

REVIEW

Review of Treasures from the Sea: Sea Silk and Shellfish Purple Dye in Antiquity, ed. H. L. Enegren and F. Meo

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Treasures from the Sea: Sea silk and shellfish purple dye in antiquity, ed. H. L. Enegren and F. Meo, Oxford; Havertown: Oxbow Books, 224 pages (Hardbound), £38, US\$55, 2017, ISBN: 978-1785704352.

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This volume presents the proceedings of a conference held in Lecce, Italy, in 2013, on the subject of two sea “treasures”: the beard fibres of the fan mussel, used to weave small scale textiles known as sea silk, and purple dye extracted from the hypobranchial glands of certain molluscs. Sixteen papers are presented, the first half focussing on sea silk, and the second half on purple dye. The volume brings together several different approaches including archaeology, experimentation, scientific analysis, and terminology.

Sea silk and purple dye were both difficult to obtain and considered valuable and prestigious in antiquity. Sea silk fibres are harvested from the mussel *Pinna nobilis*, which attaches itself to the seabed using these fibres. An adult mussel can produce 2–3g of the fibres, which is reduced by about

80% during processing. The natural colour is a greenish brown, transformed into a golden brown by cleaning and treating with lemon juice. It continued to be produced through to modern times, until 1992 when it was placed under the protection of the EU Habitat Directive. One interesting short article (Pes & Pes) introduces the reader to the skills required for the preparation of sea silk for weaving by modern practitioners; the process is delicate and lengthy, which adds to the value of the material.

Finds of actual textiles made of sea silk or dyed purple are extremely rare. The archaeological evidence for both sea silk and purple dye production is mainly the mounds of discarded mollusc shells that can be found at several sites around the Mediterranean. However, molluscs of these types were also collected as a food source, and the fan mussel as a source of mother-of-pearl. To extract the dye from the molluscs the shell needed to be crushed, so mounds of crushed, rather than

whole, shells are often taken as evidence for purple dye production. The papers that deal with the archaeological evidence (Houby-Nielsen; Kremer; Meo; Soriga & Carannante) in the main take the approach that a wider range of evidence must be considered that may in conjunction with the shell mounds indicate that a textile preparation or dyeing industry was taking place. Loom weights provide some of this evidence; some of the weights found are much lighter than normal ones, suggesting they were used for a finer fabric, woven on a smaller scale. This may have coincided with the use of a purple dye and sea silk for imitation gold threads. These loom weights spread from Crete to the rest of the Aegean and the Levantine coast, indicating the spread of the technology associated with the weights, which may have been related to the use of special dyes. An additional piece of evidence for the production of sea silk are sharp micro blades which appear in the archaeological record at the same time as *Pinna* shells. However, the evidence for the manufacture of both sea silk and purple dye presented here is unconvincing. It would be interesting to see in the future a more thorough investigation, including scientific analysis, of the dyeing installations in the Aegean and Levant, which may provide more direct evidence of the use of purple dye. There is also the unresolved question as to what acidic substance would have been used to bring out the golden shine of the *Pinnus* fibres; modern texts and experiments state that lemon juice should be used (Meo; Pes & Pes) but lemons were not introduced into the Mediterranean region until the 3rd century BC (Meo).

Scientific and experimental studies presented in the volume prove that Pliny's description of the purple shellfish dyeing process was inaccurate and replicate the ancient procedure, which takes several days, a large amount of molluscs, and is famously very smelly (Cooksey; Kanold; Meiers). One reported experiment shows that sea silk could not be dyed purple (Kanold), which

brings into question whether the two industries might have been at all related, despite their shared prestige.

Several papers deal with the issue of the terms used for sea silk and purple dye in the languages of antiquity (Brøns; Maeder; Meiers; Soriga & Carannante; Soriga). The conclusion seems to be, unsurprisingly, that no-one can be sure what exactly was meant by several of the words used, and whether they were specific for the materials under discussion, or more general, for instance "prestigious fabric" rather than "sea silk", or "purple/red dye" rather than "shellfish purple". It seems unlikely that this issue can be resolved, and there may be too much space devoted to these discussions in this volume, which at times become repetitive.

Some of the most interesting articles are those that deal with the position of purple textiles within ancient societies, and the people who used them. In the main it seems that both sea silk and purple fabric had a very privileged position in society, but the discovery of fragments of purple dyed textile (some identified as shellfish dye) in the rubbish heaps at the 1st century CE Roman fort of Didymoi in Egypt suggest a more complicated picture (Gleba et al.). Their presence here indicates that either the dye was more accessible than previously assumed, or some sort of recycling was occurring. Two articles deal with the presence and role of purple textiles in Greek temples (Brøns; Ferrara), where they were offered in tribute and subject to restrictions, along with other brightly coloured fabrics. One article introduces the *Purpurarii* (Lowe), prosperous traders in purple dye and fabrics, and one with the role of shellfish resources in diplomatic events of economic importance around the Aegean (Giner & Nieto).

The volume is a pleasure to read, and those of us in the English-speaking world should be grateful that they chose to publish in English. Some of the photographs could be of a higher quality, but the overall publication is excellent. The interdisciplinary

approach maintains the reader's interest and works well for ancient materials, which can be studied from a variety of angles.

Competing Interests

The author has no competing interests to declare.

References

- Brøns, C** 2017 Sacred colours: purple textiles in Greek sanctuaries in the second half of the 1st millennium BC. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 109–117.
- Cooksey, C** 2017 Recent advances in the understanding of the chemistry of Tyrian purple production from Mediterranean molluscs. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 73–78.
- Ferrara, B** 2017 “A Lydian chiton with a purple fringe...”: the gift of the garment to the Hera of Samos and Hera of Sele. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 118–130.
- Giner, C A** and **Nieto, F J F** 2017 “Purple wars”: fishing rights and political conflicts concerning the production of marine dyes in Hellenistic Greece. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 145–153.
- Gleba, M, Berghe, I V** and **Cencioli, L** 2017 Purple for the masses? Shellfish purple-dyed textiles from the quarry workers' cemetery at Strozcapponi (Perugia/Corciano), Italy. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 131–137.
- Houby-Nielsen, S** 2017 Finds of *Pinna nobilis*, *Hexaplex trunculus* and evidence for specialized textile production in Aetolian Chalkis. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 46–55.
- Kanold, I B** 2017 Dying wool and sea silk with purple pigment from *Hexaplex trunculus*. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 67–72.
- Kremer, C** 2017 The spread of purple dying in the Eastern Mediterranean – a transfer of technological knowledge? In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 96–108.
- Lowe, B J** 2017 Purpurarii in the Western Mediterranean. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 154–158.
- Maeder, F** Byssus and sea silk: a linguistic problem with consequences. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 4–19.
- Meiers, F** 2017 Historical outline and chromatic properties of *purpura rubra Tarentina* and its potential identification with purple dye extracted from *Bolinus brandaris*. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 138–144.
- Meo, F** 2017 Taras and sea silk. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 56–62.
- Pes, A** and **Pes, G** 2017 Dal bisso grezzo al filato di bisso/From raw silk to byssus thread. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 63–66.
- Sorgia, E** 2017 Mari(ne) purple: western textile technology in Middle Bronze Age Syria. In: Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 79–85.

Soriga, E and **Carannante, A** 2017 Tangled threads. Byssus and sea silk in the Bronze Age: an interdisciplinary approach. In:

Enegren, H L and Meo, F (eds.), *Treasures from the sea: sea silk and shellfish purple dye in antiquity*. Oxford: Oxbow, 29–45.

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