So, with respect to its beginning and end points, i.e. mouth and excretory orifice, the body of the sea-urchin—its internal visceral structure—is continuous. However, the internal viscera are *not* continuous with the outer shell or 'test' of the sea-urchin. Rather, it—this continuous body—is like the lantern that is lacking its encircling skin.

It turns out, then, that what is today referred to as Aristotle's lantern by invertebrate zoologists is only part of what Aristotle said was 'like a lantern without its skin'. The lantern *with* its skin, would be the analogue of a sea-urchin, *tout court*. The lantern *without* its skin is analogous to the entire internal viscera of the sea-urchin, including 'Aristotle's lantern', oesophagus, stomach, intestines and rectum.

As many historians have indicated, a preliminary to establishing a systematic science is the formulation of a uniform and consistent language by which to refer to newly discovered entities in a manner which will relate those entities conceptually to those already named and described. Studying the very beginnings of a science gives us insight into how this process begins. Often, it is through the metaphorical extension of the terms of our non-scientific language—for example, calling a spherical, spiny sea creature a 'hedgehog' and characterizing its internal structure as 'like a lantern without the encircling skin'. Aristotle's belief in the importance of studying the primary and extended meanings of words is not unrelated to his place in the history of science.

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An Island gem in Derby

JAMES G. LENNOX

(PLATE XIIa)

The following note aims to bring the attention of scholars to a very fine seal (PLATE XIIa) in the collection of the Derbyshire Museum Service at Kedleston Road, Derby. My thanks are due to Mr D. Sorrell, County Museums Officer, for permission to publish this piece.¹

Following Boardman,² the seal may be identified as an Island gem, probably from Melos, of the early sixth century BC. The seal was acquired in 1954 from a dealer, following its purchase at auction in London (of which no details are available), and now bears the catalogue number 833:6. It consists of a small piece of green serpentine, flecked with white, shaped to a lentoid form. 5.5 mm thick at the centre, tapering to 1.75 mm at the top and bottom, it is not perfectly round, the width being 17 mm and the height 17.5 mm. A hole is drilled across its width.

The design is of a prancing winged horse, whose lower body becomes that of a fish. Such creatures appear on three other known Island gems, *IGems* no.

¹ I would also like to express my thanks to Prof. W. G. Lambert for his identification of the seal, and his subsequent help in my investigation of Island gems, to Prof. Boardman who brought the Budapest seal to my attention, and made several comments on this short notice, and to Mr G. Norrie of the Department of Ancient History, Birmingham University, for the excellent photograph.

² J. Boardman, Island Gems: A Study of Greek Seals in the Geometric and Early Archaic Periods, Soc. Prom. Hell. Stud. Suppl. Paper x (1963) ('IGems'). 291 (illustrated as AG pl. 5.21),³ IGems no. 292, and a seal from Budapest which appears in the Bulletin du Musée Hongrois des Beaux Arts 32-3 (1968) 16 no. 8 fig. 20.⁴ More common are winged goat-fish (IGems nos 248, 249, 251 and 253A, pl. 9), but no suggestion has been found as to the meaning of such composite figures.⁵

As to the date of this particular seal, Boardman notes three main stages of development in Island gems. It is clear that this seal belongs to the highest development of the series, his Class D seals, and is therefore to be dated to around 600 BC, or to the early sixth century. Boardman states (*IGems* 85) that the finer Class D seals were the work of no more than two artists. If this is the case, we would attribute this seal to the artist of group 6(j) (*IGems* 87), called by Boardman the 'Blind Dolphin Master'. Our seal bears strong similarities to *IGems* no. 251, notably in the shape of the animal's eyeless head, the execution of the mane, legs and tail, and the way in which the animal has been shaped, in order to fill the field.

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³ A. Furtwängler, Die antiken Gemmen (Leipzig 1900).

⁴ See also JHS lxxxviii (1968) 5 no. 291.

⁵ For later Greek and Persian winged horse-fish, see Boardman, Greek Gems and Finger Rings (London 1970) figs 788–9, 979 (p. 437 f., nos 362–4).

Athena Parthenos: a nineteenth-century forger's workshop*

(PLATE XIIb-e)

While piecing together information on some of the copies of the Athena Parthenos for the recent congress in Basle, I looked again with slightly wiser and perhaps sadder eyes at a small terracotta from the collections of the Manchester Museum that I had published in this journal some eleven years ago (PLATE XIIb). I found her interesting because apart from such features as the triple-crested helmet, the snake lurking within her shield, and the Nike poised upon her right hand, which identified her beyond doubt as a copy of the Parthenos, she rested her right hand on a plain column with torus mouldings. There is another figurine from the same mould in the museum in Geneva, and a third from a parallel mould in Exeter, and I concluded that they were Romano-Gallic 'souvenirs' of the second century AD.¹ I was convinced of the authenticity of the type, not least because of the pedigree of the Geneva figurine. However, several scholars have had their reservations, right back to the first appearance of the Geneva

* I touched on these forgeries at the Basle Parthenon Congress, and have benefited enormously from discussion with my colleagues at the time though my particular thanks must go to Prof. Ernst Berger; the responsibility for the final result of course rests with me. The following abbreviations are used: Leipen: N. Leipen, *Athena Parthenos. A Reconstruction* (Toronto 1971); Prag: A. J. N. W. Prag, 'Athena Mancuniensis. Another Copy of the Athena Parthenos', *JHS* xcii (1972) 96–144.

¹ Manchester Museum 20,001; Geneva, Musée d'Art et d'Histoire 7464; Exeter, Royal Memorial Museum 5/1946/778; Leipen 11 nos 42, 44, figs 44, 45; Prag 96–102, pls XIX–XXII.

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(b) Athena Parthenos, Manchester Museum.

(c)-(e) Forged terracotta lamps, British Museum.