In the ‘General Conclusions’ to their article on the excavations of the Tash-K’irman Oasis, 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

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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,\(^2\) which is the first
reliable attestation of the use of siege-towers and arrow-firing
catapults in classical Greek warfare.\(^3\)

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,\(^4\) 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,\(^5\)
and the excavator’s eventual conclusion that these must have
been fired by the Persians during their siege of Paphos in

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2 Diodorus Siculus 14.49ff.
3 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’.
111-114.
5 F.G. Maier, Ausgrabungen in Alt Paphos: Stadtsmauer und Belagerungswerke,
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.

If the excavators of Paphos and Phocaea are right in their datings and deductions, then the hypothesis that the torsion catapult was used for the first time in early fourth century Sicily must be abandoned. Rather, the Phocaean 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, does not exist in the form they envisage. The torsion catapult may well have been borrowed

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

8 For references to debates on the interpretation, see P. Briant, Bulletin d’histoire achéménide (1) (= Topoi Suppl. 1), Lyon 1997, 28, n. 48; idem, BHAcH 11, Paris 2001: 84, n. 146.

9 Helms et al., 2001: 139.
by the classical world from the great empire(s) of the east, rather than the other way around.¹⁰

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