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Trans-PLANT and MAST: two interwoven projects

Introduction

Transformational uses of dye plants in Linear B tablets. New approaches to cultural identity and technologies in the Bronze Age Aegean, with the acronym Trans-PLANT, is a Marie Skłodowska-Curie project founded by the European Union under the Horizon 2020 scheme and hosted at CTR, Saxo Institute (University of Copenhagen, Denmark) since August 2021. The scientific aim of Trans-PLANT is to use Mycenaean dye plants as a prism through which to explore Bronze Age Aegean protohistoric societies and unravel the wealth of information that is hidden within Bronze Age Aegean scripts and material culture. Trans-PLANT also has the ambitious goal of bringing Aegean studies beyond their specialised niche by integrating the results into the current scientific debate. Instrumental to this end are the Trans-PLANT outreach activities and the MAST project (Meetings on Aegean Studies), which has joined forces with Trans-PLANT in a dissemination mission. As a result, the Trans-PLANT outreach programme targets the general audience, and the MAST contents, with a more technical focus (seminars, papers, discussions, images, etc), are published open-access in the peer-reviewed and rapid publication journal *Classical Continuum*. This contribution aims to present selected Trans-PLANT activities as well as introduce MAST and invite even more participants to join it in the future.

The Aegean “linear” scripts: Linear A and Linear B

While excavating the ruins of Knossos in Crete in 1900 CE, Arthur Evans uncovered clay tablets bearing evidence of writing systems thus far unknown. By observing the tablets and the shape of the inscribed signs, Evans realised that two related but overall different writing systems were at play. He also

determined that chronology played a major role in explaining those differences and that the two writing systems were syllabic scripts with a strong logographic component. In this context, in which both scripts were undeciphered, Evans coined the names of these writing systems, with his nomenclature making reference exclusively to the scripts and the shape of the signs. As such, Evans qualified the two scripts as “linear” since their signs were contrasted with the decorative and calligraphic signs of another script used in the same geographic area in the second millennium BCE. Next, he established an opposition between the two “linear” scripts, arguing that one was older and the other more recent. Accordingly, Evans named “Linear A” the former and “Linear B” the latter. Fast forward to today (fig. 1), Linear B (circa 1450 to 1200 BCE), attested on the island of Crete and the Greek mainland, is the only Aegean script to have been deciphered and records the earliest form of the Greek language known (Mycenaean); Linear A (circa 1750 to 1450 BCE), attested on the island of Crete and the Aegean area, encodes a language (Minoan) that is still poorly understood.

Trans-PLANT

The Trans-PLANT project has the ambitious goal of raising awareness of the wealth of information that is hidden within Aegean scripts and Bronze Age material culture by using the written sources on Mycenaean dye plants (Linear B tablets) as a prism through which to explore protohistoric societies. By focusing on dye plants and their transformation into fashion goods, Trans-PLANT aims to demonstrate how the knowledge coming from transformational uses of dyes transcends the visual perception of the resulting product and addresses the cultural message it conveys. The project explores the

interrelations between linguistics, history of science, and experimental archaeology to analyse dye plants, the technologies transforming them, and dyed goods such as textiles. In particular, the Trans-PLANT project focuses on dye terminology as well as technical knowledge and cultural identities. The analysis of dye terminology examines dye plants

in Linear B texts and uses this as a model of linguistic interaction to define transculturation by combining Indo-European linguistics and Aegean epigraphy with research on ancient technologies, cross-crafts, cross-cultural textiles, and experimental archaeology. The section on technical knowledge and cultural identities is made of two parts. The first part

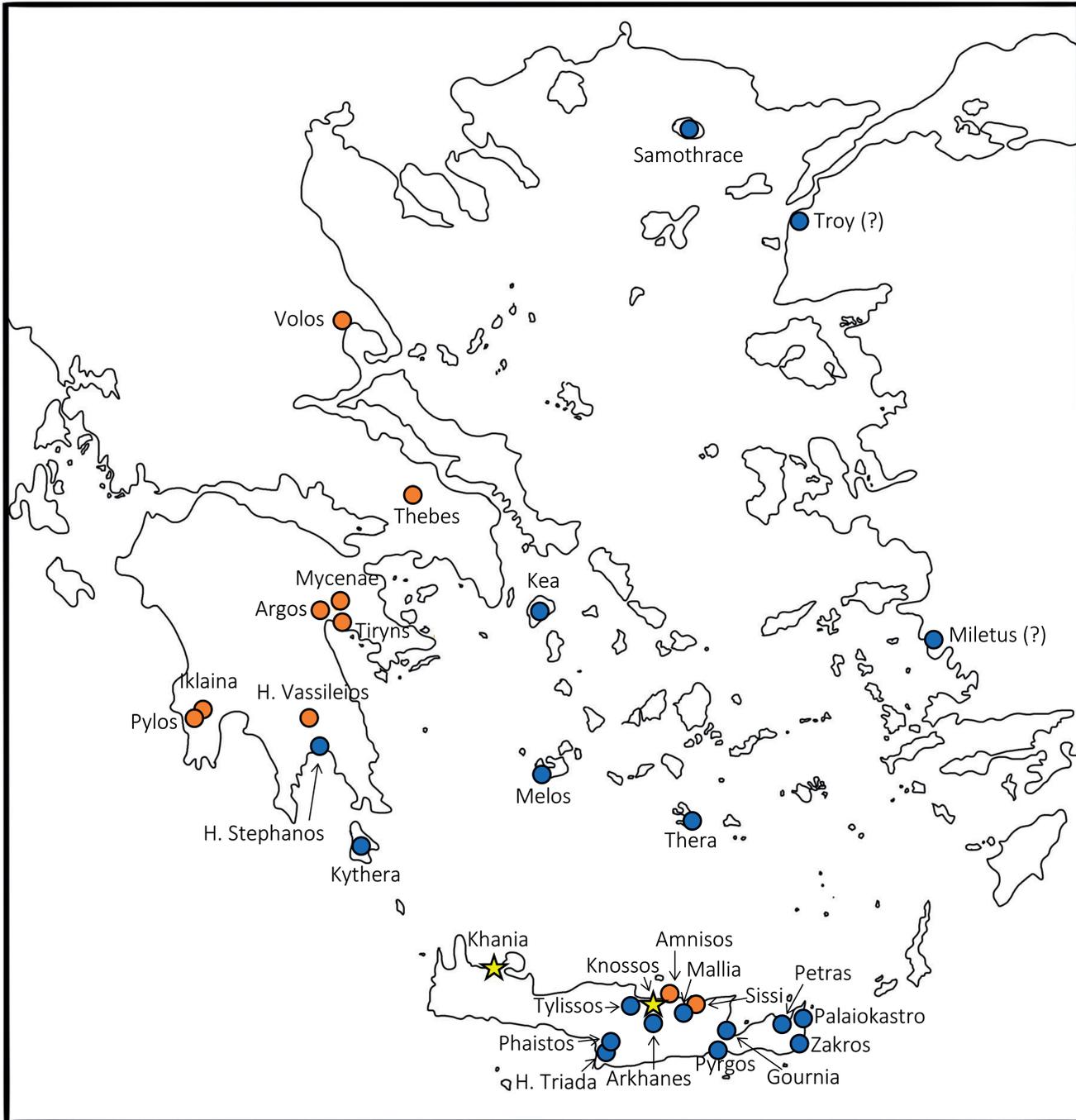


Fig. 1: Main Minoan and Mycenaean sites in the Aegean area. Minoans — Linear A (1750–1450 BCE); Mycenaean — Linear B (1450–1200 BCE) (Drawing: Ester Salgarella)



investigates cross-craft and cross-cultural interactions by combining the reconstruction of the Mycenaean *chaîne opératoire* of dyeing textiles with the cultural dimension of these goods in Mycenaean and Minoan society. The second part analyses roles and functions of particular colours in dyed textiles to show the dimension of coloured goods as a cultural media communicating identity, status, power, and gender.

In addition, Trans-PLANT is committed to a rich programme of outreach activities. This part of the project aims to promote accessible, but research-based, approaches to classics and the Bronze Age Aegean by engaging in mainstream topics to show the richness of the classical substratum in daily life. It has been communicated via texts, oral presentations, digital presentations, images, small films, and the Trans-PLANT logo.

The Trans-PLANT outreach activity

The Trans-PLANT outreach programme aims to raise awareness among the general public on the concepts at the core of the project: translation, transformation, and transculturation. In addition to a number of in-person events, the written production encompasses ten pieces that have been published in *Simbiosi: un nuovo rapporto tra uomo e natura*, a periodical focusing on ecosystems and more sustainable approaches to natural resources. They show specific examples of plants' transformations (both in mythology and through technologies) and their cultural impact in the ancient world and how they were transmitted to present day. The following three pieces showcase the approach of the Trans-PLANT project.

By focusing on the bear in ancient Greece, *Zafferano, sacerdotessa e stelle: l'orso in Grecia antica* examines the word for "bear" in a number of ancient and modern Indo-European languages and explores the ritual and gendered uses of crocus and saffron-dyed textiles in second and first millennium BCE.

With an overview of the willow in ancient medicine, ancient wheel construction, opera, and modern poetry, *La canzone del salice: breve storia di remedia medicinalia effervescenti, ruote micenee, cetre e arpe* traces the use of the willow from Assyrians and Babylonians to nowadays. It also focuses on Mycenaean tablets and their attestation of willow as a construction material for chariot wheels in the second millennium BCE.

Tagliare per rinascere, ovvero Saturno e i limoni focuses on Saturn as an agricultural god in ancient Greece and the legacy of the rituals connected with the festivity in his honour in contemporary traditions.

The Trans-PLANT logo (fig. 2)

The choice of the green colour is due precisely to the natural colour of (most of) the plants. The circle symbolises the transformation, not only because the circular shape has no beginning or end but also because the beginning and the end coincide in it. Two triangles on the external part stress the movement and the circularity of the transformational activities. A bigger triangle is inscribed within the circle and refers to the internal characteristics that are necessary for an external and visible outcome. Surmounting the internal triangle there is a stylised, linear version of the logogram for the crocus as it appears in Linear B tablets and Minoan frescoes (fig. 3a and fig. 3b).



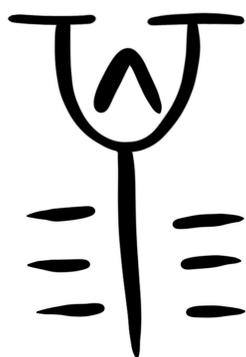
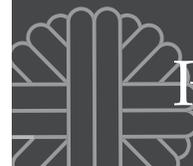
Fig. 2: The Trans-PLANT logo (Image: Rachele Pierini)

MASt

MASt (*Meetings on Aegean Studies*) is tightly interwoven with textile research in a number of areas, including the MASt board and editorial team, the MASt logo, and the MASt seminar topics.

MASt was co-founded in 2019 by Gregory Nagy, Tom Palaima, and Rachele Pierini. Started as a collegial seminar, MASt quickly grew into a worldwide network in just three months. Today, the MASt network involves 20 plus institutions in more than 15 time zones (from California, US, to Australia) and maintains the friendly and collaborative atmosphere of the earliest encounters. Furthermore, the MASt team includes a project leader (Pierini), an editor-in-chief (Pierini), an associate editor (Palaima), an editorial board (Elena Džukeska, Joseph Maran, Leonard Muellner, Gregory Nagy, Marie-Louise Nosch, Thomas Olander, Birgit Olsen, Helena Tomas, Agata Ulanowska, Roger Woodard), a secretary (Giulia Muti), editorial assistants (Harriet Cliften, Linda Rocchi, Katarzyna Żebrowska), a student assistant (Matilda Agdler), and a digital media consultant (Riccardo Finamore).

The MASt project is designed to boost specialised discussions on Bronze Age Aegean topics and enhance the connection between prehistorians and classicists and between the ancient world and today's society. The MASt logo conveys these messages and



a



b

Fig. 3: a – The crocus logogram as drawn in the reference table for linear B logograms, decided in the Salamanca Colloquium (Ruipérez 1972); b – Minoan representation of saffron on the Minoan fresco from Akrotiri (Xeste 3, Room 3, 1st floor) *Saffron gatherers*, 17th century BCE. Now in the Prehistoric Museum of Thira, Fira, Santorini (a – Drawing: Ester Salgarella after *Docs*³; b – Image: Elsa Yvanez)

values, and the project's initiators designed a twofold strategy (that is, specialist seminars and open-access publications) to achieve MAST's ambitious goals.

MASt offers quarterly online seminars in which two speakers present the latest results of their research on Bronze Age Aegean topics in 20-minute talks. A 30-minute debate follows each presentation. In this timeframe, the participants, who all have substantial expertise in Bronze Age Aegean matters, engage in discussion with the speakers and provide extensive feedback. Within a few months of the specialist seminar, the MAST team publishes the peer-reviewed papers along with substantial summaries of the discussion in the journal *Classical Continuum*, an online open-access periodical founded by Harvard University.

The MAST logo (fig. 4)

The mast of a ship is a sturdy, vertical structure that supports its sails, flags, and antennae. MAST supports Aegean sails since the Bronze Age Aegean is the project's scientific focus; supports all perspectives, backgrounds, and identity flags; supports new approaches to classics by pioneering wireless and online meeting as well as free and open-access content. It has done all three since 2019.

The mast is located near the centre of a vessel and helps to balance the boat and keep it stable while it is underway. Additionally, the Greek word for "mast" (*histós*) also means "beam of the loom" since it stems from an Indo-European root indicating "to make stand, set up". With its increasingly larger network, array of specialised areas and approaches, and intergenerational participation, MAST is designed to provide a safe space to set up new ideas for discussion and growth and aims to constitute a reference point for anyone passionately interested in navigating the challenging and open waters of the Aegean world, be they already on board or about to embark on a journey.

Boats were essential tools for the Aegeans to explore, navigate, connect distant places, run businesses, discover new countries and cultures, bring people and societies together, and communicate. The MAST boat is a symbol of connection, discovery, progress, mobility, and communication. It represents the project's values of passionate commitment, cooperation, growth, and openness and the project's goals of expansion, community-building, interdisciplinarity, multilingualism and multiculturalism, connectedness, and public engagement.



Fig. 4: The MAST logo (Image: Rachele Pierini)

The shape of the second letter in MAST is based on the sign for *a* in Linear A and Linear B—it is the same since Linear B inherited it from Linear A and thus is commonly referred to as the AB sign (fig. 5). Specific features of the Linear B sign have been emphasised to obtain a sign that is close to a capital A of the Latin alphabet. By undergoing this change, this letter represents MAST's goal to unravel the connectedness between the ancient and today's worlds while focusing primarily on what is unique in the past and present and what is shared, what is still the same and what is different, what can be maintained and what has to be rethought to enter the future.

The MAST colours are the natural colours of the beautiful Aegean Sea - the colours that the Aegeans could, and still can, enjoy. The elements in the green water colour represent Aegean key features (the boat and the vertical stroke in the Linear B sign for *a*) and the elements in the blue colour represent the contemporary approach to the Bronze Age Aegean through dedicated meetings and studies. The inner circle in green water represents the MAST focus on the past societies of the Aegean area and the outer circle in blue represents the MAST commitment to bring the second millennium BCE into the third millennium CE.

MASt and textile research

The summer 2020 MAST seminar (the first to be published as a MAST report) hosted a paper by pioneer textile researcher Elizabeth Barber *The weaving process in ancient and today's textile industry and some notes on Mycenaean and alphabetic Greek textile lexicon* (Barber 2020).

In the fall 2020 MAST seminar, Anne Chapin delivered a presentation about the visual impact of textile patterns



Fig. 5: The AB sign for *a* as it appears on the Hagia Triada tablet HT 126a (Image: SigLA)

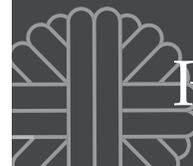
in Aegean Bronze Age painting, focusing on the exploitation of artistic elements and design principles of Aegean artists. Hedvig Landenius Enegren and Rachele Pierini also offered a comparison between second millennium BCE and third millennium CE practices for washing textiles with ashes. The comparison has been subsequently published as an appendix to the Fall 2020 MAST report (Landenius Enegren 2020; Pierini 2020).

The winter 2021 MAST seminar hosted the first part of the presentation of the book by Morris Silver *The Purpled World: Marketing Haute Couture in the Aegean Bronze Age* (Pierini and Palaima 2021a), whereas the second and last part of this presentation appears in the spring 2021 MAST report (Silver 2021).

In the summer 2021 MAST seminar, postdoctoral researcher Chiara Spinazzi-Lucchesi and terminological expert Susanne Lervard (both from the Centre for Textile Research in Copenhagen) contributed to the discussion on the papyrus flower (Pierini and Palaima 2021b). The fall 2021 MAST seminar hosted Hedvig Landenius Enegren's research on the non-flammable fibre asbestos in ancient textile manufacture (Landenius Enegren 2021).

The winter 2022 seminar hosted a paper by Agata Ulanowska which presented the COST Action project, EuroWeb (Ulanowska 2021).

Textiles are extensively represented in the MAST team, too. In addition to co-founder and editor-in-chief Pierini, the board includes Centre for Textile Research initiator and former director Marie-Louise Nosch and EuroWeb leader Agata Ulanowska. Secretary Giulia Muti is an archaeologist specialising in Bronze Age Cypriot textile production and editorial assistant, Katarzyna Żebrowska, is an archaeologist of the



Aegean region, specialising in the functionality of textile tools.

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