



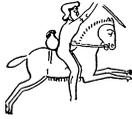
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## **A Note on the Excavations in the Tash-K'irman Oasis**

In the 'General Conclusions' to their article on the excavations of the Tash-K'irman Oasis,<sup>1</sup> the authors observe that their investigations suggest that pottery and traces of occupation, together with the size of Kazakl'i-yatkan, makes it possible that this could have been the capital of Chorasmia in the fifth and fourth centuries.

The prominence of the site is emphasised by the fortifications - a solid curtain wall, paralleling other Central Asian sites of this date. However, they continue, this creates problems as the current hypothesis is that this type of fortification was introduced to Central Asia only in the wake of Alexander's

<sup>1</sup> S.W. Helms, V.N. Yagodin, A.V.G. Betts, G. Khazhaniyazov, F. Kidd, Five Seasons of excavations in the Tash-K'irman Oasis of ancient Chorasmia, 1996-2000. An interim report, *Iran* 39 (2001): 119-144 (138-9).



invasion, in response to his use of mechanised siege craft, *i.e.* the torsion catapult, invented some time around 390 BC in the west. The idea is based on Diodorus' account of the siege of Motya by the Syracusan tyrant, Dionysius I,<sup>2</sup> which is the first reliable attestation of the use of siege-towers and arrow-firing catapults in classical Greek warfare.<sup>3</sup>

Helms *et al.*, therefore, suggest tentatively that we should visualise Central Asian leaders taking the idea of these, to them novel, techniques home with them only in the late fourth century, after seeing Alexander in action.

There may, however, be another way out of this conundrum. In an article published in 1994,<sup>4</sup> P. Briant discussed the fifth century siege ramp found at Old Paphos on Cyprus, together with 422 sling stones, ranging in weight from 2.7 to 21.8 kg,<sup>5</sup> and the excavator's eventual conclusion that these must have been fired by the Persians during their siege of Paphos in

<sup>2</sup> Diodorus Siculus 14.49ff.

<sup>3</sup> It is thought that Dionysius may have adopted some of these "techniques from Carthage" (see further, *Oxford Classical Dictionary* (3rd ed., 1996), s.v. 'siegecraft, Greek').

<sup>4</sup> P. Briant, À propos du boulet de Phocée, *Revue des Études Anciennes* 96 (1994): 111-114.

<sup>5</sup> F.G. Maier, Ausgrabungen in Alt Paphos: Stadtmauer und Belagerungswerke, *Archäologischer Anzeiger* 1967: 303-330.



498/7 BC.<sup>6</sup> Given their weight, this can only have been achieved by using a catapult. Briant goes on to point to the find of an identically shaped sling stone, weighing 22 kg, at Phocaea (Ionia), datable to the Persian siege under Harpagus, c. 540.<sup>7</sup>

If the excavators of Paphos and Phocaea are right in their datings and deductions,<sup>8</sup> then the hypothesis that the torsion catapult was used for the first time in early fourth century Sicily must be abandoned. Rather, the Phocaeian and Paphian evidence suggests that the Achaemenids were familiar with the implement from the earliest days of their expansion.

None of this, of course, solves the question of where the technique originated, but it suggests that the problem of the 'direction of influence', raised by the excavators in relation to the Chorasmian sites,<sup>9</sup> does not exist in the form they envisage. The torsion catapult may well have been borrowed

<sup>6</sup> F.G. Maier, *Ausgrabungen in Alt Paphos: sechster vorläufiger Bericht: Grabungskampagne 1971 und 1972*, *Archäologischer Anzeiger* 1974: 26-48. The siege is mentioned, implicitly, in the context of the Ionian Revolt, by Herodotus 5.115.

<sup>7</sup> Ö. Özyigit, *The city walls of Phokaia*, *Revue des Études Anciennes*, 96 (1994) 77-110; for the siege, see Herodotus 1.164.

<sup>8</sup> For references to debates on the interpretation, see P. Briant, *Bulletin d'histoire achéménide* (I) (= *Topoi* Suppl. 1), Lyon 1997, 28, n. 48; *idem*, *BHArch* II, Paris 2001: 84, n. 146.

<sup>9</sup> Helms *et al.*, 2001: 139.



by the classical world from the great empire(s) of the east,  
rather than the other way around.<sup>10</sup>

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<sup>10</sup> Pierre Briant draws my attention to another recent article on the subject by H. Tréziny, Les fortifications grecques en occident à l'époque classique (491-322 av. J.C), *Pallas* 51, 1999: 241-282 (in particular 252-253).