

# CLARIN-IT and the Definition of a Digital Critical Edition for Ancient Greek Poetry

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## Classical Studies in the Digital Era

- Thanks to modern science we can preserve and hand down Ancient Greek texts to next generations (not only among specialists in the field)
- Ancient Greek studies have profited greatly from digital technologies, for example, analysing texts with computational methods
- The digital technology allows us to
  - ✓ manage much more data and
  - ✓ adopt new philological approaches
- The treatment of literary texts currently does not correspond to scholars' expectations

## Digital Edition of Archilochus

## Ancient Greek Poetry and DH

- Ancient Greek fragmentary poetry is different from other literary texts:
  - more complex traditions
    - ✓ with different kinds of sources (manuscripts, papyrus, epigraphy)
    - ✓ with variants and lacunae
- NLP of fragmented tradition is particularly challenging and open field of experimentations
- Automatic analyses can not only support new readings and interpretations, but also offer stronger certainty as regards
  - ✓ reconstruction,
  - ✓ integration and
  - ✓ authorship attribution

## A New Digital Edition

- New models and tools for authoring, editing and indexing ancient Greek fragmentary texts
- A methodology with a complete and reliable set of tool(s) to
  - allow the creation of a philologically, scientifically reliable and critically controlled product
    - ✓ with previous editions, secondary literature and new hypotheses
    - ✓ with critical apparatuses, commentaries and translations
  - make available online, easily searchable and interoperable
    - ✓ sample data to support (automatic) translation experiments
    - ✓ specific lexica based on ancient Greek fragments
- A new digital and critical edition which includes the use of Semantic Web technologies and Linked Open Data

## CLARIN-IT and DEA

- The DEA project is aimed to:
  - ✓ define a methodology for a digital critical edition
  - ✓ develop resources, materials and tools for improving studies and research in Greek Classical philology
  - ✓ integrate the available digital resources, implementing and enriching what already exists
- The project represents one of the attempts within the context of CLARIN to
  - ✓ improve linguistic services for studies in Ancient Greek language and philology, thus fostering digital approaches to Ancient World
  - ✓ contribute to the wider impact of CLARIN on the specific Italian community
- Tour de CLARIN – CLARIN Italy. One of the messages is: DEA can constitute a case study in the framework of CLARIN-IT and its interests and specialization towards the Digital Classics

## DEA



## A pilot study to address research challenges

- A pilot set of Archilochus' papyrus texts, with several typologies of textual problems (gaps, supplements, etc.)
- find appropriate solutions with TEI encoding to manage the critical apparatus and witnesses
- apply NLP chains to fragmented ancient texts to support:
  - ✓ new readings and interpretations
  - ✓ stronger certainty of corrections, integrations
  - ✓ authorship attribution
- create a corpus of fragmentary ancient texts
- make data searchable and interoperable
- enrich data with lexical datasets in LOD and other existing resources
- obtain a complete edition that is useful not only for scholars interested in Classical and Ancient Studies but also for non-specialists
- provide through CLARIN
  - ✓ specific lexica based on ancient Greek fragments
  - ✓ sample data to support train systems and allow automatic analysis experiments of ancient Greek



TEIHEADER	Mark
Typology	
Title	<titleStm><title>Archilochus, fr. 23 W.</title><rendi>apex</rendi><chi> digital edition</chi></titleStm>
Author (and other responsibilities)	<respStm><resp>Encoding (or other responsibilities)</resp><persName xml:id="Iniziali nome puntate">Name and Surname</persName></respStm></titleStm>
Digital Edition	<publicationStm><pubPlace>D.E.A. - Digital Edition of Archilochus' fragments</pubPlace><pubPlace>Parma</pubPlace><date>2018</date><availability><p>This fragment is available only for demonstration purposes. (user license)</p></availability></publicationStm>
Source Description	<sourceDesc><bib><title type="Volume">Archilochus, Hipponax, Theognidea</title><title type="Part">Archilochus, fr. 23 W.</title><rendi>apex</rendi></bib></sourceDesc>
Title	<title type="Volume">Archilochus, Hipponax, Theognidea</title>
Author and Fragment	<title type="Part">Archilochus, fr. 23 W.</title><rendi>apex</rendi></title>
Meter	<note>Iambic Trimeters</note>
Ancient Author	<author xml:id="Archilochus">Archilochus</author>

TEXT	
Section	<div type="tipo_di_sezione_es_titolo" cert="000"></div>
Number of the verse	<div xml:id="11">
Gap (certain length)	<gap reason="lost" extent="unknown" unit="chars">
Gap (certain length)	<gap reason="lost" quantity="00" unit="chars" cert="grado_di_cortezza">
Lines lost	<gap reason="lost" extent="unknown" unit="lines">
Letters (illegible)	<gap reason="illegible" quantity="2" unit="chars">
Reading (unclear)	<unclear></unclear>
Supplement (uncertain letters)	<supplied reason="illegible"></supplied>
Supplement (lost letters)	<supplied reason="lost"></supplied>
Text deleted (ancient witness)	<del rend="erasure"></del>
Text deleted and illegible (ancient witness)	<del rend="erasure"><gap reason="lost" quantity="3" unit="character"></del>
Text added (ancient witness)	<add place="000"></add>
Text deleted (modern editor)	<surplus></surplus>
Text added (modern editor)	<add esse="Editore"></add>

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