

# Compensatory Lengthening in Ancient Greek.

## Phonetics, Phonology, Dialectology.

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**Compensatory Lengthening (CL)** = «the lengthening of a segment [...] in compensation for the loss or reduction of another» (Gess 2011, 1513).

### CL in Ancient Greek (Bartoněk 1966)

#### Phonological Theories

De Chene & Anderson 1979 (CL = Weakening + Monophthongization).  
Hayes 1989 (Moraic Theory: preservation of syllable weight).  
Kavitskaya 2002 (diachronic approach: phonologization of vowel length).  
Recent OT approaches: Topintzi 2006, Beltzung 2008, etc.

Research has shown rich and varied cross-linguistic typology of CL. Different CL's in Greek need not be explained by a single rule: different mechanisms are involved. But they must all be phonetically plausible!

### 1<sup>st</sup> CL      2<sup>nd</sup> CL      3<sup>rd</sup> CL

**1<sup>st</sup> CL:** VsR, VRs > V:R  
VRy > V:R

**2<sup>nd</sup> CL:** Vns > V:s / Vis  
(Lesb., Thera, Cyrene)

**3<sup>rd</sup> CL:** VCw > V:C

**1<sup>st</sup> CL:** All dialects except Thessalian and Lesbian.

**2<sup>nd</sup> CL:** Most dialects (vs retained in Cretan, Arcadian, Thessalian).

**3<sup>rd</sup> CL:** Eastern Ionic, some Doric dialects.

**1<sup>st</sup> CL:** Before the earliest alphabetic records. Before Ion-Att. ā > æ̃.

**2<sup>nd</sup> CL:** After Ion-Att. ā > æ̃.

**3<sup>rd</sup> CL:** After Ionic-Attic split.

**1<sup>st</sup> CL:** Mechanism debated! (see below)

**2<sup>nd</sup> CL:** Nasalization with lengthening or diphthongization.

**3<sup>rd</sup> CL:** 'Double Flop' = VC<sub>1</sub>C<sub>2</sub>V > V:C<sub>1</sub>V

### 'Hidden' CL in Greek?

Two intriguing hypotheses that still need to be thoroughly tested.

#### Quantitative Metathesis

**Traditional Description:** vowels exchange length (no phonetic explanation, no typological parallels!).

Méndez Dosuna 1993: synizesis + CL by gliding.  
Ion.-Att. νηός > Att. νεώς, cf. Old Icelandic *keosan* > *kjōsan*.

#### Wackernagel's Lengthening Law

«In Greek, compositional hiatus is avoided by elision of morpheme-final vowel plus lengthening of morpheme-initial vowel» (Collinge 1985, 238).

$$CV_1 + V_2 \rightarrow CV_1'V_2$$

**Traditional Explanation** (Wackernagel 1889): old contraction \*στρατο+αγ- > στρατᾶγός, \*ὄμο-ed-t- > ὄμηστῆς, later extended by analogy.

Berenguer-Sánchez 2011: different strategies for resolving hiatus

$$CV_1 + V_2 > C(V_1)V_2'$$

Synizesis + CL: \*ki-a-wetes > \*kṽāwetes > Myc. *za-we-te* Att. τῆτες.  
Elision + CL: \*epi-akowos > \*epākowos > ἐπίκωος.

WHAT?

WHERE?

WHEN?

HOW?

Problems

#### CL by degemination?

Lejeune 1972: \*esmi > Eol. ἔμμι, non-Eol. ἤμι/εἰμί.

Ruipérez 1972: \*esmi > \*emmi (= Eol. ἔμμι) > non-Eol. ἤμι/εἰμί.

But cf. ἄλλος, ἐννέα (geminate preserved), μέσσοσ > μέσος (geminate simplified without CL)! Gemination probably is *not* an intermediate stage.

Mycenaean spelling is not helpful: *a-ke-ra<sub>2</sub>-te* = ἀγέφαντες ~ -έρρ- ~ -εῖρ- ~ -ήρ-? (or ἀγγελ-?) Not ἀγέρσαντες = \*\**a-ke-sa-te*!

#### Diphthongal outcome

**Origin:** 'lenition' /n/ > [ŋ] palatalized /n/?

How does it relate to CL? Intermediate stage Vns > Vis > V:s? (very unlikely!)

**Distribution:** are diphthongal forms outside Lesbos genuine, or literary eolicisms?

#### Mechanism of 3<sup>rd</sup> CL

**Resyllabification:** VC.wV > V:CV?

**Metathesis:** VCw > VwC > V:C? Unlikely: Vw-diphthongs in Greek never give V:!

**Aspiration:** VCw > VCh > VhC > V:C? Unlikely: w > h restricted to Anlaut.

#### Treatment of -sw- and -dw-

Usually considered doubtful; few words, etymologies often obscure: νοῦσος (Att. νόσος), ἴσος (Att. ἴσος), οὐδός (Att. ὀδός), δεῖδω (Att. δέδια), Ἄσια (vs Ἀσία), εἶδαρ, χελιδών. Some cases could have metrical lengthening, but at least some of these words probably have genuine CL.

#### Mechanism of 1<sup>st</sup> CL

**Aspiration vs voicing:** VsR, VRs > VhR, VRh (Kiparsky 1967, Kavitskaya 2002) or > VzR, VRz (Wackernagel 1888, Lejeune 1972)?

First hypothesis more likely: part of a wider sound change s > h; /z/ not phonemic in Greek; VRh > VhR metathesis more likely than VRz > VzR; aspiration preserved in ἦνία < \*anhiā < \*ansiā.

Kiparsky 1967: metathesis VRh > VhR (likely); VRy > VRh > VhR (unlikely).

Steriade 1982: resyllabification VR.sV > V:RV (unlikely).

#### Treatment of -rs-, -ls-

**CL vs retention**, even in words from the same root: ὄρρος vs οὐρά < \*ors-; κόρη vs κουρεύς, κουρά < \*ker-s-.

Regular CL in aorists: ἔστειλα, ἔσπειρα < \*e-stel-sa, \*e-sper-sa (analogical? cf. ἔμεινα, ἔνειμα < \*e-men-sa, \*e-nem-sa).

Forbes 1958: CL is regular, exceptions are analogical. Problem: too many ad hoc assumptions.

Ruijgh 1986: retention is regular, lengthening is analogical. Problem: only works for κουρά.

Wackernagel 1888, Miller 1976: -Vrs- > -Vrz- > -V:r- only before the accent (cf. Verner's Law!). Exceptions due to analogy or morpheme boundaries. Attractive solution, but other -Rs- clusters (and simple -s-) are never affected by accent position in Greek.

#### Treatment of -osN-/oNs- (also -eNs-?)

**Unexpected vowel timbre:** ω (η) in all dialects! ὤμος < \*omso-, ὠνος < \*wosno-, κῶμος < ?\*komso-, γέγωνε < ?\*ge-gons-e, δῆνεα < \*dens- (or \*dans-?).

Dunkel 1995: loanwords from Mycenaean. Problems: the Mycenaean outcome itself is unknown, and not all words are likely loans; the alleged parallels have other explanations.

**Long vowel not from CL:** IE lengthened grades? laryngeals? analogy? Problem: ad hoc explanations, can't account for all forms.

**Regular development?** Apparently the best solution; can it be phonetically justified? Is Ion.-Att. κρουός < \*krosn- a real counterexample?

#### Treatment of -In-

**Part of 1<sup>st</sup> CL?** Lengthening (βούλομαι < \*g<sup>w</sup>ol-no-, ὀφείλω < \*op<sup>h</sup>el-no-) vs retention (πίλναμαι, \*ὄλνυμι > ὄλλυμι).

Most plausible explanation: secondary restoration of suffixes -nu-, -na- (cf. δαίκα-vu-μι, δύ-να-μαι); no restoration in \*g<sup>w</sup>olnomai > βούλομαι because no class of -no- presents could apply analogical pressure (cf. Minamimoto 2012).

Ruipérez: Vln > Vll > V:l (as ln > lh is impossible) – argument for CL by degemination (see above)? Not necessarily; the rules may be different.

#### Dialectological Issues

Outcome of CL traditionally used as isogloss for dialect grouping (esp. within Doric). Ahrens 1843: *Doris mitior* (7 long vowel phonemes: εἰμι φερουσα ξεινος) vs *Doris severior* (5 long vowel phonemes: ἤμι φερωσα ξηνος). Bartoněk 1972: *Doris media* (mixed distribution).

**Traditional view:** 5 vowels = archaism (identical to inherited Common Greek system), 7 vowels = innovation (two new phonemes are created).

Sheets 1979: new ē, ō produced by CL, monophthongization and contraction can merge with inherited ē, ō or not. A 7-vowel system can develop into a 5-vowel one, not the other way around!

Not a significant isogloss? «distinción [...] desdeñable del punto de vista de la clasificación genética» (Méndez Dosuna 1985, 276).

#### References

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