

From stone to dataset: proposing a digital workflow for analyzing out-of-context inscriptions.

An example of a votive dedication in Eastern Sicily

Maria Rosaria Ariano
Sapienza – University of Rome



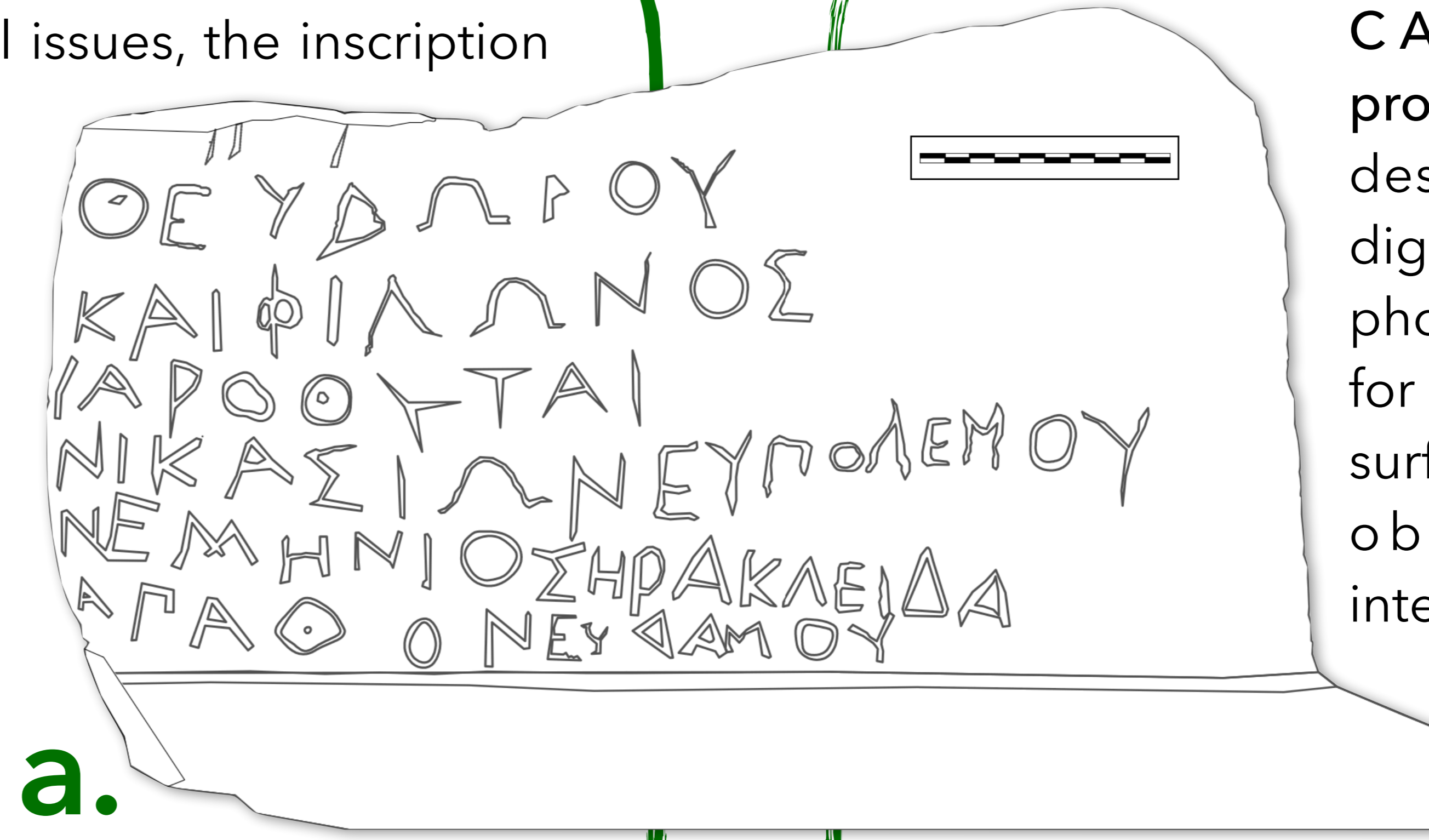
1 Context & Issues



The Catania plain in Eastern Sicily served as a contact zone between Greeks and non-Greek populations. The Sikels inhabited various sites in the Etnean hinterland, including the Mendolito settlement (6th-5th century BC), located few kilometers from Adranon (now Adrano), founded around 400 BC by Dionysius I of Syracuse. Unfortunately, the site of Mendolito has been affected by illegal digging activities. Moreover, most of the inscriptions (Greek and non-Greek) have been recovered from private properties, only partially investigated by archaeological excavations carried out during the last century. In 1896, a molded limestone block with a Greek votive inscription, likely dedicated to the Sikel god Adranos, was found in a private plot outside the Mendolito's walls.

2 Workflow

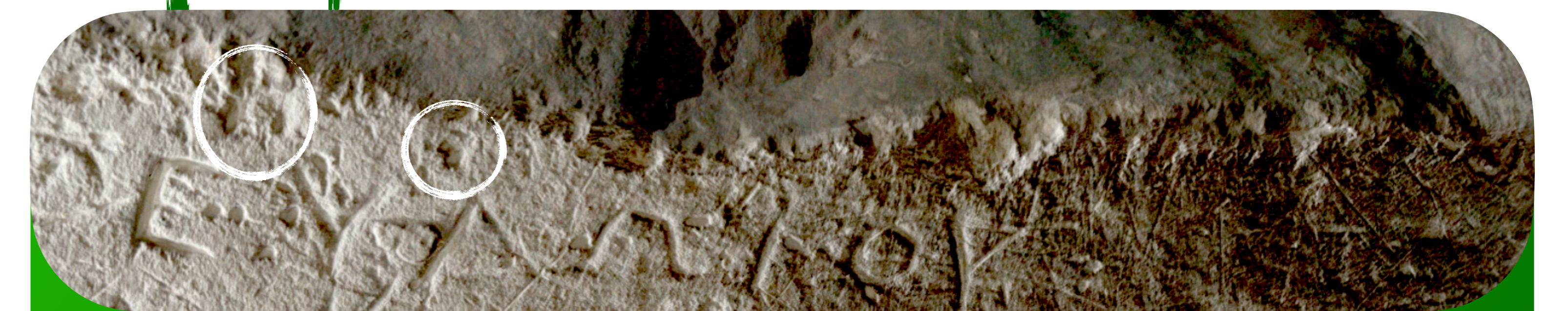
In addition to the contextual issues, the inscription presents an irregular *ductus* with strokes of varying width and depth. Most scholarly editions concur on the reading, but the first line remains fragmentary: some traces are not clearly readable and can only be inferred. For this reason, an inscription like this – textually not highly problematic, but palaeographically distinctive and central to the debate on Sikel-Greek cult practices – represents a suitable case study for a replicable workflow. The workflow aims to integrate traditional documentation (squeezes, hand-copies and photographs) with:



- a. **vector tracing of the inscribed surface in a CAD environment**, in order to highlight letter strokes and material discontinuities;
- b. **Reflectance Transformation Imaging (RTI)**, in order to reveal the micro-topography of an object's surface from multiple lighting angles.

3 Results

CAD drawing and RTI processing are essential, non-destructive tools for modern digital epigraphy. While frontal photography is often insufficient for complex carvings, RTI reveals surface details beyond physical observation through 3D-integrated algorithms. Although traditionally independent, these methods are complementary: their integration provides a workflow for digital transcription and produces large-format outputs (museum panels) that bridge the gap between technical research and public accessibility.



The default lighting in RTI software (RelightLab) highlighted the strokes of the probable $\epsilon\pi\iota$ on the first, otherwise illegible line: specifically, above *epsilon* and *delta*.

Scan to watch the RTI rendering test of the inscription!

