

ROMANCE IN A LIMESTONE LANDSCAPE

While some believe that the portrait of Lesbos in *Daphnis and Chloe* is based on the island's actual topography, for others it is either imaginary or drawn from conventional depictions of idyllic landscapes. This paper argues for the realism of the portrait, by suggesting that Longus' account of springs, caves, and rivers includes details that are more likely to have been observed directly than derived from literary tradition.

SPRINGS

Springs play a crucial role in *Daphnis and Chloe*, but Vieillefond denies that they are a significant part of the Lesbian landscape: "Aucune des informations dignes de créance ne fait de la Lesbos un pays fertile en sources et en eaux courants, pas plus chez les auteurs anciens que chez les voyageurs modernes, et aujourd'hui la sécheresse générale de l'île, hors de la période hivernale, est un fait évident."¹

Lesbos is far from dry by Greek standards; although precipitation varies seasonally (from 152 mm in December to 3 mm in July), the annual average is high, 725 mm near Mytilene, and 925 mm on the Gulf of Yera. In Athens, annual rainfall rarely exceeds 400 mm; only Ioannina and Kerkyra report totals over 1000 mm.² Apart from a rise of 2.5 m in the sea-level,³ there is little evidence of environmental change on Lesbos since antiquity; inscriptions describing land use (*IG* 12.2.76–80) suggest that the island's ecology was similar to the present.⁴

Water runs through the literature of Lesbos from Sappho (frag. 2 L.-P.) to Elytis and Myrivilis.⁵ Lesbos does have plentiful springs, described both by visitors and local scholars,⁶ including the πηγή Καρύνης, portrayed in the fiction of Myrivilis and the paintings of Theophilos.⁷ Several inscriptions (*IG* 12.2.4, 95, 103) name water-sources near Mytilene, including one associated with the Nymphs, *IG* 12.2.129, *Supplementum*, which begins

σοὶ Πλα[τ]ανη[ις] ἀνῆκε κόρη Διὸς ὕδατόεσσα
πηγή Νυμφάων, Ὅρφιτε, νῆμα φίλον.

Orphitos is probably M. Gavius Orfitus, *cos.* 165 (*PIR*² G 105), brother-in-law of Pompeia Agripinilla, a descendant of Pompey's Lesbian friend Theophanes. With a πηγή Νυμφάων dedicated to a consul related to the most famous family of Roman Lesbos, it is difficult to maintain that the springs described by Longus are imaginary features of a conventional landscape.

The eastern section of Lesbos near Mytilene is largely composed of permeable limestone.⁸ Rain water that passes through limestone collects in an aquifer in the low-est permeable stratum. Springs occur when water in the aquifer meets an impermeable

1. Vieillefond 1987, cc–cci.

2. G. and T. Choutzaos 1989, 19. National Statistical Service 1992, 34.

3. Basiakos 1986, 208.

4. Kontis 1978, 37–38.

5. Elytis 1982, 105; idem 1993, 22; Myrivilis 1950, 54; idem 1983, 348.

6. Chatzioannou 1985, 157; G. and T. Choutzaos 1989, 17; Clavijo 1943, 26; Eleftheriadis 1983, 17–18, 69; Kontis 1978, 12; Stanford and Finopoulos 1984, 19; Taxis 1909, 13.

7. Myrivilis 1991, 65–67; Elytis 1973, 56.

8. Bornovas 1983; Basiakos 1986, 208.

stratum and is displaced towards the surface; they are relatively unaffected by seasonal variations in precipitation, since water takes months to seep through narrow underground passages. If the aquifer is deep, gravity causes hydrostatic pressure at the boundary with the impermeable stratum, and water is forced upwards to merge with some force in rising "Vauclusian" springs.⁹ The Lesbian Mt. Olympus (968 m), in the limestone zone, receives over 1000 mm of rain and even snow, which passes through several hundred vertical meters of limestone strata, creating a large aquifer under considerable pressure, from which water "bubbles up" (ἀναβλύζω or a cognate term) in several Vauclusian springs.¹⁰

THE CAVE OF THE NYMPHS

The most important spring in *Daphnis and Chloe* is in the Cave of the Nymphs where Chloe was found (1.4):

Νυμφῶν ἄντρον ἦν, πέτρα μεγάλη, τὰ ἔνδοθεν κοίλη, τὰ ἔξωθεν περιφερής. τὰ ἀγάλματα τῶν Νυμφῶν αὐτῶν λίθοις ἐπεποίητο· . . . ἵνα τοῦ ἄντρου τῆς μεγάλης πέτρας ἦν τὸ μεταίτατον, ἐκ πηγῆς ὕδωρ ἀναβλύζον ρεῖθρον ἐποίει χεόμενον, ὥστε καὶ λειμῶν πάνυ γλαφυρὸς ἐκτέτατο πρὸ τοῦ ἄντρου πολλῆς καὶ μαλακῆς πόας ὑπὸ τῆς νοτίδος τρεφομένης.

This cave was part of the grove described in the prologue:¹¹

ἐν ἄλσει Νυμφῶν θέαμα εἶδον κάλλιστον. . . . Καλὸν μὲν τὸ ἄλσος, πολύδενδρον, ἀνθηρόν, κατάρρυτον· μία πηγὴ πάντα ἔτρεφε, καὶ τὰ ἄνθη καὶ τὰ δένδρα.

By those who contend that Longus' portrait of Lesbos was not drawn from nature, the Cave of the Nymphs is interpreted as a conventional *locus amoenus*, based on Nymphaea in art and literature. But Longus' shrine is much simpler than the elaborate Nymphaea of Hellenistic cities; even the shrine to which a herdsman brings a goat in a Pompeian wall-painting has an artistic architectural facade.¹² The Caves of the Nymphs usually cited as Longus' source, such as *Odyssey* 13.103–9 and Theocritus *Idyll* 7.135–39,¹³ lack several elements found in Longus, such as the entrance at the center of a steep rock, the water gushing up, and the grass in the meadow. Homer and Theocritus do not mention statues of the Nymphs; Longus' representation of the Nymphs finds an analogue not in a literary ekphrasis, but in a native bas-relief from Mytilene, three dancing figures with the dedication Ἑρμογένης θεᾶς Νύμφας.¹⁴ The crucial detail of Longus' cave is the ὕδωρ ἀναβλύζον of the spring. ἀναβλύζω is in modern Greek the proper term for rising springs, and probably had the same meaning in antiquity, see [Aristotle] *Mund.* 396a22. But ἀναβλύζω does not occur in other literary descriptions of springs and Nymphaea; with most idyllic springs, e.g., Theocritus *Idyll* 13.39–54, it does not greatly matter whether the water trickles down, gushes up, or flows out from an underground river. Longus' choice of ἀναβλύζον to describe the spring in the Nymphs' cave was thus dictated not by literary convention, but by the actual hydrology of Lesbos. The fact that

9. Named from a spring in Provence; Trudgill 1987, 72.

10. Myrivilis 1991, 65; Charitonidis 1968, 14; Taxis 1909, 97.

11. As demonstrated by Hunter 1983, 42–43.

12. Merkelbach 1988, 215, Abb. 9.

13. Schönberger 1973, 175; Vieillefond 1987, 112.

14. Charitonidis 1968, 25, no. 29, plate 10a.

springs on Lesbos well up under hydrostatic pressure could not be discovered from other texts; neither Strabo nor Pliny, who discusses both rising springs and Lesbos (*HN* 2.106.232; 5.39.140), mentions such springs on the island.

CAVES

There are over seventy caves on Lesbos, some of which, at Magara near Kentro, Ayios Ioannis near Mychos, and Ayios Thimianos near Thermi, were apparently used in antiquity.¹⁵ None of these contains a Vauclusian spring, although there are caves close to the Piyi Karinis,¹⁶ and a φούσα (karstic well)¹⁷ near the cave of Ayios Ioannis. So far, no cave has been found on Lesbos that corresponds precisely to the Cave of the Nymphs; but the mere existence of caves on the island, not recorded in any ancient source, is a fact that Longus must have derived from personal knowledge.

RIVERS

Many water-courses on Lesbos are χεῖμαρροι, with substantial flow in winter but dry in summer. Yet Longus, who mentions winter torrents (3.3.2), also describes Daphnis bathing in rivers (plural) at the height of summer (1.23.2, 3.24), which Vieillefond characterizes as fantasy.¹⁸ We expect seasonal rivers in limestone topography, in which precipitation normally passes into the underground system, but in periods of high rainfall cannot be absorbed by the waterlogged surface soil, and flows in otherwise dry stream-beds.¹⁹ There are nevertheless several rivers on Lesbos that flow all year;²⁰ Kontis identifies fifteen,²¹ and in antiquity there would have been more, since many perennial sources have now been diverted, for fire-fighting in the forests, municipal drinking water, and irrigation. Some streams are dry in summer in their upper courses but contain water close to the sea-shore, owing principally to impermeable alluvia deposited in coastal plains by winter torrents; the Aspropotamos has plentiful water at its outlet, but none a few hundred meters up stream.²² Daphnis, who almost drowned in the sea (1.30), did not actually swim in the rivers; the slow shallow waters in river outlets in high summer are quite sufficient for the kind of baths he took, and are nicely characterized by the phrase ἡρέμα ρέοντα (1.23.2). Longus' account of Lesbian rivers, far from fantasy, reflects specific local conditions that are not, to my knowledge, paralleled in other pastoral landscapes such as Arcadia.

In each case—rising springs, caves, summer flow in rivers—Longus provides details about Lesbos that are not found in other accounts of the island or in conventional

15. G. and T. Choutzaos 1989, 27–28, 45, 61.

16. Idem, 37.

17. A vertical channel up which water rises from the aquifer under pressure but rarely reaches the surface.

18. Vieillefond 1987, ciii, cci.

19. Trudgill 1987, 87, fig. 6.2.

20. Green (1982, 213) and G. and T. Choutzaos (1989, 15) claim that there is only one, but name different rivers.

21. Kontis 1978, 12.

22. Mason (1979, 161) saw water in it but Green (1982, 212) did not; they observed it at different locations.

descriptions of pastoral landscapes. Longus' accurate account of the hydrography of Lesbos is an important proof of the realism of his portrait.

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