

# Studying Greek History through Inscriptions

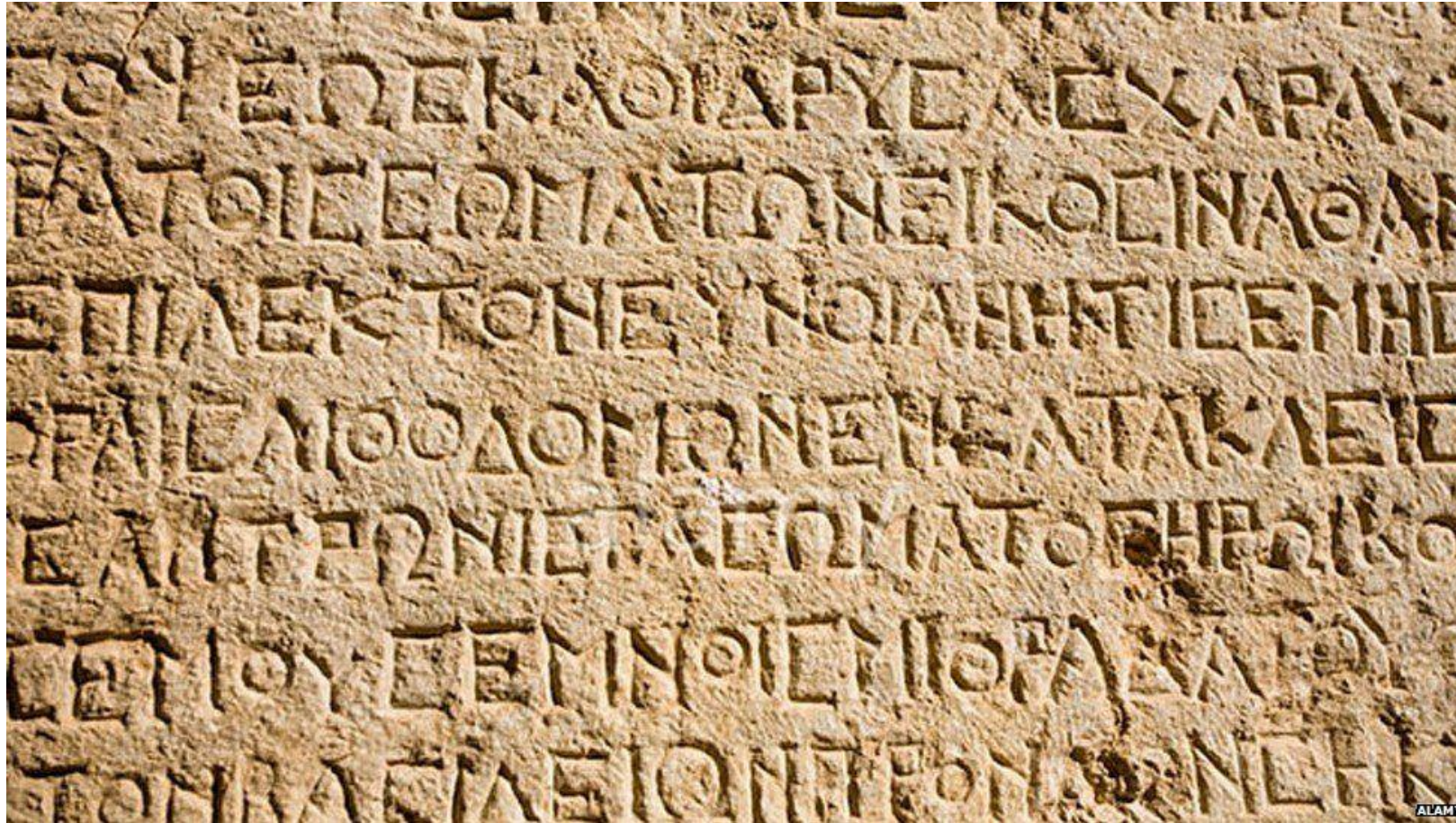
# Introduction to Ancient Greek Epigraphy

- ~~1) The value of inscriptions in the Study of Antiquity~~
- ~~2) A Classification of Greek Inscriptions based on material~~
- ~~3) A Classification of Greek Inscriptions based on content~~
- 4) Some features of the Greek inscriptions
- 5) Origin and development of the Greek alphabet / Archaic alphabets
- 6) The evolution of the form of the letters
- 7) The study of inscriptions
  - Methods of approaching the inscriptions
  - The tools of epigraphy
- 8) Publications and bibliography of inscriptions
- 9) Epigraphy and the Internet

# Some features of the ancient Greek inscriptions

- Capital letters
- Without spaces between words
- Without systematic punctuation

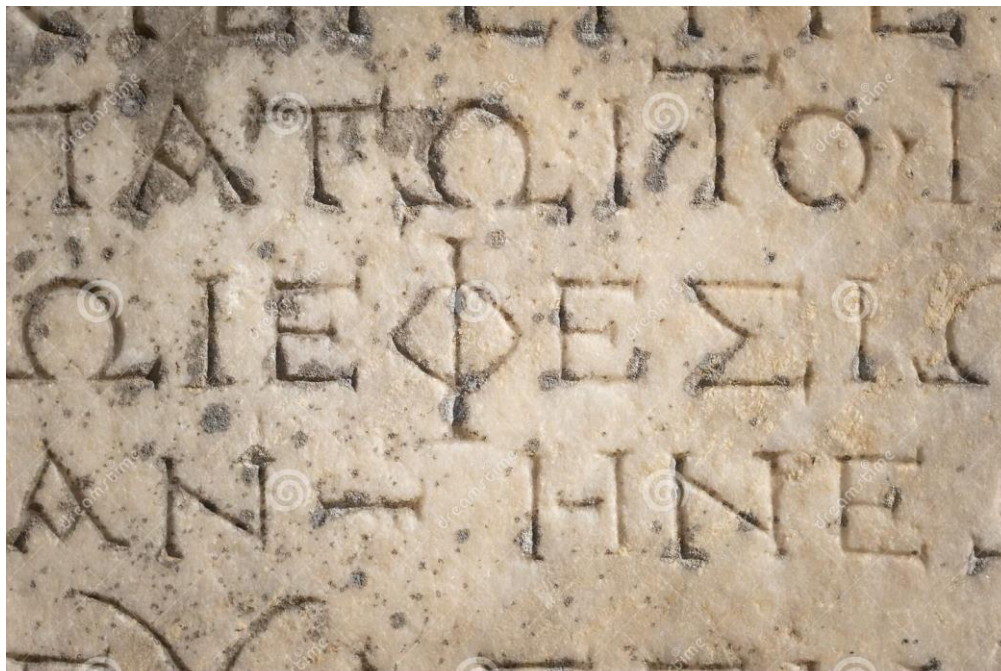
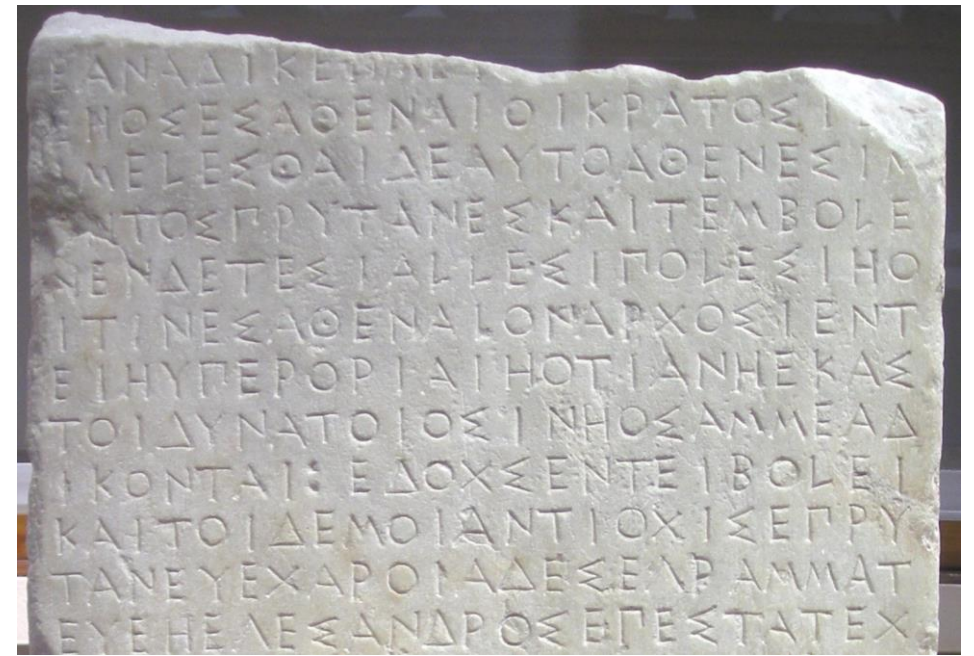
# Capital letters without spaces







# Punctuation



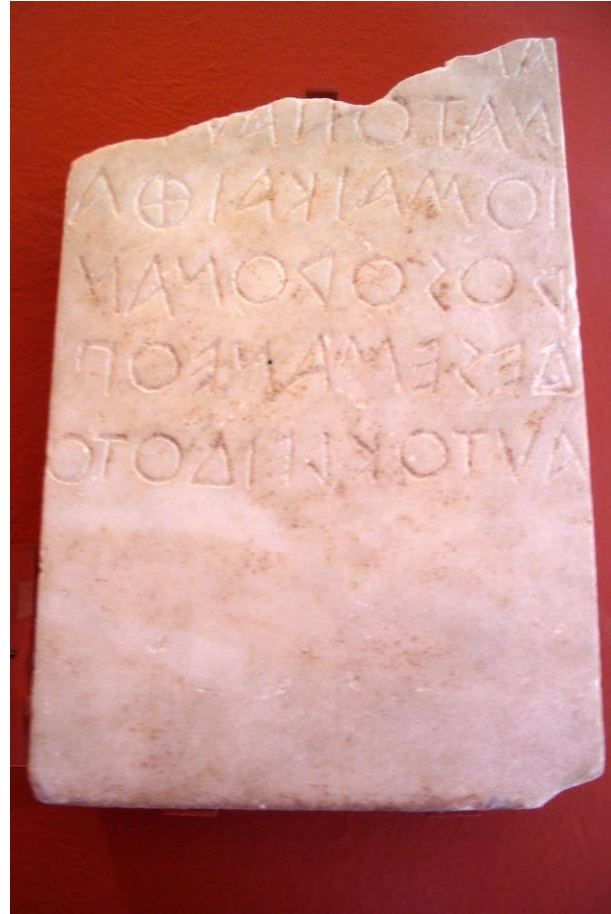
# Direction of letters and text in the early inscriptions

From right to left (ἐπὶ τὰ λαϊά): Grave-stele of Keramo, Athens, 625-600 BC





**From right to left and from bottom to top:  
Grave-stele of Autokleides, Athens, ca. 550 BC**



# Boustrophedon

**THIS IS AN EXAMPLE OF TEXT THAT HAS BEEN WRITTEN OUT IN THE BOUSTROPHEDON STYLE, WHERE LINES ARE ALTERNATELY WRITTEN LEFT TO RIGHT AND RIGHT TO LEFT.**





**The most complex case: vertically and boustrophedon  
Establishment of the Panathenaic games, Athens, 570-560 BC**



**POSITION OF THE LETTERS/TEXT  
ON THE STONE/METAL/TERACOTTA**

# Stoichedon-style

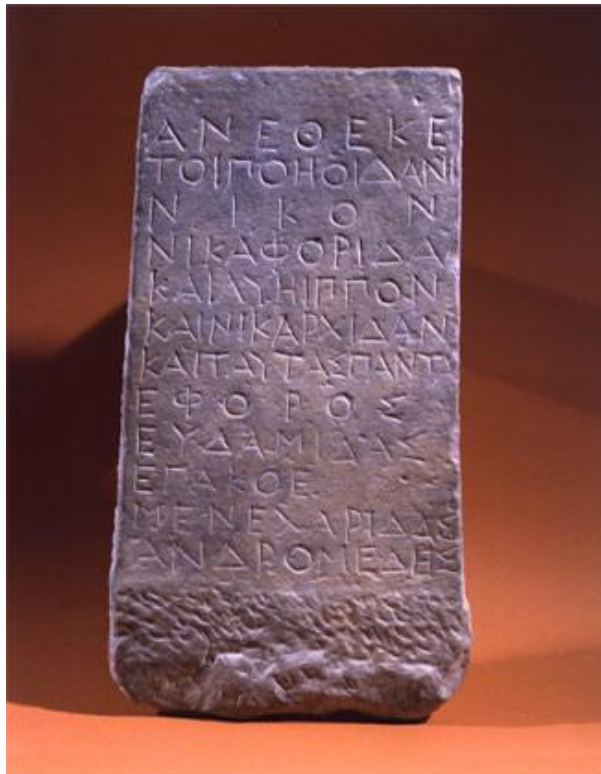
A piece of art: the Hecatombedon-inscription, Athens, 485/4 BC



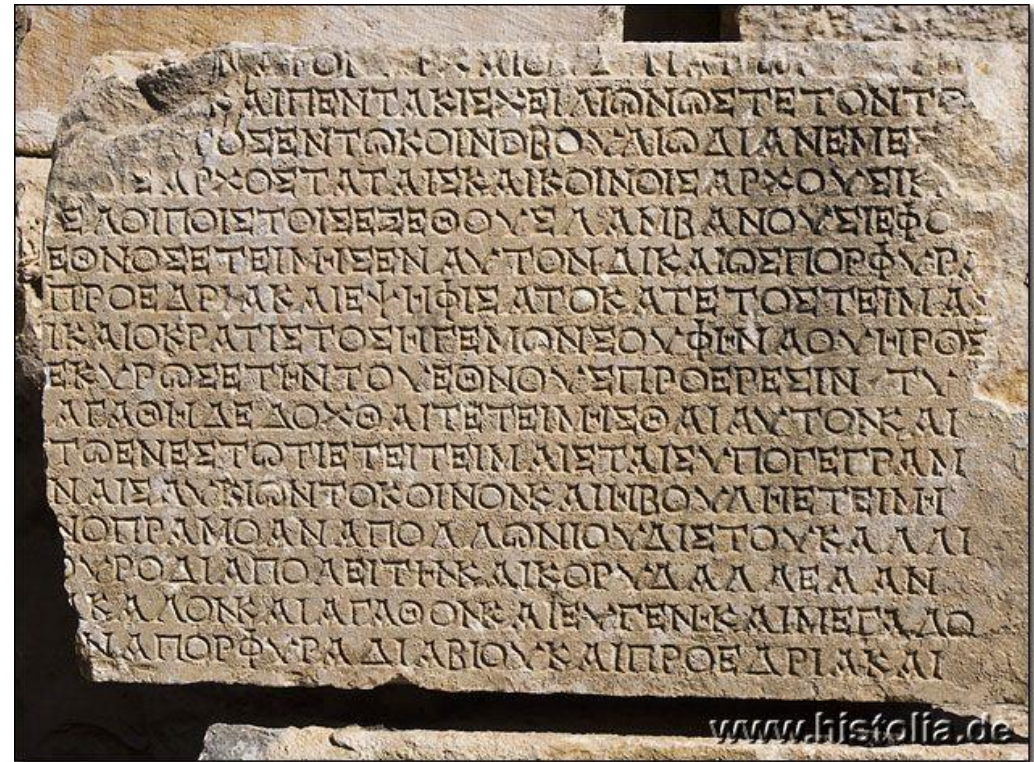


# Non-stoichedon style

Liberation of slaves,  
Tainaro/Sparta, later 5th - early 4th  
century BC



Opramoas inscription, Rhodiapolis,  
Turkey, 2<sup>nd</sup> c. AD



α	β	γ	δ	ε	ζ	η	θ
π	ο	ξ	ν	μ	λ	κ	ι
ρ	σ	τ	υ	φ	χ	ψ	ω

κινηδὸν δὲ ὡς ἐπὶ τούτοις

α	ε	ι	ν	ρ	φ
β	ζ	κ	ξ	σ	χ
γ	η	λ	ο	τ	ψ
δ	θ	μ	π	υ	ω

πληθηδὸν οὕτως

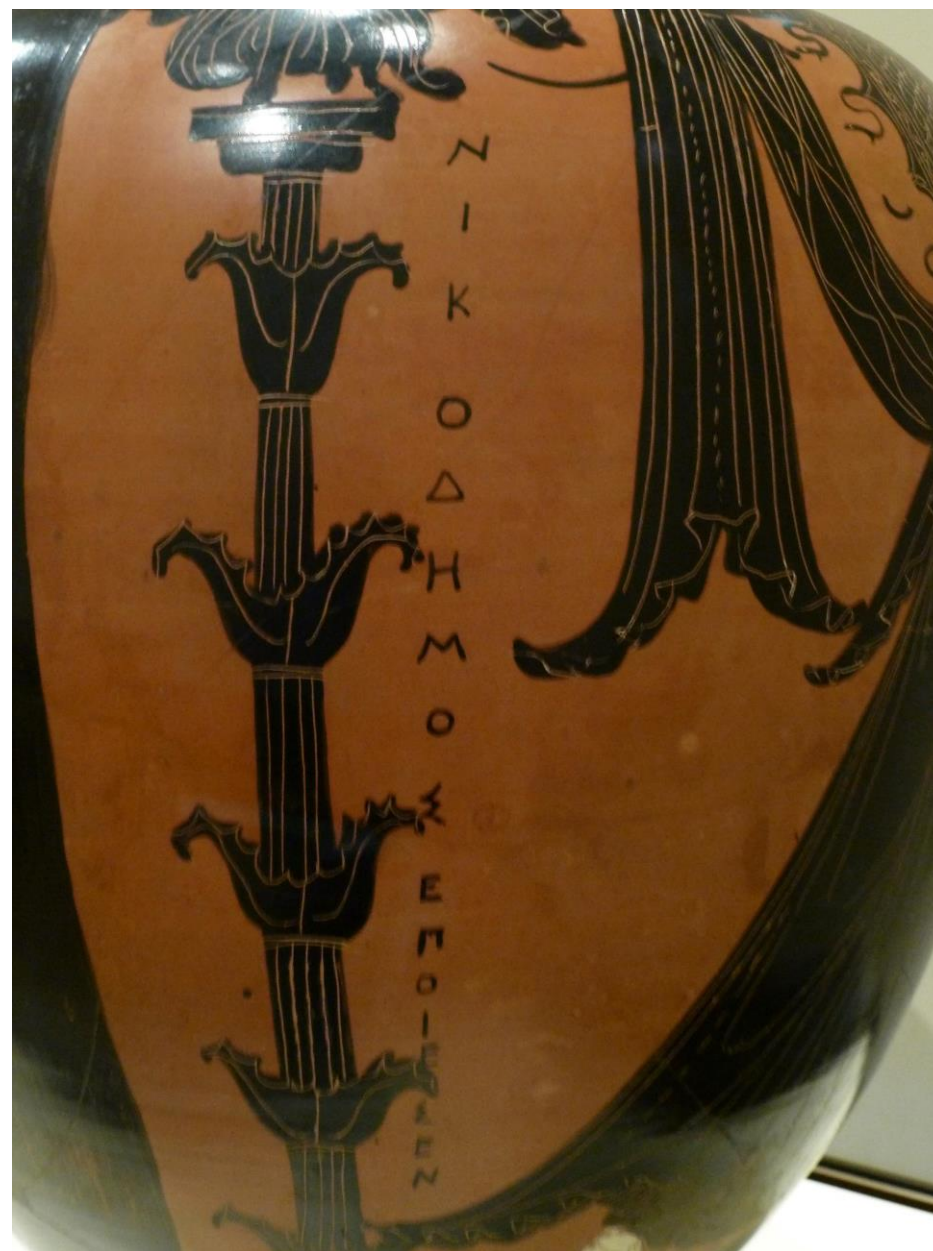
α	β	γ	δ	ε	ζ
η					ω
θ					ψ
ι					χ
κ					φ
λ					υ
μ					τ
ν	ξ	ο	π	ρ	σ

σπειρηδὸν οὕτως

		θ	ι		π	ρ		ω
α	β		η	κ	ο	σ	τ	ψ
γ	δ	ε	ζ	λ	ξ	υ	φ	
				μ	ν			

KIONEDON

Panathenaic  
amphora





# Speiredon



**ORIGIN AND DEVELOPMENT  
OF THE GREEK ALPHABET**



# Phoenician letters – Greek letters

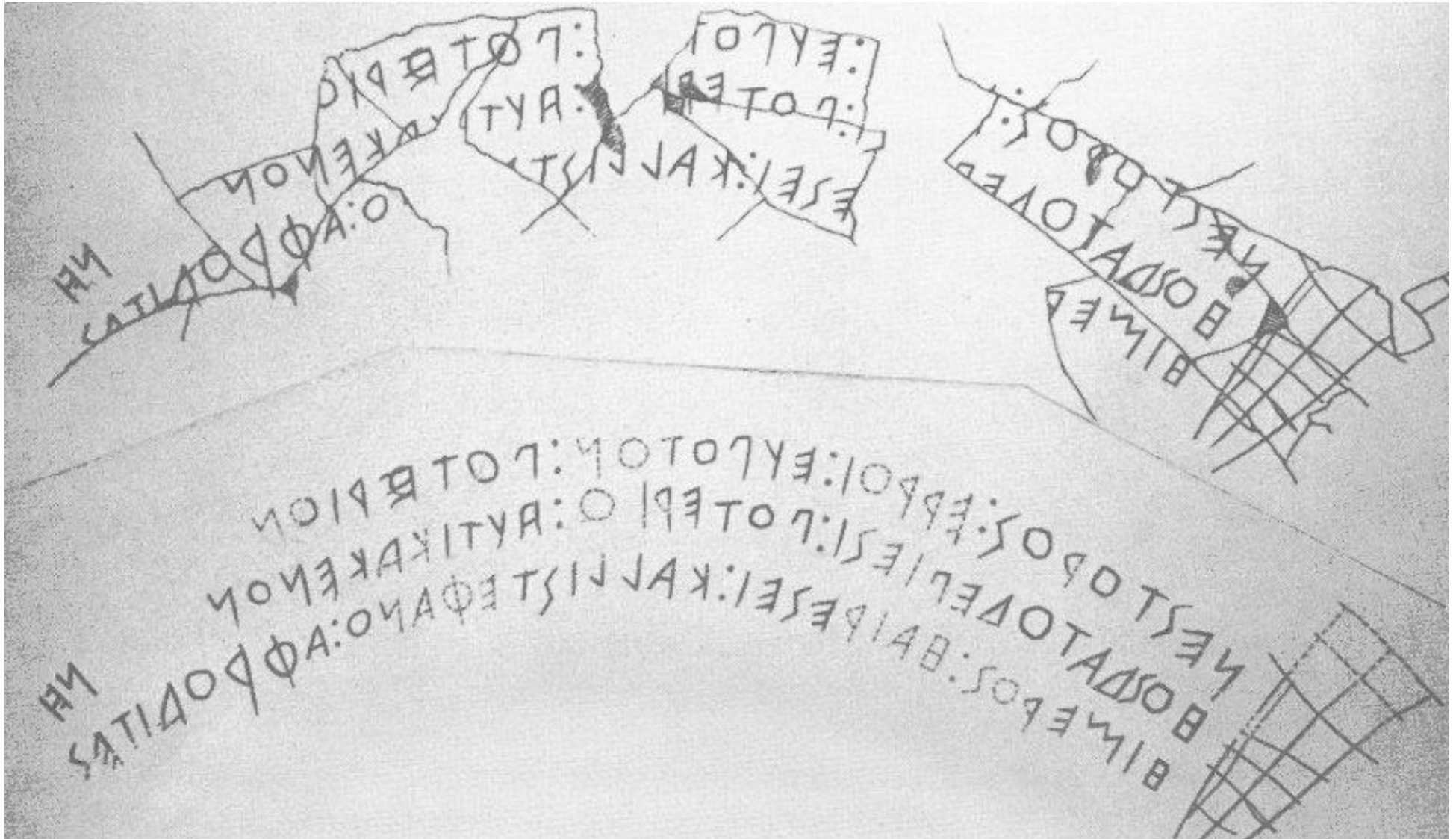
Αιγυπτιακή ιερογλυφική		Φοινικικό		(αρχαϊκό)	Ελληνικό (κλασικό)	Λατινικό
	βόδι		Aleph		Άλφα	Α
	σπίτι		Beth		Βήτα	Β
	καμήλα		Ghimmel		Γάμμα	Γ
	πόρτα		Daleth		Δέλτα	Δ
	χαρά		He		Έψιλον	Ε
	στύλος		Waw		Δίγαμμα	Ζ
			Zayin		Ζήτα	Ζ
			Cheth		Ήτα	Η
			Theth		Θήτα	Θ
	χέρι		Yod		Ιώτα	Ι
	φυτό		Kaph		Κάππα	Κ
	σκοινί		Lamed		Λάμβδα	Λ
	νερό		Mem		Μυ	Μ
	ψίδι		Nun		Νυ	Ν
	ψάρι		Samech		Ξει	Ξ
	μάτι		Ayin		Όμικρον	Ο
	στόμα		Pe		Πει	Π
			Sade		Σαν	Σ
			Qoph		Κόππα	Φ
			Resh		Ρω	Ρ
	κεφάλι		Shin		Σίγμα	Σ
	βουνό		Tau		Ταυ	Τ
	σταυρός				Υψιλον	Υ
					Φει	Φ
					Χει	Χ
					Ψει	Ψ
					Ωμέγα	Ω
						Υ
						ΥΥ
						Χ



# Dipylon-inscription, late 8<sup>th</sup> c. BC



# Cap of Nestor, late 8<sup>th</sup> c. BC





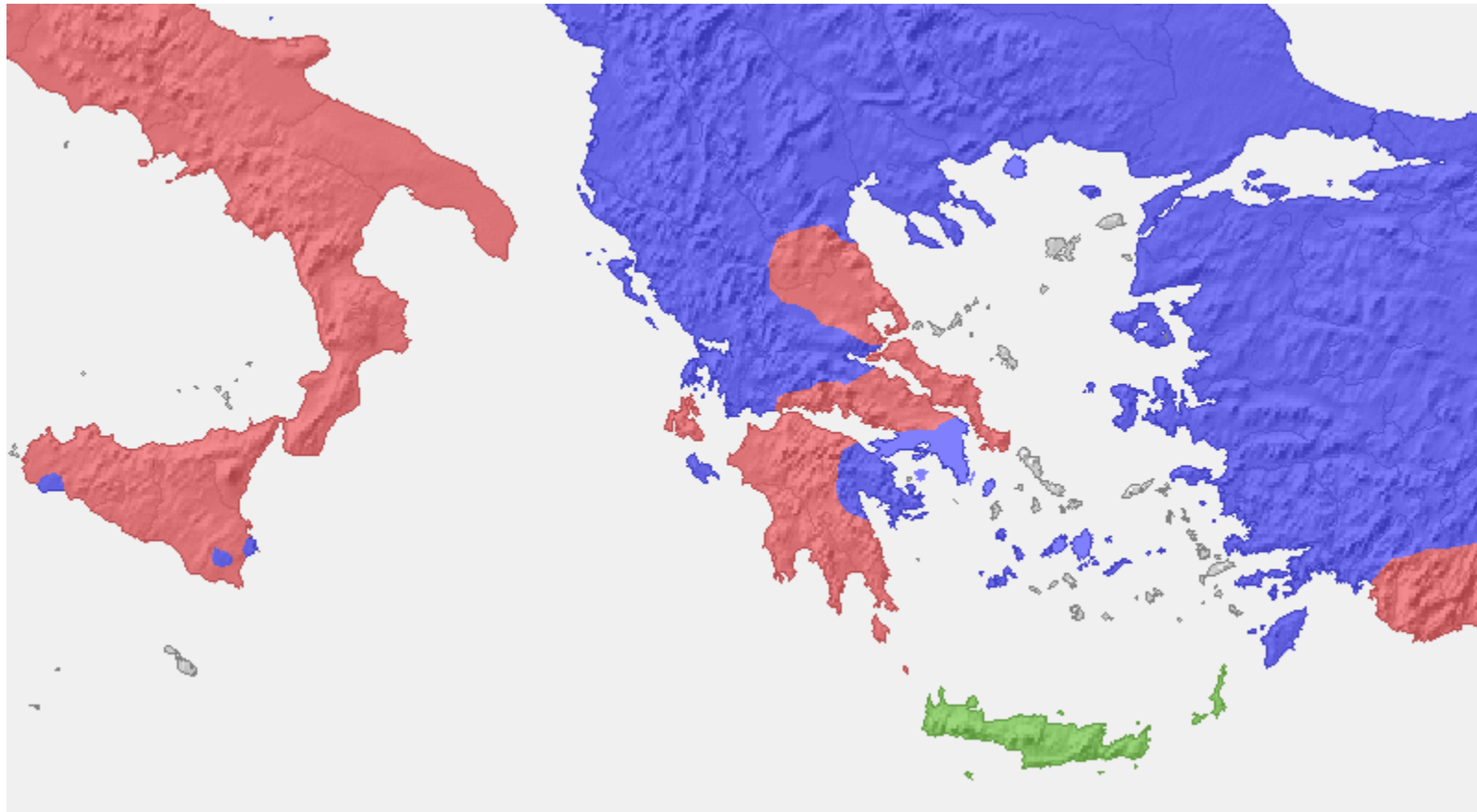


# Archaic Greek alphabets

	Phoenician	Ionia	Athens	Corinth	Argos	Crete	Euboea	Modern	AP	MP
alpha	Α	Α	Α	Α	Α	Α	Α	Α α	[a]	[a]
beta	Β	Β	Β	Β	Β	Β	Β	Β β	[b]	[v]
gamma	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ γ	[g]	[ɣ]
delta	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ δ	[d]	[ð]
epsilon	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε ε	[e]	[e]
digamma	Ϝ		Ϝ	Ϝ	Ϝ	Ϝ	Ϝ	Ϝ Ϝ	[w]	[w]
zeta	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ ζ	[zd]	[z]
eta	Η	Η						Η η	[eː]	[i]
heta	Θ		Θ	Θ	Θ	Θ	Θ		[h]	
theta	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ	Θ θ	[tʰ]	[θ]
iota	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι ι	[i]	[i]
kappa	Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ κ	[k]	[k]
lambda	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ λ	[l]	[l]
mu	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ μ	[m]	[m]
nu	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν ν	[n]	[n]
xi	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ ξ	[ks]	[ks]
omicron	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο ο	[o]	[o]
pi	Π	Π	Π	Π	Π	Π	Π	Π π	[p]	[p]
san	Ϻ			Ϻ	Ϻ	Ϻ	Ϻ		[s]	
koppa	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ	Ϙ Ϙ	[k]	
rho	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ ρ	[r]	[r]
sigma	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ σ	[s]	[s]
tau	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ τ	[t]	[t]
upsilon	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ υ	[u, u]	[i, v]
phi	Φ	Φ	Φ	Φ		Φ	Φ	Φ φ	[pʰ]	[f]
khi	Χ	Χ	Χ	Χ		Χ	Χ	Χ χ	[kʰ]	[ç, x]
psi	Ψ		Ψ	Ψ			Ψ	Ψ ψ	[ps]	[ps]
omega	Ω						Ω	Ω ω	[oː]	[o]
sampi	Ϻ						Ϻ	Ϻ Ϻ	[s]	

Euböa	Ionien	Athen	Korinth	modern
Α	ΑΑ	ΑΑ	ΑΑ	Α
Β	Β	Β	Β	Β
Γ	Γ	Γ	Γ	Γ
Δ	Δ	Δ	Δ	Δ
Ε	Ε	Ε	Ε	Ε
Ϝ	-	Ϝ	Ϝ	(Ϝ)
Ζ	Ζ	Ζ	Ζ	Ζ
Η	Η	Η	Η	Η
Θ	Θ	Θ	Θ	Θ
Ι	Ι	Ι	Ι	Ι
Κ	Κ	Κ	Κ	Κ
Λ	Λ	Λ	Λ	Λ
Μ	Μ	Μ	Μ	Μ
Ν	Ν	Ν	Ν	Ν
Ξ	Ξ	(Χξ)	Ξ	Ξ
Ο	Ο	Ο	Ο	Ο
Π	Π	Π	Π	Π
Ϻ	-	-	Ϻ	(Ϻ)
Ϙ	Ϙ	Ϙ	Ϙ	(Ϙ)
Ρ	Ρ	Ρ	Ρ	Ρ
Σ	Σ	Σ	-	Σ
Τ	Τ	Τ	Τ	Τ
Υ	Υ	Υ	Υ	Υ
Φ	Φ	Φ	Φ	Φ
Χ	Χ	Χ	Χ	Χ
(Φξ)	Υ	(Φξ)	Υ	Ψ
-	Ω	-	-	Ω

**The four main variants of the Greek alphabets**  
green (Cretan), red (Euboean or Western) and blue (Ionic, Attic  
and Corinthian)



## Variations in additional letters

In some, but not all, Greek dialects, additional letters were created to represent aspirated versions of Κ and Π (an aspirated version of Τ already existed as described above) and combinations of Κ and Π with Σ. There was some variation between dialects as to the symbols used:

- [k<sup>h</sup>] could be Κ, ΚΗ, Ψ, or Χ
- [p<sup>h</sup>] could be Π, ΠΗ, or Φ
- [ks] could be ΚΣ, ΧΣ, Χ, or Ξ
- [ps] could be ΠΣ, ΦΣ, or Ψ

# Vowels

Greek, like Phoenician, made a distinction for vowel length.

At the beginning Greek had five short vowels ( $\alpha$ ,  $\iota$ ,  $\epsilon$ ,  $ο$ ,  $\upsilon$ ) and four long vowels ( $\eta$ ,  $\omega$ ,  $\epsilon\iota$ ,  $ο\upsilon$ ), but only five vowel letters.

As in Phoenician, the difference in length was not originally made in writing.

However, later the letter eta (not needed for a consonant in eastern dialects of Greek, which lacked [h]) came to stand for the long vowel [ $\eta$ ], and a new letter, omega ( $\omega$ ), was developed for long [o].

Long [e:] and [o:] were written with the digraphs  $\epsilon\iota$  and  $ο\upsilon$ , respectively.



## Standardization – the Ionic alphabet

In 403/2 BC, following the defeat in the Peloponnesian War and the restoration of democracy, the Athenians voted to abandon the old Attic and to introduce a standardized variant of the eastern **Ionic alphabet**, after a proposal by archon Eukleides. This **alphabet** included eta and omega. All vowels could be written systematically, thus becoming the first 'true' alphabet.

In the course of the 4th century to displace the local alphabets throughout the whole Greek-speaking world.

# DATING OF INSCRIPTIONS BY LETTERS

# THE EVOLUTION OF THE FORM OF THE LETTERS

$\alpha$  (alpha): A A A A A ( $\Delta$ )  $\bar{A}$

$\epsilon$  (epsilon): E E  $\epsilon$  E ( $\epsilon$ )  $\leftarrow$   $\Xi$   $\Xi$

$\zeta$  (zeta): I Z

$\eta$  (eta): H |H |x| | $\infty$ | H

$\theta$  (theta):  $\odot$   $\ominus$   $\omin�$   $\otimes$

$\mu$  (my): M M M M

$\nu$  (ny): N N N N

$\xi$  (ksi):  $\Xi$   $\Xi$   $\Xi$   $\Xi$   $\Xi$   $\Xi$

$\pi$  (pi):  $\Pi$   $\Pi$   $\Pi$   $\Pi$   $\Pi$

$\rho$  (rho): P P R

$\sigma$  (sigma):  $\Sigma$   $\Sigma$   $\Sigma$   $\Sigma$   $\Sigma$   $\Sigma$

$\upsilon$  (psilon): Y Y Y

$\phi$  (phi):  $\Phi$   $\Phi$   $\Phi$   $\Phi$   $\Phi$

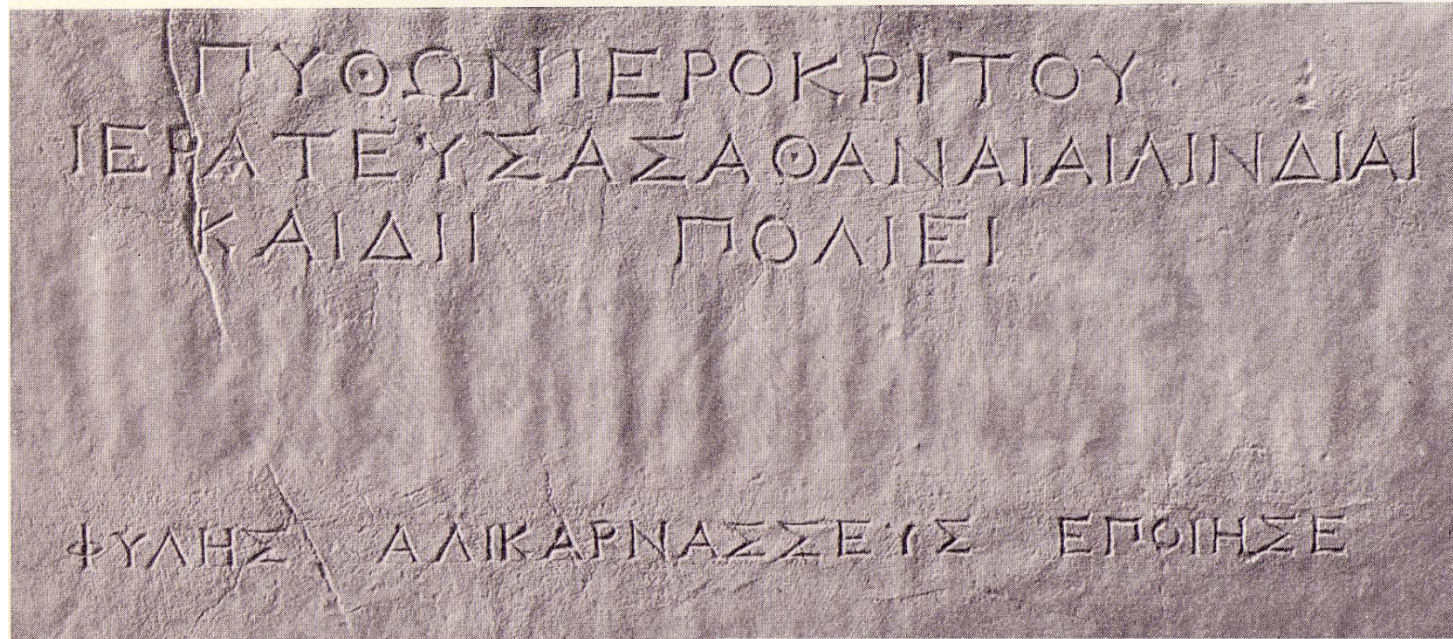
$\omega$  (omega):  $\Omega$   $\omega$   $\omega$   $\omega$   $\omega$   $\omega$  ( $\omega$ )



**METHODS OF APPROACHING  
THE INSCRIPTIONS**

# SQUEEZES

Blinkenberg, *Lindos I* 93A, ca. 240 BC



*a*

Πυθων Ιεροκριτου  
ιερατευσας Αθαναιαι Λινδραι  
και Διι Πολιει

Φυλης Αλικαρνασσευς εποιησε

## Collections of squeezes

- [The Oxford Center for the Study of Ancient Documents \(CSAD\)](#)

The CSAD has built up a considerable squeeze collection which is now entering in an image bank. You will find images for various areas of the Greek world.

- [Images of the squeeze collection at the Ohio State University.](#)

The *Center for Epigraphical and Palaeographical Studies* at OSU offers photographs of a large selection of (mainly) Athenian documents. For each image publication details are provided. You can of course browse for individual publications.

- [The McGregor squeeze collection at the University of British Columbia](#)

The McGregor squeeze collection consists of more than 1000 squeezes of inscriptions mainly from classical Athens and Nemea.

- [Ecole française d'Athènes / Institut Fernand Courby HiSOMA](#)

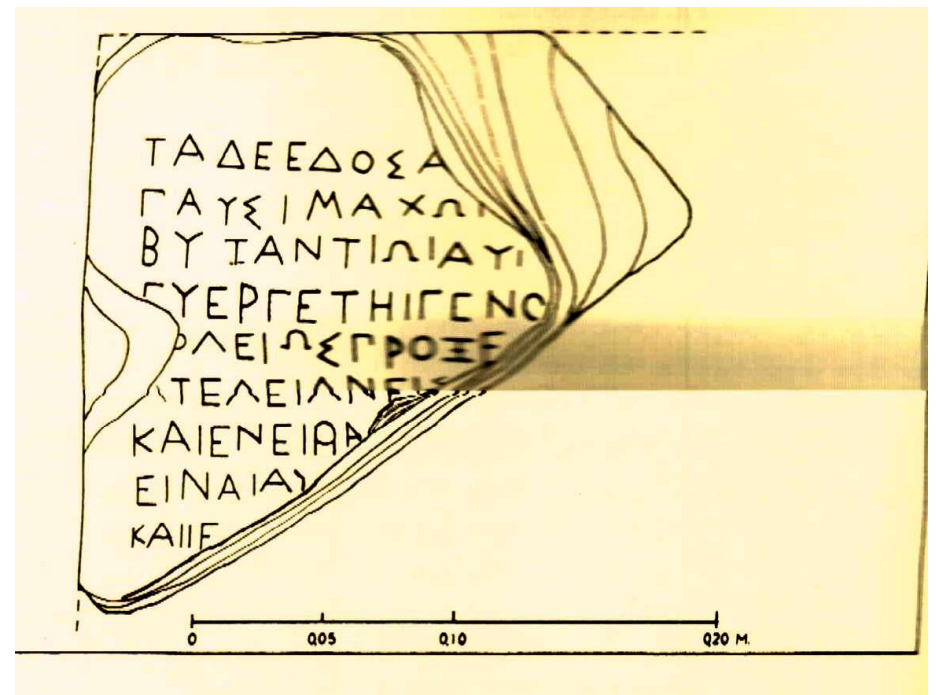
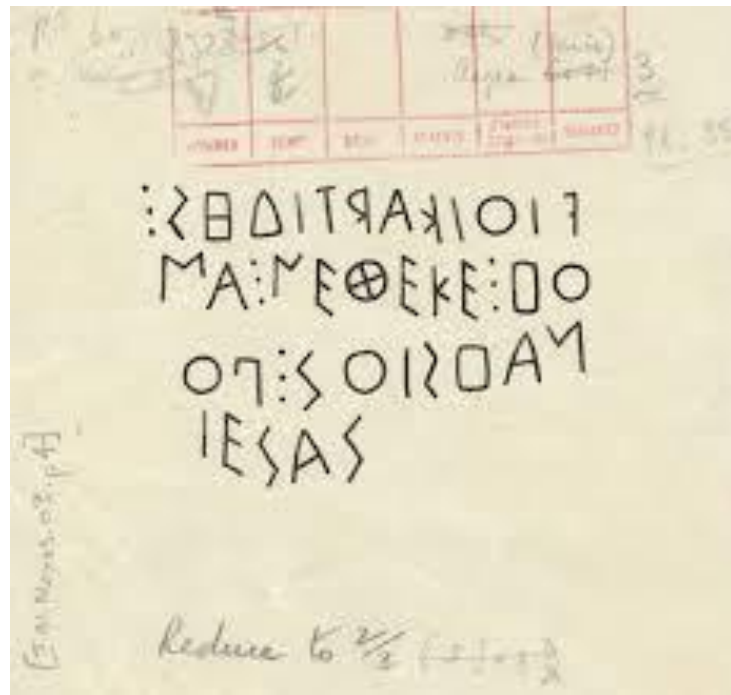
A project to make the many squeezes of French archaeological projects that are kept in the [EfA](#) and the [Institut Fernand Courby](#) is now under way. You find more information [HERE](#).

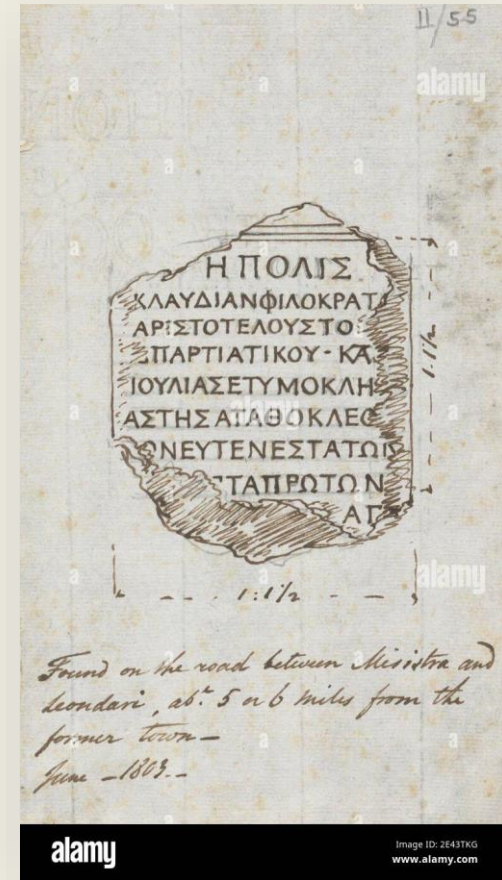
- [Institute for Advanced Study, KRATEROS project](#)

<https://www.ias.edu/krateros>



# COPIES





# Restoring ancient Greek inscriptions

## Joining fragments



Alina Bessarabova  
ART RESTORATION

Byzantine Inscription  
on Marble

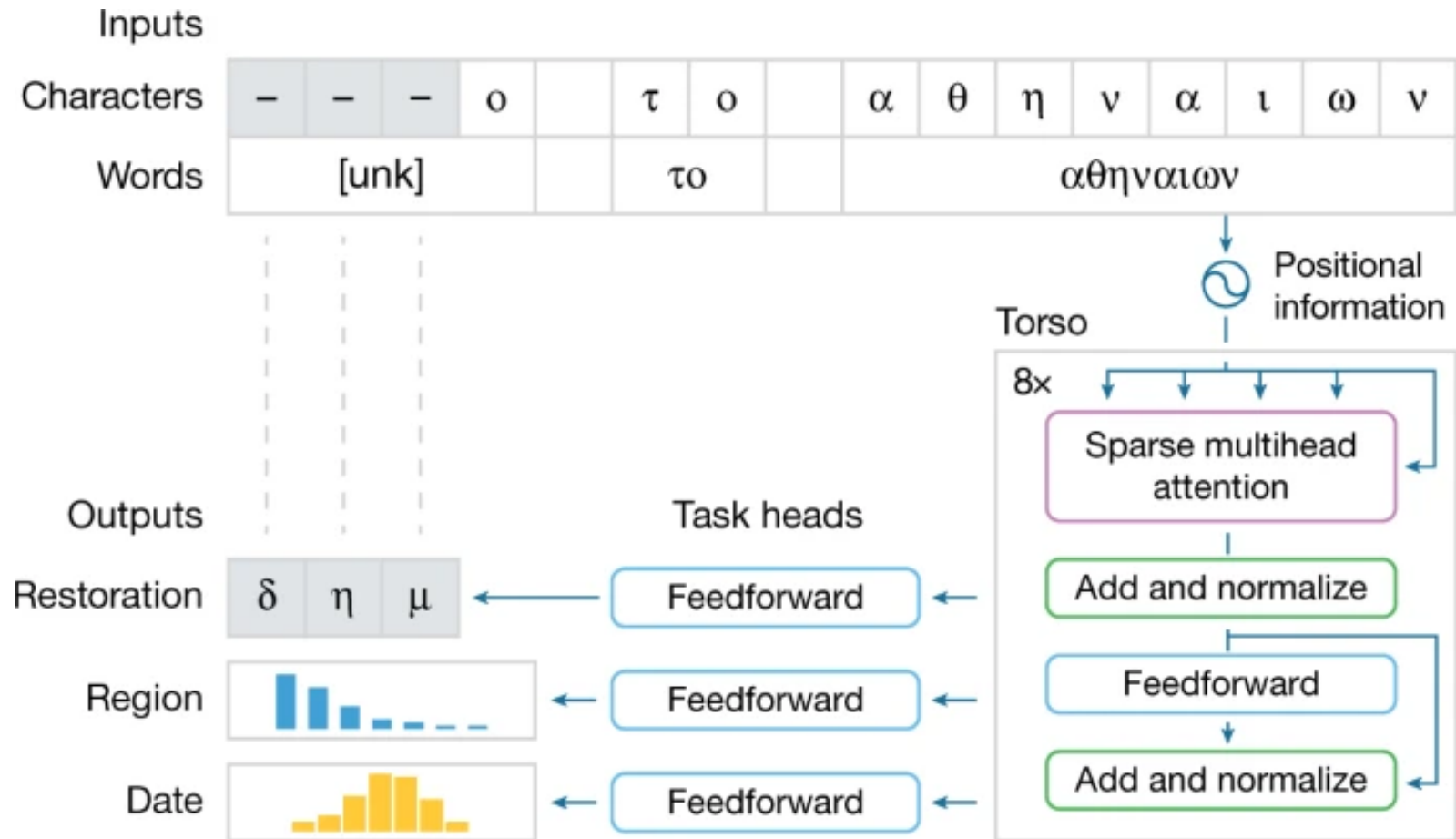




# Fill the gaps



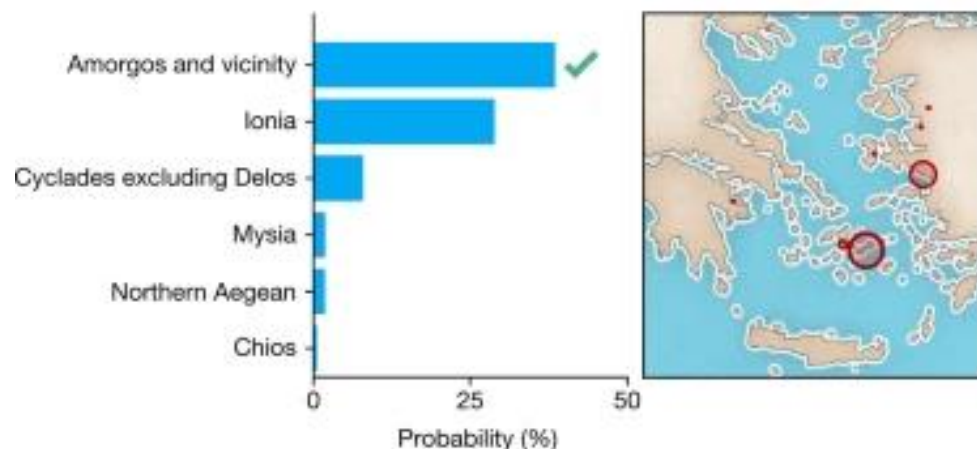
<https://ithaca.deepmind.com/>



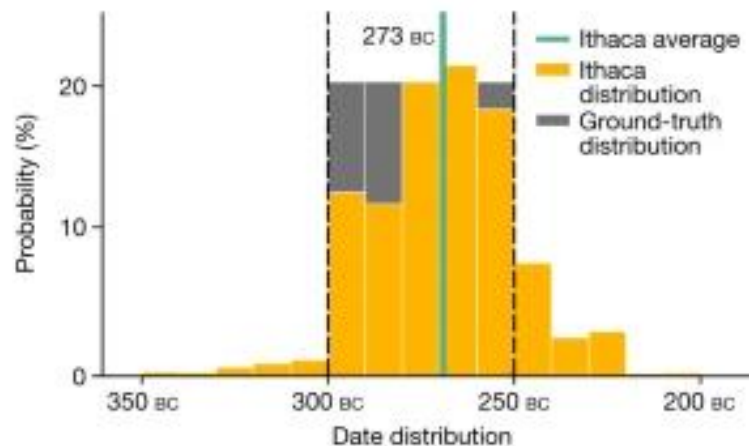
**a** Text restoration (Athens, 361/0 BC)

Input text:	θεοι επι νικοφημο αρχοντος -----ια αθηναιων και θετταλων εις τον αει χρονον
Restorations: (1)	θεοι επι νικοφημο αρχοντος <b>συμμαχ</b> ια αθηναιων και θετταλων εις τον αει χρονον ✓
(Ranked by probability)	(2) θεοι επι νικοφημο αρχοντος <b>εκκλησ</b> ια αθηναιων και θετταλων εις τον αει χρονον
	(3) θεοι επι νικοφημο αρχοντος <b>προξεν</b> ια αθηναιων κν θετταλων εις τον αει χρονον

**b** Geographical attribution (Amorgos, 400–300 BC)



**c** Chronological attribution (Delos, 300–250 BC)



**d** Chronological attribution (Athens, 414/3 BC)

Saliency map: δε εξ σικελιαν εγον τα κρηματα στρατηγοις νικηται κυδαντιδεις και κουναρχοσι



# Epigraphic conventions

## Symbol

## Meaning

[abc]	Letters once present, now missing due to damage to the surface
[ --- ]	Damage to the surface or support; letters cannot be restored with certainty
a(bc)	Abbreviation; text was never written out; expanded by editor
[[abc]]	Letters intentionally erased in antiquity
-----	Lost lines, quantity unknown
?	Uncertainty
ᵃᵇ.	Subscribed dot. Characters damaged or unclear that would be unintelligible without context
<abc>	Letters erroneously omitted by the text, restored by the editor.
{abc}	Letters considered erroneous and superfluous by the editor.

# Epigraphic corpora

*CIG* = *Corpus Inscriptionum Graecarum* (4 volumes)

*IG* = *Inscriptiones Graecae*, Berlin (30 volumes)

*IK* = *Inschriften aus Kleinasien*, Bonn (68 volumes)

*MAMA* = *Monumenta Asiae Minoris* (10 volumes)

*TAM* = *Tituli Asiae Minoris* (9 volumes)

## As example: Tituli Asiae Minoris (TAM)

- Tituli Lyciae lingua Lycia conscripti, E. Kalinka, 1901
- Tituli Lyciae linguis Graeca et Latina conscripti, 3 τόμοι, E. Kalinka, 1920-1944
- Tituli Pisidiae linguis Graeca et Latina conscripti. Tituli Termessi et agri Termessensis, R. Heberdey, 1941
- Tituli Bithyniae linguis Graeca et Latina conscripti. Paeninsula Bithynica praeter Chalchedonem, F. C. Dörner, 1978
- Tituli Lydiae linguis Graeca et Latina conscripti, 2 τόμοι, P. Herrmann, 1981-1989
- Συμπληρωματικοί τόμοι
- G. Laminger-Pascher, Die kaiserzeitlichen Inschriften Lykaoniens I. Der Süden. TAM Ergänzungsband 15. Wiener Denkschriften 232, 1992
- H. Malay, Greek and Latin Inscriptions in the Manisa Museum. TAM Ergänzungsband 19. Wiener Denkschriften 237, 1994
- M. F. Smith, The Philosophical Inscription of Diogenes of Oeno-anda. TAM Ergänzungsband 20. Wiener Denkschriften 251, 1996
- K. Tomaschitz, Unpublizierte Inschriften Westkilikiens aus dem Nachlass T. B. Mitfords. TAM Ergänzungsband 21. Wiener Denkschriften 264, 1998
- H. Malay, Researches in Lydia, Mysia and Aiolis. TAM Ergänzungsband 23. Wiener Denkschriften 279, 1999

# Selections of inscriptions

Dareste, R., Haussoulier, B. & Th. Reinach (eds) (1894-1904) *Recueil des inscriptions juridiques grecques*, Paris.

Arangio Ruiz, V. & A. Olivieri (eds) (1925) *Inscriptiones Graecae Siciliae et infimae Italiae ad ius pertinentes*, Milano.

Effenterre, H. van & Fr. Ruze (eds) (1995) *Nomima. Recueil d'inscriptions politiques et juridiques de l'archaïsme grec*, 2 τόμοι, Rome.

Koerner, R. *Inschriftliche Gesetztexte der frühen griechischen Polis*, Köln 1993.

Collitz, H. – Bechtel, F., *Sammlung der griechischen Dialektinschriften*, 4 τόμοι, 1884-1915

Schwyzler, E., *Dialectorum Graecarum exempla epigraphica potiora*, 1923

Ziehen, L. *Leges Graecorum Sacrae*, Leipzig 1906.

Sokolowski, Fr. *Lois Sacrees de l'Asie Mineure*, Paris 1955.

*Lois Sacrees des Cites Grecques*, Paris 1969.

*Lois Sacrees des Cites Grecques. Supplement*, Paris 1962.

Lupu, E. *Greek sacred law. A collection of new documents*, Leiden 2005.



# Translations

Bertrand, J.-M. (1992) *Inscriptions historiques grecques*, Paris.

Arnaoutoglou, I. (1998) *Ancient Greek laws. A sourcebook*, London.

Brodersen, K. et als (επιμ) (1992-1999) *Historische griechische Inschriften in Übersetzung*, 4 τόμοι, Darmstadt.

Bagnall, R. & P. Derow (2004) *The Hellenistic world. Historical sources in translation<sup>2</sup>*, Oxford.

Brun, P. (2005) *Imperialisme et démocratie à Athènes. Inscriptions de l'époque classique (c. 500-317 av. J.-C.)*, Paris.

Austin, M. M. (2006) *The Hellenistic world from Alexander to the Roman conquest. A selection of ancient sources in translation<sup>2</sup>*, Cambridge.

If you want to find new inscriptions, comments of publications on published inscriptions, or other editions of a text you need to consult one or more of these important **heuristic instruments**, Some, but not all, are on-line.

- [Supplementum Epigraphicum Graecum](#)
- [L'Année Epigraphique](#)
- [Bulletin Epigraphique](#)
- [Guide de l'épigraphiste](#)
- [Kernos Epigraphic Bulletin](#)

# EPIGRAPHY AND THE INTERNET

- Packard Humanities Institute – Greek Epigraphy: <http://epigraphy.packhum.org/inscriptions/>
- Inscriptiones Graecae: <http://pom.bbaw.de/ig/>
- Inscriptions of Aphrodisias : <http://insaph.kcl.ac.uk/iaph2007/inscriptions/index.html>
- Attic Inscriptions Online (AIO): <http://www.atticinscriptions.com/>
- Collection of Greek Ritual Norms: <http://cgrn.ulg.ac.be/>
- Dodona online: <https://dodonaonline.com/>
- GEI – Greek Economic Inscriptions: <http://saet.sns.it/en/gei-greek-economic-inscriptions/>
- Current epigraphy: <http://www.currentepigraphy.org/>