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# Potboilers Reheated

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*Finds of heated stone from prehistoric sites in England were for many years interpreted as 'potboilers', a view recommended for the south-east of the country in particular by the finding of pots – invariably of later Bronze Age date – filled with them. When exposed to stress, stone behaves in a predictable way. A comparison of stones from apparently* in situ *archaeological potboilings with those produced during experimental potboilings supports the evidence of earlier work on pottery (Woods 1984) that they were nothing of the sort, the wider contextual associations of the archaeological finds suggesting instead that they comprise votive deposits. At the end of their functional life, heated stones acquired a symbolic charge, and were placed in pots in funerary contexts. This realisation both supports and qualifies Brück's recent post-modern interpretation of deposits of heated stones from later Bronze Age sites in southern England, reminding us on the one hand of the need to understand our data in terms its of its own nature – in this case geological and sedimentological – as well as its wider archaeological context, and on the other of the importance of non-traditional approaches to these. A number of other possible explanations for heated stones found in Bronze Age pots are reviewed and – for the time being – discarded.*

In a recent article on Bronze Age ritual practices, 'Fragmentation, personhood and the social construction of technology', Joanna Brück refers to the deposition of heated flint, 'thought to have been used as a means of heating water or other liquids in pottery which could not itself have withstood direct heat from a hearth' – potboilers. The colour of burnt flint and cremated bone is similar, she points out, postulating a connection between food cooked using heated stones, the heated stones themselves, and cremated bone, all of which would have been associated with ceramic containers (Brück 2006a, 304). Typical of much recent synthetic work, including several key papers on the Bronze Age by Brück herself, this paper applies a conceptual framework derived primarily from the post-modern anthropology of writers such as Pierre Bourdieu (1991), Henrietta Moore (1986), and Marilyn Strathern (1993), to a *melange* of antiquarian and other traditionally formulated data, which enables her to make a useful interpretative leap beyond the limits of conventional data analysis. My interest here is the use made by her of early records of geological material from archaeological contexts. Analogous uses of such finds include Brück's own (1999, 152) re-erection of Bronze Age Itford Hill's chalk phallus, Mary Ann Owoc's re-interpretation of colour in West Country barrows (eg, Owoc 2002), and Mark Bowden and Dave McOmish's (1987, 79) reference to the location of caches of 'slingstones' (sorted beach pebbles) in inaccessible pits within the interiors of Iron Age hillforts, in support of their argument that the defensive role of the later was largely symbolic.

The term 'potboiler' was replaced long ago by the interpretatively neutral fire-cracked-flint or fire-cracked-rock because heated stones are frequently associated with recent anthropological and archaeological contexts that clearly did not involve heating liquids in pots, such as cooking pits (Ó'Drisceoil 1988; Ramseyer 1991; Wandsnider 1997), saunas (Barfield & Hodder 1987), and, possibly, storage heaters (Seager Thomas 2005, 95–6; Rapp 2002, 120), and because experimental work (Woods 1984) has disabused us of the antiquarian belief, resurrected by Brück's recent paper, that open fired pottery could not withstand direct heat from a fire (eg, Curwen 1937, 186). But heated stones *are* found in pots, and particularly later Bronze Age pots

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(Figs 1 & 2), and the frequency of this and its chronological focus strongly suggests that it was not accidental. These apparently *in situ* potboilers are the subject of this paper. Criteria exist by which potboilings can be identified in the archaeological record, the absence of which supports the belief that they *did not* in fact occur, while comparison between the by-product of experimental potboilings carried out by the author and descriptions of heated stones found in Bronze Age pots across south-east England, although not proving a specific connection of the sort postulated by Brück, confirms one non-functional role for the latter. This importantly shortens the length of her interpretative leap. In addition, many of the issues raised, apply equally to a range of contexts comprising or associated with burnt stones. Using stones to heat water in pots, for example, is not very different from using stones to heat water in troughs. It follows therefore that the results of my analyses could further the debate about the nature of burnt mounds and their associated troughs (Barfield & Hodder 1987; Ó'Drisceoil 1988, etc).

## STONE FINDS IN CONTEXT

Most archaeological sites are dug from a geological and/or geomorphological matrix and many of the finds and features comprising them are geological and/or geomorphological in nature, not just the obvious artefacts conventionally grouped in excavation reports under struck flint and stone finds, but stone that has been altered incidentally by fire or abrasion, and assemblages of stones upon which an artefactual *pattern* has been imposed by human agency, for or during use. It is remarkable, therefore, how little attention these things have received and how poorly they are understood by archaeologists. Heated stones are a case in point. They are among the most abundant and widespread categories of artefactual material found on prehistoric sites and they occur in a wide range of demonstrably different contexts. Yet study is routinely limited to counting and weighing only. The odd thing is, archaeologists are interested in heated stone. Joanna Brück's article discussed here is one of at least three by her that utilise pre-existing data on heated stone (Brück 2001; 2006a & b); and archaeological papers that discuss it imaginatively, although rare, go back at least to the 1930s (Curwen 1931, 144–5). Why then can we not get past counting them? Why can we not give them the consideration that we would, say, a potsherd or a loomweight, which, having been burnt already, is in fact far less susceptible to the affects of heat, and being more variable structurally is affected in a much less regular and, therefore, interpretable way. For a specialist in stone finds it is incredibly frustrating.

My method of analysing stone finds is essentially sedimentological (Seager Thomas 1999). As in any sedimentological analysis the key diagnostic criteria are stone morphology, stone sorting, and context. Different types of human activity alter the natural form and distribution of stone, sometimes in a functionally diagnostic way (Fig. 3). In conducting the experiments described here, my aim was to identify which alterations were caused by which activities and, thereby, provide a set of data against which excavated assemblages could be compared.

To this end, naturally occurring stone of a variety of types from across south-east England – the area in which all the finds of heated stones in Bronze Age pots considered here were made – was burnt, in oxidising and reducing fires (the latter achieved by placing the fire in a shallow pit and banking it up with organic material). The heated stones were then divided, half being left to cool in the fire and half being quenched in a large water-filled pot dug into the ground. The sorting and clast morphology of unburnt, burnt, and burnt and quenched stones were then noted and compared (Table 1). For example, when burnt, fresh chalk flint turns blue grey, grey, and then white, a colour gradient developing through individual and groups of stones, depending on the temperature of the fire and their position within it. At the same time small fire-spalls gravitate to the base of the fire. A typical *in situ* burnt group would comprise crazed, deeply fissured but frequently whole, clast-supported stones, sorted by colour and by size (*cf*, Seager Thomas 2005, table 4). By contrast, a quenched assemblage, though identically crazed, would be fragmented (the fissured stones split into separate pieces), clast-supported, and sorted by size alone (Fig. 3, top row, left). The similarity between them reflects the effect of thermal shock and the absence from both of a finer matrix which could inhibit the movement of and separate individual stones; the difference, the mixing, and disturbance of the stones as they are transported from the fire to the pot and their agitation



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TABLE 1. EXAMPLES OF THE EFFECT OF FIRE AND QUENCHING ON FLINT AND OTHER STONE TYPES FOUND IN BRONZE AGE CONTEXTS IN SOUTH-EAST ENGLAND

<table>
<tr><th rowspan="3">STONE TYPE</th><th colspan="4">FIRE</th><th rowspan="3">QUENCHING</th></tr>
<tr><th colspan="3">Colour</th><th rowspan="2">Hardness</th><th rowspan="2">Morphology</th><th rowspan="2">Sorting</th></tr>
<tr><th>oxidising fire</th><th colspan="2">reducing fire</th></tr>
<tr><td>Chalk flint</td><td>Grey to white with increasing heat</td><td>As oxidising fire</td><td rowspan="11">Dark grey rinds resulting from absorption of carbon, ubiquitous in sandstones & on flint cortecies, rare but occasionally present on fractured surfaces of flint</td><td rowspan="2">No change</td><td rowspan="2">Deep subconcoidal fractures/fissures. Surface crazing & pitting</td><td rowspan="11">Visible heat gradient with more part burnt stones or stones burnt at lower temp. at base of & at periphery of in situ fires. Small stones collect at base of fire. Many whole cracked stones</td><td rowspan="11">Stone displaying heat gradient becomes separated or mixed, agitation causes already cracked stone to break apart & smaller spalls to gravitate downward, where they concentrate. Additionally quenching of some stones can freeze fire induced colour changes already taking place, resulting in sharp colour differences across them</td></tr>
<tr><td>Flint head (iron stained)</td><td>Int. grey to white with increasing heat/red cortex/surface rind</td><td>Int. grey to white with increasing heat/grey cortex/surface rind</td></tr>
<tr><td>Ferruginous sandstone (Tertiary)</td><td>Dark/vivid red</td><td>Blue grey</td><td rowspan="4">Increasingly friable with heat</td><td rowspan="4">Deep fractures. Sharply angular lumps with subconcoidal fractures</td></tr>
<tr><td>Lodsworth and other siliceous Lower Greensands from west of the Arun</td><td rowspan="3">Pink/ red</td><td rowspan="6">Grey</td></tr>
<tr><td>Eastbourne Upper Greensand</td></tr>
<tr><td>Calcareous Lower Greensand (rag) (east of the Arun)</td></tr>
<tr><td>Kentish Rag</td><td rowspan="3">Pink/ red (superficial)</td><td rowspan="2">No change internally. Soft/dusty surface rind, slightly thicker on more calcareous rag</td></tr>
<tr><td>Isle of Thanet (doggers)</td><td rowspan="2">Deep fractures. Sharply angular lumps with subconcoidal fractures</td></tr>
<tr><td>Bluestone</td><td>Splits along bedding plane</td></tr>
<tr><td>Folkestone Stone</td><td>Brown</td><td rowspan="2">Very friable</td></tr>
<tr><td>Granite</td><td>No change</td><td colspan="2">No experimental data but microprobe analysis of granite apparently burned underground during moorland peat fires & displaying grey rinds, shows these to be carbon enriched</td><td>N/A</td></tr>
</table>

in the pot as they turn the water around them to steam. Human disturbance of deposits generated in this way invariably results in changes to these relationships (Fig. 3, middle & bottom rows).

In addition separate experiments were carried out in order to assess the amount of time, wood, stone, and water needed to boil an egg in this way. These different experiments were repeated over three seasons with closely comparable results.

## *IN SITU* POTBOILERS

How closely, then, do excavated, apparently *in situ* potboilers correspond to experimental potboilers? The answer is: not very. I have considered a dozen or so pots that contained assemblages of heated stones.

The published data are as follows. At Farnham, Surrey, the upright base of a Middle Bronze Age vessel contained:

> 'twenty calcined flint pot-boilers (and *a number of small fragments from them*) [my italics], a few particles of charcoal and [a] small flint implement ... Covering this material, which rested directly on the bottom of the vessel, was a layer of dark soil containing several fragments of a small vessel ... With it was part of the edge of the lower stone of a saddle-quern' (Lowther 1939, 182).

Different sites outside Chichester, Sussex, yielded 'The base of a [Middle] Bronze Age urn containing 3,800g of fire-cracked-flint' (Kenny 1992) (Fig. 1), 'the lower half of [a] Late Bronze Age vessel… filled with burnt flint and ferruginous sandstone… placed on a pedestal', and two others (Chadwick 2006, 18). There are also examples from three Hampshire sites, Twyford Down, where the fill of a near complete Middle Bronze Age bossed jar 'was found to be almost entirely composed of large burnt flint nodules with a thin layer of charcoal across the base' (McKinley 2000a, 117); Compton, where two Middle Bronze Age vessels 'are said to have been filled with soil, burnt flints and ash' (King 1989, 18); and Langstone Harbour, where the fill of a near whole bucket urn comprised 'principally large fragments of burnt flint' (Allen & Gardiner 2000, 97).

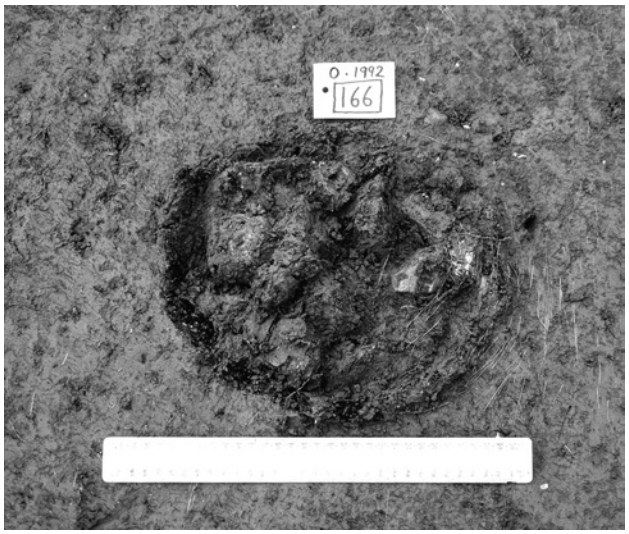


Fig. 1.
Middle Bronze Age jar from Chichester found full of burnt flint (photo: J. Kenny). Scale 300 mm

To these I can add three hitherto unpublished examples, all from Sussex. Two were excavated on the outskirts of Littlehampton: a whole, very large Middle Bronze Age cordoned bucket urn on display in the town museum (Fig. 2, right) which, when found, was full to the brim with clast-supported, burnt, mostly ferruginous sandstone, and a smaller vessel found about 35m away, which contained burnt flint underlain by what was described by its excavator, the late Peter Hammond, as 'the contents of a meal' (pers. comm.) – possibly burnt bone. The other was found unstratified in the spoil from the Late Bronze Age platform/midden site of Shinewater Park, Eastbourne, and comprised a very small shouldered jar with five small pieces of burnt greensand on its base, enough to boil a small quantity of liquid (Fig. 2, left).

Of these, closest to my experimental potboilings is the Farnham assemblage. We do not know if the stones were sorted, as in the experiments (Fig. 3, top row, left), or mixed, as in a secondary deposit (Fig. 3, middle row, right), but in terms of the sizes of the stones present, the record is consistent with *in situ* potboiling. Indeed, the vessel even had a gap at the top of the vessel for the egg (see Cooking with stones, below). However, the description reads as though the struck flint implement, which does not appear to have been burned, was amongst the burnt flint, rather than the other finds, strongly suggesting that the former



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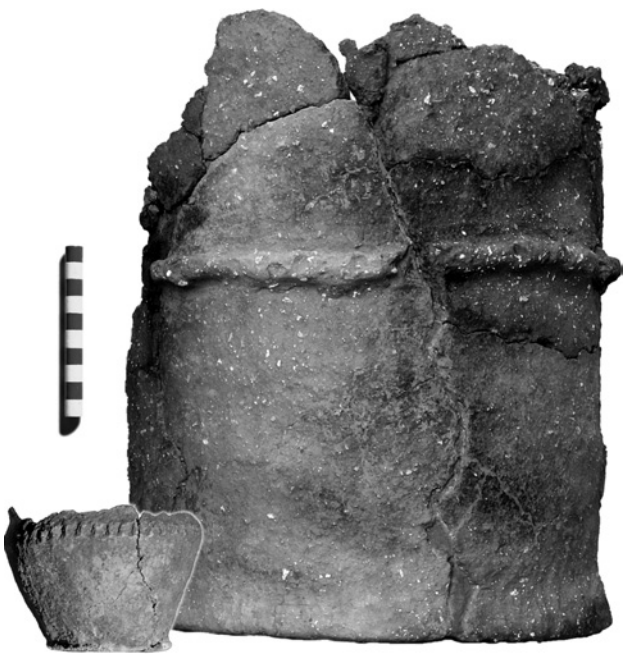

Fig. 2.
Middle Bronze Age jar from Littlehampton (right) found full of burnt ferruginous sandstone (photo: author, with the permission of Littlehampton Town Museum), and Late Bronze Age jar from Shinewater Park, Eastbourne, found with five small pieces of burnt greensand on its base (photo: author). Scale 100 mm

was a secondary deposit (Fig. 3, middle row, centre). (The key feature here is the *mixing* of burned and unburned material: if the stones were heated in order to boil water, they would not be mixed with unburned stones unless they had been disturbed or were in a secondary position). James Kenny describes his pot as 'completely stuffed with *medium-sized* nodules of burnt flint' [my italics] (Kenny pers. comm.), whilst one pair of closely fitting stones visible in his photograph resembles my 'deeply fissured but frequently whole… stones', which occur in burnt but not quenched assemblages (Fig. 1, lower left; *cf.* Ramseyer 1991, fig. 7). Jacqueline McKinley, who emphasises that she herself excavated the Twyford Down pot, says the same thing. And Adrian Chadwick says '…sometimes there was burnt stone with unburnt material, so clearly they were mixing material that had different contextual origins, and may have been derived from different practices,' observing that 'stones did sometimes seem to have been packed into the pots… rather than being loosely poured into them' (Chadwick pers. comm.). Again the sedimentological evidence indicates that these were not *in situ* potboilings: Kenny's and McKinley's pots because of the *absence* from them of the small stones, which *would* be expected of an *in situ* potboiling (Fig. 3, lower row, left), and Chadwick's because the burnt stone was mixed with unburned material, which *would not* (Fig. 3, middle row, centre).

The remaining groups are just about explicable in terms of *in situ* potboiling, but only on the basis of an absence of diagnostic sedimentological evidence (of the sort described above) to the contrary, which given the wider record discussed here is not good enough. But if they weren't potboilings, what were they? This brings us back to Brück.

## COOKING WITH STONES

Before going on to discuss what I think Bronze Age pots filled with heated stones were I want to dispose once and for all of the idea that they were used for cooking. I referred above to the space required in which to cook food. This is my first objection – the space in several of these vessels is not big enough. Indeed to keep a pot boiling for long enough to cook almost anything would, if they were not replaced, require more heated stones than any vessel will actually hold. Cooking in pots therefore is an extremely dangerous process, necessitating not only the transport of hot stones from the hearth to the pot, but also the continuous removal of stones from the boiling water. My next objection is that it is incredibly inefficient, both in terms of the amount of wood needed to heat the required stones, and the time it takes to heat them, my egg – for example – taking a good two hours and an awful lot of wood. Finally, the resulting brew is too caustic to drink (because of the addition of ash along with the burnt stones – Ray Mears pers. comm.) and, where flint has been used, dangerously full of cracked stone (Woods 1984, 26–7). Combined with the sedimentological evidence reviewed above, these observations appear to rule cooking out of consideration.



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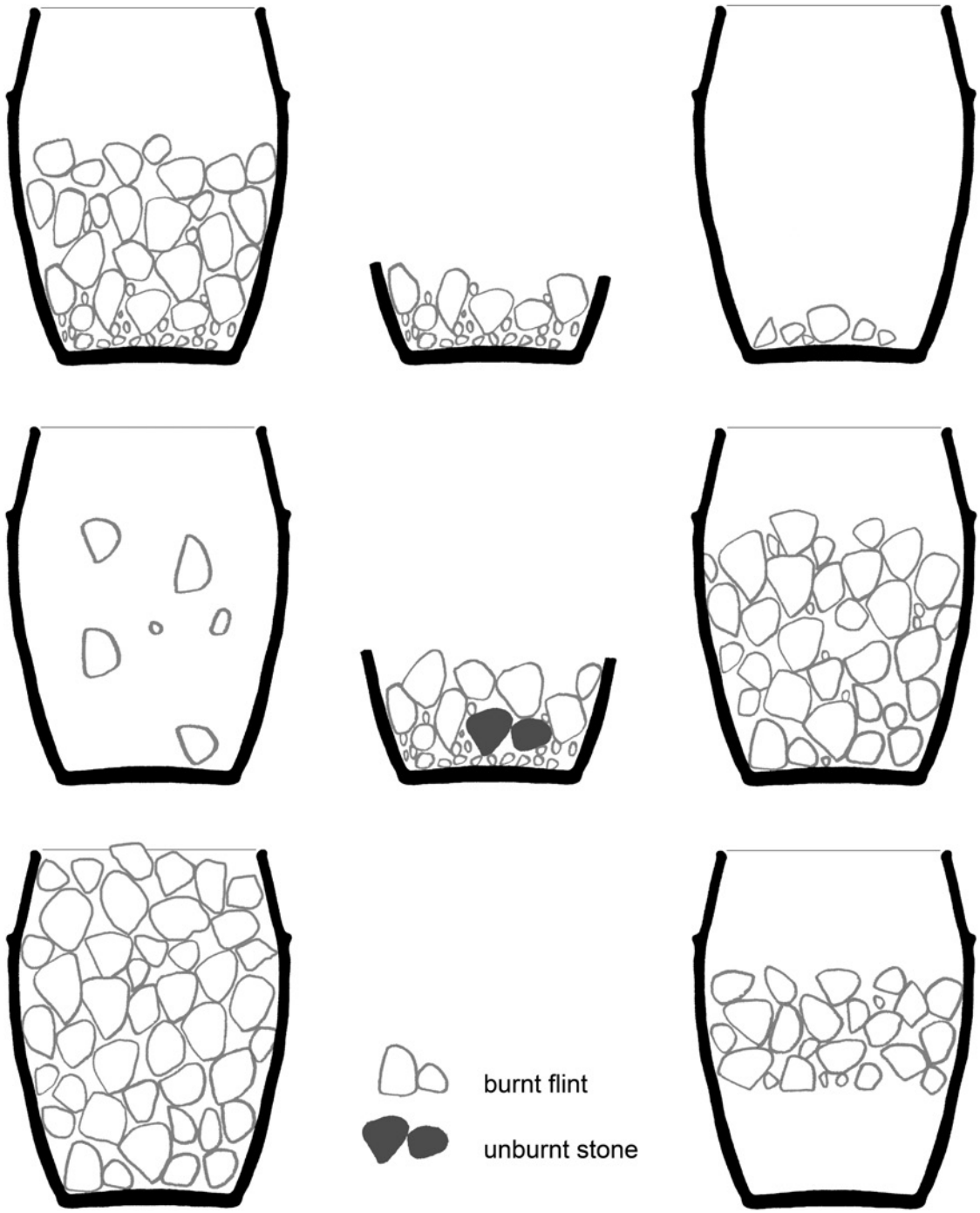


Fig. 3.
Heated stone in pots. Probable *in situ* potboilers with a high proportion of small stones towards the base (top row, left), possible *in situ* potboilers (top row, middle and right), matrix-supported, casually or incidentally deposited stones (middle row, left), clast-supported, possibly curated stones (middle row, middle & right), and curated and structured deposits comprising well-sorted (bottom row, left) and layered stones (bottom row, right)



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## THE FUNERARY CONNECTION

Brück's theory is based primarily upon the possibility of a connection perceived during the Bronze Age between cooking and cremation and a similarity between the appearance of cremated bone and heated flint. Although we cannot rule out a perceived connection between cooking and cremation *per se*, to the extent that there is no evidence for cooking in pots using burnt stone to heat water contained in them, and – on two sites – ferruginous sandstone, which, when burnt is red not white, was mixed with or substituted for flint, it does not stand up well. However, she also refers to the association of heated stone with Middle Bronze Age barrows and this stands up much better. Of the vessels or groups of vessels listed above, five were definitely associated with burials, four (the two Chichester sites, Langstone Harbour, and Twyford Down) with cremations or cremation cemeteries, and two (Shinewater Park and Twyford Down) with inhumations (the Shinewater pot is from Area B, which yielded the skeleton of a child: Greatorex 2003, 92). Whatever the mechanism, heated stones were treated like dead people.

There are several possible explanations for this. The first is the bright colour of the material – white or blue-grey for the heated flint, red for the ferruginous sandstone. In the West Country, curated quartz is widely associated with Bronze Age ritual and, elsewhere, other distinctly coloured stones appear to have been similarly charged with meaning and it may be that our heated stone is another example (*cf*. Jones & MacGregor 2002). Equally, heated stone could have been symbolic as an artefact, 'redolent of productivity and growth' as Brück says (2006a, 304) or some such thing. Indeed, in the settlements where her discussion is focused, we find many examples of apparently everyday objects, including heated stones, which have been treated in non-functional ways that are suggestive of just that. Take, for example, a concentration of burnt quern fragments from a Middle Bronze Age house floor at Sussex's New Barn Down. Possibly it comes from a hearth. It was in the right position, just inside the house doorway, if like so many others of this date it faced south-east. Heated stones are frequently associated with hearths of this period; and the excavated overburden was so thin that any other trace of a hearth could have been leached away. But the stone is all imported Lodsworth greensand – with none of the usual fire-cracked-flint – suggesting selection and, from it, two whole and relatively unworn querns can be reconstructed, suggesting that their burning was not an act of casual re-use (Seager Thomas 1998, 7; 1999, 41, fig. 1).

The alternative is that it was a by-product of some other aspect of the funerary ritual. For small quantities found mixed with cremations, for example, the idea that it was burnt 'natural' scraped up along with pyre debris is fairly compelling (Walker & Farwell 2000, 21; McKinley 2000b, 164–6). Were this the case we might expect to see a colour gradient in individual stones, reflecting their positions in relation to the fire. Another possibility is that it was produced during the cooking – using heated stones – of ritual meals, a view consistent with the possible identification of a deeply fissured but whole stone in one of the Chichester assemblages.

However, because of the very large quantities in which it occurs in some pots, because of its mixing or association with unburned material, because it is *not* directly associated with cremated human bone (with the possible exception of the 'contents of a meal' described by Peter Hammond under the flint filling of one of the vessels from Littlehampton), because of its sorting and clast-support, because of the scarcity of evidence for an alternative role at most of the locations where it is found – such as hearths containing heated stones, because it is found neatly packed into pots, it is very difficult to accept this material as *just* a by-product. During the later Bronze Age in south-east England, previously heated stone with no functional role that can be inferred from the excavated evidence was *deliberately* introduced into pots on cremation cemeteries and – possibly – elsewhere. In my view this is about as close to proof of ritual intent as one is likely to get in prehistoric archaeology.

## FUNCTIONAL 'POTBOILERS': YES OR NO?

There may of course be other possible explanations for burnt stones found in individual pots. Having conducted several potboilings, I am drawn to the idea that heated stones *were* used to boil water in this way, either for the spectacle itself or – perhaps – for fumigation, something that might have been desirable in a mortuary context. Related to this is the idea that they were used to sterilise the pots, a technique



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applied to wooden vessels in Romania until fairly recently (John Nandris pers. comm.). Then again, heated stone may have been stored prior to use as pottery temper (*cf*. Drewett 1982, 333; Needham & Spence 1996, 163) although, if this was the case, it remains to be seen why it was stored in pots. The difficulty with these ideas is not that they are bad or far-fetched, but that they lack any evidential foundation. Their importance is as much cautionary as interpretative – they alert us to the possibility of activities not accommodated by the present analysis.

## RECORDING STONE FINDS

Assemblages of heated stones that have been disturbed by people often lack easily interpretable patterning. Their relationships with each other and to the contexts in which they occur may make no functional sense. They may be clast-supported or matrix-supported, they may be large *or* small, they may incorporate unheated stones and artefacts, their sorting may be inverted, or they may not be sorted at all. Only in very rare instances can we infer from the stones themselves why they were moved and/or why they were redeposited in a particular way – as for example when they have been ground-up for pottery temper or incorporated into a post-hole or some other kind of structure. Differences exist, however, between assemblages of heated and quenched stones that are functionally *in situ*, and assemblages of heated and quenched stones that have been moved, which can and should enable us to distinguish between them in excavation.

The most obvious, the easiest to recognise, and the most commonly available of the many functionally diagnostic characteristics we encounter in assemblages of heated stones are colour, hardness, and morphology. But most important of all is context, the relationships between stones, between stones and the sediments from which they are recovered, and between stones and other finds. The identification of these requires very close attention to detail during excavation.

Elsewhere I have suggested that an interpretatively useful record of this could be achieved through the adoption of prompt-led recording sheets designed for the excavation of stone filled features (Seager Thomas 1999, 47) but the possible range of diagnostic characteristics and the different ways these present themselves in excavation requires a more reflexive approach, which in turn requires a better understanding of stone on the part of the excavators concerned. Table 1, which describes the effect of fire and quenching of assemblages of different types of stone, and Figure 3, which gives examples of, and explanations for, the possible sedimentological variability that they might encounter, should help in the future. But progress towards an interpretatively useful record of features containing burnt stones could be made in excavations tomorrow by the simple expedients of quality photography, gridded bulk sampling, and the detailed recording of the relationships of the stones (and the samples of them) to each other, to other finds, and to the features/sediments in which they occur. This would enable specialists like me to reconstruct most of the criteria necessary for their interpretation and so advance the study of heated stone enormously.

## THE IMPLICATIONS FOR BURNT MOUND STUDIES

In my introduction I referred to the possible implications of my study for the interpretation of burnt mounds. Implicitly all of these are associated with assemblages of heated stones, sometimes within the mound, sometimes the associated trough, and yet few workers have seriously considered the effects of heating and quenching on these stones – not Michael O'Kelly, whose experiments showed that heated stones placed in a trough of water *could* be used for cooking (1954; 1989); not Lawrence Barfield & Mike Hodder, in their influential 1987 reinterpretation of 'Burnt Mounds as Saunas'; and not Diarmuid Ó'Drisceoil in his 1988 rebuttal of this interpretation.

In this context it is worth drawing attention to a couple of instances where a sedimentological approach to the stone finds from features interpreted as burnt mounds has had an impact. At the base of a wooden trough associated with a Suffolk burnt mound, Edward Martin observed 'fine flint chips, as would have been produced by putting hot flints into cold water' (1988, 359). This suggested to him that it had indeed been used for boiling water; a view consistent with the results of my quenching experiments both in pots and pits, which showed that small fire-spalls gravitate to the base of the both.



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(Martin's trough was wooden, so in its case we can rule out the idea of an *in situ* fire). By contrast, in an unpublished report on a Late Bronze Age pit excavated at the Royal Docks Community School in East London, I argue that an assemblage of deeply fissured but mostly *whole* burnt flints recovered from it, the morphology of which is identical to my *in situ* burnt flints, is the residue of dry cooking, rather than boiling – despite the fact that the pit, which was rectangular, yielded no identifiable charcoal and the site was close to water and littered with burnt flint, characteristics widely held to be characteristic of traditionally interpreted burnt mounds (Barfield & Hodder 1987, 370).

This surely begs the question: How many of O'Kelly and Ó'Drisceoil's boiling pits and Barfield & Hodder's saunas were in fact used for dry cooking? For the future, the foregoing methodology provides a mechanism by which we might find out. Finally, on the same grounds that I concluded that pots filled with heated stones would not have been used for cooking, I challenge the *Irish* cooking hypothesis.

## CONCLUSION

A post-modern analysis does not need data, indeed data might be thought of as an impediment, but if we are to continue to move forward in our understanding of the past, we must return to it. Having said that we see from the foregoing how each can inform the other to their mutual advantage, data validating the funerary connection in Brück's synthesis, her synthesis prompting the discovery of a new fact about potboilers or heated stones and facilitating the development of a set of criteria by which still more might be discovered. The mixing of methodologies works! Data, however, is a sensitive tool and it is obviously important to understand it as fully as possible if it is to be used effectively. Contrary to popular belief, because of the changes it undergoes when burnt, moved, and buried, excavated stone can be understood better than many types of material, not less, and for this reason it provides a perfect medium for the study of human activity during prehistory. This short study is a case in point. However, the analytical principals and methods applied to it, are relevant to most categories of finds, interpretative value generally being enhanced by study in context, conceptual, and material, and it is to be hoped that future syntheses on both this and other aspects of the material record, irrespective of the tradition to which they belong, will continue to benefit from this realisation.

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