

# THE CHRONOGRAMS <br> OF THE <br> EURIPIDEAN DRAMAS 

COLLECTED AND SOLVED BY

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Oxford
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## EURIPIDEAN CHRONOGRAMS

The mode of signature employed by the Greek tragedians in their dramas is indicated in a story told by Diogenes Laertius in his Life of Heraclides Ponticus. One Dionysius Metathemenus, a philosopher whose life is narrated by the same author, or, according to another account, Spintharus, a tragedian mentioned by Suidas as the author of two dramas, had composed a poem (probably a tragedy) called Parthenopaeus, which he put out in the name of Sophocles. Heraclides quoted this work as by that poet. Its author informed Heraclides of what had happened. Heraclides rejected the claim. Its author then wrote bidding Heraclides look at the parastichis ' which was in perfect order ' ${ }^{1}$; Heraclides replied that this might be accidental. The author then wrote : You shall solve the following also ${ }^{2}$ :
> ${ }^{1}$ каì єìє $\pi \alpha \gamma \kappa \alpha ́ \lambda \omega s$. These words were strangely taken by Diogenes to mean 'and it contained Pankaloss', which he supposed to be the name of the beloved of Dionysius. Such a name being unexampled, it appears in Pape's Lexicon of Proper Names in the form Пáүкалоs.
> ${ }^{2}$ каì rav̂̀a єip $\dot{\prime} \sigma \epsilon \iota s$. For єípícкєıv, in the sense of solving an enigma, see L. \& S., s. v. aivı $\mu \mathrm{a}$, and the definition of र $\overline{\text { íqos in }}$ Athenaeus 448 c.

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\gamma\epsiloń\rho\omega\nu \pii0\etaкоs oủ\chi à\lambdaí\sigmaк\epsilon\tauа\iota \piá\gamma\eta
\alpha\lambdaí\sigmaк\epsilon\tauа\iota \muév, \mu\epsilon\tauà \chi\rhoóvo\nu \delta' à\lambdaí\sigmaк\epsilon\tauа\iota
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with the key attached, 'Hраклєíŋŋs $\gamma \rho a \dot{\mu} \mu a \tau a$ oùк
 stand literature nor was he ashamed. Whether Heraclides succeeded in solving this puzzle or not is not stated ; clearly the two lines are an anagram for the following, which contain the sentiment given in the key-

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ả\gamma\rhoа́\mu\muато́s \tau\iotas, 'Нраклєíß\eta Поvтiк', єi.
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Heraclides Ponticus, you are an illiterate; plague on you, bad boy, who when convicted brazen it out. And, indeed, the two lines which contained the puzzle were evidently composed with a view to it; for the Greek proverb has the word $\dot{\alpha} \lambda \omega \dot{\omega} \pi \eta \xi$, fox, and not ape; ${ }^{1}$ and the former is proverbial with the Hellenes, as with other European races, for cunning. Moreover, the second line is weak, since not every aged ape is caught in a trap, and in the case of an aged beast the phrase 'after a time' is unsuitable. Still the sixty-one letters of this couplet furnished precisely the letters re-

[^0]quired for the mock signature of Heraclides Ponticus.

If the charge of illiteracy brought against Heraclides was not wholly unreasonable, the practice with which it deals must have been one known to the experts in tragedy. If Diogenes were right in supposing that the name which was to be found was that of some other person than the author, Heraclides would have been justified in rejecting this evidence; and ignorance of the private affairs of Dionysius or Spintharus could not count as illiteracy. Probably Diogenes was misled by the story of the manner wherein Phidias had signed the statue of Olympian Zeus. ${ }^{1}$ The charge was not unreasonable if dramatists regularly signed their works in a certain way, and the expert knew where to look for the signature. The supposition that its presence might be accidental would only be made by one who was unacquainted with the practice.

The signature was then an iambic couplet made up of the same letters as the first iambic couplet of the play, containing the names of the author and a direction to find them; usually the names occupy one line and the direction the other. This holds good of all the tragedies which have come

[^1]down to us. And it is owing to this double use of the same letters that the initial lines in most cases exhibit peculiarities of some sort-violations of history or usage, grammar or metre. Some, e. g. the initial couplets of Euripides' Electra and Sophocles'Antigone, admit neither of translation nor of emendation; in the Hecabe this queen is called the daughter of Cisseus, whereas the proper name of her father, Dymas, could have been got into the line without difficulty, had not the letters of the other been required. In the initial iambics of the Iphigenia in Aulis Helen and Clytaemnestra are given a sister Phoebe for a similar reason.

In certain cases the syntax of the signature indicates that something more is to follow; and this is the Chronogram, an iambic couplet to be reconstructed out of the second iambic couplet in the play, giving the date in Olympiads, and a direction to find it. The sacrifices required in order to introduce this are not less than those made to the signatures; the Agamemnon and the Antigone furnish examples. The earliest signature and chronogram which we possess, those in the Suppliants of Aeschylus, state that an expert in tragedy will look out for them; the date there given being Ol. lxxiii. This seems an early date to speak of experts in tragedy; but in classical

Greek this word meant only melancholy poem, ${ }^{1}$ whence Plato repeatedly calls Homer an author of tragedy.
For an initial exercise in the solution of these puzzles the twenty-four chronograms of the Euripidean dramas seem well suited. For the reason given no alteration whatever of the traditional text can be admitted. ${ }^{2}$ It will be found that eighteen of these mention the Olympiads or the Olympia ; three the Feasts of Zeus ; one the Sacrifices of Zeus ; one the Sacrifices of Pisa; whereas one, the Rhesus, gives numerals mentioning Chief Sacrifices. This play, however, is signed, not by Euripides, but by Sophocles, whose style was detected in it by some early critics. Of the dates given twelve are in agreement with either a traditional date or with one that can be inferred with certainty from the content of the drama; the remaining twelve are, for the most part, in agreement with dates that have been inferred on less cogent grounds.

The phrases which occur in the language of

[^2]these cryptograms, $\gamma \rho \dot{\rho} \mu \mu a \tau \alpha$ (or $\sigma \tau о \iota \chi \hat{i} a$ ) $\hat{a} \lambda \lambda \alpha \alpha^{\sigma}-$ $\sigma \epsilon \iota \nu, \dot{\omega} \theta \in \hat{\epsilon} \nu, \kappa v \kappa \lambda о \hat{\nu} \nu$, suggest the employment of movable letters, such as those supplied for wordgames, and indeed this apparatus is necessary if the puzzles are to be solved with ease and certainty. The Greek in which they are composed should be simple and clear ; only so far as a solution displays those qualities can it be considered correct. The task of solution is facilitated by the fact that the content of the puzzles is known a priori, except the actual numeral ; and even of that we know that it must be between 82 and 94 . When once the decade and the word Olympiads have been eliminated, not only have the letters requiring rearrangement been reduced by a third, but since these words can only occupy particular places in the iambic line, the general structure of the chronogram is ascertained. Further, the words tragedy, poem, letters, and the various synonyms for date, speedily reveal themselves in most of the chronograms.

Whether it would be possible in any one case to obtain a correct date in this manner except as the result of design may well be doubted; at least there is no occasion to believe it until an example is produced. That it would be impossible to do so in an indefinite number of cases will
perhaps be granted ; since otherwise it would be necessary to hold that, given an iambic couplet, it can always be so rearranged as to provide not only $a$ date, but the date of its composition with a direction to find it. If twelve cases are not sufficient for the purpose of proving design, it is hard to think of a number which would satisfy requirements. But in the remaining twelve cases, though the tradition does not assure us that the chronograms are right, we have no reason for supposing that they are erroneous.

It only remains to be seen whether the chronograms can be successfully attacked on the ground of the Greek in which they are composed. To the best of the writer's belief they contain no form or phrase for which the ordinary grammars and dictionaries fail to supply justification. The metre is of about the same rigidity as that employed in the satyric drama Cyclops.

Reference is made to Professor Murray's edition for the MS. tradition, the traditional dates, and the inferred dates, except in the case of nos. 20-4, where the lines are taken from the Poetae Scenici Graeci, ed. 5. The order of nos. 1-19 is that of Murray.

1. Cyclops



Solution



It was an Olympiad and ninety. 0 thou who shalt comment on me, ask me about the date of composition.

Date OI. xci. No tradition.
2. Alcestis



Solution


And what shall be the age? Name Olympiads for the piece. Cancel five and insert ninety.

Date OI. lxxxv. Tradition the same. The shifting from imperative to optative is like Odyssey ii. 230, \&c.
3. Medea



Solution



Clothe with the letters the words, in order to learn my date: Olympiads, but from ninety you shall take three.
43 31 Date Ol. lxxxvii. Tradition the same.

$$
\begin{aligned}
& \text { 4. Heraclidae }
\end{aligned}
$$

$\pi o ́ \lambda \epsilon \iota \tau$ ' ä $\chi \rho \eta \sigma \tau о$ к каì $\sigma v \nu a \lambda \lambda \alpha ́ \sigma \sigma \epsilon \iota \nu \beta \alpha \rho v ́ s$

Solution


Take then, interchange the letters, if you have asked the date; with seventy-nine Olympiads a decade.

Date Ol. lxxxix. No tradition. For ${ }^{a} \rho$ ’ see Electra 374.

5. Hippolytus<br> 

## Solution



$O$ thou that dost then ask the age, making it equal to ninety Olympiads, then subtract three.

Date Ol. lxxxvii. Tradition the same. 'Then' means after the signature.

## 6. Andromache

Прıá $\mu$ оv тúpavעov é $\sigma \tau i ́ a \nu ~ a ̉ \phi \iota к o ́ \mu \eta \nu ~$

Solution
סias $\theta$ ' éoptàs $\delta o ́ s, \pi o ́ v o u ~ ' \pi i ̀ ~ \delta р a ́ \mu a \tau \iota ~$

And as the commencement of the labour upon the drama give ninety feasts of Zeus and subtract one.

Date Ol. lxxxix. Murray about the same.
7. Hecabe



Solution


Do you the business of the date of the poem. I see it equal, aye, equal to eight over and above eighty Olympiads, you will say.

Date Ol. Ixxxviii. Murray the same.

## 8. Suppliants

 $\pi o ́ \lambda \iota \nu \tau^{\prime}$ 'А $\theta \eta \nu \omega \hat{\nu} \tau \eta{ }^{\prime} \nu \tau \epsilon \Pi \iota \tau \theta \epsilon \epsilon \omega \overline{ } \chi^{\theta o ́ v \alpha}$

## Solution




And when I make a date for the poem, let me make it in the line: Nine enneads of Olympia after a heptad.

Date Ol. lxxxviii. Murray about the same.
9. Heracles Mad



Solution



Look at the date of the poetry; there are four words therein which should have been exposed: viz. Eighty-nine feasts of Zeus.

Date Ol. lxxxix. Murray the same.
10. Ion



Solution



I represent the years of the tragedy. Why should you not, friend? Viz. with nine enneads of the sacrifices of Zeus one ennead.

Date Ol. xc. Cf. Murray.
11. Troades



Solution



A clever man, skilled in anagrams, will hit upon the line, It was an Olympiad and ninety, which is the date.

Date Ol. xci. Tradition the same.
12. Electra



Solution



And this is the age of the tragedy. You shall drag it hence in four words, viz. With ninety Olympiads one.
Date Ol. xci. Murray the same.
13. Iphigenia in Tauri



Solution



Do you skilfully rearrange, and find as the date of the piece six Olympiads after nine enneads. Date Ol. lxxxvii.

## 14. Helen




Solution



Do you hear the ninetieth feast of Zeus with two? Have from herself the date of the tragedy. Date Ol. xcii. Tradition the same.

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15. Phoenissae



Solution



May you be ignorant of the date of the tragedy, in order that you may apprehend what is meant by the letters X with LXXXII Olympiads.

Date Ol. xcii. Murray the same. For the elisions see Athenaeus 453 d .

## 16. Orestes




Solution
кảuol xpóvous $\sigma \hat{\text { v̀ }}$ фpáý' ákov́ras tò $\sigma \tau i ́ x \omega$. ठío kảvevíkove'. ipà $\gamma$ d̀ $\Pi \iota \sigma a i ̂ a ~ \theta \omega ̂ . ~$

And do you name a date for me, when you hear the two lines. Ninety-two; for let me make it Pisaean sacrifices.

Date Ol, xcii. Tradition the same.
17. Bacchae
$\Sigma \epsilon \mu \epsilon ́ \lambda \eta \lambda^{\prime} \chi_{\epsilon} \epsilon \theta \epsilon \hat{i} \sigma^{\prime} \dot{a} \sigma \tau \rho \alpha \pi \eta \phi o ́ \rho \varphi \pi \nu \rho i$ $\mu о \rho \phi \grave{\nu} \nu \delta^{\circ}$ ả $\mu \epsilon i \not \psi a s$ є̇к $\theta \epsilon о \hat{v} \beta \rho о т \eta \sigma i ́ a \nu$

## Solution




And you shall date me by Olympiads; subtract seven from a hundred. I have versified the date of the poem. It was a slow business.

Date Ol. xciii. Tradition the same. For the form of the first verb see Troades 1234 (MSS.), \&c.

## 18. Iphigenia in Aulis

${ }^{\text {'E }} \mathrm{E}$ е́v $\eta \tau \epsilon \tau \alpha u ́ \tau \eta S$ oi $\tau \grave{\alpha} \pi \rho \hat{\omega} \tau$ ’ $\dot{\omega} \lambda \beta \iota \sigma \mu \epsilon ́ \nu 0 \iota$


Solution



Then nine enneads of Olympian sacrifices, and the years of another whole ennead, with the commencement of a third.

Date after Ol. xc. The traditional date is Ol. xciii. The accusative is after the word ' containing' in the signature which precedes.
19. Rhesus
$\lambda \alpha$ Óvтєs ö $\mu \mu \alpha$ тои̉ $\mu o ̀ \nu$ aï $\rho \in \sigma \theta a \iota ~ \phi v \gamma \hat{n}$ $\mu \epsilon ́ \lambda \lambda o v \sigma \iota ~ \sigma \alpha i ́ \nu \epsilon \iota ~ \mu ’ ~ \epsilon ै \nu \nu v \chi o s ~ \phi \rho v \kappa \tau \omega \rho i ́ a ~$

## Solution




At the same time by rearrangement of letters I represent the date. Then from a whole hundred Chief sacrifices now subtract seven sacrifices.
Date Ol. xciii. The signature which precedes is that of Sophocles, whose style was detected in it by some ancient critics.
To these we may now add some Chronograms from the fragments.
20. Meleagros



Solution


Do you know what games are entirely auspicious to the tragedy? Yes, the ninth Olympiad from the ninth ennead.

Date Ol. xc. This explains why the dates are so often based on the ninth ennead.

## 21. Oeneus

$T v \delta \epsilon u ̀ s ~ \tau o ́ k o s ~ \mu e ̀ \nu ~ O i v e ́ \omega s ~ \pi a \tau \eta ̀ \rho ~ \delta ' ~ \epsilon ̉ \mu o ̀ s ~$


Solution


Seeing ten enneads, cry out Olympiads! and observe how they measure the years of this tragedy. Date OI. xe.
22. Phrixus


Solution


The prudent tragedy has concealed her age, which she knows, too; nine times nine plus twice six Olympiads.

Date OI. xciii.
The list closes with two which have come to us in a corrupt form, but seem to have been long ago corrected with certainty.
23. Telephus
 Ave $\gamma \eta \gamma$ à $\rho$ ' $A \lambda$ 白ov $\pi \alpha i ̂ s ~ \mu \epsilon \tau \hat{\varrho}$ T T $\rho v \nu \theta i \varphi$

Solution



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Find out the letters for an iambic line, and carefully ask of them the Olympia. The age, my friend, is a tetrad with nine enneads.

Date Ol. lxxxv. Tradition the same.

## 24. Archelaus

ôs ék $\mu \epsilon \lambda a \mu \beta$ рóroıo $\pi \lambda \eta \rho \frac{v i r a l ~}{\text { poàs }}$


## Solution




How many years? Ah, evil ones, the whole tragedy proclaims you neighbours of the ninetythird Olympiad.

The Archelaus was written as a compliment to the Macedonian Archelaus, who was at the height of his power in Ol. xciii.

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[^0]:    ${ }^{1}$ See Leutsch's Paroemiographi. The form with 'ape' comes from this passage of Diogenes.

[^1]:    ${ }^{1}$ Clement Alex. Protrepticon 53.

[^2]:    ${ }^{1}$ Bekker's Anecdota 747, 3 тоíךца émıráфıov. Ibid. 1
     т $\omega \nu \tau \rho a ́ \gamma \omega \nu$ ф $\omega \nu \eta ̂ s . \quad$ So too Plato, Cratylus 408 c.
    ${ }^{2}$ In the case of the Fragments 23 and 24 we have only inaccurate quotations. We cannot then use of them the phrase 'traditional text'.

