

## Introduction

WHAT IS THAT PRONOUN DOING THERE?

## Typical relative clauses in ancient Greek

-Relative pronoun: inflected subordinator followed by the rest of the relative clause
"Head: DP or pronoun, which can be:

1. external (preposed to the RC)

P. 9.87
"a man is mute who does not have Herakles on his lips"
2. external (postposed to the RC)
oíol $\delta \varepsilon ̇$ Ф

ávסเסoĩ 廿uxà̧ rá入ıv
fr. 133.1-3
"the ones for whom Persephona receives the payment of her ancient grief, she brings back again their souls to the sun above on the ninth year"
3. internal

P. 5.116-117
"every opportunity there is for local excellence, he has dared to do"
4. null
 N. 3.70-71
"in trial the accomplishment appears, of that in which one is the best"

## Puzzling relative clauses



Өvạ́кóvt $\omega \mathrm{L}$;
0. 9.33-35
"nor did Hades keep his staff unmoved, with which he leads the mortal bodies down to the hollow city of the dead"



"and to carry out the word of Medeia, at the $17^{\text {th }}$ generation, [the word] spoken at Thera, which Aietas' holy child once blew from her immortal mouth, the queen of the Colchians"

- In both cases, the relative pronoun appears after material belonging to the relative clause.
-Descriptively, I will call them postponed relative pronouns.
-What is puzzling about them is that they are rare (12.3\%): in run-of-the-mill relative clauses in ancient Greek, the pronoun must be initial in the clause.


## Why are postponed RPs problematic?

Relative pronouns are in the highest position in the clause structure.
-No extraction nor raising to object (prolepsis)
Both would imply a movement through $\operatorname{Spec}, \mathrm{C}_{h} \mathrm{P}$, which is impossible since it is already occupied by the RP.
-No topicalization over the RP
"Counterexamples imply topicalized phrases pertaining to the matrix clause:



"but for the new year there is no one who does not expect among the mortals to become friend of Wealth and noble men."

## A Pindaric peculiarity?

The postponement of the RP is attested in verse:

1. $7^{\text {th }}-6^{\text {th }}$ C. BCE

आópva ס’ ő кદ́ tıऽ ठíḍ[ $\omega$

Alcaeus fr. 117b. 26-27 V.
"who makes a gift to a whore, it is as if he had thrown it in the wave of the salted sea."
2. $6^{\text {th }} \mathrm{c} . \mathrm{BCE}$


Theognis 601-602
"begone, you enemy of the gods and unfaithful to mankind, who kept the cold colorful snake in your lap!"
3. $6^{\text {th }} \mathrm{C} . \mathrm{BCE}$

к $\lambda$ nporta入n
трãтоऽ $\lambda$ áx!
Stesichorus fr. 222b
"who has his lot come out first in the drawing of lots, by the will of the Moirai"

## A Pindaric peculiarity?

4. $5^{\text {th }} \mathrm{C} . \mathrm{BCE}$
ŋ̄ тà̀v $\mu \varepsilon \gamma a \lambda \omega ́ v u] \mu o v ~ A I ́ y ı v a v, ~ \mu \varepsilon \gamma[i ́ \sigma t] o u ~$

Bacchylides Ep. 9.55-56
"or the renown Aigina, who after approaching the bed of the Great Zeus bore a hero"
5. $5^{\text {th }} \mathrm{C} . \mathrm{BCE}$

Aeschylus Pers. 598-9
"Friends, whoever has the experience of evil things, knows..."
6. $5^{\text {th }} \mathrm{C} . \mathrm{BCE}$

Sophocles Trach. 200
"O Zeus, who owns Oite's unbreakable meadow"
7. $5^{\text {th }} \mathrm{C} . \mathrm{BCE}$

"any man who bears with utter nobility the fortunes sent by the gods, this man is wise"

## A Pindaric peculiarity?

It is not attested in Homer nor in prose. Some of the examples adduced in the literature must be explained otherwise:

 émíotavtai; [Plat.] Amat. 137c
"Who knows how to correctly flatter the horses? The ones who make them better or other people? - The ones [who make them] better. - Now, as for the dogs, the ones who know how to make [them] better, is it not those who know how to flatter them correctly?"
$\rightarrow$ Topicalization pertaining to the matrix clause, not the relative.

"whoever is the best among the Achaeans"
$\rightarrow$ Partitive genitives are not a part of the relative per se.

## What is there to explain?

1. 

What licenses the postponement of the relative pronoun?
2.

Why is there variability regarding its position (initial vs. postponed)?



## The data

AN OVERVIEW

## The relative pronouns

As in Homer, the simple relative pronouns are the reflexes of two different PIE roots, both originally anaphoric-demonstrative pronouns:
ö¢, ö, ö (<*Hyo-) : the classical relative pronoun
Cognate with anaphoric iv, Sanskrit RP yáh, Avestan RP yō, Lat. anaphoric is, etc.

- $\dot{\text { o }}$, $\dot{\alpha}$, tó (<* so-, *to-) : identical with the definite article

Cognate with Sanskrit sá, sā, tád, Germanic par, etc.
-Some forms are a priori ambiguous (ä, oi, ai), but were counted as reflexes of *Hyo-. (Endingless masc. ò is demonstrably a philological chimaera (Probert 2005), and all instances were counted as reflexes of *so-.)
"Both ös and ó can also be used as demonstrative-anaphoric pronouns in Pindar.

- Probert (2015) makes a good case for attributing anaphoric uses of ös to a form *so-s.
- Earlier literature (Des Places 1947, Hummel 1993) relies on the "movement of the sentence" to set them apart, but this leads to a fuzzy and subjective classification.

Stricter criterion: asyndeton secures a relative reading of the pronoun, whereas coordination leads to an anaphoric reading.

## Repartition of forms

| Singular |  | *so- | Init. | Post. | *HyO- | Init. | Post. |  | ural | *so- | Init. | Post. | *Hyo- | Init. | Post. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nom. | ö | 7 | 1 | ös | 52 | 8 |  | Nom. | toí | 5 | 1 | oì | 9 | 1 |
|  | Acc. | tóv | 32 | 1 | öv | 18 | 1 |  | Acc. | toús | 5 | 0 | oűs | 1 | 0 |
|  | Gen. | тoũ | 2 | 0 | oũ | 1 | 0 |  | Gen. | тธ̃v | 1 | 0 | $\tilde{\omega} v$ | 7 | 0 |
|  | Dat. | T(ึ) | 6 | 0 | $\tilde{\dot{\varphi}}$ | 3 | 1 |  | Dat. | toĩ¢ | 3 | 0 | oĩs | 9 | 4 |
|  | Nom. | $\dot{\alpha}$ |  |  | व̈ | 11 | 1 | N | Nom. | т $\alpha$ í | 1 | 0 | $\alpha i$ | 1 | 1 |
|  | Acc. | đóv | 17 | 2 | öv | 6 | 2 |  | Acc. | tás | 0 | 0 | ä¢ | 3 | 2 |
|  | Gen. | тã¢ | 6 | 0 | ¢̃¢ | 2 | 0 |  | Gen. | тãv | 1 | 0 | $\tilde{\alpha} v$ | 0 | 0 |
|  | Dat. | т ${ }_{\text {ax }}$ | 1 | 0 | 安 | 6 | 2 |  | Dat. | toĩs | 2 | 0 | aĩs | 2 | 0 |
|  | Nom. | tó | 0 | 0 | ö |  |  |  | Nom. | т ${ }_{\text {á }}$ | 2 | 0 | ä |  |  |
|  | Acc. | tó | 4 | 1 | ő |  |  |  | Acc. | т ${ }^{\text {á }}$ | 2 | 0 | ä |  |  |
|  | Gen. | тoบ̃ | 1 | 0 | oũ | 2 | 0 |  | Gen. | т ข | 7 | 1 | $\dot{\omega} v$ | 2 | 0 |
|  | Dat. | Tนิ | 1 | 0 | $\tilde{\dot{\varphi}}$ | 1 | 0 |  | Dat. | toĩs | 1 | 0 | oĩs | 1 | 0 |
| Total |  | 82 | 77 | 5 | 117 | 102 | 15 |  | otal | 32 | 30 | 2 | 43 | 35 | 8 |

## The relative pronouns

-Other complex relative pronouns are attested in Pindar, all based on the relative root *Hyo- :

- őठtıऽ: indefinite relative pronoun
- őवाधр: specific relative pronoun
- őote: used when the relative clauses attributes a permanent property to the head noun
- oĩos / óлоĩoc: relative pronoun of quality
- öб(б) os / óróб(б)os: relative pronoun of quantity
"Moreover, other roots are used as adverbial relatives:
- ávíka: "when"
- ǐva: "where"
- $\varepsilon$ हैv $\boldsymbol{\alpha}$ / हैv $\boldsymbol{\varepsilon}$ vv "where, whither"
initial $18 x$ postponed $0 x$
initial $7 x$ postponed $0 x$
initial $25 x$ postponed $5 x$
initial $15 x$ postponed $3 x$
initial $21 x$ postponed $1 x$
initial $8 x \quad$ postponed $1 x$
initial $15 x$ postponed $3 x$
initial $11 \times \quad$ postponed $1 x$


## The relative pronouns

Since relative pronouns are also used as interrogative pronouns, I excluded from the corpus:
-indirect interrogative clauses
exclamative clauses
"comparative clauses

## Other subordinators

## "O $\varsigma$-SUBORDINATORS

| -̇̇п¢̣̃ | "to the point where" | " $\varepsilon$ í |
| :---: | :---: | :---: |
| -órótع / órótav | "when, whenever" | - $\varepsilon$ "ıı |
| -Őtع / ötav | "when, whenever" | -غ̇пદí |
| -őtı | "because" | -غ̇пદıర́n |
| - ойvعка / oűvekev | "because" | -roiv |
| -őфра | "in order that" | - $\varepsilon$ Ũtร |
| - $\dot{\omega}$ | "how" |  |
| -őँ ${ }^{\text {cos }}$ | "how" |  |
|  | "just as" |  |
|  | "so as to" |  |

## OTHER

"if"
"if indeed"
"after, when, as soon as; for"
"since"
"before"
"when, after"

## Position of subordinators

## Subordinator type

The most obvious difference in the rate of postponement is the subordinator:
"the rate is highest with non-relative subordinators, which is expected since they do not occupy the Spec, $\mathrm{C}_{h} \mathrm{P}$.
"it is roughly as expected with all relative pronouns based on the root *Hyo- (ös etc.)
"the rate is lowest with $\dot{\delta}$ < *so-: there seems to be a reluctance to postpone this pronoun, even though all examples are metrically secured.

Rate of postponement according to the lexical type of the subordinator

## Crosslinguistic similarities

| Language | Root | Restriction <br> to poetry | Position | Optional |
| :--- | :--- | :--- | :--- | :--- |
| Latin | ${ }^{*} k^{w}$ is | Yes | Clause-2nd | Yes |
| Tokharian | ${ }^{*} k^{w}$ is | Yes | Clause-2 <br> Ind | Yes |
| Oscan | ${ }^{*} k^{w}$ is | No | ? | Yes |
| Hittite | ${ }^{*} k^{w}$ is | No | Clause-2 |  |

"Except in Vedic, the relative pronoun is always a reflex of PIE * $\boldsymbol{k}^{\boldsymbol{w}}$ is, cognate (or identical) with the indefinite pronoun.

Except in Oscan and Hittite, the postponement of the relative pronoun is a poetic feature of the language.

- In Hittite, the current theory is that there is a connection between the semantics of the relative clause and the option of postponing the pronoun.
-It has been claimed that in Tokharian and Vedic, the relative pronoun is in situ, or at least does not show wh-movement.



## Semantics

## Typology of relative clauses

"AG relative clauses can be classified as restrictive, non-restrictive and maximalizing.
-No statistically significant difference between initial and postponed RPs
"Difference in the choice between ó and ös:

- ős is more frequent than expected with restrictive RCs
- ó is more frequent than expected with nonrestrictive RCs and unattested with maximalizing RCs
-This trend is in line with Homeric usage (Monteil 1963, Probert 2015), although Pindar allows for ó to appear in constructions where Homer only uses ő̧.

Choice of pronoun according to the semantic type of the relative clause


## Definiteness of the head

-The definiteness of the head has been claimed to be the key in the optional postponement of the relative pronoun in Hittite.
-In Pindar, it is not always sure if the head is definite or indefinite:

- no systematic use of the definite article in his dialect
- rhetorical stance of the poet (in a mythological allusion, is the audience supposed to know the referent of the NP?)
-The definiteness of the antecedent NP has no influence whatsoever on the postponement of the RP.

Definiteness of the head



## Syntax

## Case accessibility hierarchy

1. subject $>$ direct object $>$ indirect object $>$ oblique $>$ genitive $>$ object of comparison (Keenan and Comrie 1977)

Case accessibility does not play any role whatsoever in the postponement of the relative pronoun.


## Headedness of the RC

"Ancient Greek relative clauses can be:

1. postposed externally-headed | 2. preposed externally-headed | 3 . internally-headed | 4. null-head
"All those constructions allow for the postponement of the relative pronoun:

"to the daughters of Cadmos, who suffered a lot"
 "any man who bears with utter nobility the fortunes sent by the gods, this man is wise"


N. 4.41-43
"which kind of virtue lord Potmos gave me, I know well, that time passing will achieve it as fated"
2. $Ө$ aveĩv $\delta^{\prime}$ oĩoıv áváyka [scil. દ̇otı], tá ké tıs ávávu

O. 1.82-83
"for those who must die, why would anyone follow in vain an anonymous old age, sitting in obscurity?"

## Headedness of the RC

-Statistically, no difference is visible in the distribution of initial vs. postponed relative pronouns among those 4 categories.
"The syntax of each type is different, so we would expect a difference in the ratio of postponed vs initial RPs if their position was due to syntax.

Syntactic type of the relative clause
 external

external


- Postponed relative pronoun


## Rel-in-situ?

One possible explanation for postponed relative pronouns would be to allow them to remain in their base position, as has been advocated for other languages (de Vries 2002, 2005; Hindi: Mahajan 2000, Tokharian B: Hearn 2017; Hittite: Sideltsev 2015).

Problems:
-It doesn't explain why the pronoun is always second in the relative clause (either after the first word or the first constituent).
-It doesn't explain why the negation and sentence clitics are blocked from raising higher than the relative pronoun.
-It doesn't explain why it is optional.

## Information structure

## 1．TOPIC

OỦ Kと́tı пןóб $\omega$
áß $\alpha \tau \alpha v ~ \alpha ̈ \lambda \alpha ~ к เ o ́ v \omega V ~ U ́ \pi \varepsilon ̀ \rho ~ ' H \rho \alpha к \lambda \varepsilon ́ o \varsigma ~ \pi \varepsilon \rho \alpha ̃ ̃ ~ \varepsilon u ̉ \mu \alpha \rho \varepsilon ́ \varsigma, ~$

«áptupas к入utáવ‘• N．3．21－23
＂it is not easy to cross the trackless sea beyond the pillars of Herakles，which the hero－god set up as the famous witnesses of the limit of navigation＂

2．FOCUS

N．7．90－91
＂under your protection，you who subdued the Giants，would he gladly live＂
3．UNCLEAR

тદ́入
P．4．245－246
＂［a dragon］which in thickness and length surpassed a fifty－oar ship，that the blows of a hammer built＂

# Prosody 

A LAST RESORT EXPLANATION

## Contiguity

-The element above the relative pronoun is located immediately before the pronoun in all 45 instances but one.


"success is the best prize; good reputation is the second lot; with both of them, a man who gains and takes them, gets the highest crown"
"Furthermore, only 11 occurrences have more than 1 lexical word before the pronoun, and never more than 1 constituent. As a rule, the relative pronoun is second in the relative clause, i.e. it is in the so-called Wackernagel position.
-Inter-speaker variation between prosodic word treatment and phonologic word treatment is expected (cf. Huggard 2015 for Hittite, Goldstein 2015 for Greek).
-Hypothesis: the relative pronoun can be postpositive in AG verse.

## Domain interruption

-The postponed relative pronoun can interrupt a syntactic domain.

 O. 6.84-85
"my mother's mother the woman of Stymphale, fair-flowered Metopa, who bore the rider Theba"
"A case of hyperbaton?

"in wisdom [he is] a fox, which forstalls the swoop of the eagle by falling on her back"
"Only 5 cases similar to (2), versus 13 cases similar to (1).

## Prosodic breaks

Avoidance of line-ends before a postponed relative pronoun: only 4 instances where it is line-initial.
 цариариZоїбаs סраквія


fr. 123.1-4
Participial clause
2. $ү \lambda \tilde{\omega} \sigma \sigma \alpha v \varepsilon u ́ \rho \varepsilon ́ t \omega ~ к \varepsilon \lambda \alpha \delta \tilde{\tau} \tau ו v$, 'Opботрıaiva


N. 4.86-88

 őӨı трáyol puvaıદ̧i $\mu i$ íбүovtal.
fr. 201.1-3
 oửठغ̇ $\pi \alpha \mu \phi \omega \dot{v} \omega v$ ỉaxàv


Nothing special

P. 3.16-19

## Prosodic breaks

"Responsion in the Pindaric stanza allows to detect prosodic breaks within the line.
"Score for word-ends: 1 for a lexical word-end, 0.5 for a clitic or appositive word-end, divided by the total number of responsions (expressed as a percentage).

Word-end score (with line-ends)


Word-end score (line-internal)

"Average word-end score difference between first word of the RC and postponed RP: $22.37 \%$.

## Complex relative pronouns о̋бтıऽ, öбाहр and őбтє

"Contrary to what is attested in other authors, in Pindar relative öбtıs and öбॉعр are never postponed.
-Statistically significant for őбtıc (undecidable for őб兀єр).
-Restriction on simplex relative pronouns (including oĩos and ő $\sigma \circ \varsigma$ )? But ő $\sigma t \varepsilon$ is postponed $5 \times$ (20\%).
"Possible explanation: őбtıs and őблєр were not analyzable anymore by Pindar's time (at least by some speakers), whereas öбtع was still felt as ös + "epic" т $\varepsilon$.

## Clitics and postpositives

When a clitic or postpositive with scope over the relative clause is present, it never precedes the relative pronoun.


O. 8.75-76
"the finest victory of hands for the Blepsiads, whom the sixth garland now crowns because of their fights full of leavves"
2. ої́ $\Sigma \cup \rho \alpha к о \sigma i \omega v \dot{\alpha} \rho \chi \tilde{\omega} \delta \alpha \mu \alpha \sigma \theta \varepsilon ́ v \tau \varepsilon \varsigma ~ \pi \alpha ́ \theta o v$,
 "Such were their sufferings once they were vanquished by the leader of the Syracusans, who from their rapid ships flung their youths into the sea"



"and to carry out the word of Medeia, at the 17 th generation, [the word] spoken at Thera, which Aietas' holy child once blew from her immortal mouth, the queen of the Colchians"

## Clitics and postpositives



I. 1.12-13 "in which Alcmena bore the dauntless son as well whom once Geryon's bold dogs feared"
5. трह́ $\omega$ tol $\pi o ́ \lambda \varepsilon \mu \circ \vee$
$\Delta i o ́ \varsigma ’ E v v o \sigma i ́ \delta \alpha v \tau \varepsilon$ b $\alpha \rho[u ́] k \tau \cup \pi о v$


غ́я tòv $\beta \alpha \theta u ̈ v ~ T \alpha ́ \rho \tau \alpha \rho o v ~$
fr. 52d.40-44
"I flee away from the war of Zeus and loud-thundering Earthshaker, who once sent the earth and a compact army, with their lightning and trident, in the depths of the Tartaros"
-Only $5 \times$, and almost always with *so- (even if *Hyo- relative pronouns are $7 \times$ more frequent overall).
"The count is different if we add all instances of öбtع counted as ő $=\tau \varepsilon(5 \times)$.

## Problems with a prosodic explanation

-CLITICS AND NEGATIONS
Why can't a clitic or a negation appear to the left of the relative? There is not enough data to answer this question, but a solution might be that there was an ordered clitic chain (as there is with postpositive particles)
-OPTIONALITY
Clitics and postpositives are lexically determined: a word is either a full lexical word or a clitic/postpositive.

## A diachronic explanation

-In all other IE languages (except Vedic) where postponement of the RP is attested, the RP is a reflex of PIE * $k^{w}$ is, homophonous with the indefinite (clitic) pronoun.
-In AG, both relative pronouns are identical with anaphoric pronouns. Such pronouns are usually ratified topics, which are treated as postpositive in AG.
"When they acquired a relative function, they might have kept this placement property as an archaism.
-This property then extended to complex pronouns when they became unanalyzable.
"This would explain both the restriction of this postponement to verse and its optionality.


# Conclusion 

SUMMING UP

## Dead-ends and a possible solution

-In Pindar (and other verse authors), the relative pronoun comes sometimes second in the relative clause.
-Relative clauses with a postponed pronoun do not differ from regular relative clauses:

- no difference in their semantics
- no difference in their syntax
-The solution to the problem lies in prosody: the ability of the relative pronoun to be treated as a clitic or postpositive word. This explains:
- why the pronoun is always second in the clause;
- why it can interrupt syntactic domains;
- why there is fewer line-ends before the postponed relative pronoun than before the initial relative pronoun.
-The optionality is probably a result of diachrony.



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