

## 7.14 ASSESSMENT OF WORKED STONE OBJECTS

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### *Summary*

7.14.1 A fragment of a quern, a spindle whorl and a small section of rubble were recovered by hand excavation. The quern may be Roman, Anglo-Saxon or early medieval, and is of a rare, oscillatory type. The spindle whorl is of a material and type that is now well attested within East Kent, being produced at or near *Sandtun*, West Hythe. The section of stone rubble comes from an early medieval context but its function in relation to activity of that period is unclear.

### *Introduction*

7.14.2 The three stone objects retrieved by hand excavation consist of a fragment of a quern, a spindle whorl and a small section of rubble. No further fragments of stone implements were recovered from the sampling programme. The two objects and the fragment of rubble are relevant to the following fieldwork event aims;

- to recover artefact assemblages (especially pottery) to elucidate the sequence of site development; to provide information on the status and economy of the site and data on trade and exchange;
- to recover environmental and other economic indicators if these are found to be present on site.

### *Methodology*

7.14.3 Each object has been examined visually, with the aid of a hand lens in some cases. They have all been identified as to stone type, as noted in Table One. The spindle whorl has been weighed and its dimensions have been recorded.

### *Quantification*

7.14.4 Details of each stone object are presented in Table One. This includes an estimate of their likely dating, on typological grounds alone. The objects consist of a spindle whorl, a fragment of a quern and a piece of stone rubble.

#### 7.14.5 Table One

##### *Worked Stone Objects*

<i>Context</i>	<i>SF</i>	<i>Group</i>	<i>Stone Type</i>	<i>Object Type</i>	<i>Period</i>
568	390	13	Hythe Beds Siltstone	Spindle Whorl	Anglo-Saxon or Early Medieval
342	219	11	Basalt Lava	Quern	Anglo-Saxon or Early Medieval
569	298	12	Composite	Rubble	Medieval ?

7.14.6 The spindle whorl is complete and is made from a Hythe Beds siltstone, in common with a number of spindle whorls of late Anglo-Saxon and early medieval date. It is a good example and belongs to Walton Rogers type A2, one of the most common forms for spindle whorls of this East Kent provenance (Walton Rogers 1997, 1736-41).

- 7.14.7 The fragment from a basalt lava quern stems in all probability from an upper stone and it includes a good section of the outer circumference. Along the edge are two notches designed for cordage, with marks of wear. It is possible that these relate to the use of the object as a *pendelmühl* (oscillating quern), which is pulled alternately in two directions (*cf* Frere and Stow 1983, 183 and fig 72.5).
- 7.14.8 Little needs to be said of the fragment of rubble, which has no diagnostic features other than its stone type.

#### *Provenance*

- 7.14.9 Spindle whorls of this type are believed to have been manufactured at *Sandtun*, West Hythe, (see App. 14.6) although this need not have been the only centre of production. Detailed analysis has shown other such 'siltstone' pieces to have been made from a clay ironstone outcropping near Hythe and, perhaps, in the iron-producing areas of the Weald. It represents an object type that was widely traded during the early medieval period. It came from a context that produced a single sherd of an early medieval sandy ware and this group as a whole has been placed in the early medieval period (context 568, sub-group 104, Group 13, Phase 3). The particular pit in which this spindle whorl was found also contained an iron fibre-processing tooth (see Appendix 7.13) and both objects are firmly associated with textile manufacture, rather than ironworking.
- 7.14.10 The quern fragment came from one of the pits dispersed away from the centre of the enclosure, and thought to have been used for domestic waste (context 342, sub-group 24, Group 11, Phase 3). Ceramics suggest that its context belongs to the early medieval period, a fascinating period of transition for this particular object type.
- 7.14.11 The fragment of stone rubble came from one of the smaller pits of Group 12, which are thought to have been full largely of residues from ironworking (context 569, sub-group 112, Group 12, Phase 3).

#### *Conservation*

- 7.14.12 All of the objects survive in a stable condition. The siltstone spindle whorl needs to be monitored for its humidity, given that objects of this type can fracture easily in adverse conditions. Similar conditions should prevail also for the quern fragment, basalt lava having a tendency to fragment over time. Both objects should be recorded in detail during the analytical phase.

### *Comparative Material*

- 7.14.13 The spindle whorl is complete and represents a good example of a type that is current in East Kent from the ninth century onwards to the thirteenth century. Evidence for the manufacture of spindle whorls of this type has come from *Sandtun* (West Hythe) and it is likely that they were produced there during the Anglo-Saxon period, and possibly during two phases of occupation of mid Anglo-Saxon and early medieval date (Riddler forthcoming). Analysis of whorls of this stone type from St Gregory's Priory (Canterbury) and Townwall Street (Dover) by electron microscopy and x-ray diffraction, has shown that they are in fact clay ironstone (M. A. Eden and W. J. French, cited in Hicks and Hicks, forthcoming). The most likely source of clay ironstone is in the Lower Greensand hills, in that part of the Weald mined for iron ore in the medieval period, or in outcrops of the same strata in the Hythe-Sandsend area. They appear to have been widely traded in East Kent and they are known from Canterbury and Dover as well as *Sandtun*. The full extent of their distribution within and beyond East Kent has yet to be determined (Walton Rogers and Riddler, forthcoming).
- 7.14.14 The estimated diameter of the quern (c. 420mm) is commensurate with a pre-conquest dating, at which time such objects were more common. Equally, however, basalt lava querns are known from early medieval contexts and that appears to be the situation here (Walton Rogers and Riddler, forthcoming). At both Canterbury and Dover, querns of this material occur in late Anglo-Saxon and early medieval contexts almost to the exclusion of any other stone types. Whilst Anglo-Saxon querns were probably used as hand-mills for the grinding of grain, the widespread adoption of water-powered mills during the medieval period lead to a rapid decline in hand-milling, which may be attributed to the period around the twelfth or thirteenth century (Biddle 1990, 882-3; Margeson 1993, 202). Basalt lava querns of this date are therefore considered to have been redeployed for the grinding of hops for beer (Walton Rogers and Riddler forthcoming). However, this assumption is based entirely on the situation in urban environments, at Canterbury, Dover, London, Norwich and Winchester. The situation in rural England has as yet been little studied, which heightens the significance of the Mersham example. In addition, it should be noted that it survives in good condition, with a number of distinctive and unusual attributes.
- 7.14.15 The fragment of stone rubble has no diagnostic features other than its stone type. It presumably stems from a stone building of early medieval date, although it could be a residual Roman find.

### *Potential for further work*

- 7.14.16 The siltstone spindle whorl is an important addition to the type, which both confirms and extends the distribution of the Hythe production centre. It is evidence for trade in worked stone artefacts during the early medieval period and it forms one element of the evidence for textile manufacture at the site. It is directly relevant to several of the Fieldwork Event Aims, relating both to trade and to industry. It is recommended that it be drawn and fully catalogued and that the distribution of similar items from other assemblages be examined.
- 7.14.17 The quern fragment is unusual in several respects; *pendelmühl* are very rare in themselves and querns are in any case seldom found in rural surroundings. Its significance lies also in its recovery from a post-conquest setting, at a point when the use of such objects was subject to revision and change. As with other object types,

like the post-Roman ceramics and the ferrous residues, there is an important contrast to be drawn between urban and rural situations.

- 7.14.18 The rubble fragment may be of Roman or post-Roman date and it cannot be securely related to any structures in the vicinity of the site. It has little potential for further study.

#### **7.14.19 Bibliography**

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