

DURA-EUROPOS AND THE INTRODUCTION OF THE "MONGOLIAN RELEASE"

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Of the various ways of drawing a bowstring and releasing an arrow, there are two which seem to have been standard in the Mediterranean world and the Middle East in classical and medieval times. The first of these is the so-called Mediterranean release in which the first two or more fingers of the right hand rest on the bowstring, with the nock of the arrow between the fore- and middle finger.¹ The shaft rests on the left hand on the left side of the bow stave. On release, the bowstring is thrown to the left, against the left arm, which is commonly protected by a bracer. Variants of this method of release are thought to have been universal in the classical world and in the Parthian and Sassanian empires, down to the period of the Hunnic invasions of Europe if not later.²

It is thought that at some date in late antiquity a new technique was introduced by nomadic peoples from Central Asia. This was the so-called Mongolian release, in which only the thumb holds the bowstring.³ The arrow is not gripped by the fingers, but held to the string by a slightly sprung nock or simply wedged between the thumb and a knot on the string itself. Unlike the Mediterranean release, the shaft sits against the right side of the bowstave, and on release the string tends to be thrown outwards from the left arm, making a bracer unnecessary. However, the great strain placed on the thumb required the wearing of a ring to spread the load over the ball of the thumb to prevent cutting and ensure a smooth release.⁴

The date and place of invention of the Mongolian release is unknown, but jade rings identified as thumbings imply its use in China in Han times, i.e. contemporary with the Parthian and early Roman empires.⁵ It is more likely to have been invented by Central Asian nomads to whom skill at archery was of great social, military and practical importance.⁶

Jon Coulston's excellent and very thorough review of the available evidence found nothing to indicate that the Mongolian release was known in Iran or the West before the later fourth century.⁷ However, incompletely published evidence from Dura-Europos in Syria indicates that it was employed in the Middle East, by Rome, Sassanian Persia or both, by the mid third century AD.

Dura was a garrison city of the Roman empire besieged and destroyed by the Sassanians in the mid 250s AD.⁸ The city was

never reoccupied, so there are no later phases overlying the Middle Roman deposits. The joint Yale-French Academy excavations between 1928 and 1937 recovered large quantities of exceptionally well preserved arms, including archery equipment, deposited during the siege.

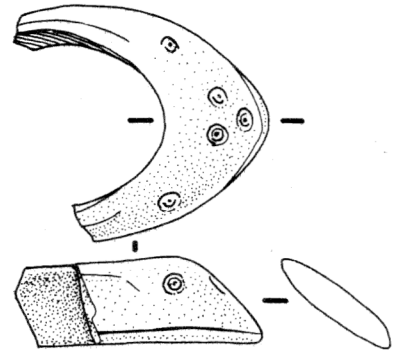
During the course of the excavations a broken ring of polished bone, certainly an archer's thumbing, was recovered⁹ (Figs.1 and 2). Unfortunately, no exact provenance was recorded. At the time, it was described as "certainly Parthian",¹⁰ but no reason was given so it may reasonably be suggested that the thumbing could have been a casual surface find, an object dropped on the site by some hunter in later times.¹¹ The simple ring and dot decoration of the object itself is hardly diagnostic, but its state of preservation is significant. Material which had not been deeply buried on the site was in very poor condition due to the penetration of the surface layers by the winter rains which facilitated chemical and biological degradation. The ring is therefore likely to have been deeply buried, which in turn suggests that it does belong to the siege period. But clearly, this is hardly conclusive.

The crucial evidence comes from the fragments of arrow shafts found at the site (Figs.3 and 4). Some come from contexts sealed during the fighting, so their dating is beyond doubt. The best example is a shaftment with its fletching intact, the only one from the Roman empire.¹² The main point of interest is the positioning of the fletching. Arrows designed to be shot using the Mediterranean release must have a space between the tail end of the vanes and the nock to accommodate the fingers holding the arrow to the bowstring, or the fletching will be crushed. The Dura arrow has no such gap; the vanes extend right back to the edge of the nock. I therefore suggest that this arrow can only have been shot with the Mongolian release, which requires no gap as the fingers do not grip the arrow.¹³ Several other less well preserved shaftments bear traces of their fletching.¹⁴ Although the vanes have fallen apart, the base of each feather still adheres to the reed shaft so it may plainly be seen that in each case they extended to the edge of the nock. No surviving shaftment from Dura has the tell-tale gap, but the sample is so small that this cannot be seen as proof that all arrows were of

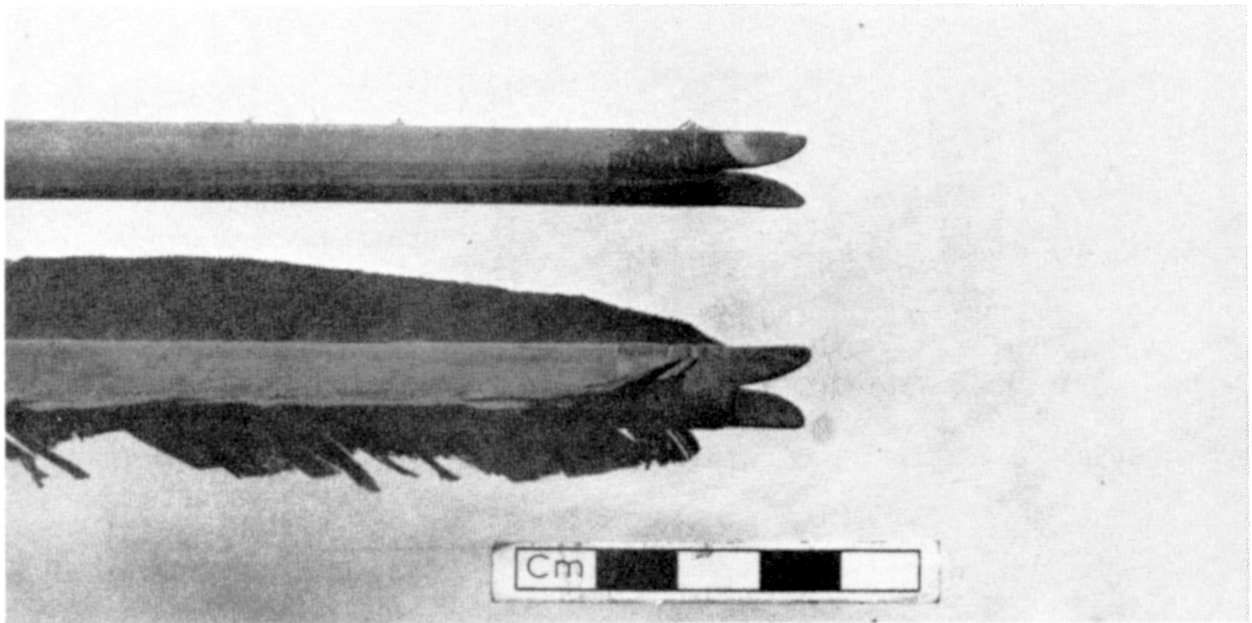
Fig.1: The Dura thumbing, Yale no. 1929.475A (photo; author).

Fig.2: The Dura thumbing.

Fig.3: Details of shaftments from Tower 19. Yale no. 1933.445A (bottom) and 1933.445C, showing the vanes reaching the edge of the nock.



0 20mm



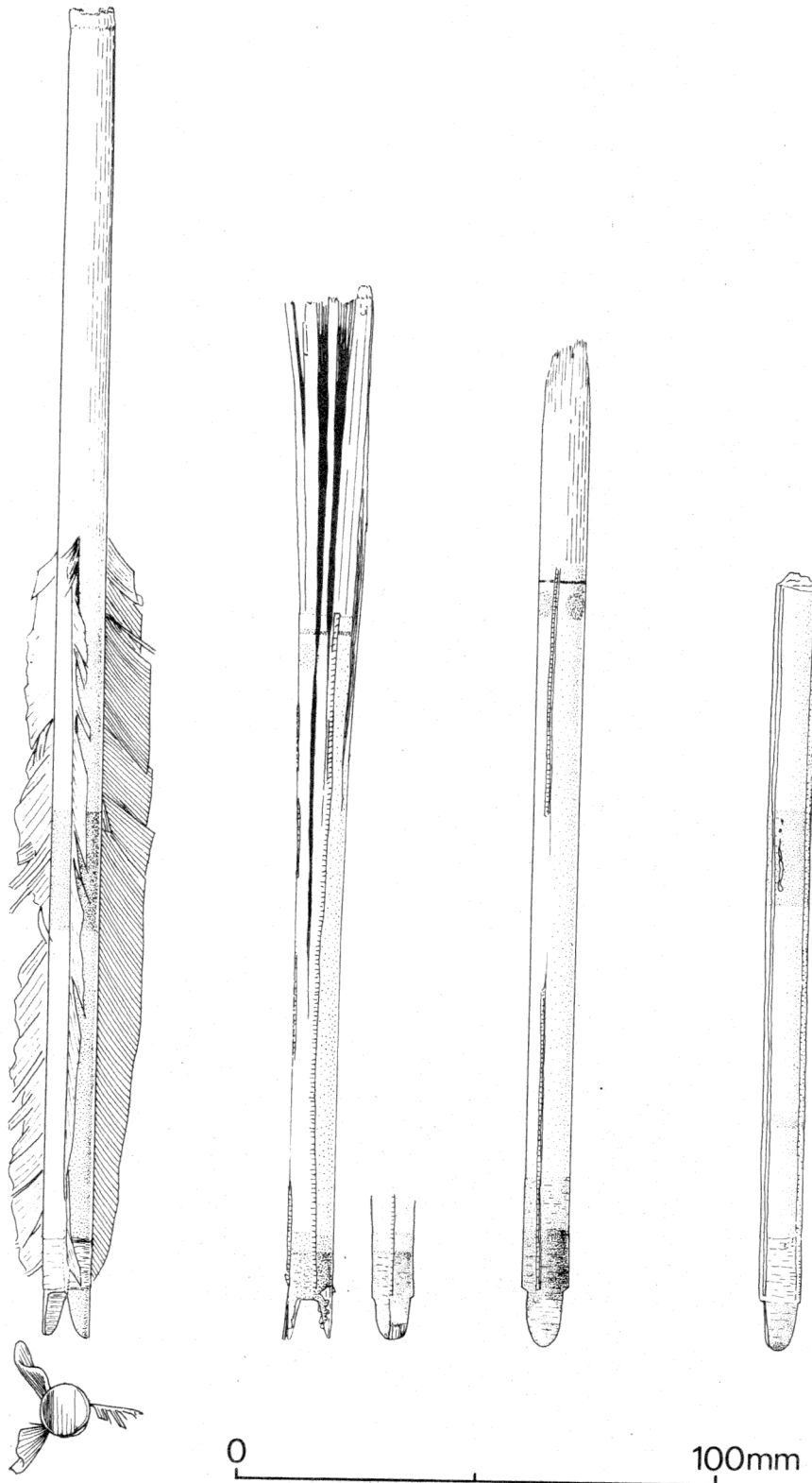


Fig.4: Shaftments from Tower 19 (left to right, 1933.445A, B, and C), and from "L7-W", the wall in the vicinity of the tower (right).

the attested design.

The Mongolian release, then, was employed at the siege of Dura. It is rather more difficult to decide who was using it. Three of the shaftments were found inside tower 19, where the famous scutum and horse armours lay.¹⁵ This would seem to suggest that they belonged to the defenders, as the tower collapsed and sealed its contents before the Persians overran the city.¹⁶ However, in the absence of adequately detailed records and plans, the possibility that they were shot into the tower by the attackers cannot be ruled out.

To conclude, the Dura evidence demonstrates that the Mongolian release was known on the borders between the Roman and Sassanian empires by the mid-third century AD, over a century earlier than has hitherto been believed. How widespread was its use at the time is a question which remains unanswered.¹⁷ The absence of contemporary depictions may suggest that it took a long time to become common in the Middle East. Alternatively, it could be a salutary warning of the dangers of using depictional evidence for such fine technical details of military history.

ACKNOWLEDGEMENT

I would like to thank Yale University Art Gallery, and in particular Ms. Susan Matheson, for permission to publish the Dura thumbing and arrows.

FOOTNOTES

1. RAUSING, 1967, 28; COULSTON, 1985, 278.
2. COULSTON, 1985, 277-8.
3. MORSE, 1885; COULSTON, 1985, 275-8.
4. MORSE, 1885, 16; LUSCHAN, 1891, 670; COULSTON, 1985, 276.
5. POPE-HENNESSY, 1923, 74-6 and plate 50; RAWSON & AYERS, 1975, 63 no.171.
6. COULSTON, 1985, 277.
7. COULSTON, 1985, 276-8.
8. The best introduction to Dura is HOPKINS 1981 which also contains a full bibliography. For the excavations, see CUMONT 1926; the Dura Repts and the series of Final Reports

which remains incomplete. For the most recent discussion of the date of the siege, see JAMES 1985.

9. Yale University Art Gallery inventory no.1929.475A. Dura field number, if any, is lost. The object was briefly mentioned in Dura Rep. II, 73-4. Its surviving length is 39mm, width of aperture c.24mm, and height 11mm.
10. Dura Rep. II, 74.
11. COULSTON, 1985, 276.
12. Yale no.1933.445A, published in Dura Rep. VI, 453, no.1 and plate XXIV, top left.
13. This was suggested in Dura Rep. VI, 453, a reference overlooked by Coulston, and by myself until this paper was already in draft.
14. Yale nos.1933.445B; 1933.445C; 1982.28.34.
15. Yale nos.1933.445A to C. The provenance of 1982.28.34 appears to be "L7-W", which is the city wall in the vicinity of tower 19.
16. Tower 19 collapsed when the Persian attackers fired the mine they had dug beneath it, with the intention of bringing down the tower and adjacent wall to create a breach which could be carried by assault. The collapse therefore occurred while the defenders were still in control.
17. COULSTON, 1985, 276-8.

ABBREVIATION

Dura Rep.: P.V.C. Baur, M.I. Rostovtzeff et al., eds. The Excavations at Dura-Europos. Preliminary Reports of the First to Ninth Seasons, 1928-1936, (New Haven 1929-1952), 8 vols. in 10 parts.

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