

Mycenaean Cruces I: PY Vn 493+*frr.* (3) (Class i) <a-ke-ra₂-te>

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PY Vn 493+*frr.* (3) (Class i) <a-ke-ra₂-te>

1.1 The *s*-aorist participle <a-ke-ra₂-te> appears in the header of PY Vn 493+*frr.* (3) (Class i), followed by a series of personal names, place names, and numerals:

- .1 a-ke-ro, e-po, a-ke-ra₂-te
- .2 pa-wa-wo, ti-mi-ti-ja 20
- .3 o-to-wo-q̄a, e-sa-re-wi-ja, z̄a-me-e-wi-ja-q̄e 50
- .4]po-ro-u[-te-]a, e-re-te-re-wa-pi 20
- .5]-ja 20
- .6]-re-wi-ja-q̄e 50
- .7] *vac.*
- .8] 40
- .9 me-]ta-pa-q̄e 20
- .10]p̄e-to-no 25
- .11]ja, a-ke-re-wa-q̄e 20

reliqua pars sine regulis

1.2 The text is best interpreted as /angeloi ep^ho(n)s agERantes/, followed by the list of <a-ke-ro>, places where they collect the <e-po> ‘young goats’ (: ἔπιφος Hom.+) – cf. KN Ce 283 (H124), Ws 8712 (H124³), likely logographic KN U 5715, PY Wr 1458¹ –, and their number. See Leukart 1996, who emends <a-ke-ro> ⇒ <a-ko-ro> /agoroi/, and Rougemont 2009: 296ff. for general discussion.

1.3 A consensus has emerged in the literature that the form <a-ke-ra₂-te> represents /agerrantes/ with an Aeolic-style geminate outcome of the CL1, with <ra₂>, which is otherwise used in cases of original /rja/, /lja/ and syncopated /re/ija/, /le/ija/, representing the originally non-palatal CL1 product /rra/ </rha/ </rsa/. See Leukart 1996, Hajnal-Risch 2006, Melena 2014, García Ramón 2016, Judson 2020.

1.4 This interpretation rests on three assumptions: (1) the sign <ra₂>, in addition to its normal value representing palatalized (plus or minus -j-) -ra- and -la-, viz. /r^ja/, /r^jja/ and /l^ja/, l(l)^jja/ uel sim., is also used to represent non-palatal geminate /rra/ and /lla/; (2) that the CL1 outcome in Mycenaean was a geminate sonorant; and (3) that depalatalization of the outcome of original -rj- clusters and (at least some part of) CL1 was complete by the time of our text, at least at Pylos.

1.5 The point of this discussion is to determine which, if any, of these assumptions is likely correct.

2.1 The sign <ra₂> and its correlate <ro₂>, which alternate with simple <ra> and <ro>, are used in cases of inherited /rja/o/ and /lja/o/ or the results of a Mycenaean-internal syncope of original /re/ija/o/ and /le/ija/o/. For this general (apparently variational) syncope, cf. e.g.

¹ See Palaima 2000: 265 for possible restoration PY Wr 1459g <e-ri-[po>.

Knossos	Pylos	Ayios Vasileios
<ka-za> < <i>k^halki/ejā</i> - Sp 4452 (H231, Arsenal) (: <ka-ki-jo> So 894 [NEP], <ka-ke-ja-pi> Sd 4409, 4412, 6066 [H128, Arsenal]) <su-za> < <i>sūki/ejā</i> - F 841 (NEP), Gv 862 (NEP), 864 (NEP)	<a ₃ -za> < <i>aigi/ejā</i> - Ub 1318 (H32) <a-sa-ti-ja> Mn 162 (H2) (: <a-si-ja-ti-ja> Ae 134 [H42], etc.) <i-za-a-to-mo-i> < <i>ik^wk^wijā</i> - Fn 50 (HCiii) (: <i-qi-ja> Kn Sd 4402 [H128, Arsenal], etc.) <ku-ru-sa-pi> < <i>k^hrūsi/ejā</i> - Ta 707 (H2), Ta 714 (H2) <su-za> < <i>sūki/ejā</i> - Er 880 (H24)	<a ₃ -za> < <i>aigi/ejā</i> - Ul 10

2.2 Following a foundational survey by Heubeck 1979, it is assumed <ra₂>, <ro₂> = /rra/o/, /lla/o/ in a handful of lexical items. So Melena 2014, Hajnal-Risch 2006, García Ramón 2016 (tentative).

2.3 However, when we survey the material, the few cases that could belong here are in PNN where a palatal reading is also possible or where the precise identification of the form is at best uncertain. See Melena 2014: 63ff. and Jiménez Delgado 2011 for a thorough survey of forms. Cf.

PGk. -rja/o-, -lja/o-	Syncopated -rja/o-, -lja/o- < -re/ija/o-, -le/ija/o-	Consistent with /-rj-/ /-lj-/ or Unclear	
<a-ro₂-a> KN Ld 571 (H116), L 586 (H103³), L 5910 (H103), So 4430 (H130, Arsenal) <a-ro₂-je> KN So 4437 (H130, Arsenal) < a-ro₂-e> N L 735 (H214) <a-ro₂- > KN L 728 (: ἀρείων Hom.+) <ku-pa-ro₂> PY An 616 (H1), Un 219 (Cii), Un 267 (H1) <ku-pa-ro> KN Ga 454 (H223), Ga 465 (H223), Ga 517 (H135), Ga 8005 <ku-pa-ro-we> PY Fr. 1203 (Class ii) (: κύπαιρος Alcμ.) <qa-ra₂> PY Na 192 (H22) <qa-ra₂-te> PY Na 7.7 (H30), An 39n (Ciii); TH Of 38 (H303) <qa-ra₂-to-de> TH Of 37 (H303) <qa-ra₂-ti-jo> KN Dg 1235 (H117) (: <qa-ra₂-ri > KN X 7873, <qa-ra₂-ro> D1 932 [H117], <qa-ra₂-wo> KN Ce 50 [H124b, RCT])	<e-ke-ra₂-wo> PY Un 718 (H24) <e-ke-ra₂-wo-ne> PY An 724 (H1) <e-ke-ra-<wo, u>-ne> PY Un 219 (H15) <e-ke-ra₂-wo-no> PY Na 610 (H1) <e-ke-ra₂-u-na> PY U na 853 (H6) < e-ke-ri-ja-wo> PY Qa 192 (H15) (: ἐγχειριάων*. See García Ramón 2014) <po-pu-ro₂> KN L 778 (I1, Room of the flower gatherer) <po-pu-re-ja> KN L 474 (H211) <po-pu-re-jō > KN X 976 (H225) (: πορφυρέος Hom.+) <a-ke-ti-ra₂> PY Aa 815 (H1), Ab 564 (H21) <a-ke-ti-ra₂-o> PY Ad 290, TH Of 36 (H303) <a-ke-ti-ri-ja> PY Aa 85 (H40, Aa 717 (H1), Kn Ai 739 (H207?), Ak 7001 (H102) <a-ke-ti-ri-ja-i> PY Fn 187 (H2), Um 219 (H15) (: ἀσκητρία*)	<ra-pi-ti-ra₂> PY Ab 553 (H21) (: ῥαπτρία Eust.) <ra-qi-ti-ra₂> PY Ab 356 (H21) <ra-qi-ti-ra₂-o> PY Ad 667 (H23) (: συλλητρία Aesch.+) <mi-ra₂> PY Ta 715 (H2) (: μελία Hom.+) <pu₂-ra₂-a-ke-re-u> PY Na 228 (H1) <pu₂-ra₂-a-ki-ri-jo> PY Na 425 (H1) (: φυλία Hom.+ See Melena 2013) <e-pi-qo-ra₂> PN PY Ma 456 (H2) (: ἐπιπολία* = PN Ἐπιπολαί) <pi-ti-ro₂-we-sa> PY Ta 713 (H2) (: πτυλίον*) <qe-ro₂> KN K 740 (H102), Sk 789, etc. (5x) (H206, NEP) (: ψέλιον Hdt., v.l. ψέλλιον X., σπέλ(λ)ιον XXX)	<e-ro₂-qo> PN PY Ea 29 (H43), Ea 325 (H43), Ea 813 (: Ἐρίων García Ramón 2014: 38²³, Ἐλλων* < *elno- Melena 2014: 67) <ku-ro₂> PN KN As 603 (H103), U 4487 (H202), PY Ea 814 (H43), TH Fq 120, Fq 205 (H307) <ku-ro₂-jo> KN B 822 (NEP) (: Κύριος; Κύλλος, Σκύλλος) <ko-tu-ro₂> PN PY Cn 436 (H1), Eb 839 (H41), Eb 1347 (H41), Tn 431 (H2), TH Of 34 (H303) (: Κοτύλιος/ίων*: Κότυλος, Κοτυλάς) <pa-ku-ro₂> PN PY Aq 218 (H21), Jn 750 (H2) (: Παχύλιος/ίων*: Παχυλλάς) <pe-ta-ra₂> FPN MY Fo 101 (H53) (?: <pe-ta-ro> PN PY Jn 310 [H2]) (: Πεταλία*: Πετάλη, Πεταλλίς)

(: πάλλας, -αντος Hes., πάλλας, -ακος Gell.+ [: Lat. <i>paelex</i> Pl.+], Παλλάς, -άδος Hom.+) <tu-ro₂> PY Un 718 (H24), Un 1185 (H1) (if *<i>tūrjos</i> à la Meier Brügger 2004, otherwise syncopated τυρίον Chionid.+) <]-pe-ro₂-ne[> KN E842 (Area Bull Relief) (if <a-pe-ro₂-ne>*, otherwise syncopated <u-pe-ro₂-ne>*)	<me-re-ti-ra₂> PY Ab 789 (H21) <me-re-ti-ra₂-[o> PY Ad 308 (H23) <me-re-ti-ri-ja> PY Aa 62 (H4), Aa 764 (H1) (: μελετρία*) <pe-ke-ti-ri-ra₂> PY Ab 578 (H21) <pe-ke-ti-ra₂-o> PY Ad 694 (H23) <pe-ke-ṭi-[ri-ja> PY Aa 891 (H1) (: πεκτρία*) <o-ti-ra₂> PY Ab 417 (H21) <o-ti-ra₂-o> PY Ad 663 (H23) <o-ti-ri-ja> PYAa 313 (H1) (: Ὀρθρία GN) ?<]pi-ra₂-mo[> KN X 7860 <pi-ri-me-ja> PY An 39 (H10)	<ka-tu-ro₂> PN PY Ub 1318 (H32) (: Κανθύλιος/ίων*: κανθύλη Ar.)	<*56-ro₂> PN KN Dv 1422 (H117) (: βαλιός Hom.+ Melena 2014: 68 [tentative]) <pe-ra₂> GPN KN X 999 (? : <pe-ra₂-wq[> PN) (: Πέλλα, πέλλα λιθος Hsch.) <u-ro₂> PN KN Db 5367 (H117) (: ὕλλος) <ki-ra₂-i-jo> PN KN Sc 103 (H124i) ?<ki-ri-ja-i-jo> PY An 519 (H1) <wi-ja-we-ra₂> FPN PY Cn 643 (H1), Jn 478 (H2), Mn 1410 (H14) <a-de-ra₂> FPN Kn Ap 639 (H103) <]ta-ra₂> FPN Kn Ai 632 <ta-ra₂-to> PN PY En 74 (H1), Eo 351 (H41) <ta-ra-to> Eo 247 (H41) <ka-pa-ra₂> PY Jn 706 (H21), KN Ak 5009 (H103) <ka-pa-ra₂-do> PY Ad 679 (H23) <ka-pa-ra₂-de> PY Aa 788 (H1), An 292 (H1) (? : <ka-pa-ri-jo> PN Kn U 4478 [H202], Vc 72 [H124s], V 69 [H124b], V 77 [H124], <ka-pa-ri-jo-ne> KN Fh 344 [H141]) <a-pe-ti-ra₂> KN V 280 (H124, RCT) <]o-ne-ro-i[> KN X 1620 <a₃-ra₂-[> MY X 8 (Petsas)
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2.4 There is thus no certain evidence for the assumption that <ra₂> and <ro₂> could have the value non-palatal /rra/o/ or /lla/o/, let alone be used specifically to indicate geminate sequences. See further Jiménez Delgado 2011. The only form that would potentially point to a nonpalatal geminate is <a-ke-ra₂-te>, the precise form whose value is the question at hand.

3.1 The second assumption that we find in the literature is that in Mycenaean and Achaean more generally the outcome of the CL1 was a geminate long sonorant, similar to Aeolic, and thus that <a-ke-ra₂-te> = /agerrantes/. This is likewise not supported by the facts.

3.2.1 When we look at Arcadian inscriptions, we find clear evidence across multiple regions that the CL1 produced compensatory lengthening proper with a *severior*, viz. five-long-vowel, result.² Cf. e.g.

CL Proper	
Tegea	<i>Té</i> 4 Dubois, ca. 324 BCE 1.13 <οφηλον>, 1.23 <βωλευσασθαι>, <βωλευσητοι>, 1.40 <ωφηλον> <i>IG</i> 6, 4 th c. BCE 1.1 <1.5 <κ]ρ]ινωνσι>, 1.8 <φθεραι>, 1.12 <ιγκεχηρηκοι>, 1.17 <φθηρων>, 1.29 <μηνα> <i>IG</i> 16, ca. 218 BCE <ιν σταλαν>
Mantineia	<i>IG</i> 262, 5 th c. BCE 1.15 <κακρινε> (: 1.21 <κα τορρεντερον>, 1.23 <κα τονν[υ/ι]> Te Riele <i>BCH</i> (1987), early 4 th c. BCE 1.18 <σταλογραφοι>, 1.22 <βωληιον>, 1.22 <ιμφαναι> <i>IG</i> 289, 4 th c. BCE <εμβωλεος>
Thelphousa	<i>The.</i> 3 Dubois, ca. 242 BCE 1.6 <εκεχηριας>, 1.11 <χηροτονησαι>, 1.12 <εχηροτονθη>
Megalopolis	<i>I.v.Magn.</i> 38, 207/6 BCE 1.24 <αμμε>: 1.19 <αμετεραι>, 1.22 <αμε>, 1.39+ <εκεχηριαν>, 1.46/7 <βωλευσασθαι> For the many errors in the inscription, see Dubois 1988 II 275.

3.2.2 There are only three inscriptions that present anything that might point to an Aeolic-like geminate outcome here. All are problematic.

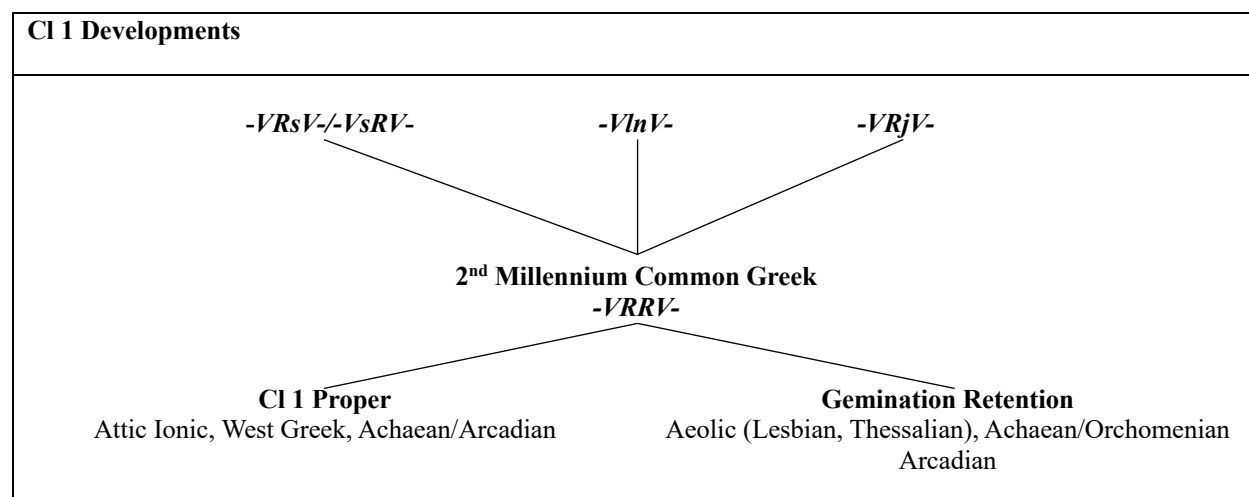
CL Gemination	
Tegea	<i>IG</i> 6, 4 th c. BCE 1.8 <φθεραι>: 1.5 <κ]ρ]ινωνσι>, 1.12 <ιγκεχηρηκοι>, 1.17 <φθηρων> <i>Té</i> 4 Dubois, ca. 324 BCE 1.23 <βωλευσασθαι>, <βωλευσητοι>, 1.40 <ωφηλον> <i>IG</i> 16, ca. 218 BCE <ιν σταλαν>
Megalopolis	<i>I.v.Magn.</i> 38, 207/6 BCE 1.24 <αμμε>: 1.19 <αμετεραι>, 1.22 <αμε>, 1.39+ <εκεχηριαν>, 1.46/7 <βωλευσασθαι> For the many errors in the inscription, see Dubois 1988 II 275.
Orchomenos	<i>IG</i> 343, ca. 360-350 BCE 1.36/37 <οφελλο[νσ]ι>, 1.51/52 <ε[κ]ρινναν>: 1.8 <κα μην αυθι>, 1.39 <-βωλευσαμινος>, 1.57/58 <ιολλ[α]ος>

3.2.3 While it is not impossible – or perhaps even necessarily unlikely given the geographic expanse over which the Achaean dialects were used – that they had different CL1 outcomes, some CL proper, others gemination, this is not a strong basis on which to make the argument. The assumption that <a-ke-ra₂-te> represents /agerrantes/ should be considered at best uncertain – and ultimately disfavored by the evidence.

3.3.1 What is really motivating the geminate interpretation of <a-ke-ra₂-te>, despite the questionable evidence of *IG* 343, is the further underlying assumption, now standard in a large subarea of the literature, that assumes all three inputs to the CL1 merged in the 2nd millennium BCE in all dialectal subgroups in geminate sonorant sequences,

² Note that there seems to be no evidence for the precise form of the CL1 outcome in Cyprian. The <Ζωεος ημι> cited at Egetmeyer 2010: 111f. is a mistaken extrapolation of the rendering at Masson 1971: 449 of inscriptional alphabetic <ζοεοσεμι>.

which were then preserved in Mycenaean and Aeolic and systematically degeminated with CL in the prehistory of Attic Ionic, West Greek, and Achaean/Arcadian. Viz.



See e.g. Cowgill 1969, Hock 2004, Parker 2008, Ringe 2024: 266ff.; Ruipérez 1972, García Ramón 2016: 213; Risch 1979, Leukart 1996, Hajnal Risch 2006: 256ff.

3.3.2 This assumption has three rather grave issues:

3.3.2.1 It is unnecessary – there is no phonetic requirement for a geminate mid-stage and ample cross-linguistic evidence for direct CL and gemination outcomes of similar sequences. See e.g. Kavitskaya 2002 and Campo Astoricza 2011.

3.3.2.2 It is uneconomical – it requires the creation of a unity mid-stage at a time when we already have considerable dialectal differentiation – mid-2nd millennium BCE –, which would then be independently eliminated in the prehistory of three highly differentiated and geographically widely separated dialectal subgroups (Attic Ionic, West Greek with its varieties, Achaean/Arcadian), all via a typologically rare sound change.

3.3.2.3 It is directly contradicted by the facts of the language – so *-ll-*, which fails to degeminate, but which would have to be considered as old if not older than other geminates that derived from *-Rj-* sequences, given the underlying phonetic similarity of *-llj-* < *-lj-* – on which see Colatani 2014 –, and further i.a. ἐννέα and related forms, whose geminate depends on laryngeal-related developments and so would have preexisted all other geminates subject to degemination. See Peters 1991 and the excellent review and discussion in Batisti 2014: 53ff.

3.3.2.4 In any ranking of reconstruction scenarios this assumption should be radically disfavored, and the default approach should be direct resolution of these sequences via CL or gemination according to dialect subgroup.

3.4 To conclude, while a geminate is possible in <a-ke-ra₂-te>, there is no direct evidence in favor of it – and taken at face value, Arcadian would suggest a CL1 proper outcome.

4.1 The final assumption here is that the use of <ra₂> to render a sequence that was originally non-palatal indicates that we have had depalatalization of (at least some of) our palatal CL1 sequences by the time of this text – this I think is correct.

4.2 Recall the sequences that actually go into the CL1 and that the *jod* portion is actually a subset of a larger set of changes involving a sonorant plus *jod*. Viz.

CL1 Sequences			
-VRsV/-VsRV-	-VlnV-	-VRjV-	
<a-no-wo-to> KN K 871 (H102a, Area Bull Relief) <o-wo-we> PY Ta 641 (H2) <a-ni-ja> KN Sd 4402++ (H128, Arsenal) <e-po-mi-jo> KN Sk 8100++ (H206, Arsenal) <me-no> KN Fp 1 ++ (H138, Clay Chest) <o-pi-me-ne> PY Fn 7 (H3) etc.	<o-o-pe-ro-si> PY Na 228 (H1) <o-pe-ro> PY Na 724 (H1), Eb 149+ (H41) <o-pe-ro-sa> PY Eb 338 (H41), Ep 704 (H1) etc. On issues with this sequence, see Batisti 2014: 229ff.	-VljV- > -VllV- -(i,e,u)wjV- > -(i,e,u)jjV-	?<qa-ra₂> PY Na 192 (H22), <qa-ra₂-te> PY Na 7.7 (H30), An 39n (Ciii); TH Of 38 (H303) <qa-ra₂-to-de> TH Of 37 (H303) <qa-ra₂-ti-jo> KN Dg 1235 (H117) ? <[-pe-ro₂-ne]> KN E842 (Area Bull Relief) (if <a-pe-ro₂-ne>*, otherwise syncopated <u-pe-ro₂-ne>*) Arc. <i>IG</i> 4, 4th c. BCE, Tegea, 1.44 <αλλοις>, etc. Cyp. <a-i-lo-ne> <i>ICS</i> 217A.14, ca. 450 BCE, Idalion, <a-i-la> <i>KAFIZIN</i> 117b, ca. 225-218 BCE
			KN <di-wi-je-ja> Xd 97 (H124λ, RCT), <a-ra-ka-te-ja> Ak(1) 5009 (H103), Lc(1) 531 (H103), <e-ne-re-ja> Ak(1) 638 (H103), etc. PY <a-ra-ka-te-ja> Ad 697 (H23), Aa 89 (H4), Aa240 (H1), <i-je-re-ja> Py Ae 303 (H42), Eb 297 (H41), etc. <i-qe-ja> An 1281 (H12), <i-te-ja> Ad 684 (H 23), etc. MY <e-ro-pa-ke-ja> Fo 101 (H53, HOM), etc. TH <a-ra-ka-te-ja> Of 34 (H303), <te-pe-ja> Of 35 (H303), etc. AV Or 18 <i-je-re-ja>
		-(a,o)(r,n,w)jV- > -(ai,oi)(r,n,w)V-	<a-ro₂-a> KN Ld 571 (H116), L 586 (H103?), L 5910 (H103), So 4430 (H130, Arsenal), <a-ro₂-je> KN So 4437 (H130, Arsenal), <[a-ro₂-e> N L 735 (H214) <a-ro₂-[> KN L 728 (: ἀρείων Hom.+) <ku-pa-ro₂> PY An 616 (H1), Un 219 (Cii), Un 267 (H1), <ku-pa-ro> KN Ga 454 (H223), Ga 465 (H223), Ga 517 (H135), Ga 8005, <ku-pa-ro-we> PY Fr. 1203 (Class ii) (: κύπαιρος Alcμ.) <e-re-pa-i-ro> PN KN Vc(5) 212 (H124s, RCT) (: ἐλεφαίρω, -ομαι Hom. Hes., Ἐλεφῆνωρ PN Hom.+) See Aura Jorro 1985: s.v. with lit. and Neumann 1995: 156.³ Arc. <i>IG</i> 6, 4th c. BCE, Tegea 1.16/17 <λυμαινῆτοι> (: 1.1 <1.5 <κ]ρ]ινωνσι>, 1.8 <φθεραι>, 1.12 <ιγκεχηρηκοι>, 1.17 <φθηρων>, 1.29 <μῆνα>) <i>Té</i> 4 Dubois, ca. 324 BCE, Tegea, 1.41 and 44 <φαινῆτοι>, 1.62 <κοινοι> (: 1.23 <βωλευσασθαι>, <βωλευσητοι>, 1.40 <ωφῆλον>) <i>IG</i> 343, ca. 360-350 BCE, Orchomenos 1.18 <χαῖριαδαι> PN, 1.30 <κοιναι> (: 1.36/37 <οφελλο[νσι]τ>, 1.51/52 <ε[κ]ρινναν>: 1.8 <κα μην αυθι>, 1.39 <βωλευσα-μινος>, 1.57/58 <ιολλ[α]ος>)

³ Hajnal Risch 2006: 258⁴⁵⁰. “Damit fällt es schwer (JR: because Mycenaean is still at the geminate stage), der Bestimmung des PN *e-re-pa-i-ro* KN Vc 112 als */Eleph^hairōn/* (vgl. hom. Ἐλεφῆνωρ) nach Neumann 1995, 156 zu folgen. Ein Verbum **/elep^hairōl/* (~ ἐλεφαίρωμαι) setzt einen Stammauslaut **/o-ar-je/o-/ < */o-r-je/o-/ -/* (...) voraus. Gemäss den Ausführungen im Text wäre hieraus im Mykenischen ein Stadium **/o-ar'r'e/o-/* zu erwarten, die Entwicklung zu **/o-aire/o-/* erst in nachmykenischer Zeit berechtigt.“

			Cyp. <ka-i-re> <i>ICS</i> 367d, ca. 475-400 BCE, Marion, <ka-i-re-te> <i>ICS</i> 264.1, 4, after 325 BCE, Golgoi, ἀποαῖρεν ἀποκαθαίρεν Κύπριοι Hsch. A6247 (: σαῖρω) NB Arcadian Carbon Clackson 2016, 5th c. BCE 1.1 <χο[ρον>, 1.4 <χο{:}ρον>, 1.13 <χορο> (: <χοιροθυων> <i>IG</i> 429, 4th c. BCE, Phigalia). See Kostopoulos 2023 with lit. for this and other possibly similar forms in Thessalian, Lesbian, and Boeotian.
		-(i,e,u)(r,n)jV- > -(i,Ē,ū)(r;n)V- -(i,e,u)(rr,nn)V⁴	<a-ke-re> PY Cc 660 (H21), ?Xa 1587 Arc. above

4.3 In line with Hock 2004, who effectively revived Danielson 1903’s palatalization account against Kiparsky 1967, we should see all the changes involving sonorant plus *jod* as part of an interrelated set. We can unpack them into three broad sequential changes:

4.3.1 First, we obviously have a strong coarticulatory palatalization of sonorants followed by *jod*. This is visible in the full assimilation of -Vl̥jV- > -Vl̥jV- > -Vl̥jV-, -(i, e)wjV- > -(i, e)w^jjV- > -(i,e)jjV-, and the diphthongization/“prevocalization” of -(a,o)(r;n,w)jV- > -(a,o)(r^j,n^j, w^j)jV- > -(ai,oi)(r;n,w)V-. Given the extreme phonetic similarity of palatal/palatalized laterals and *jod* – see Colatani 2014 –, the triviality of the assimilation of -(i, e)wjV- > -(i,e)jjV-, and the invariance of the outcomes here across the dialects, we are free to assume that these two changes represent early developments.

4.3.2.1 Second, we have diphthongization/“prevocalization” and CL/gemination changes, which clearly depend on some level of articulatory undershoot of segmental *jod*.⁵ On “prevocalization” and its importance here, see Hock 2004 and the book-length study Operstein 2010.

Direct CL1/Gemination	Intermediate Common Greek Gemination
-AR^jjV-, -ER^jjV- -AiR^jjV-, -ER^jjV- (Preservation) (Innovation) / \ Attic Ionic, West Greek, Aeolic, Achaean Dialects? Achaean Dialects -AiR^jV-, -ĒR^jV- -AiR^jV-, -ER^jR^jV-	-AR^jjV-, -ER^jjV- -AiR(R^j)V-, -ERR^jjV- (Innovation) (Preservation) / \ Attic Ionic, West Greek, Aeolic, Achaean Dialects? Achaean Dialects -AiR^jV-, -ĒR^jV- -AiR^jV-, -ER^jR^jV-

⁴ On possible forms with diphthongal outcome in Attic, Ionic and elsewhere, see Kostopoulos 2023. While the nature of the evidence urges caution and strong skepticism – viz. it would not be surprising to discover that <ei> for /ē/ was at least sporadically in use much earlier than expected –, if they were to prove real, they could be understood as alternative outcomes at the C1 level, or more likely in my view, as with -a^jl̥V- > -ail- in Cyprian and Elean, as late, dialect-internal diphthongizations as a result of persistent sonorant palatalization.

⁵ A third possibility would be to take seriously forms like Arcadian Carbon Clackson 2016, 5th c. BCE 1.1 <χο[ρον>, 1.4 <χο{:}ρον>, 1.13 <χορο> (: <χοιροθυων> *IG* 429, 4th c. BCE, Phigalia) and possible similar forms in Aeolic and to assume that these dialects lacked the “prevocalization” development and geminated all sonorant plus *jod* clusters. An alternative here would be to assume a late, dialect-specific lowering and monophthongization of /oi/ before -r-.

4.3.2.2 Note that at the completion of this stage Greek would have had a phonemic contrast between palatalized and non-palatalized sonorants. While this contrast would not have been robustly instantiated across the language, it would have been highly visible in indicative present: s-aorist subjunctive pairs like *krīn'ō/e-*: *krīno/e-*, *p^ht^hēr'ō/e-*: *p^ht^hēro/e-*, etc. bzw. *krin'ō/e-*: *krinno/e-*, *p^ht^her'ō/e-*: *p^ht^herre/o-*, *angel'lo/e-*: *angelo/e-*, etc.

4.3.3 The final step under any account is depalatalization of the sonorant – viz. *-r^j-/-r^jr^j-* > *-r-/-rr-*, *-n^j-/-n^jn^j-* > *-n-/-nn-*, *-l^j-* > *-ll-*, this last perhaps relatively late, in the early prehistory of some individual dialects (Cyprian, Elean).

4.4 Back to Pylos and <a-ke-ra₂-te>. To judge by at least <ku-pa-ro₂> PY An 616 (H1), Un 219 (Cii), Un 267 (H1) (: <ku-pa-ro> KN Ga 454 [H223], Ga 465 [H223], Ga 517 [H135], Ga 8005 <ku-pa-ro-we> PY Fr. 1203 [Class ii]), palatalization was still present here in Pylos at the time of our texts, or had disappeared so recently that conventional spellings noting it were still in use.⁶

4.5 If we take the spelling <a-ke-ra₂-te> seriously, it can only point to a form that has been depalatalized. Here we can assume (1) that *-r^j-* and *-n^j-* were in the process of depalatalizing, perhaps as a variational phenomenon, or (2) perhaps more likely that we had a precocious variational depalatalization only involving *-r^j-*, which for articulatory and aerodynamic reasons does not like to be palatalized and tends to depalatalize quickly cross-linguistically, even in languages with a robust palatal: non-palatal contrast. See Hall 2000, Kavitskaya et al. 2009, and Kavitskaya and Wandl 2025

4.6 For the specific use of <ra₂>, we might conjecture that the scribe had simply decided that <ra> and <ra₂> were fully equivalent and extended <ra₂>'s usage. More narrowly, modifying a suggestion by Jiménez Delgado 2011, we might also conjecture that he knew conventionalized spellings with <ro₂> in the present – so participle *<a-ke-ro₂> *et sim.* –, where the form had likewise depalatalized, and extrapolated that the special signs <ro₂>, <ra₂> were proper in forms of this verb.

5.0 To sum up: When it comes to the now standard interpretation of <a-ke-ra₂-te>, there is no evidence for the general use of <ra₂> or <ro₂> in the value /rra/, /lla/ or /rro/, /llo/, no support for the assumption that we have a geminate CL1 outcome /rra/ here, but it is likely that the form represents a precious indication that sonorant depalatalization was in effect in late 13th/early 12th c. Pylos, at least involving *-r^j-* from inherited *-rj-*. This of course further tells us – provided we dispense with the geminate mid-stage scenario – that the CL1 was long complete, whatever its precise value in Mycenaean.

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⁶ This likewise obviously holds for palatal *-l^j-* as we no doubt have it in <qa-ra₂> PY Na 192 (H22), <qa-ra₂-te> PY Na 7.7 (H30), An 39n (Ciii); TH Of 38 (H303), <qa-ra₂-to-de> TH Of 37 (H303), <qa-ra₂-ti-jo> KN Dg 1235 (H117), whatever its origins. At Knossos we have palatalization noted in texts from the Arsenal – cf. e.g. <a-ro₂-a> So 4430 (H130, Arsenal), <a-ro₂-je> KN So 4437 (H130, Arsenal) – and the West Magazine – cf. e.g. <a-ro₂-a> L 586 (H103⁷), L 5910 (H103) –, likely mid- and late-stage deposits, respectively. See Driessen 1999, Firth and Skelton 2016, and Nosch 2024.

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