

where \textit{rr-} is an augmented prefix, and \textit{en-} is masculine gender prefix

This contraction can be observed in for instance dual number prefixes. These are composed of an augmented number prefix plus a gender morpheme. This rule is illustrated in (2) for the pronouns \textit{nungkurvynguwa} ‘2fdu’ in (2a) and \textit{nungkuruwa} ‘2mdu’ in (2b) (see Leeding 1989: 78).\footnote{Leeding calls this process ‘cerebralisation’ (1989: 78-80).}

\begin{enumerate}
\item a. /nəŋkʷ-ɾ-ŋ-wa/ \[nŋkcurŋuwa\]
\quad 2-a-f-SF
\qquad ‘you two females’
\item b. /nəŋkʷ-ɾ-ɛn-wa/ \[nŋkŋuwa\]
\quad 2-a-m-SF
\qquad ‘you two males’
\end{enumerate}

The contraction does not take place for feminine gender in (2a). The masculine pronoun \textit{nungkuruwa} in (2b) varies with \textit{nungkunuwa} due to loss of retroflexion (section 2.5.8). The examples in (3) provide more examples of this contraction.

\begin{enumerate}
\item a. \textit{n-enungkvarba} /nəŋkʷapa/ \[nŋkŋapa\]
\quad 3m-man
\qquad ‘adult man’
\item b. \textit{yarnungkvarba} /jir-ɛn-wa/ \[jaŋŋapa\]
\quad 1a.man
\qquad ‘we men’
\end{enumerate}

Leeding notes some “[r]are occurrences of the full form used by the old generation in variation with the [contracted] form” (1989: 78-9), such as \textit{yirr-enungkvarba} ‘we men’ (cf. [3b]).

The contraction also occurs with the adjective \textit{eningaba} ‘good’:

\begin{enumerate}
\item /nəŋ-ɛniŋapa/ \[1\text{-}good\] \[nŋeniŋapa\] ‘I am good’
\item /nar-ɛniŋapa/ \[12a\text{-}good\] \[naŋŋapa\] ‘we are good’
\item /kar-ɛniŋapa/ \[2a\text{-}good\] \[kanŋapa\] ‘you(pl) are good’
\item /wur-ɛniŋapa/ \[3a\text{-}good\] \[waŋŋapa\] ‘they are good’
\end{enumerate}

The evidence that the stem-initial \textit{en}-segment here represents the masculine gender prefix is that it may be replaced by the feminine prefix \textit{adh-} in the feminine form, which knows two variants: \textit{dh-eningaba} ~ \textit{dh-adhingaba} [3f\text{-}good] ‘she is good’ (JW1 p.34).
We saw in Chapter 4 that the ‘3mdu’ pronominal prefix on verbs and adjectives is \( nen- \). Dual number is built from augmented number plus a gender prefix. I therefore propose that the masculine dual number prefix is the result of the contraction described above, followed by loss of retroflexion. Compare the feminine dual prefix in (5a) with masculine dual in (5b).

(5) a. narr-\(ng\)– [3a-\(1\)] \( [naran] \) ‘3\(\text{fdu} \)

b. *narrv-\(en\)– [3a-\(m\)] > *narr- > \(nen\)– [\(nen\)] ‘3\(\text{mdu} \)

Loss of retroflexion in the masculine dual in (5b) is accompanied by a vocalic shift - a process that occurs in other contexts also, as outlined in section 2.5.8.

However, the rule in (1) is not a synchronically productive phonological rule. Other combinations of /\(ɾ\)/ coming into contact with /\(ɛn\)/ do not produce [\(η\)]. This is illustrated in (6) for the COLL noun class/3a marker \( wurr\)-, and in (7) for inverse transitive pronominal prefixes with a second order ‘3m’ object.

(6) \( wurrendhindha \) ‘COLL.rat’
\( n-enjarrngalyilya \) ‘3m-boy’, \( wurr-enjarrngalyilya \) ‘3a-boys’

(7) \( kvrr-en\)– [2a.O-3m.S]
\( yirr-en\)– [1a.O-3m.S]
\( yarr-en\)– [12.O-3m.S]
\( ngsarr-en\)– [12a.O-3m.S]
\( narr-en\)– [3a-3m]

The contraction \( rr(V)n > rn \) occurs in frozen forms in other Gunwinjguan languages also. Heath (1984: 68) describes an almost identical rule in Wubuy of non-singular /\(ɾ\)/ contracting with the masculine gender /\(ni\)/ to /\(ŋi\)/ (e.g. *\(nu-ku-rr-ni > nu-ku-\(rni \) ‘2mdu’; compare Enindhilyakwa \( nungku-\(rmu-wa \) ‘2mdu’ in [2b]). He suggests the same etymological analysis for masculine dual -\(rni \) in Ngandi independent pronouns (e.g. *\(rmuka-rr-ni > rmuka-\(rni \) ‘2mdu’ (1978a: 54). Baker (2004) describes a similar derivation for Ngalakgan pronominal prefixes, which show a retroflex nasal when preceded by \(-rrV\)- (e.g. *\(nurrurn > nurn- \) ‘2augO’).\(^{14}\) In none of these languages is this derivation a synchronically regular process and only occurs in frozen number+gender combinations.

\(^{14}\) In Murrinh Patha, a language genetically distant from the Gunwinjguan languages, a similar contraction *\(rr-nV > rnV \) occurs in auxiliary verbs (I. Green 2003: 144).