Syntactic Quirks of Adjectives

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§1 Introduction

• There are different positions and functions of adjectives within a phrase.

Cf. Wackernagel 1924: 65-68, Bhat 1994, Wetzer 1996, Cinque 2010, Ramaglia 2011, Rießler 2016.

1) ATTRIBUTIVE adjective modifies a noun within a noun phrase (NP)

(1) English a black cat

German eine schwarze Katze

Latin oculis nigris 'with black eyes' (Pl. Capt. 647) Greek κακὸς χόλος 'wretched anger' (Il. 16.206)

2) PREDICATIVE adjective as part of the predicate, describing the subject, (optionally) linked with a copula

(2) English The cat was black
German Die Katze war schwarz

Latin **nigra** est coma 'the hair is **black**' (Mart. 4.36.1) Greek φυήν γε μὲν οὐ κακός ἐστι 'in physique he's not that **bad**' (*Od.* 8.134)

3) SECONDARY PREDICATE adjective modifies the subject or the object, describes a state or condition of the subject or object during the action (depictive), or as the result of the action (resultative)

(3) English *She_i* painted the room **barefoot**_i.

She painted the room_i black_i.

German Sie, malte den Raum $barfu\beta$, aus.

Sie malte den Raumi schwarzi aus.

Latin Conueniunt frequentes prima luce (Liv. 1. 50. 2)

'They gather at daybreak in large numbers'

Cf. Cabrillana 2024.

Greek εἰ πάντες σὺν νηυσὶν ἀπήμονες ἦλθον Ἀχαιοί (Od. 4.487)

'whether all the Achaeans came **unharmed** with their ships'

Cf. Caso 2024.

4) APPOSITIVE adjective(s) follow(s) or precede(s) a noun, like a nonrestrictive appositive

(4) English The Common raven, **black**, **large**, and **intelligent**, is the most widely distributed of all corvids.

German Der Kolkrabe, **schwarz**, **groß** und **intelligent**, ist der am weitesten verbreitete aller Rabenvögel.

Latin uilicus meus, bonus et impiger, ...

'my steward, good and energetic, ...' Cf. Hale & Buck 1903.

Greek κρητῆρας δύο μεγάθεϊ μεγάλους, **χρύσεον** καὶ ἀργύρεον ... (Hdt. 1.51.1) 'two very large bowls, one **of gold** and one **of silver** ...' Cf. Bakker 2009.

In languages like Latin and Ancient Greek, appositive adjectives are often difficult to distinguish from attributive adjectives (cf. Bakker 2009 for Greek; Spevak 2015 for Latin and Greek).

5) SUBSTANTIVIZED adjective is used as a noun. Cf. Höfler 2020.

(5) Latin semper auarus eget (Hor. Ep. 1.2.56)

'The **miserly** is always poor'

Greek ... τῶν ὁ μὲν χρύσεος ἔκειτο ἐπὶ δεξιὰ ἐσιόντι ἐς τὸν νηόν, ὁ δὲ ἀργύρεος ἐπ᾽ ἀριστερά.

'..., the **golden one** stood to the right, the **silver** to the left of the temple entrance.

(Hdt. 1.51.1)

(The substantivized type is of no interest for today.)

§2 Restrictions

Not all adjectives of a language can (or can equally well) be used in all these syntactic positions.

Cf. Coppock 2008: 161-192, Ramaglia 2011.

Some semantic types of adjectives can **only** be used attributively (non-predicative adjectives; Coppock 2008)

(6) English sheer, utter, mere, main, principal, former, ...

by **sheer** coincidence the **main** entrance a **mere** formality

BUT: the coincidence was *sheer, he made the entrance *main, the formality, *mere and unimportant, was soon over

Cf. German *bloß*, *lauter*, *ehemalig* (also attributively only)

... or **mostly** attributively (denominal relational adjectives; Coppock 2008, Spevak 2015)

(7) Latin nauis oneraria *Haec nauis oneraria est. (Spevak 2015)

'Ship of burden' *This ship is of burden'

Cf. onus, -eris n. 'burden'

On the other hand, there are also syntactic restrictions not on (semantic) types of adjectives, but on **forms of adjectives**.

In German, the attributive adjective is inflected while the non-attributive adjective is uninflected.

Die Katze ist **schwarz**.

(8) eine **schwarz-e** Katze vs. Er malt das Zimmer **schwarz** aus.

Der Rabe, schwarz, groß und intelligent, ist ...

If and when there are restrictions, the distribution is often attributive vs. non-attributive.

predicative

attributive vs. secondary predicate

appositive

Whichever way one wants to analyze the underlying syntax in detail (cf. Cinque 2010, Ramaglia 2011, Caso 2024), the adjective will be part of the NP in attributive position, and not be part of it in non-attributive (predicative, secondary predicate, appositive) position.

Another source for distributional restrictions on certain forms of adjectives lies in the presence/absence of definiteness marking on the adjective.

§3 Definite adjectives

Definite adjectives are a peculiarity of Germanic (base adjective + *-n- suffix), and Baltic and Slavic (base adjective + pronominal *-io-).

IDF DEF

(9) Gothic raups rauda 'red'

Proto-Slavic *rudŭ *rudŭji
Lithuanian raŭdas raudàsis

Cf. Osthoff 1876, Hajnal 1997, Jasanoff 2002, Nussbaum 2014, Pfaff 2020 (Germanic); Flier 1974, Petit 2009, Sommer 2019, Wandl 2022 (Balto-Slavic).

Function and semantics are largely overlapping, with some idiosyncratic developments in each branch and each language. Cf. Flier 1974 for Old Church Slavonic, Šereikaitė 2019 for Lithuanian, Ratkus 2018 for Gothic.

Generalizations regarding their syntactic behavior:

1) **Attributive** position: Both adjective types can appear as modifiers of nouns, expressing the expected

indefinite (IDF) vs. definite (DEF) distinction, but only the definite adjective is used in

combination with demonstratives.

'old houses' (10) Latvian vec-as mājas old-IDF houses 'the old houses' vec-ās mājas old-DEF houses 'in this small room' šai maz-ajā istabā this.LOC small-LOC.DEF room.LOC (Kalnača & Lokmane 2021: 160) Gothic 'on good earth' ana airþai god-ai on earth good-IDF ana þizai god-on airþai 'on this good earth' this on good-DEF earth (Braune & Heidermanns 2004: 114)

2) **Predicative** position: Only the **indefinite** adjective is used in predicative position \pm the copula

(11) Latvian šīs mājas ir vec-as these houses old-IDF are 'these houses are old' (Kalnača & Lokmane 2021: 161) Gothic ni god-a hvoftuli izwara so good-IDF this glorying your 'your glorying is not good' (Braune & Heidermanns 2004: 114)

3) **Secondary predicates**: Only the **indefinite** adjective is used as a secondary predicate, even if controller is marked as definite by a demonstrative.

(12)	Latvian	viņš he	<i>nokrāsoja</i> painted	mašīnu car.ACC		sarkan-u red-ACC.	
			1	car.Acc		icu-Acc.	
		`He pair	nted the car red.'				(Kalnača & Lokmane 2021: 161;
							Riaubienė 2016)
	Gothic	jah	gasaihvand	þana	wodan		gawasid-ana
		and	saw.3PL	this.ACC	possesse	d.acc	clothed-ACC.IDF
		'And the	ey saw the possessed	d man cl	othed'		

[→] Special status of secondary predicates vis-à-vis attributive adjectives (Schultze-Berndt & Himmelmann 2004, Irimia 2012, Guzzo & Goad 2017, Caso 2024).

4) **Appositive** position: Only the **indefinite** adjective is used in appositions.

(13)	Latvian	Vācu	aitu	suns,	pieticīg-s	un	jūtīg-s
		German	sheep	dog	modest-IDF	and	sensitive-IDF
		'The Ger	man shee	epdog, m	odest and sensitive	e'	(Kalnača & Lokmane 2021: 162)

Again, the patterning is attributive (IDF or DEF) vs. non-attributive (only IDF).

§4 What happens when a language loses the distinction?

Old Church Slavonic still had a system of definite and indefinite adjectives, with some noteworthy peculiarities (Flier 1974).

• Most modern Slavic languages have abandoned the distinction and generalized one form (Majer 2024).

In Russian, the definite adjective is generalized as the basic form of the adjective (known as long form (LF)), but most adjectives retain a short form (SF) (NOM only) besides the long forms (all cases).

(14)	Proto-Slavic	*rudŭ	*rudŭjĭ
		red.NOM.SG.M.IDF	red.NOM.SG.M.DEF
		\downarrow	\downarrow
	Russian	rud	rudyj
		red.NOM.SG.M.SF	red.NOM.SG.M.LF

[→] Exception: when definite adjective is used as a noun.

Both forms can be used **predicatively** (with some nuanced semantic differences; see Geist 2010, Borik 2014, Bikina & Martin 2021), only the **long form** can be used **attributively** (Hinterhölzl 2001).

(15)	Russian		SHORT (< INDEF.)	LONG (< DEFINITE)	
		ATTRIBUTIVE		umnaja devuška	
			-	smart-LF girl	
				'a smart girl'	
		PREDICATIVE	Devuška umna .	Devuška umnaja .	
			girl smart-SF	girl smart-L F	
			'The girl is smart'	'The girl is smart'	(Hinterhölzl 2011)

→ When languages give up the distinction definite vs. indefinite adjectives, they may still exhibit **holdovers** of the earlier system, with a relic form used in **predicative** position but not in **attributive** position.

This distribution is reminiscent of the syntactic behavior of Ancient Greek feminine adjectives in -oc.

§5 The Greek feminine adjectives in -oς (or: adjectives of two terminations)

In almost all Core IE languages that preserve the feminine gender, the feminine agreement forms of thematic adjectives in *-o- have the suffix *- eh_2 - (i.e., *-e-+ *- h_2 -).

(16)	NPs of noun.f + adj.f Vedic	<i>priy-ã</i> dear-F	<i>jāyā</i> wife.F	'dear wife'
	Latin	<i>puella</i> girl.F	<i>pulchr-a</i> pretty-F	'pretty girl'
	Old Church Slavonic	<i>slěp-a</i> blind-F	žena woman.F	'blind woman'
	Latvian	<i>liel-a</i> big-F	<i>māja</i> house.F	'big house'
	Gothic	stibna voice.F	<i>mikil-a</i> big-F	'loud voice'

Ancient Greek is an **exception** to the uniform pattern seen in (17). While feminine agreement forms in *- eh_2 - are the rule, there is a large group of adjectives that take the form in *-o- (= ADJ.M) as the feminine agreement form (Kastner 1967, Höfler 2022a, Höfler 2022b).

(17)	Ancient Greek NPs of NO	UN.F + ADJ.F		
	a.	μακρ-ὰ long-F	ἡμέρᾶ day.F	'long day'
	b.	ποθειν-ὸς desired-F?	ἡμέρᾶ dav.F	'longed-for day'

The agreement behavior of adjectives as in (17b) is nowadays mostly considered an archaism from a time when there were only **common gender** and neuter nouns (Kastner 1967, Olsen 1999: vi, Höfler 2022a).

Spread of * - h_2 - as the feminine agreement marker for adjectives in * -o- happened gradually, and while most other languages reflect its full (and predictable) grammaticalization, Ancient Greek preserves the more archaic state.

- → The synchronic distribution and rationale behind feminine agreement forms in *-o- and *- eh_2 in Greek is still largely unexplained. Some rules:
 - a) **Simplex** adjectives usually have *-*eh*₂- (e.g., μακρ-ὰ ἡμέρ $\bar{\alpha}$ 'long day')
 - b) Compound adjectives usually have *-o- (e.g., καλλιστέφαν-ος Άφροδίτη 'fair-wreathed Aphrodite')

But no clear rules or distribution for simplex adjectives that have *-o- (e.g., ποθεινὸς ἡμέρ $\tilde{\alpha}$) and compound adjectives that have *- eh_2 - (e.g., πολυ-μνήστην βασίλειαν 'the queen wooed by many', Od. 23.149).

→ Mostly just accepted as a quirk of Ancient Greek.

Time to look at synchronic distributional patterns of feminine forms in $-o\varsigma$ vs. $-\eta$.

• It might reveal more about the ultimate origin of the agreement form in $*-e-h_2-$, and of the origin of the feminine gender (Hackstein 2013, Höfler 2024).

\$6 The Greek feminine adjectives in -oc revisited

Aim is not to explain why simplex adjectives have $-\eta$ and compounds have $-o\zeta$, but rather look into the unexpected cases, viz. **simple adjectives** that *sometimes* have **feminines in** $-o\zeta$, and see whether the preference of agreement forms is mapped onto syntactic position.

→ Based on Kastner 1967, I collected material from early epic (Iliad, Odyssey, Hesiod, Homeric Hymns), early poets, and Attic authors (Menander d. 290 BCE).

Table 1 is a list of all simplex adjectives in -to-, -ro-, -lo-, and -no- that exhibit unexpected feminine forms in -oς, organized by syntactic position: attributive vs. non-attributive (i.e., predicative, secondary predicates, appositive).

I ignored adjectives in -ιος.

- "_V" indicates that the adjectival form (in NOM.SG $-o\varsigma$) occurs before a vowel in non-prose texts (i.e., poetry or drama). In such cases, the choice of the $-o\varsigma$ instead of $-\eta$ may have been motivated by a desire to avoid hiatus.
- (18) λόγοις τοιούτοις **πλαγκτὸς** οὖσ ' ἐφαινόμην (A. Ag. 593) (to avoid: **πλαγκτὴ** οὖσα?) '[Klytaimnestra:] By such taunts I was made to seem as if **my wits were wandering**.'

Feminine forms in -0ζ from epic poetry were excluded when they are **not metrically equivalent** to a hypothetical form in $-\eta$, in which case the use of -0ζ may have been driven by metrical necessity. Thus, (19) was excluded, (20) included.

- (19) αἰετὸς ἀργὴν χῆνα φέρων ὀνύχεσσι πέλωρον, ήμερον ἐξ αὐλῆς (Od. 15.161-2) (†ἡμέρην unmetrical) 'an eagle, bearing in his talons a great white goose, a **tame** one from the yard
- (20) $\dot{\eta}$ μὲν γὰρ **βροτός** ἐστι, σὰ δ' ἀθάνατος καὶ ἀγήρως (*Od.* 5.218) (*βροτή [with correption] possible) 'for <u>she</u> [Penelope] is **mortal**, while you [Calypso] are immortal and ageless.'

Many of the adjectives in the list are not attested in a feminine agreement form with overt $-\eta$. Those that are, however, are shown in **bold**.

• Two adjectives, κινητός 'movable' (Pl. *Ti.* 37d) and πτερωτός 'winged' (S. *OC* 1460), were excluded due to ambiguity or unclear syntax (attributive vs. appositive).

	-to-	-ro-	-lo-	-no-
ATTR	δακρυτός 'wept for' (A.) _V πορευτός 'traveling' (A.) σπαρτός 'sown' (E.) _V	αίματηρός 'bloody' (Ε.) ἐλεύθερος 'free' (Α.) ἥμερος 'tame' (Pi.) λάβρος 'fierce' (Ε. 2×) λοίδορος 'abusive' (Ε.)	ἀπατηλός 'deceptive' (Pl.) κίβδηλος 'counterfeit' (Pl.) στύφλος 'hard' (A. 2×, Ε. 2×) στυφελός 'hard' (A.) φαῦλος 'trivial' (Thuc.) φειδωλός 'stingy' (Ar.)	ποθεινός 'longed-for' (E.) _V πτηνός 'winged' (Pl.) παιδνός 'childish' (E.) τιθηνός 'nursing' (E.)
NON- ATTR	αἰσθητός 'sensible' (Pl.) αἰτητός 'asked for' (S.) βροτός 'mortal' (Od.) _V γνωτός 'known' (S.) δυνατός 'capable' (Pi.) δωρητός 'gifted' (S.) ζηλωτός 'enviable' (2× Ε.) 1× _V θετός 'placed' (Ε.) θνητός 'mortal' (3× Ε.) _V ἰαλτός 'sent' (S.) _V μεμπτός 'blaming' (S.) _V πλαγκτός 'wandering' (A.) _V στυγητός 'hated' (A.) τολμητός 'ventured' (Ε.) _V φορητός 'bearable' (Ε.) _V ἀνητός 'bought' (Ε.) _V	έλεύθερος 'free' (E.)	δαῦλος 'shaggy' (A.) δῆλος 'visible' (E.) _V εὕκηλος 'content' (S.) κίβδηλος 'counterfeit' (Pl.) μάχλος 'lewd' (E., Ερhor.) _V στύφλος 'hard' (S.) φαῦλος 'trivial' (Ε.) _V	ἀνθρώπινος 'human' (Pl.) γαληνός 'mild' (E.) _V δάπανος 'prodigal' (Thuc.) κοινός 'common' (S.) _V λίχνος 'gluttonous' (E.) _V ὀρφανός 'bereft' (E.) χαῦνος 'loose' (Pl., Arist.)

Table 1 – Simplex adjectives in -to-, -ro-, -lo-, and -no- that exhibit unexpected feminine forms in -ος.

The **ratio** attributive to non-attributive position is roughly one third to two thirds.

Here are a couple of illustrative examples.

- a) ATTRIBUTIVE
- καὶ διαρταμῶν λάβρφ μαχαίρα σάρκας ἐξώπτα πυρί (Ε. Cyc. 403)
 'Then butchering them with a fierce blade he roasted their fleshy parts in the fire'
- b) NON-ATTRIBUTIVE: PREDICATIVE
- (22) **στύφλος** δὲ <u>γῆ</u> καὶ χέρσος (S. *Ant*. 250) 'the earth was **hard** and dry'
- c) NON-ATTRIBUTIVE: SECONDARY PREDICATE
- (23) ἀρχῆς οὕνεχ', <u>ἡν</u> ἐμοὶ πόλις **δωρητόν**, οὐκ αἰτητόν, εἰσεχείρισεν (S. *OT* 384) 'for the sake of this royal power, <u>which</u> the city placed in my hands **as a gift**, though **I had not asked it**'
- d) Non-attributive: appositive
- (24) γηροβοσκήσειν τ' ἐμὲ καὶ κατθανοῦσαν χερσὶν εὖ περιστελεῖν, ζηλωτὸν ἀνθρώποισι (Ε. Med. 1035) 'that you would tend me [Medea] in my old age, and when I died, dress me for burial with your own hands, an enviable lot for mortals.'

To evaluate the numbers, it will be necessary to sift the data.

• Exclude all adjectives that never attest a feminine agreement form in $-\eta$, only include adjectives that exhibit a variation between feminine forms in -0ς and $-\eta$ (i.e., the adjectives in **bold** print in *Table 1*).

§7 Ratio of adjectives that show a variation between -oς and -η as the feminine agreement form

Pruned in this way, the distribution is even more pronounced: 16% attributive vs. 84% non-attributive.

A *Chi-squared goodness of fit test* based on proportions identifies the distribution as significant (i.e., compared against an equal 50%: 50% distribution).

	TOKENS	Percentage
ATTR	5	16,13%
NON-ATTR	26	83,87%
Total	31	100%
Distribution	highly significant $(p = 0.0001621)$	

Table 2 – Ratio attributive vs. non-attributive position of adjectives that show a variation between $-o_{\zeta}$ and $-\eta$ as the feminine agreement form.



■ ATTR ■ NON-ATTR

The numbers change only a little bit when potential **hiatus-avoiding** cases are **excluded** (but the numbers become quite low).

	TOKENS	Percentage
ATTR	4	20%
NON-ATTR	16	80%
Total	20	100%
Distribution	significant (<i>p</i> = 0.00729)	

Table 3 – Ratio attributive vs. non-attributive position of adjectives that show a variation between -0ς and $-\eta$ as the feminine agreement form ignoring potential hiatus-avoiding cases.

→ The **form in -oc** appears more often in **non-attributive** position than one would expect if one assumed that its syntactic positions were evenly distributed.

§8 Are these adjectives just used less often in attributive position?

One could be tempted to explain the preference for non-attributive appearance of these adjectives by semantic restrictions of some sort. Perhaps these adjectives are just in general less common in attributive usage?

In order to test this, I collected the attestations of the feminine agreement forms in $-\eta$ of these adjectives.

	-ος	-η
ATTR	1	1. αἰσθητή (Arist. 2×)
	2	2. ἀνθρωπίνη (Pl. <i>passim</i>)
	3. ἀπατηλός 'deceptive' (Pl.)	3
	4	4
	5	5
	6	6 - 3) m 96 a x (A)
	7 8	7. ἐλευθέρα (A.) 8. ζηλωτή (Pl.)
	ο 9. ἥμερος 'tame' (Pi.)	ο. τηλωτη (F1.) 9. ήμέρα (Pi., Hdt.)
	9. ημέρος τάπιο (11.)	10. θνητή (Od., A., Ar., Pl.)
	11	11. κοινή (<i>passim</i>)
	12	12
	13	13. ὀρφανή (Lys.)
	14	14. πλαγκτή (<i>Od.</i> , E., A.)
	15. ποθεινός 'longed-for' (E.) _V	15. ποθεινή (Pi., E., S., Ar.)
	16. πτηνός 'winged' (Pl.)	16. πτηνή (Pi., E. 2×, S.)
	17	17. σφοδρά (Pl. passim)
	18	18. φανερά (passim)
	19. φαῦλος 'trivial' (Thuc.)	19. φαύλη (<i>passim</i>)
	20	20. χαύνη (Pl. 2×)
	21	21. ἀνητή (Od.)
NON-	1. αἰσθητός 'sensible' (Pl.)	1. αἰσθητή (Arist. <i>passim</i>)
ATTR	2. ἀνθρώπινος 'human' (Pl.)	2
71111	3	3. ἀπατηλή (Pl.)
	4. γνωτός 'known' (S.)	4. γνωτή (Thgn.)
	5. δῆλος 'visible' (E.) _V 6. δυνατός 'capable' (Pi.)	5. δήλη (passim)
	6. ουνάτος capable (Pl.) 7. ἐλεύθερος 'free' (E.)	6. δυνατή (Hp., Pl., Ar., Thuc.)
	7. ελευθέρος 11ee (E.) 8. ζηλωτός 'enviable' (2× E.) 1× _V	7 8
	9. ἥμερος 'tame' (Pl. 4×)	9. ἡμέρα (Pi.)
	10. θνητός 'mortal' (3× E.) _V	10. θνητή (<i>Od.</i> , Hes. <i>Th.</i> , <i>h.Ven.</i> , Arist.)
	11. κοινός 'common' (S.) _V	11. κοινή (<i>passim</i>)
	12. μεμπτός 'blaming' (S.) _V	12. μεμπτή (Pl.)
	13. ὀρφανός 'bereft' (E.)	13. ὀρφανή (Lys., Ε.)
	14. πλαγκτός 'wandering' (A.) _V	14. πλαγκτή (Od., E., A.)
	15	15. ποθεινή (Ar.)
	16	16
	17. σφοδρός 'vehement' (Pl.)	17. σφοδρά (passim)
	18. φανερός 'visible' (E. 2×)	18. φανερά (Thuc.)
	19. φαῦλος 'trivial' (E.) _V	19. φαύλη (<i>passim</i>)
	20. χαῦνος 'loose' (Pl., Arist.)	20. χαύνη (Hp.)
	21. ἀνητός 'bought' (E.) _V	21. ἀνητή (Isocr., Thuc.)

Table 4 – Attestations of adjectives that show a variation between -0 ς and - η as the feminine agreement form.

There are indeed certain adjectives in our sample that are exclusively attested in non-attributive position (γνωτός/γνωτή 'known', δῆλος/δήλη 'visible', δυνατός/δυνατή 'capable', μεμπτός/μεμπτή 'blaming'), but also one that is used attributively only (πτηνός/πτηνή 'winged').

$\S 9$ Ratio attributive vs. non-attributive position of the feminine agreement form in - η

To rule out that these adjectives just happen to be used more often in non-attributive position, we can compare the syntactic positions of their associated feminine forms in $-\eta$.

- In counting the total numbers, we have to consider that some forms (e.g., attributive κοινή, φανερά, non-attributive δήλη, etc.) have so many attestations that counting them all would skew the picture.
- If a form is attested more than 5 times (indicated by *passim* above), I only count them as 5 tokens.

Again, we can evaluate the distribution using a Chi-squared goodness of fit test based on proportions.

	TOKENS	Percentage
ATTR	50	51,55%
NON-ATTR	47	48,45%
Total	97	100%
Distribution	not significant	
	(p = 0.7607)	



Table 5 – Ratio attributive vs. non-attributive position of the feminine forms in -η.

The numbers are close to 50%: 50%.

 \rightarrow This means that there seems to be **no significant preference** of these adjectives (at least in their agreement form in - η) for **attributive** or **non-attributive** syntactic position.

§10 Comparing all four quadrants

This also means that the conspicuous gaps in the top left quadrant of Table 4 are even more interesting. It is a frequent pairing to find the form in -00 in non-attributive position and the form in -01 in attributive position.

(25) λόγοις τοιούτοις πλαγκτὸς οὖσ' ἐφαινόμην
 (A. Ag. 593)
 '[Klytaimnestra:] By such taunts I was made to

seem as if my wits were wandering.'

(26) [ἐλπὶς] ἀνητὸς ἢ τολμητὸς ἢ λόγων ὕπο; (Ε. Hel. 816)
'Does [hope] lie in bribery, or daring deeds, or argument?'

(27) ἴτω <u>δίκα</u> φανερός (Ε. *Ba.* 991 (lyr.)) 'Let <u>justice</u> proceed **for all to see**'

(28) καὶ πῶς τὰ κρείσσω θνητὸς οὖσ' ὑπερδράμω;
 (E. Ion 973)
 [Creusa:] 'But how can I, being mortal, overcome one more powerful?'

-ιη ὥς θ' ἵκετο **Πλαγκτὰς** <u>πέτρας</u> δεινήν τε Χάρυβδιν (*Od.* 23.327) 'and had come to the **Wandering** <u>Rocks</u>, and to dread Charybdis'

ểμὲ δ' ἀνητὴ τέκε μήτηρ (Od. 14.202) 'A bought mother gave birth to me'

τί ποτ' ἐς φανερὰν $\underline{\delta}$ ψιν βαίνουσι βροτοῖσιν; (Ε. El. 1236) 'Why do they they go in **visible** sight for mortals?'

κρύψεν δὲ θεὸν θνητήν τε $\underline{yυναῖκα}$ (Od. 11.244) 'and hid the god and the mortal \underline{woman} '

The inverse distribution is rare.

(29) οὔτε ἐξετάζομεν οὔτε ἐλέγχομεν τὰ γεγραμμένα, σκιαγραφία δὲ ἀσαφεῖ καὶ ἀπατηλῷ χρώμεθα περὶ αὐτά (Pl. *Criti*. 107d) 'we do not examine closely or criticize the paintings,

'we do not examine closely or criticize the paintings, but tolerate, in such cases, an inexact and **deceptive** sketch.'

-η
[<u>ή κομμωτική</u>] κακοῦργός τε οὖσα καὶ ἀπατηλὴ καὶ ἀγεννὴς καὶ ἀνελεύθερος (Pl. *Grg*. 465b)

60

40

20

0

'[self-adornment] being rascal, **deceitful**, ignoble, and illiberal'

Comparing the numbers of each quadrant (feminine adjective in -0ς in attributive position, feminine adjective in $-\eta$ in attributive position, feminine adjective in -0ς in non-attributive position) we can run a *Pearson's Chi-squared test*.

	TOF	TOKENS		entage	
	-ος	-ος -η		-η	
ATTR	5	50	3,91%	39,06%	
NON-ATTR	26	26 47		36,72%	
Distribution	highly significant (p = 0.0005249)				

Table 6 – Ratio attributive vs. non-attributive position of the feminine forms in -0ς vs. $-\eta$.

Correct for potential **hiatus-avoidance** cases and remove all adjectives ($-o\varsigma$ and $-\eta$) if one of the attestations of the adjectival form in $-o\varsigma$ stood before a vowel:

	TOKENS		Percentage	
	-ος	-η	-ος	-ος
ATTR	3	28	4,35%	40,58%
NON-ATTR	16	22	23,19%	31,88%
Distribution	significant			
	(n = 0.002704)			

Table 7 – Ratio attributive vs. non-attributive position of the feminine forms in -0 ς vs. - η (excl. potential hiatus-avoidance cases).

30 20 10 -ος -η attr non-attr

-00

■ attr ■ non-attr

-ŋ

Key finding: Comparing the feminine forms in $-o\zeta$ and $-\eta$ in attributive and non-attributive position reveals that the **preference of -oc** for **non-attributive** position is very **unlikely to be due to chance**.

The inverse is true as well: **compound** adjectives with unexpected -η are mostly attributive (e.g., πολυ-μνήστην βασίλειαν 'the queen wooed by many', Od. 23.149).

§11 Outlook

As per Nussbaum 2014, the feminine agreement form in *- h_2 - may have started out as a "weak" adjective.

- More evidence for ADJ + *- h_2 as definite adjective:
 - Luwian common gender adjectives in *-eh₂-, mostly attributive (Rieken 2013, Melchert 2014)
 - Ancient Greek masculine adjectives in *-e- h_2 > - $\bar{\alpha}$ ς, -ης as a residual class, mostly attributive (Höfler 2022b; compounds: Fellner & Grestenberger 2016)
 - O Albanian masc., fem. & neut. adjectives in $-\ddot{e} < *-eh_2-$ (?); in Old Albanian still variation: attributive adjective: linking clitic + $-\ddot{e}$ vs. predicative adjective: no linking clitic + $-\varnothing$ (< *-os)

In turn, feminine adjectives in *-os may originally have been "strong" (i.e., indefinite) adjectives.

- Ancient Greek feminine forms in -oς may reflect residual behavior of former indefinite adjectives.
- Their syntactic distribution is reminiscent of the short-form adjectives in Russian (see §4).

§12 References

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