

ARTILLERY AND PROPHECY: SICILY IN THE REIGN OF DIONYSIUS I

If we are to obtain a clear picture of events in the ancient world – and especially in the Greek West, where the evidence is so thin on the ground – we need of course to pay due attention to detail. Bearing this in mind, I will focus in the following note on two important aspects of life in ancient Sicily during the fifth and fourth centuries B.C.: one concerned with artillery and war, the other with religion and ritual. My method will be not to generalise but, instead, to start from the work of two influential scholars – showing where their views are wrong and how those views can be corrected with the evidence at our disposal.

1. The now-authoritative status of E. W. Marsden's *Greek and Roman Artillery*¹ can easily induce one to overlook the larger and more questionable assumptions on which his work is based. One crucial example of such questionable treatment of the evidence is his widely shared and accepted view that western artillery was invented in 399 B.C. at Syracuse, in the workshops of Dionysius I².

The linchpin for Marsden's claim is a statement by Diodorus Siculus to precisely this effect: "It was at this time [i.e. 399 B.C.] that artillery was invented in Syracuse, as a consequence of the fact that the most competent craftsmen had been brought together [by Dionysius I] from everywhere into one single place" (καὶ γὰρ τὸ καταπελτικὸν εὐρέθη κατὰ τοῦτον τὸν καιρὸν ἐν Συρακούσαις, ὡς ἂν τῶν κρατίστων τεχνιτῶν πανταχόθεν εἰς ἓνα τόπον συνηγμένων)³.

That would seem straightforward enough – were it not for another remark made by Diodorus very soon afterwards, still with reference to the men in Dionysius' workshops: κατεσκευάσθησαν δὲ καὶ καταπέλται

(¹) Vol. I (Oxford 1969): "Historical Development". Vol. II (1971): "Technical Treatises".

(²) *Ibid.*, vol. I, 49-56, 65-66, 77-78. The view continues to be upheld: cf. e.g. T. Alfieri Tonini, "Atti Ce.R.D.A.C." 9, 1977-78, 28 ("l'innovazione veramente rivoluzionaria in questo campo fu la creazione della catapulta ...") with n. 38. Y. Garlan (*Recherches de poliorcétique grecque*, Paris 1974, 164-66) sees as the only possible objection to this view the claim sometimes made by scholars that artillery was not invented under Dionysius I, but simply introduced into the Greek world at the time from abroad; he fails to note that it is implicitly contradicted by Diodorus Siculus himself.

(³) 14.42.1 (cf. 50.4); Marsden, vol. I, 49.

παντοῖοι καὶ τῶν ἄλλων βελῶν πολὺς τις ἀριθμὸς (14.43.3).

This would most naturally tend to mean “catapults of all kinds were constructed, and a large number of other missile-throwers”. That of course would imply Dionysius’ craftsmen were already familiar with a variety of artillery weapons, which they managed to reproduce and no doubt improve on. But this same implication obviously does little to support Marsden’s claim that in these activities promoted by Dionysius “we have to do with the very first appearance of any form of artillery whatsoever”⁴.

Marsden himself, however, came up with a different translation of the statement in Diodorus: “catapult-bolts of all kinds were prepared, and a large number of other missiles”⁵. For a number of reasons this is out of the question. First, in order to produce the best results the earliest forms of artillery required a bolt of fixed weight and proportions which could easily be ascertained through a process of trial and error. It is absurd to suppose that many different types of ammunition were produced for the one, basic form of catapult which Marsden believed was the only version of the weapon manufactured – or even known of – at the time: the heat of battle would certainly not have been the right moment to start trying to select the most effective type of ammunition for a single weapon by adopting a hit-and-miss procedure or following a process of elimination. Second, Diodorus’ context – as well as the normal use of the word by other writers – makes it quite clear that by *καταπέλται* here he will have meant catapults, not just catapult-bolts⁶. As for the word *βελῶν*, it is more ambiguous – meaning artillery weapons as well as the missiles they fire – and here is to be understood in the former sense⁷. Third, the verb *κατεσκευάσθησαν* in the context of weaponry tends to mean “were constructed” rather than simply “were prepared”; in the terminology of warfare the word had the very specific technical sense of constructing a piece of artillery⁸. All in all, we are bound to conclude that Diodorus was indeed talking about different kinds of weapon rather than just different types of ammunition.

We have already seen the motivating factor behind Marsden’s attempt to locate the invention of artillery, and no less, in the workshops of Dionysius

(⁴) Vol. I, 49.

(⁵) Vol. I, 55-56.

(⁶) Cf. e.g. Diodorus 14.50.4 ὄξυβελέσι καταπέλταις, 14.51.1, 20.71.2, Polybius 5.88.7-8, and the 3rd-century B.C. inscriptions from Samothrace reproduced by Marsden himself, vol. I, 76 (καὶ καταπάλας καὶ βέλη καὶ τοὺς χρησομένους τούτοις).

(⁷) Cf. e.g. Diodorus 14.50.4 τοῦτο τὸ βέλος; Plutarch, *Apophth.* 191e with Marsden, vol. I, 65; Polybius 5.4.6 with Marsden, vol. I, 77 n. 3; and for the ambiguity of the word, Garlan (as in n. 2), 213 with n. 9.

(⁸) Note e.g. Marsden’s comments, vol. II, 44 § 4.

I: Diodorus Siculus' assertion that artillery was simply "invented", εὑρέθη, during the activities at Syracuse in 399 B.C. Marsden was determined to attribute this assertion to no less an authority than the Sicilian historian Philistus – who was a close friend of Dionysius I, who had been an eyewitness of the activities in question, and who can fairly be described as "the ultimate source" for Diodorus' account of the goings-on at Syracuse during the year 399⁹. Yet in doing so Marsden failed, on a general level, to make due allowance for the complexity of the sources on which Diodorus relied – and in particular for the fact that Diodorus seems only to have had access to Philistus' writings indirectly, through the medium of later historians who often embroidered, modified or substantially rewrote the version of events which they found in Philistus¹⁰. And on a more specific level, he failed to pay due attention to the incompatibility between Diodorus' simple "invention" theory and his more complex statement about the construction of different types of artillery. This phenomenon of Diodorus including, in his account of Dionysius' reign, duplicate descriptions of the same events which prove to be fundamentally incompatible with each other is one that has recently been well studied and documented in the work of M. Sordi¹¹.

Of the two contradictory versions of events which we are concerned with, it is the more simplistic one which is by far the more suspicious. Greeks were notoriously arbitrary in their discovery of "inventors"¹². Here it is difficult not to suspect the influence of that great populariser and generaliser, Ephorus, whom we know Diodorus used extensively as one of his sources in this particular section of his histories – and who we can also see deliberately modifying Philistus' earlier account in the process¹³. Ephorus in fact wrote a work *On Discoveries*, Περὶ εὐρημάτων, in which he described as "inventors" individuals whom other more careful ancient historians preferred simply to describe as "transmitters" or intermediaries¹⁴. His facile oversimplifications in this regard were already criticised and made fun of in antiquity¹⁵.

In short, the "invention" theory could hardly be more flimsy; and it is

⁽⁹⁾ Marsden, vol. I, 49-50; B. Caven, *Dionysius I*, New Haven 1990, 93-95.

⁽¹⁰⁾ See now M. Sordi, *La Dynasteia in Occidente*, Padua 1992, x with n. 2, and passim.

⁽¹¹⁾ Cf. *ibid.*, ix, 38-39, 52-64, 74 with n. 5, 110-11, and passim.

⁽¹²⁾ A. Kleingünther, *Πρώτος εὐρετής*, Leipzig 1933; A. Lesky, *Geschichte der griechischen Literatur*³, Bern 1971, 155.

⁽¹³⁾ Cf. 14.41.2 with Sordi's comments, *op. cit.* 74-75; and e.g. 14.54.4-5.

⁽¹⁴⁾ *FGrH* 70 F105a.

⁽¹⁵⁾ Strabo 7.3.9 = *FGrH* 70 F42; *Schol.* Apollonius Rhodius 1.1276 (γελοῖος δὲ Ἐφορος νομίζων ...) = *FGrH* 70 F42a; Kleingünther, *op. cit.* 149-150 with n. 128.

certainly too fragile to be used, as Marsden attempted to do¹⁶, as a basis for reconstructing the whole history of western artillery. What is more, only when we rid ourselves of this theory can we start to make sense of other pieces of evidence apart from the ones already considered. So, for example, it is clear that artillery must already have become a stunningly effective weapon of war for it to contribute to Dionysius' initial artillery success at his siege of Motya during 397 B.C. Even Marsden¹⁷ was moved to posit the presence at Motya of "advanced" forms of non-torsion catapult, which would be very strange if the most primitive version had only been discovered two years earlier and not yet tested in battle. All in all, the most we can say is that the events of 399-397 B.C. provided the first occasion when artillery was produced and used in the western world on a major scale. It is worth adding that Marsden's further argument – on the grounds that there are supposedly no explicit references to the use of artillery prior to 399¹⁸ – is also null and void. On these same grounds of silence one would have to conclude that Dionysius I did not use artillery in his sieges of Caulonia, Hipponium and Rhegium in 389-87, although it is virtually certain that he did¹⁹. In fact, however, as I have shown elsewhere²⁰, references to the use of artillery prior to the year 399 in outlying parts of the Greek world do exist, although Marsden failed to date the references correctly or appreciate their real significance. But that is another story.

2. As we have seen, it is not always easy to lay hands on pieces of evidence that definitely derive from Philistus. When we can, the evidence is invaluable because of Philistus' unique ability to inform us about early Sicilian history. His first-hand knowledge of Sicilian customs and culture must date back to the fifth century B.C. or – at the very latest – the first few years of the fourth, prior to his quarrel with Dionysius I and his subsequent exile.

One of the more intriguing pieces of information provided by Philistus concerns a family of dream-interpreters in inland Sicily. Here we have two sources to rely on. The first is Cicero: in his *On Divination* he describes how – according to Philistus – Dionysius' mother had a dream when she was pregnant with him which was interpreted for her by "the interpreters of

(16) Vol. I, 49-56, 65-66, 77-78.

(17) Vol. I, 100; cf. 56. For the siege of Motya see Diod. Sic. 14.49.3, 50.4, 51.1; J. I. S. Whitaker, *Motya*, London 1921, 83 and n. 3.

(18) Vol. I, 49-51.

(19) See Marsden himself, vol. I, 77.

(20) P. Kingsley, *Ancient Philosophy, Mystery and Magic: Empedocles and Pythagorean Tradition*, Oxford 1995, chs. 11-12.

omens who at that time were known in Sicily as Galeotae”²¹. The second is Pausanias, who states that according to Philistus the inhabitants of Hybla Gereatis on the southern slope of Mount Etna “were interpreters of omens and dreams, and the most devoted to piety of all the barbarian peoples in Sicily”²².

Some time ago Ziegler made the unfortunate assertion that there is no real link between the dream interpreters who, according to Pausanias, were based in Hybla Gereatis and the famous family of Sicilian dream-interpreters referred to as Galeotai by Cicero – as indeed, after Cicero, by other writers including Aelian and Stephanus of Byzantium²³. Ziegler appears later to have changed his mind²⁴, although without giving any reason. But that is beside the point: what is important here is to try to get to the truth of the matter behind the fluctuating opinions. The first fact to be considered is that Stephanus of Byzantium also states, quite specifically, that the inhabitants of Hybla Gereatis – or Geleatis as it is sometimes referred to – were called Galeotai²⁵. Ziegler claimed that what we have here is simply a mistaken confusion on Stephanus’ part: a confusion which occurs nowhere else. Strictly this is not correct. Cicero’s mention of Philistus as authority for his statement that the Galeotai were renowned in Sicily as dream-interpreters, coupled with Pausanias’ mention of Philistus as authority for his own assertion that the inhabitants of Hybla Gereatis were famous in Sicily as dream-interpreters, plainly suggests the underlying identity of both reports. If there is any “confusion” involved here, it had occurred long before the time of Stephanus. Second, it is highly implausible that there were two distinct families or groups of dream-interpreters in Sicily which had such similar names²⁶. Their identity is, in fact, clearly implied by Pausanias’ emphasis on the fame of the inhabitants of Hybla Gereatis throughout Sicily. Ziegler’s further claim that the failure of Cicero to state precisely where in Sicily the Galeotai came from shows they did not belong to one particular

(²¹) *Interpretes portentorum qui Galeotae tum in Sicilia nominabantur* (*De div.* 1.20.39 = *FGrH* 556 F57a).

(²²) τεράτων καὶ ἐνυπνίων ἐξηγητὰς εἶναι καὶ μάλιστα εὐσεβεῖα τῶν ἐν Σικελίᾳ βαρβάρων προσκεῖσθαι (*Pausanias* 5.23.6 = *FGrH* 556 F57b).

(²³) *Pausanias and Cicero*, *loc. cit.*; Aelian, *Var. hist.* 12.46; Stephanus of Byzantium s.v. Γαλεῶται (cf. Hesychius s.v. Γαλεοί); K. Ziegler, *RE IX* (1914) 25, followed by F. Jacoby, *FGrH IIIb*, *Kommentar*, 513 with n. 156. The legend, also mentioned by Stephanus, which traces these Galeotai back to a legendary Galeotes does not concern us here: cf. P. Catturini, “RIL” 121, 1987, 15-23.

(²⁴) In *Der Kleine Pauly II* (1967) 675 (“Wahrsagergeschlecht der Γαλεῶται aus Hybla in Sicilien”).

(²⁵) S.v. Ὑβλαι (ἢ μικρὰ ἦς οἱ πολῖται Ὑβλαῖοι Γαλεῶται).

(²⁶) Correctly A. L. Kjellberg, *RE VII* (1910) 592-4; H. Hepding, *RE IX* (1914) 29.

town but were a family spread throughout Sicily²⁷ is, needless to say, both arbitrary and unfounded.

Then we come to another point: the name given to the dream-interpreters. Ziegler was perfectly correct in asserting that the word Galeotai is Greek whereas the town name Gereatis, or Geleatis, is non-Greek: no doubt Sikel²⁸. In fact it would seem not to have been noticed that the variant forms Geleatis (attested by our earliest certain authority for the name, Thucydides)²⁹ and Gereatis are clearly due to the similarity and frequent interchange between the liquid consonants *l* and *r* not just in Indo-European languages in general but also, specifically, in the non-Greek dialects of Italy and Sicily³⁰. However, in citing the Greek appearance of the one name but not of the other as proof that the two words "Galeotai" and "Geleatis" are unrelated, Ziegler appears also to have overlooked one other fact, which is even more fundamental. This is the widespread tendency of the Greeks to incorporate non-Greek names into their own language by assimilating them to similar-sounding Greek words and, in so doing, providing them with an apparent "etymology". We can see this process at work – it usually affected the vowel structure of words in particular – in Sicily as well as wherever else in the ancient world Greeks came into contact with foreign cultures and names³¹. The difference, and yet similarity, between the words Geleatis and Galeotai – which in Greek meant either "lizards" or "swordfish" – is a clear indication that here, indeed, we have a classic example of precisely this phenomenon of "double etymology". This phenomenon alone accounts for the remarkable similarity between the names Geleatis and Galeotai: a similarity which has been persistently overlooked in modern scholarly literature.

How, then, are we to understand the significance which this derivative title "Galeotai" assumed in the eyes of ancient Greeks? The usual assumption has been that the word was explained in the sense of "lizards", and was associated with the role occasionally attributed to lizards in some ancient di-

(²⁷) *RE IX* (1914) 26.

(²⁸) *Ibid.*

(²⁹) Thuc. 6.62.5; Catturini (as in n. 23), 16 n. 2.

(³⁰) Cf. W. M. Lindsay, *The Latin Language*, Oxford 1894, 80-83, 89-96, 275-79; R. S. Conway, J. Whatmough and S. E. Johnson, *The Prae-Italic Dialects of Italy*, London 1933, vol. II, 476, 479; also V. Pisani, *Lingue e culture*, Brescia 1969, 197 and n. 10.

(³¹) For the evidence see P. Kingsley, "Journal of the Warburg and Courtauld Institutes" 56, 1993, 11-15.

vinatory techniques³². However, as A. L. Kjellberg has shown³³, there is not the slightest support for this assumption. On the other hand, there is plain evidence linking these Sicilian dream-prophets with "galeotai" in the sense not of lizards but of swordfish. Archippus gives us a good insight into the jokes which were already being cracked in the fifth century B.C. about Sicily's famous Galeotai when, in a play called "The Fishes", he refers to them as "sea-prophets" (μάντεις θαλάττιοι)³⁴. But the crucial missing link which has been overlooked in this context is a remarkable passage in Strabo that shows just what the word "galeotai" is most likely to have meant on Sicily itself. In the passage in question, Strabo quotes Polybius to the effect that the waters off Sicily were renowned in antiquity for their extraordinary proliferation of "galeotai" or swordfish. It will be noted that the same situation exists down to the present day³⁵. When the Greeks arrived in Sicily they evidently found swordfish not only in the seas around the island, but also close to the top of Mount Etna.

There is one final point worth noting with regard to these Galeotai. In fact nothing could be more understandable than for the dream-interpreters of this name, consulted both by the mother of Dionysius I (according to Cicero) and subsequently (according to Aelian)³⁶ by Dionysius himself, to have been inhabitants of the Hybla on the southern edge of Etna. We happen to know that Dionysius had a very special interest in this region and in its native religious traditions. For example, just a few miles to the west of Hybla Geleatis on the slopes of Etna he founded a new city next to the local temple of Adranus; he immediately dedicated the city to the temple god³⁷.

This temple of Adranus deserves a few concluding remarks. In her influential *Héphaistos*, Delcourt claimed that in Sicily the association of Hephæstus with subterranean fire was "literary rather than religious"³⁸. Characteristic as this assertion is of the modern tendency to force a sharp wedge between Greek literature and religion, it is totally misleading. We know that in Sicily Hephæstus took over the cult and attributes of Adranus,

(³²) So e.g. Th. Hopfner, *Griechische-ägyptischer Offenbarungszauber*, vol. I, Leipzig 1921, 114 § 463; Ziegler, *Der Kleine Pauly* II (1967) 675-76.

(³³) *RE* VII (1910) 592-93.

(³⁴) Fr. 15 Kassel-Austin. Cf. Kjellberg, *loc. cit.*; also Archippus, fr. 23.2 Kassel-Austin, and Kassel and Austin on Philyllius, fr. 1 (*PCG* VII, 375).

(³⁵) Strabo 1.2.15-16 = Polybius 34.2.4-34.3.12. Cf. D'Arcy W. Thompson, *A Glossary of Greek Fishes*, London 1947, 43, 178-180.

(³⁶) *Var. hist.* 12.46.

(³⁷) Diodorus Siculus 14.37.5. Sordi (as in n. 10) 41-42 discusses the political aspect of the move.

(³⁸) M. Delcourt, *Héphaistos*, Paris 1957, 189.

who was plainly an indigenous non-Greek god; Adranus' temple on the edge of Mount Etna, with its dogs, its sacred grove and its perpetual fire "that was never extinguished and never died down", became for the Greeks the temple of Hephaestus³⁹. Apart from this appropriation of Adranus' temple by Hephaestus, Delcourt's statement is also contradicted by the numismatic evidence for a cult of Hephaestus both on the neighbouring island of Lipara and in Mytistraton⁴⁰. In the case of Lipara, the existence of a temple of Hephaestus can be inferred for at least the fourth century B.C. and very probably earlier⁴¹; worship of Hephaestus on the island is likely to have followed on from the worship of an earlier fire god, as in the case of Etna⁴². This is not even to mention the remarkable "hill of Hephaestus", in the immediate vicinity of Acragas: a local cult centre where the god was believed to make his presence under the hill known by extraordinary feats of spontaneous combustion⁴³. Otherwise the fact that Thermessa, between Lipara and Sicily, was known as Hieria because – at least in historical times – it was considered "sacred" to Hephaestus⁴⁴ is itself ample proof that Hephaestus' association with underground fire in the neighbourhood of Sicily was far more than simply "literary".

These religious traditions, no doubt largely pre-Greek, had remarkable powers of endurance. The Latin poet Grattius has left a description of the use of incense by priests for the worship of Vulcan in the heart of the cavernous, volcanic regions of Sicily. A number of the details in his description make it clear that he is referring to worship at the temple of Adranus, built out of lava on the south-west slope of Etna⁴⁵. This practice of burning in-

(³⁹) Aelian, *Nat. anim.* 11.3, 20; E. Freeman, *History of Sicily*, Oxford 1891-94, vol. I, 183-89, L. Malten, *RE VIII* (1912) 322-23, B. Pace, *Arte e civiltà della Sicilia antica*, Milan 1935-49, vol. III, 460, 519-521, 540. There can be no doubt that the two Aelian passages refer to the same place and the same temple – even though Aelian was apparently unaware of the fact due to his using different sources (cf. 11.20 ad init. ὡς λέγει Νουμόδορος; Freeman, *op. cit.*, vol. I, 186 n. 1). For the equation of Adranus and Hephaestus cf. also *ibid.* 525; Malten, *op. cit.* 323.7-10.

(⁴⁰) Lipara: E. Ciaceri, *Culti e miti nella storia dell'antica Sicilia*, Catania 1911, 153; Malten, *op. cit.* 322. Mytistraton (central Sicily): K. Ziegler, *RE XVI* (1935) 1427; J. A. de Waele, *Acragas Graeca*, vol. I, The Hague 1971, 206 and n. 1122.

(⁴¹) Diod. Sic. 20.101.1-3 (the evidence is usually overlooked).

(⁴²) Freeman, vol. I, 90-91; Pace, *op. cit.*, vol. III, 547.

(⁴³) Solinus 5.23-24; Freeman, vol. I, 76; Ciaceri, *op. cit.* 152; Pace, vol. III, 526, 598.

(⁴⁴) References and discussion in Freeman, vol. I, 87-91; Ciaceri 153; Malten 322, 326; Pace, vol. III, 547.

(⁴⁵) Grattius, *Cynegeticon* 430-466. For the location on Etna cf. S. Sudhaus, *Aetna*, Leipzig 1898, 153; C. Formicola, *Il Cynegeticon di Grattio*, Bologna 1988, 188. The identification with the temple of Adranus is confirmed by the following details: banning

cense for ritual purposes on the slopes of Etna, also attested elsewhere in Latin literature⁴⁶, was certainly more than a mere poetic fantasy on the part of Roman writers. Cicero throws an interesting light on the matter when, in the first century B.C., he speaks of the "incredible" number of very ancient and very beautiful incense-burners which used to be found everywhere in Sicily but in his day were rapidly disappearing. This diffusion of the practice of incense-burning no doubt goes back to the early days of Phoenician influence and colonisation of the island – well before the time of Dionysius I⁴⁷. There is much here that can help us in reconstructing the details of a culture which was the equal of Athens but, because of the persistently Athenocentric approach to the ancient world, has suffered so badly even down to modern times.

University of London

PETER KINGSLEY

of criminals and those with criminal intentions (Grattius 447-49, Aelian, *De nat. anim.* 11.3, 20), special kindness shown by the god to people with pure intentions (Grattius 456-460, Aelian 11.20, cf. 3), emphasis on the temple as home of the god and on the presence of the god himself (Grattius 433, 443-459, Aelian 11.20), importance of dogs (Grattius 435-36, Aelian 11.3 and 20; Formicola, *op. cit.* 189); perpetual fire-altar (Grattius 441-458, Aelian 11.3).

⁽⁴⁶⁾ *Aetna* 339-342, 351-57.

⁽⁴⁷⁾ Cicero, *Verr.* 2.4.21.46-24.54; S. Eitrem, *Opferitus und Voropfer der Griechen und Römer*, Kristiania 1915, 233. For Phoenician involvement in the spread of incense to the western Mediterranean cf. H. von Fritze, *Die Rauchopfer bei den Griechen*, Berlin 1894, 18-19 and, in general, W. Burkert, *Greek Religion*, Oxford 1985, 62.