

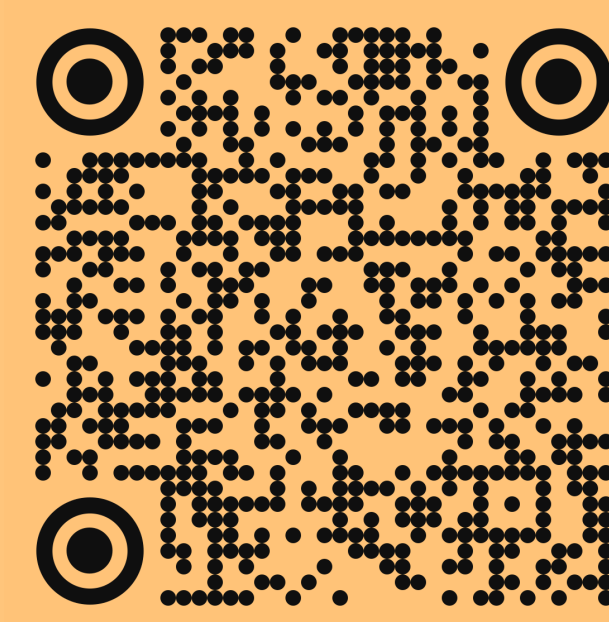
Virgilio (invisibile) a Verona

High school students transcribe Virgil's works in palimpsest XL (38) of the Biblioteca Capitolare in Verona

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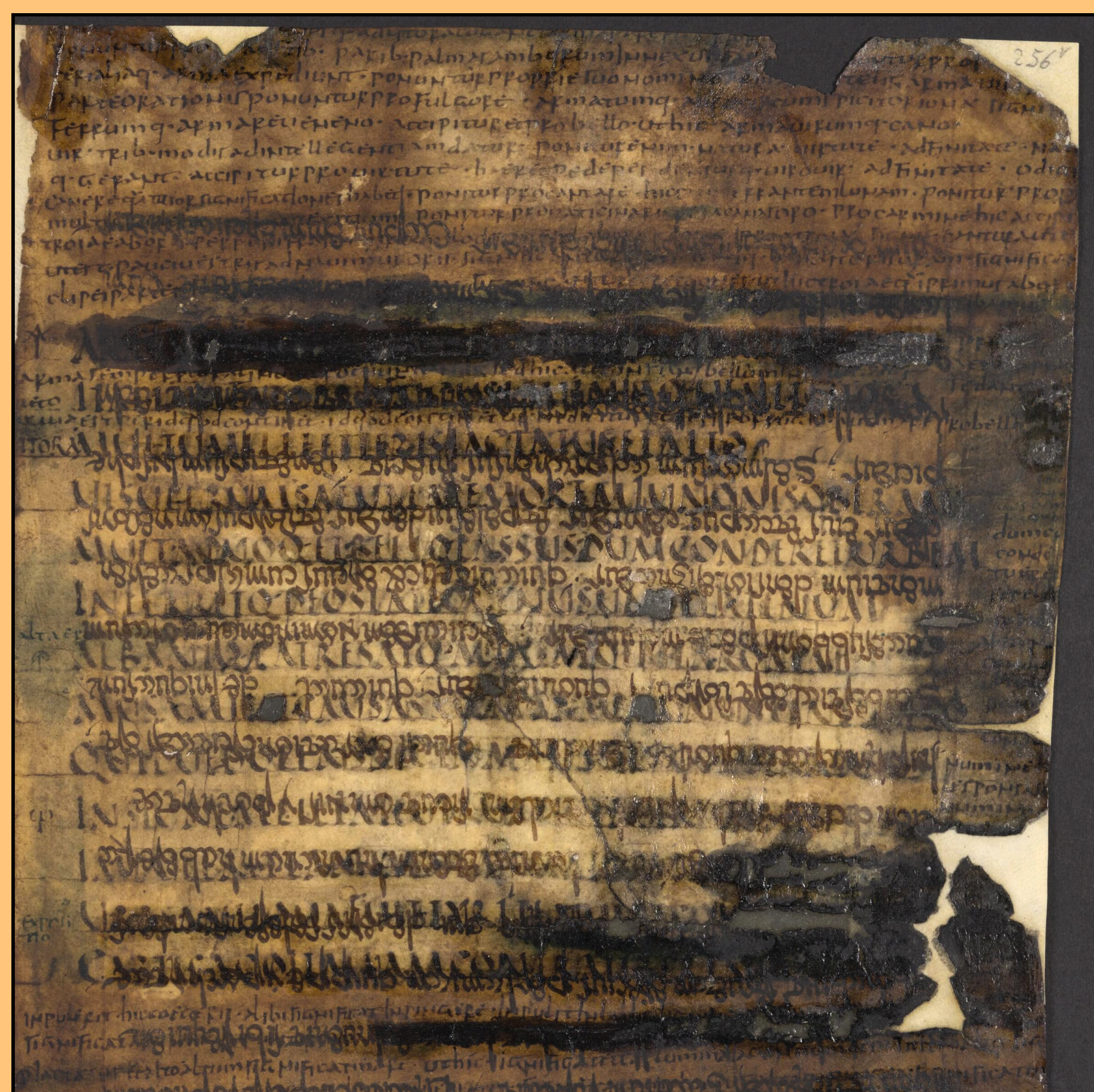


Read more at the AntCom blog

In spring 2024, the Veronese unit of the AntCom project digitized **four palimpsest codices** of the Biblioteca Capitolare in Verona with **Multispectral Imaging (MSI)**. The digitization produced significant amounts of **image data** awaiting **processing** and **transcription**. One of the palimpsests was codex **XL (38)**.

The palimpsest

- 7th- to 8th-century copy of Gregory the Great's *Moralia in Iob*.
- Partial palimpsest; parchment from **four source books**, including the **Veronese Virgil**: a 5th-century fragment of the *Bucolics*, the *Georgics*, and the *Aeneid*, copied in *capitalis rustica*.
- Treasured Virgilian witness for its age and unique marginal commentary (*Scholia Veronensia*).
- Parchment damaged during 19th-century recovery attempts with **chemical reagents**.



Verona, Biblioteca Capitolare, XL (38), f. 256v: the beginning of the *Aeneid*. Reagent use targeting mainly the precious *scholia*.

The fragment had never been transcribed with modern imaging. We turned to citizens to find what MSI could further recover beyond previous transcription efforts.

Citizens: Why high schoolers?

Outreach and onboarding: The project ran within existing agreements between UniVr and local schools, under Italy's "School-Work Training" program.



56
3rd–5th-year
students

9
local high
schools

Skillset: The transcription journey can benefit from the students' knowledge of Latin **and vice versa**. Students in the final years of their studies have guaranteed recent exposure to Virgil's works through the national curriculum.

The curriculum

The **22-hour curriculum** was split into **12h of training**, each session building in difficulty, leading up to the **10h of transcription**.

A. Theoretical foundation (6h)

- Philology and critical editions: Geymonat's (2008) edition of Virgil's works would assist the transcription.
- Virgilian manuscript tradition and commentators: Veronese Virgil and its *scholia* contextualized.
- MSI: physics and methods behind the multispectral images to be transcribed.



B. Paleographic laboratory (2h)

Students examined selected original folios of codex XL (38) and built kinesthetic familiarity with its script in an immersive laboratory hosted by the Biblioteca Capitolare.

C. Transkribus & trial transcription (4h)

Hands-on introduction to the collaborative transcription tool of choice, followed by practice of the overall workflow on the *Vat. lat. 3225*, a simpler, non-palimpsest Virgilian codex of similar period and script.



D. Transcription (10h)

- 24 groups, each assigned an image/bifolio.
- Each group provided with MSI images, Geymonat's edition, script reference, transcription guidelines.
- Workflow:

Drawing of undertext regions ↓
Drawing of lines ↓
Verse-by-verse transcription ↓
TEI encoding.

6 PARS BELLI HAUD TEMNENDA VIRI IACET ORODES
7 CONCLAMANT SOCII LAETUM PAEANA SECUTI-
8 ILLE AUTEM EXSPIRANS· NON ME QUICUMQ· ES INULTO

abbrev add corr del gap nota unclear



E. Peer review (remaining transcription hours)

Groups exchanged folios and proposed improvements or signaled particularly problematic regions. Peer review would expose each image to more transcribers and facilitate more efficient expert review.

Limitations and difficulties

Time management: 10 hrs of transcription proved just enough for the transcription and encoding of a single image. 15/24 groups initiated peer review, but none completed it.



Quality control: Peer review would have hinted at problematic areas for expert review. **Agreement metrics** could have been used, having each image transcribed by two or more transcribers independently. Expert review was a manual process.



Representatives from each of the 9 participating schools presented results and observations during the final conference in the presence of expert and non-specialized audience.

600+
transcribed
verses

24/52
transcribed
images

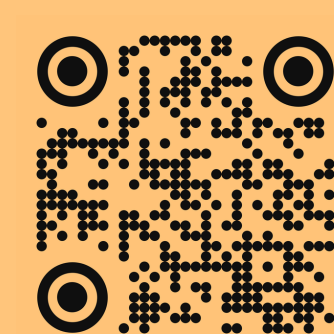
91,6%
overall
attendance

Results

TEI-encoded transcriptions of the Veronese Virgil that report **spatial coordinates** of transcribed verses on the image and maintain **uncertainty** for doubtful readings. The resulting XML files will be **versioned** on GitHub, assigned a **permanent DOI** via Zenodo, and **coauthored** by the participating students.

Dissemination

The project concluded with a conference featuring expert keynotes and presentations by representatives of each participating school. The event was open to **local school communities**. The conference drew coverage from local and university media.



AntCom GitHub