

# Parian *lychnites* and the Prima Porta statue: new scientific tests and the symbolic value of the marble

John Pollini, Norman Herz, Kyriaki Polikreti, and Yannis Maniatis

In 1992 the results of the first analysis of the marble type of the marble statue of Augustus from Prima Porta in the Braccio Nuovo of the Vatican Museum were reported in *JRA*.<sup>1</sup> The isotopic analysis suggested that the statue was probably carved in Parian *lychnites* (λυχνίτης), a fine to medium grain marble from the Greek island of Paros that was highly prized in antiquity for its whiteness and translucency.<sup>2</sup> This finding was received with scepticism by some because Parian *lychnites* shares certain properties with a particular Ephesian marble also used for sculpture. With new scientific advances in testing marbles, it can now be shown conclusively that the marble sample from the Prima Porta sculpture is Parian *lychnites*. The scientific results of this new testing are presented in the second section of this article. Some facts and fallacies about Parian *lychnites* are treated in section 1, while section 3 discusses some of the possible symbolic and ideological values of Parian *lychnites*, color symbolism in general, and the reason why *lychnites* might have been specifically chosen for this statue.

## 1. Parian *lychnites*: facts and fallacies (J.P.)

It has been known for some time that the beautiful white *lychnites* marble was quarried in two underground shafts in the valley of Aghias Minas in the central part of Paros, ESE of the village of Marathi.<sup>3</sup> The larger of the two shaft-quarries is popularly known as the “Grotto of the Nymphs”, from a relief representing nymphs near the entrance; the smaller is known as the “Grotto of Pan”, from a relief image of that god near its entrance. Because of the size of the underground shaft, it had long been maintained that Parian *lychnites* could be obtained only in small blocks. This mistaken idea was reported in the influential work of R. Gnoli, *Marmora romana*.<sup>4</sup> To support his idea that it was necessary to use two blocks of Parian *lychnites* to create an entire standing figure, Gnoli refers to a specific example, a statue of a female member of the Antonine house found near the Serapeum at Lepcis Magna.<sup>5</sup> It is clear that Gnoli believed that Parian *lychnites* could be obtained only in blocks of c.1 m<sup>3</sup>.<sup>6</sup> In any case, because of such a mistaken idea, it had generally been assumed that the heroic-size statue of Augustus from Prima Porta (c.2 m in height)<sup>7</sup> could not have been carved in Parian *lychnites*. It was suggested

- 1 The marble sample was taken beneath a plastered surface dating back to the time of the discovery of the statue in 1863: see Pollini and Herz, *JRA* 5 (1992) 204, fig. 1 for the location.
- 2 For the best types of white marbles available to the ancients and their “workability” and different “response” to the sculptor’s tools, see the excellent study by P. Rockwell, *The art of stonework: a reference guide* (Cambridge 1993), esp. 20-21, 26-29.
- 3 For simplified geological map of the main marble producing area on Paros, see K. Germann *et al.*, “Provenance characteristics of Cycladic (Paros and Naxos marbles) – a multivariate geological approach,” in *Classical marble: geochemistry, technology, trade* (NATO ASI ser. E. 153, Dordrecht 1988) 253 fig. 1.
- 4 R. Gnoli, *Marmora romana* (1971) 225-26 and rev. ed. (1988) 262. Cf. recently Rockwell (*supra* n.2) 27, who puts it more cautiously: “The size and shape of the remains of the quarries suggest that it may have been difficult to obtain this stone in very large blocks in its purest form.” Although it is, of course, difficult to say how large is large, a block the size needed for the Prima Porta statue was certainly possible, based on visual inspection of the underground shaft.
- 5 Gnoli (1988) 262 n.3. Although his statement may be true in the case of this particular figure, it does not preclude sculptors from obtaining larger blocks for an entire figure at other times.
- 6 For an imperial figure the size of the Prima Porta statue to have been carved out of one piece of marble, the block of marble would have to have been about 1 x 1 x 2 m. See also n. 11.
- 7 For the significance of the height of the statue and its ratio of 1 : 7<sup>1/2</sup>, see J. Pollini, “The Augustus from Prima Porta and the transformation of the Polykleitan heroic ideal: the rhetoric of art,” in W. Moon (ed.), *Polykleitos, the Doryphoros, and tradition* (Madison, WI 1995) 266, 271.