Chapter 5: The Middle to Late Bronze Age ceramic transition in the Lower Kennet Valley and beyond

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INTRODUCTION

The most exciting discovery from the analysis of the later Bronze Age pottery recovered from the Green Park Phase 1–3 and Moores Farm sites has been the recognition that our perception of this ceramic period has been very categorised and surprisingly limited in its contribution to the study of past human behaviour. Previous analyses either suggested that there was a straightforward recognition of middle and late Bronze Age ceramic evidence or presented an accommodative description to cope with the variation observed. What has been missing from much of the archaeological fieldwork for this period in southern Britain has been any systematic use of radiocarbon dating to assist in the interpretation of the ceramic sequence; it is important that we link the ceramics, the occupation evidence and the outstanding metalwork evidence (Needham 1996). This paucity of absolute dating evidence for the pottery, and therefore the cemeteries and settlements, has continued despite the call thirty years ago for this to be conducted on a regular basis (Barrett and Bradley 1980, 252). The landscape project presented in this volume has demonstrated that the use of radiocarbon dating can transform our assumptions and provide a new way of looking at the later Bronze Age.

Ceramic periods tend to be represented by distinctive, 'best' examples displaying strong characteristics of recognisable vessel forms and decoration supported by broad trends in fabric recipes. Often in the general literature the same best vessels (Langmaid 1978, fig. 14) are repeated again (Darvill 1987, fig. 67) and again (Gibson 2002, fig. 51), ingraining the images of the perfect examples and period divisions in our minds. We describe and name these types, and expect others to follow our work by comparing their pots to these 'fossil types'. This trend results in straight-jacketing of the evidence and the reinforcement of periodisation of past behaviour, cutting it into distinct phases without exploring or explaining how people evolved their daily interactions and general social reproduction to get from one 'phase' to the next. It is as though one day a group of people are classifiable as middle Bronze Age urn users and the next morning they wake up and discover they have become late Bronze Age pot people. This method of classification and periodisation does nothing to help explain how or why what we see in the archaeological record, the residues of past human behaviour, changed. Even worse, it has restricted our exploration of the subtle variations which may have been taking place during one defined period by stopping us from seeing these variations because they do not fit the classic definition –we justify the variation by not accepting its presence until the overwhelming amount of evidence forces us to do so. This landscape project is one of those cases; it provides an opportunity to focus on the *transition* from the middle Bronze Age to the late Bronze Age, first in the area of the Kennet and Middle Thames Valleys, and then more widely in central southern England.

POTTERY TRADITIONS

The above introduction is undoubtedly unfair and overly critical of many researchers. The history of archaeology is one of classification and the structuring of material culture, monuments, settlements and landscapes in order to try and make sense of those fragments of information left to us. Many archaeologists are now reaching well beyond classification to investigate the differences in social organisation, lifeways and expression through deposition, vision and variation in the archaeological record of prehistoric Britain. This overview will attempt to do the same for the ceramic evidence from the later Bronze Age, the second half of the second millennium BC. But first it is necessary to present briefly the basic, traditional classification of the two main phases within this broad ceramic period.

Middle Bronze Age

The pottery forms classified as belonging to the middle Bronze Age in this area are known as Deverel-Rimbury barrel, bucket and globular urns. The middle Bronze Age in this particular area dates from the 16th to 17th centuries cal BC, based on radiocarbon dating of samples associated with metalwork (Needham 1996, 133–4, fig. 1), but the infrequency of determinations associated with ceramics is striking. Distinctive regional subdivisions of barrel, bucket and globular urns for central Wessex, the Lower Thames Valley and Sussex have been detailed by Ellison (1975; 1978; Dacre and Ellison 1981, 173–4) and a general summary of middle Bronze Age pottery is provided here.

Barrel urns are always large and tall, with either a convex profile with the rim slightly smaller than the girth or a flared profile with the rim diameter slightly larger than the girth (Dacre and Ellison 1981, figs 10–13). The rims are distinguished by having a broad, flat top surface and a slight external protrusion or lip, as well as the occasional internal protrusion. Decoration consists of applied and fingertipped, horizontal, vertical or wavy cordons. This effect is often reinforced by fingertip impressions along the external rim lip. The vessels are invariably medium to thick-walled (*c* 8–14mm), can be up to 0.5m tall and range in capacity from *c* 7000–56,000cm^3 (Barrett 1980, fig. 2; Dacre and Ellison 1981, figs 10–13). It is likely that barrel urns were storage vessels due to their size and shape, and it is easy to imagine that the lip of the rims provided a means to secure a leather cover using rope or a broad, flat surface upon which to rest a wooden lid. However, more studies of vessel sizes by rim diameter correlated to visible residues and absorbed lipid analysis need to be conducted to confirm this assumption. The absence of any residue evidence on or in barrel urns would help to support this assumption of barrel urns as dry storage vessels.

Bucket urns are medium to thick-walled, straight-sided, slightly convex or slightly flared profile vessels which were made from coarse to intermediate-grained, heavily flint-tempered fabrics in much of central southern England. Wall thickness ranges from 8–18mm for published examples from the region. These vessels vary considerably in size from *c* 2000–40,000cm^3 (Barrett 1980, fig. 2). When decorated, which is usually the case for published examples from cemeteries, this consists of fingertip impressions (ibid., fig. 3.1–2), nailed or tooled slashes (ibid., fig. 4.2), plain raised or applied cordons, or cordons with fingertip impressions or slashes on the widest point of the vessel if convex or just above the middle of the vessel profile if neutral (ibid., figs 4.1 and 4.3; Lobb 1992, fig. 24.1). The applied and impressed cordons can be a combination of horseshoe-shaped with horizontal designs, either applied cordons or simply impressions (Barrett 1973, fig. 1.1; Dacre and Ellison 1981, fig. 19.E3). Fingertip impressions are also found on the top or inner surface of the rims of bucket urns (Lobb 1992, fig. 25.51–6). Four opposing, applied and often pinched knobs are another frequent feature on bucket urns. These may be decorative or functional, and they link these vessels to globular urns (Barrett 1973, figs 1.7–8, 1.10, 4.6, 5.6). There can be a horizontal row of impressions between the knobs. Several bucket urns have a single horizontal row of prefiring perforations just below the rim, which is regarded as a functional attribute for securing a cover (ibid., figs 1.13, 2.22, 4.1, 4.3; Lobb 1992, fig. 24.1). Bucket urns are usually far more common than barrel urns in cemetery and settlement assemblages, and have been interpreted as everyday and heavy-duty vessels (Ellison 1980).

Globular urns are, in contrast, usually made from extraordinarily well-processed flint-tempered fabrics in much of this region. The temper is well-sorted in character, which means that the size range of the angular flint chips is quite narrow, creating the effect of a sieved temper with chip sizes measuring 3mm and finer. The density of temper is extremely high, with usually between 25–50% of the fabric made of these inclusions. The vessels are far more graceful in shape, with the distinct effect of a thin-walled (3–8mm) upright plain rim falling down along a ski-slope neck onto a sloping to rounded, globular girth or distinctively hipped girth (Barrett 1973, fig. 2.15–16; Dacre and Ellison 1981, figs 14.D6, 14.D14, 14.D16, 15.D/E5–D/E7, 16–17, 20.F3). Globular urns range in size from *c* 3000–35,000cm^3 (Barrett 1980, fig. 2), and these are clearly the fineware vessels of the middle Bronze Age (Ellison 1980). The exterior surfaces are nearly always at least well-smoothed if not fully burnished. Decoration, however, is even more distinctive for these vessels and consists of tooled or incised simple horizontal linear or more complex geometric patterns located on the zone between the girth and the lower part of the neck. Tooling is created by simply pushing the surface of the pot inwards to a shallow depth while incising actually breaks the surface of the vessel and creates a sharp, rough, often deep edge to the impression; tooling is similar to burnishing while incising is like carving. The most common designs are composed of separate, repeated chevrons composed of many parallel sets of lines almost like combed, open triangles, or a panel of open triangles with infilled spaces of parallel diagonal lines between the triangles. Four opposing horizontally or vertically perforated lugs, pinched knobs like those on bucket urns, or bar handles (Sussex) are a very common characteristic of globular urns and the linear and geometric designs often incorporate these attachments within the decorative complex (Dacre and Ellison 1981, fig. 17.E30). Lugs, knobs and bar handles are usually located at the girth point. The balanced quartets of lugs or handles are likely to have been for suspension but usewear patterns are not mentioned in site reports. In the absence of published information about the use of these vessels for cooking, it is worth asking for what purpose the vessels were being suspended. Barrett (1980) has indicated that they were the most likely candidates to have been employed in the feasting activities of middle Bronze Age life.

Bases found on middle Bronze Age urns are simple, plain and flat in profile. There are often numerous extra pieces of flint chips embedded into the underside surface of these urns. Although the extra chips are the same range as those found in the vessels' fabric, the presence of base chips on all sizes and types of vessels (large, medium, small; barrel, bucket and globular) suggests that the technique is just as likely to be a period style characteristic as a

functional attribute of manufacture. The absence of chips on some vessels suggests that it may be the potter's choice to add chips or not, but the choice may be determined by the weather since this effect could assist in the drying of the pot in damper conditions. These suggestions need to be tested by experimentation. Most importantly, the bases of urns are nearly always unelaborated in profile – they are just a basic basal angle with no frills.

The function of middle Bronze Age pottery appears to be related to the storage of agricultural produce (Drewett 1979; Tomalin 1992, 86), particularly for the large and medium-sized, thick-walled urns, while the fancy globular urns may have been used for feasting events. All types of urns are found on both settlements and in cemeteries. Barrett notes that as both types of site lie in close proximity it is important to emphasise that "those vessels which were selected to accompany the ashes of the dead were drawn directly from the domestic repertoire" (1980, 298), rather than having been made specifically for cremation burial. Often cemetery assemblages include vessels which have been repaired, as shown by major cracks straddled by pairs of post-firing drilled holes. One recent study of vessels from cemeteries has demonstrated that some urns were used for cooking and storage of foodstuffs prior to their selection for the storage of the dead (McNee 2000). Clearly much work on the absorbed lipid residues of middle Bronze Age pottery needs to be conducted to elaborate on this apparent trend, and the evidence should be correlated to vessel sizes, types and visible evidence of use, as well as subtle variations in both fabric recipes and the individuality of decoration. This research would increase our understanding of the potters, their products and the role of pots in the middle Bronze Age. Ellison indicated that the size of middle Bronze Age cremation cemeteries (most with between 10–25 burials) was strongly correlated to the size of the nearby settlements and is likely to reflect "separate kinship units of roughly equal size, each in use over a fairly limited period of time" (1980, 124). Little has been done to take this observation forward in recent years.

Late Bronze Age

In contrast, late Bronze Age pottery assemblages are composed of jars and bowls (Barrett 1980, 302–6). The late Bronze Age is currently accepted as beginning in the second half of the 12th century cal BC as a plain or predominantly undecorated phase which develops into a decorated phase by the 8th century cal BC (Needham 1996, fig. 1.134–7), having previously been thought to begin during the 10th century BC (Barrett 1980). However, as will be detailed below, radiocarbon dating of late Bronze Age pottery assemblages is still a rare occurrence.

The jars in particular are quite distinctive, with a variety of upright and slightly everted rims, distinct necks which may be short to medium in length and strong, pronounced and rounded shoulders falling to narrower bases. In addition, hooked-rim, neckless, convex-profile vessels are also recognised as being part of the late Bronze Age jar continuum while "others have straighter profiles" (Barrett 1980, 307, figs 5.8 and 5.16). Jars are closed forms with the height of the vessel always greater than the diameter of the opening. Protruding, slightly flared or splayed bases with spurs or expanded projections are a distinguishing characteristic of late Bronze Age jars, and the presence of added flint chips to the base underside is still an expected attribute. Jar fabrics can be coarse or fine in texture and finish (Class I and II; Barrett 1980) and in central southern England there is a gradual replacement of flint-tempered and shell-tempered fabrics with quartz sand fabrics (Barrett 1980; Raymond 1994). This process of change in fabric recipes appears to start with the use of sandy clay matrices into which the flint temper is added in contrast to middle Bronze Age fabrics which rarely have obviously sandy clay matrices. Burnishing can often be found on the exterior surface of finer fabric Class II jars.

For this overview only the beginning of the late Bronze Age will be presented. Jars were rarely decorated at this time, but when decoration occurred it consisted of fingertip or fingernail impressions on either the shoulder zone or the interior of the rim. Applied or raised cordons and knobs are no longer present. The combination of fingertip decoration of shouldered jars on both the exterior rim and the shoulder, as well as on an applied cordon midway down the neck (Barrett 1980, fig. 6) is a later development in the decorated phase of the late Bronze Age (*c* 8th century cal BC onwards) which is not under discussion here. Jars range in size from 1000–56,000cm^3 (Barrett 1980, fig. 2), and thus it is possible to see late Bronze Age jars evolving from middle Bronze Age bucket urns in particular. Rim diameters of Class I jars in larger assemblages are consistently smaller than those of middle Bronze Age urns (Barrett 1980, fig. 3).

What is special to the late Bronze Age ceramic repertoire, however, is the appearance of bowls. These are short, squat, open forms with the aperture greater than the height of the vessel. Bowl forms include a wide range of bipartite (shouldered or biconical), hemispherical and conical profiles with upright, everted and platform rims. The flared or splayed base type characteristic of late Bronze Age jars is also found on bowls. The fabrics can be coarse or fine in texture and in finish (Class III and IV; Barrett 1980). Flint-bearing fabrics were commonly used to make bowls, but quartz sand fabrics also were developed during the late Bronze Age. Initially, naturally sandy clays were used as the clay matrix into which flint temper was added, but subsequently the sandy clays were used without adding temper. This gradual change in fabric recipe is another principal characteristic of the full late Bronze Age ceramic tradition, since it was applied to

both jars and bowls by the ninth century BC. Bowls are usually medium to thin-walled, range in size from 500–4000cm^3, and are often but not always burnished on the interior or both surfaces. At the beginning of the late Bronze Age decorated bowls are extremely rare. Very small bowls are often designated as cups, but these are quite rare in this plain assemblage phase of the late Bronze Age. It is clear from the small size of these vessels (the majority appear to have a capacity of <2000cm^3) that they are mainly individual, personal pots, although this evidence needs to be reassessed using the large assemblages which have been published during the past 20 years (eg Needham 1991; Needham and Spence 1996; Lawson 2000). Bowls expand the variety of visible shapes used in the late Bronze Age, and appear to be a complete contrast to the middle Bronze Age. This vessel type becomes more frequent during the course of the late Bronze Age.

In addition, very small bowls with rim diameters in the range of 8cm or less and capacities of less than 500cm^3 are interpreted as cups (Class V; Barrett 1980, 303, figs 5.2–3, 6.5; Gingell and Morris 2000, fig. 60.98–117) and even miniature vessels, which may be children's toys or apprenticeship attempts, are known (ibid., fig. 60.118–20).

Late Bronze Age pottery is thought to have developed in response to the increasing need for utensils or containers for feasts. The jars may have been used for storing, cooking and serving food, while the bowls may have been used for serving and eating from. It may well be that wooden bowls were used for the same purpose in the middle Bronze Age, but by the late Bronze Age this requirement was strongly expressed through the ceramic medium. There are no published examples of late Bronze Age assemblages describing evidence of use, although the presence of soot, carbonised residues and pitting of the interior surface is commonly noted (cf. Morris 2000a, 157). This absence of information is a considerable weakness in pottery analysis methodology which has been emphasised recently (Morris 2002), and a major research project using absorbed lipid residue analysis has now begun to explore the invisible evidence from several later prehistoric pottery assemblages (Copley *et al.* 2002).

What is undeniable is the sheer increase in the quantity of pots that were made and discarded during the late Bronze Age, and this is coupled with the appearance of the first ceramic-rich midden deposits (Gingell and Lawson 1984; 1985; Lawson 2000; McOmish 1996; Needham 1991; Needham and Spence 1996) and large, open settlements (such as Green Park 1 and 2) in central southern England.

Post-Deverel-Rimbury (PDR)

The above, apparently distinctive divisions of middle Bronze Age and late Bronze Age have been emphasised by the introduction of the phrase 'post-Deverel-Rimbury' (PDR) into the literature and its common adoption to replace the rather long-winded name 'plainware assemblage of the later Bronze Age'.

Labelling plainware late Bronze Age assemblages as post-Deverel-Rimbury has automatically closed down any consideration of the contemporaneity in production and use of middle Bronze Age with late Bronze Age, removed the possibility of distinctive assemblages which may fall between middle Bronze Age and late Bronze Age in their character, and discouraged the exploration of the changes from middle Bronze Age pottery to late Bronze Age pottery. Even the author of the term, John Barrett, admitted that it was not a very good term to use (1980, 306).

What do these transformations represent and can they inform us about the changes in society during the last 500 years of the second millennium BC? What were middle Bronze Age and late Bronze Age pots used for? Why were many middle Bronze Age urns so thick-walled despite the range of vessel sizes (some thick-walled urns are actually quite small)? How were middle Bronze Age and late Bronze Age vessels used and deposited, and in what kinds of sites and deposits have each been found? Are there sites where these types have been found together, and should we recognise the possibility of their contemporaneity of use? Or was the middle Bronze Age pottery curated over a long period of time? Are there assemblages of late Bronze Age pottery which can be viewed as not really late Bronze Age, as traditionally defined, but more like middle Bronze Age in their fabrics, forms and deposition? Are there regional variations in the change from middle Bronze Age to late Bronze Age which need to be explored?

Why was flint temper the only temper used to make middle Bronze Age urns and the principal temper used for later Bronze Age pottery generally? Why was so much coarse flint temper used for barrel and bucket urns, and in particular why was so much fine flint temper used to make globular urns? Flint, as many potters today will relate, is an extraordinarily difficult temper to create and to use (Cleal 1995, 191). The author has seen a famous flint-knapper work up quite a sweat trying to crush calcined flint with a metal hammer for use as temper. This was not an easy choice for later Bronze Age potters to make, but this temper was used consistently in Berkshire and Wessex (Cleal 1995, table 16.2) throughout the middle Bronze Age and the beginning of the late Bronze Age.

The application of fingertip decoration to both middle Bronze Age and late Bronze Age pots is a very personal marker, and must be a key indicator of what these pots meant to their makers and users. If so, why are there no fingertip impressions on globular urns? Are marks of personal identity less important than marks which represent the social unit on this particular pottery type? Many authors have stressed the productive investment associated with the making of globular urns, in the processing of the flint temper for the fabrics, finer walls and

general care of vessel construction, surface treatment and complex decorative motifs.

Was there a longer period during the second half of the second millennium BC when these changes were taking place, rather than simply a single century as suggested previously? Both Barrett (1980) and Gingell (1980; 1992) have argued that there are regional variations in the date ranges for the middle Bronze Age and late Bronze Age, but this overview will show that there is a greater similarity within the region than once was suspected, and the time scale is even longer.

THE EVIDENCE: POTS AND DATES

This section will review the evidence which demonstrates that there is a range of pottery which is not typical of the late Bronze Age period as described above, and that the contemporaneity of middle Bronze Age and this non-Deverel-Rimbury/non-late Bronze Age pottery is widespread and surprisingly common. There are a few available dates for some of the pottery, and these are compared to dates for middle Bronze Age urns and classic examples of late Bronze Age pottery to show that the results from this landscape project belong to a long and variable continuum of transition in central southern England (Table 5.1). It will be suggested that we recognise this transitional pottery in a positive manner and radiocarbon date deposits containing such examples, as well as deposits with solely middle Bronze Age pottery and those with just late Bronze Age pottery, in the whole of central southern England.

The Lower Kennet Valley

The Lower Kennet Valley will be investigated first in order to place the Moores Farm and Green Park 1–3 assemblages into context. There are several sites

Table 5.1 Radiocarbon dating of middle and late Bronze Age pottery in south-central England

County/site	*Pottery type(s)*	*Radiocarbon sample*	*Radiocarbon date (BP)*	*Calibrated date (95% probability)*
Berkshire				
Green Park 3	MBA	KIA-19180	3020 ± 35	1388–1130 cal BC
	MBA	KIA-19181	2995 ± 60	1395–1047 cal BC
	MBA and non-DR	KIA-19182	3070 ± 35	1412–1218 cal BC
	MBA and non-DR	KIA-19183	3150 ± 40	1518–1318 cal BC
Heron's House, Burghfield	MBA	HAR-2754	3060 ± 100	1550–1000 cal BC
Knight's Farm Subsite 3	MBA and non-DR	BM-1594	3195 ± 95	1750–1200 cal BC
Aldermaston Wharf	non-DR	BM-1592	3240 ± 135	1900–1100 cal BC
	non-DR and LBA ('plain')	BM-1590	3000 ± 40	1390–1110 cal BC
	non-DR and LBA ('plain')	BM-1591	2785 ± 35	1010–830 cal BC
Oxfordshire				
Eynsham Abbey	non-DR	OxA-7930	2895 ± 60	1310–910 cal BC
	non-DR	OxA-7931	2950 ± 40	1320–1030 cal BC
	non-DR	OxA-7932	2900 ± 55	1300–920 cal BC
	non-DR and LBA ('plain')	OxA-7928	2925 ± 35	1270–1010 cal BC
	non-DR and LBA ('plain')	OxA-7929	2915 ± 35	1260–1000 cal BC
Wiltshire				
Potterne	non-DR	HAR-6982	3130 ± 100	1630–1130 cal BC
	non-DR	HAR-8938	3000 ± 90	1460–990 cal BC
Hampshire				
Balksbury Camp	LBA ('plain')	HAR-442	2740 ± 170	1395–410 cal BC
	LBA ('plain')	HAR-5127	2800 ± 70	1160–820 cal BC
Sussex				
Black Patch	MBA and non-DR	HAR-2939	2780 ± 80	1130–800 cal BC
	MBA and non-DR	HAR-2940	3020 ± 70	1430–1040 cal BC
	MBA and non-DR	HAR-2941	2970 ± 70	1400–990 cal BC
	MBA and non-DR	HAR-3735	2970 ± 80	1410–970 cal BC
	MBA and non-DR	HAR-3736	3080 ± 70	1520–1120 cal BC
	MBA and non-DR	HAR-3737	2850 ± 70	1220–830 cal BC
Itford Hill	MBA (and 'LBA')	GrN-6167	2950 ± 35	1300–1010 cal BC

in this area which provided the basis for a definition of both plain and decorated late Bronze Age assemblages, including Aldermaston Wharf and Knights Farm sub-sites 1–4 (Bradley *et al.* 1980) which are located west of the Green Park complex. The Aldermaston assemblage contains very few decorated vessels but the forms include shouldered jars, both coarse and fine variants, a variety of bowl forms and some cups, making it a type site for the plain assemblage phase of the late Bronze Age (ibid., fig. 11, type series). In addition, however, there are several contexts where only ovoid-profile, often hooked rim jars and straight-sided jars were recovered. The latter include Pit 6 (ibid., fig. 12.18–24) with three ovoid jars, similar to Green Park 2 type 11, and three straight or slightly expanded 'flower pot' or conical-profile jars similar to some examples of the Green Park 1 type 7 vessels (Hall 1992, fig. 41). One radiocarbon determination from charcoal in Pit 6 produced a date of 1900–1100 cal BC (95% confidence, BM-1592, 3240±135 BP). A second feature, Pit 68, contained four illustrated vessels (ibid., fig. 14.67–70) including two fineware examples and two ovoid/straight-sided coarseware jars. Two radiocarbon determinations were established for grain from this pit, providing dates of 1390–1110 cal BC (95% confidence, BM-1590, 3000±40 BP) and 1010–830 cal BC (95% confidence, BM-1591, 2785±35 BP). Deverel-Rimbury pottery was not identified at Aldermaston. No dates were obtained for features containing the classic array of late Bronze Age plain assemblage pottery of shouldered jars and bowls despite 6849 sherds having been recovered from the site.

Knights Farm subsite 1 (Bradley *et al.* 1980, figs 34–6) is an outstanding example of a decorated assemblage of the late Bronze Age, but its late date places it beyond the scope of this overview. It has two radiocarbon dates from one pit rich with pottery, 2690±80 BP (HAR-1011) and 2550±80 BP (HAR1012), which support a later date. Subsites 2 and 4 (ibid., fig. 33), on the other hand, could easily have been contemporary with Aldermaston based on the range of forms and infrequency of decoration, with the exception of two Deverel-Rimbury sherds.

However, excavation of Knights Farm subsite 3 revealed two interesting small assemblages from pits. Feature 103 (ibid., fig. 32.39–42) contained a bucket urn with a knob associated with a straight-sided vessel with external slashes on the rim, an upright necked vessel with uncertain profile and a thick-walled, urn-like profile base. One sample from this feature produced a radiocarbon determination of 1750–1200 cal BC (95% confidence, BM-1594, 3195±95 BP) which is similar to the radiocarbon dating results from Green Park 3, where middle Bronze Age and non-Deverel-Rimbury pottery were also recovered together. Feature 249 contained sherds from another straight-sided vessel with fingertip impressions on the top/internal edge of the rim but a typically late Bronze Age-style flared base (ibid., fig. 32.46), again similar to the Green Park types. Other features on this site have plain assemblage late Bronze Age pottery similar to Aldermaston. At Heron's House, Burghfield (Bradley and Richards 1980) another middle Bronze Age bucket urn with a pinched knob was recovered from a circular scoop containing charcoal with a radiocarbon determination of 1550–1000 cal BC (95% confidence; HAR-2754: 3060 ± 100 BP). The scoop had cut the upper fill of a ring ditch with a radiocarbon determination of 1500–1010 cal BC (95% confidence; HAR-2749: 3040 ± 90 BP).

These three were the only radiocarbon determinations for middle Bronze Age pottery in this area prior to the Green Park determinations. What is significant for this project is the association of middle Bronze Age and non-middle Bronze Age/non-late Bronze Age types of pottery, no matter how broad the suggested date range for the Knights Farm subsite 3 deposition. There are two other assemblages which demonstrate that there are extremely secure contexts where classic middle Bronze Age pottery is found with so-called late Bronze Age pottery that is not the full range expected of a plain assemblage group of the late Bronze Age. These sites are Pingewood (Johnston 1985) and Brimpton (Lobb 1990).

The most remarkable evidence for a clear transition period from the middle Bronze Age to the late Bronze Age was discovered at Pingewood, where over 10 kg of later Bronze Age pottery was recovered. Several features contained an array of sherds from both middle Bronze Age fingertip decorated bucket urns and straight-sided jars with fingertip impressions on the rim top, flower pot jars and ovoid jars, as well as a series of features with only the latter. The middle Bronze Age and non-middle Bronze Age pottery types are found in the same coarse flint-tempered fabrics with non-sandy clay matrices. In addition, some of the non-middle Bronze Age pottery from the site is made from flint-tempered fabrics with sandy clay matrices and there are two necked vessels, with thin walls made from a fineware fabric, which could be late Bronze Age Class II jars. Base types include both thick, plain ones from urns and splayed examples, again in the non-sandy fabric with coarse flint temper. Therefore, the "Deverel-Rimbury material is found in the same features and the same fabrics as the other pottery, and there is no *a priori* case for separating the two groups chronologically" (Bradley 1985, 27).

At Brimpton, a watching brief conducted in 1978–9 discovered a palaeochannel of the River Enborne, which had been cut by later Bronze Age features (Lobb 1990, Site A). Rescue conditions allowed for only partial recording of the features and limited recovery of finds. Just over 8 kg of pottery (284 sherds) was recovered from layers deposited in the river channel which sealed these features. Approximately 95% of the pottery is flint-

tempered and consists of two main fabric groups, a very coarse and poorly-sorted group and a finer group with dense, well-sorted smaller temper. This pottery is predominantly from middle Bronze Age bucket urns, four of which are illustrated (ibid., fig. 2.3–6), with the finer fabrics used to make suspected globular urns (ibid., fig. 2.10–11). Additional types include a small tub with a knob, which may be another bucket urn (ibid., fig. 2.7), and a very large (42cm rim diameter, 32cm base diameter), thick-walled, expanded profile vessel with a rim shape very similar to many barrel urns, with a broad flat top and protruding exterior edge (ibid., fig. 2.1–2). In addition, there are a number of vertical-sided vessels, called possible jars, with flat and rounded rims (ibid., fig. 3.11–17) in the same fabrics which "would perhaps be better placed in the post-Deverel-Rimbury tradition and may suggest a date for the end of the Deverel-Rimbury period" (ibid., 47). The deposits also contained a bronze-working crucible, a Group 2 bronze side-looped socketed spearhead (which is common in the north Wiltshire, Berkshire and Oxfordshire area: Rowlands 1976, 51–2), a middle Bronze Age type bun-shaped clay weight and 69 identifiable animal bones including cattle, sheep/goat, red deer and pig. This range of material has been interpreted as representing dumps of domestic refuse into the palaeochannel from nearby occupation due to the lack of abrasion on the pottery and the good to moderate state of bone preservation. The jar-like pottery is identical to Green Park 2 R11 and R16, and this is therefore another example of the contemporaneous deposition of middle Bronze Age and non-middle Bronze Age pottery.

At Green Park 1 (Moore and Jennings 1992), Deverel-Rimbury through to plain and then decorated assemblage late Bronze Age pottery was described and illustrated, although a stratified sequence was not available. Bradley and Hall (1992) single out ovoid and straight-sided vessels, both plain and with decorated rims, applied bosses and fingertip impressed walls, as visually transitional in type, and they suggest a date of 11th century BC. However, the possibility that some of the occupation could be earlier in the second millennium BC should be explored. For example, the vessels illustrated from contexts 3515, 3585, 3631 and 3681 (ibid., fig. 49) could all be classified as transitional in type; there are no shouldered jars and only two possible bowls, while the rest are ovoid or straight-sided jars.

Other assemblages in this area which are dominated by similar ovoid profile and straight-profile vessels rather than shouldered jars and bowls and which have between 95–100% of the pottery made from flint-tempered fabrics are Field Farm (Mepham 1992a, fig. 19) and Anslow's Cottages (Mepham 1992b, fig. 42). At Field Farm there were also several middle Bronze Age cremations with urns, as well as features which contained more typical late Bronze Age pottery. Anslow's Cottages had no evidence for middle Bronze Age activity, but the pottery was dominated by straight-walled and ovoid profile vessels as well as classic late Bronze Age pottery. The pottery from both of these sites is not presented contextually in the publications, but the occurrence of this material makes the archives of these sites worth re-examination.

In summary, the evidence from several sites in the Lower Kennet Valley shows that we can expect to find secure contexts containing middle Bronze Age pottery together with pottery which is similar to it but not exactly the same, having simple, straight or convex, ovoid or conical profiles in fabrics similar to middle Bronze Age urns, as well as vessels of this shape in fabrics that show a different selection of clays for pot-making while still demonstrating continuity in the addition of crushed burnt flint as temper. Knobs and applied cordons do not occur on these new vessels, but fingertipping is present on the tops and inner surface of the rims. The bases become more distinctive, with pinched or flared profiles, and the addition of flint grits to the bases can still be found. The walls of these non-middle Bronze Age vessels are never as thick as the majority of the bucket or barrel urns. Bowls do not usually occur in this phase of production, although one does appear at Green Park 3 in the middle fill (context 2687) of waterhole 2690, in association with middle Bronze Age pottery and other vessels which would not appear out of place within a late Bronze Age plain assemblage (Figs 2.17.6, 2.18.7–12 and 2.19.13–21). The primary fill of this waterhole produced two radiocarbon dates of 1412–1218 cal BC (KIA19182) and 1518–1318 cal BC (KIA19183) respectively.

The picture at present is thus not at all simple. The dating of this transition appears to focus on the 15th to 12th centuries cal BC. If this dating proves reliable in future, it appears to cover Period 5 of Needham's chronology for metalwork assemblages of the middle Bronze Age, including Taunton, Penard and the commencement of the Wilburton phase (1996, fig. 1). Ceramically, it spans not only the middle Bronze Age but also the post-Deverel-Rimbury phase, and therefore to refer to it as post-Deverel-Rimbury can no longer be appropriate. But is this phenomenon a limited, regional development which does not occur elsewhere in central southern England?

The Thames Valley: Berkshire, Oxfordshire, Surrey and Middlesex

Until recently, the Upper Thames Valley has been seen as a core area for middle Bronze Age activity but not for the late Bronze Age. Excavations at Eynsham Abbey, Oxfordshire revealed late Bronze Age activity in the area of an enclosure ditch (Barclay *et al.* 2001). The pottery assemblage is modest (414 sherds; *c* 4 kg) but very significant due to the range of vessel forms present and the direct dating of the burnt residues on five of the vessels.

Three basic rim forms were defined as straight, incurving and everted. Rounded-shoulder sherds are rare in the collection, and the bases are steep rounded, squared angle or expanded/pinched in profile. This typology resulted in four vessel types: straight-sided, with occasional circular indentations or perforations; rounded (ovoid, convex-profile) with incurving rims, with occasional circular indentations or perforations; slightly shouldered vessels; and round-shouldered jars. The four decorated vessels with oblique incised lines or fingernail impressions on the top of the rims are all straight-sided or ovoid types which do not find parallel forms in the Upper Thames Valley, but are most similar to those from sites within the Kennet Valley and Middle Thames, in particular Green Park 1 and Aldermaston Wharf. The knobbed vessel illustrated is likely to be of early-middle Bronze Age date because it has a grog-tempered fabric. Otherwise, there are no obvious sherds from middle Bronze Age urns. Only one positively identified bowl, which is burnished on both surfaces and may be quite large in size (ibid., P6), was recovered from the same layer and section of the enclosure ditch as a round-shouldered jar.

Six radiocarbon determinations were established for the assemblage, five from burnt residues on the interior of vessels and one from an articulated animal bone deposit. Three of these were from the middle fills of the enclosure ditch and three from a ground surface (ibid., table 16). The combined dates range from 1380–910 cal BC. While the pottery is recognised by the authors as a plain ware assemblage of late Bronze Age (1150–800 cal BC) tradition, it is also equally likely to "represent the transition from the middle to the late Bronze Age during the final centuries of the 2nd millennium cal BC (1150–950 cal BC), with a range of simple straight-sided or ovoid jars replacing the heavier Bucket Urns that are so typical of the local Deverel-Rimbury tradition" (ibid., 138). The less common round-shouldered jars, a decorated jar with slashed cordon on the neck, the bowl and a miniature vessel or cup are cited as examples of a possible second phase of occupation dating to the later part of the period (*c* 950–800 cal BC).

The Eynsham Abbey assemblage and radiocarbon determinations are the most important indication that the dates from the Green Park deposits are inherently reliable, ceramically. This assemblage has virtually no examples of middle Bronze Age pottery and therefore the range of dates from the early 14th to 10th centuries cal BC overlap significantly with those from Green Park. Similarly, much of the pottery from Green Park is like that from Eynsham Abbey. Therefore, a sequence appears to have been established with these two dated assemblages.

In the Lower Thames valley, the site at Hurst Park, East Molesey (Andrews 1996) may belong to a transitional middle Bronze Age/late Bronze Age phase of activity. Only one vessel from the site has been attributed to the middle Bronze Age, a finger-impressed cordoned urn. A total of 995 other flint-tempered sherds was assigned to the late Bronze Age. However, one unusual pit deposit, which unfortunately had been disturbed, contained large parts of two vessels. One of these is a round-shouldered jar with a small everted rim and the other is a flaring, flower pot profile vessel with a compact row of numerous fingertip impressions on the upper girth zone and on the top of the flat, slightly flaring rim. The flower pot vessel is 30cm in diameter and has 10mm thick walls, while the shouldered jar is 50cm in diameter and has 12mm thick walls and wiped surfaces on the exterior. The base of the flower pot profile vessel is more similar to an urn-type base than a late Bronze Age expanded or flared base. They are made from slightly different flint-tempered fabrics: one with a common amount of moderately well-sorted flint < 2mm in size and the other with a moderate amount of well-sorted flint < 2mm in size. Both are classified as being late Bronze Age but it is worth considering whether this purposeful deposit represents another example of the transitional ceramic phase during the later Bronze Age. The 'flower pot' clearly belongs to the middle Bronze Age urn tradition in general shape, nature of the base, and style of decoration. The large jar is clearly of the plainware phase of the late Bronze Age in profile, surface finish and absence of decoration. Both belong to the later Bronze Age based on their fabrics. There is some confusion between the specialists and the excavator as to the nature of the deposition of the vessels in this feature, in particular as to which vessel is the larger of the two (despite the illustration) and whether one vessel was covering the other (compare Andrews 1996, 66, fig. 39, pl. 10 to Laidlaw 1996a, 86, fig. 53). The rest of the flint-tempered pottery from Hurst Park is a mixture of upright rim, round-shouldered jars, convex jars, and a thick-walled hemispherical bowl, none of which are decorated. Therefore, it is not inappropriate to suggest that this assemblage could belong to the end of the second millennium cal BC, and this is suggested by Laidlaw (1996a, 86) but with no supporting reasons. There is no information about the contexts of recovery for this material, other than the special deposit, and no radiocarbon determinations were obtained.

The recognition of transitional forms of later Bronze Age pottery in the Lower Thames area should be more straightforward because of the distinctive array of jars and bowls of late Bronze Age character from Runnymede Bridge, Surrey where radiocarbon determinations place this assemblage firmly in the 9th century cal BC (Needham 1991, 345–53; Ambers and Leese 1996). There are many different types of shouldered jars and bowls in the large assemblages from this site (Longley 1980; Needham 1991; Needham and Spence 1996), and most importantly there are no examples of straight-sided vessels or convex-profile jars.

Wessex: the chalkland landscapes of Berkshire, Wiltshire, Hampshire, Dorset and Sussex

Rams Hill, Oxfordshire (formerly Berkshire) is famous for its association with this transitional period of the later Bronze Age, and has been a key site in the definition of post-Deverel-Rimbury developments in southern England. Located on the northern edge of the Wessex chalk landscape, Rams Hill has been reassessed with new radiocarbon measurements for its many phases of enclosure. The dates fall within the 13th to 10th centuries cal BC, which spans the formal middle-late Bronze Age transition, overlapping the use of Penard and Wilburton metalwork (Needham and Ambers 1994, 225). The illustrated pottery from the original publication (Bradley and Ellison 1975, fig. 3.5) includes a number of very small rim fragments which appear to be hooked rim and simple ovoid jars, upright rim necked vessels, one round-shouldered jar and one more sharply shouldered jar, as well as several straight-sided vessels in a collection of later, decorated material. It is difficult at present to know exactly which of these vessels belongs to which phase of occupation and enclosure construction.

In Wiltshire, the first examples of a possible transitional phase of later Bronze Age pottery which was not actually post-Deverel-Rimbury were published by Chris Gingell (1980; 1992). Gingell recognised that not only was it possible for there to be regional variations in assemblages but that this may have chronological implications. Unfortunately, his sites on the Marlborough Downs were not appropriate for radiocarbon dating due to their disturbed nature. The pottery from Burderop Down in particular consists of a very distinctive regional type of Deverel-Rimbury barrel urn with an applied cordon tucked under a flat, horizontally everted or flared rim (Gingell 1992, 72–3). The cordon is finger-impressed or slashed on different vessels and there are examples of an applied cordon on the girth as well. The unstratified assemblage also contained shouldered jars including both biconical and rounded types, a range of other rims with flaring profiles, a hemispherical bowl, other possible bowls and expanded or pinched bases, all of which can be assigned to the plainware phase of the late Bronze Age, especially because none of it is decorated (ibid., 74-75). From Rockley Down there are other examples of shouldered jars. This site also had middle Bronze Age urn sherds (including one which appears to be a barrel urn) and other regionally specific types which could be accepted as possible transitional vessels (ibid., fig. 71.35–8).

What is interesting is that there are no good examples of convex-profile, ovoid vessels or straight-sided vessels which are so common in the Middle Thames Valley area. However, there are straight-sided vessels within the area from the site at Potterne, near Devizes (Lawson 2000). The midden contained lower zones of material, Zones 14–11 (Morris 2000b, figs 61–2), which are very different in character to the more diagnostic types depicted in the main late Bronze Age decorated assemblage typology. This pottery is thick-walled and either straight-sided or barrel-shaped. The assemblage includes incurved or hooked rim jars, simple ovoid jars, shouldered jars, slack-shouldered jars and flat-topped bowls. Only the shouldered jar and flat-topped bowl types were found in the higher zones of the midden. The discussion of the various types focused on the similarities with middle Bronze Age urns, hooked-rim jars from Aldermaston Wharf and the assemblages from Itford Hill, Sussex and South Cadbury, Somerset. Only 1.6% of the 1299 sherds examined from these zones is decorated, and one of these pieces is most likely to be from a middle Bronze Age urn based on wall thickness and decoration (ibid., fig. 62.165).

The earliest midden layers at Potterne also contained single sherds of Peterborough Ware and Beaker, which unfortunately affected the interpretation of one of the two radiocarbon determinations from Zone 11. The dates were 1630–1130 cal BC (95% confidence, HAR-6982, 3130±100 BP) and 2040–1510 cal BC (95% confidence, HAR-6983, 3430±110 BP), both of which have wide errors resulting in spans of 500 years each. Nevertheless, one pit was also dated (3605, which cut into the bedrock) and this produced a date of 1460–990 cal BC (95% confidence, HAR-8938, 3000±90 BP). The rest of the midden is dated broadly from the 10th to 6th centuries cal BC based on four samples, two each from Zones 4 and 7 (Allen 2000, table 1). The dates from these samples were regarded as suspect, and further radiocarbon dating was recommended (Bayliss 2000, 41).

It may be important to mention that there appears to be no evidence for a transitional phase of ceramic material from the middle Bronze Age to late Bronze Age recovered from the Linear Ditches Project (Bradley *et al.* 1994). This is one landscape location where, despite an abundance of evidence for both periods, there appears to be a strong separation in the types of pottery recovered and reported; there is middle Bronze Age pottery and there is plain late Bronze Age pottery. This division is especially well-represented by the clear-cut division between middle Bronze Age fabrics and late Bronze Age fabrics (Raymond 1994, appendix 2, tables 29 and 30), despite the apparent Deverel-Rimbury origins of at least five settlement locations and the equal amounts of middle Bronze Age and late Bronze Age pottery from the LDP 109 settlement outside the linear ditches system in particular (ibid., fig. 51). However, several of the late Bronze Age illustrated sherds are straight-sided or convex-profile vessels with fingertip impressions on the top of the rim and straight body sherds with fingertip impression like bucket urns (ibid., 53, figs 53.12, 53.14–15, 53.23–5) which could be transitional in nature rather than specifically late Bronze Age.

In Hampshire, the evidence is slightly different as it comes from the middle Bronze Age end of the

spectrum. Excavation of the rich middle Bronze Age Deverel-Rimbury cemetery at Kimpton, located outside Andover, revealed five phases of pyre burning and deposition of many barrel, bucket and globular urns as well as sherd groups and cremated bones associated with a complex flint platform (Dacre and Ellison 1981). In particular, however, phase E contained three vessels described as post-Deverel-Rimbury in type. Two of these are illustrated, including one plain vessel and one with very slight fingertip impressions on the upper quarter of the vessel (ibid., figs 19.E4, 19.E28). Phase E, however, also has 19 globular urns, ten bucket urns (two described as Lower Thames Valley vessels), and five accessory cups. Phase G contained nine pots described as late Bronze Age, including a slack-profiled jar or bowl, a carinated jar, a wide-mouthed jar, a round-shouldered jar, a high-shouldered jar, a straight-walled vessel, a carinated jar and an unillustrated carinated bowl (ibid., figs 20–2). These are predominantly made from coarse, flint-tempered fabrics containing large inclusions, and it was noted that these fabrics are markedly coarser than the urn fabrics (Davies 1981), although a few of the urns have similar fabric codes. What is so significant is that these post-Deverel-Rimbury and late Bronze Age vessels were all found complete or nearly complete within the funerary complex. The phase G burials were interred in relatively deep holes beneath distinct but badly eroded circular flint mounds around the margins of the flint platform.

This funerary context of recovery appears to be a Hampshire theme. Another special complex of vessels found in two nearby locations, one in a burial complex (this time an early Bronze Age ring ditch) and the other directly into the land nearby, was found at Twyford Down (Walker and Farwell 2000). The ring ditch was interpreted as a favoured location for structured deposition due to the presence of both middle Bronze Age urns and late Bronze Age vessels within the flint and ash deposits and the agricultural soils of this ditch. One of the vessels, a slightly convex but basically straight-walled form with slight finger impressions (ibid., fig. 23.8), is remarkably similar to a phase G vessel from Kimpton (Dacre and Ellison 1981, fig. 20.G3), and was found in the same context as another apparently late Bronze Age plain vessel which is much smaller but equally simple in profile. This continuity of deposition, first an early Bronze Age collared urn rim in the centre of the ring ditch area, followed by middle Bronze Age urns with cremation burials and then non-middle Bronze Age pottery in the ditch itself without burials, is extended to an area about 30m to the south-west of the ditch where six non-middle Bronze Age vessels were deposited (Walker and Farwell 2000, fig. 25.18–23). These represented formerly complete or semi-complete vessels of large size, individually placed in pits without cremated remains. Three are convex-profile jars, one is extremely similar to a bucket urn with finger-impressed girth cordon while another is a very small shouldered jar, two have bases similar to middle Bronze Age urns and one has a row of pre-firing perforations for attaching a soft lid. These vessels were found as individual items in pits cut into the chalk. Two of the three fabrics are flint-tempered but differ from the middle Bronze Age flint fabrics from this site in that the texture is coarser, with large, poorly-sorted angular inclusions. The other is labelled a flint fabric type, but the description is distinctively sandy (moderate to common amount less than 0.5mm) with only a rare to sparse amount of flint (less than 3mm across). These two sites, Kimpton and Twyford Down, demonstrate the challenge of characterising and classifying later Bronze Age pottery during this transition period.

A third site in Hampshire, Winnall Down (Fasham 1985), had a late Bronze Age phase as well as evidence of middle Bronze Age activity. The middle Bronze Age pottery consists of redeposited, thick-walled, heavily flint-tempered sherds in an early Iron Age enclosure ditch and a possible urned cremation, but the late Bronze Age is represented by an extraordinary assemblage of sherds from at least five vessels found together in a posthole (ibid., fig. 51, 4–9). These include four thin-walled, undecorated convex-profile types and an additional vessel with an expanded base which would not be out of place in a transitional assemblage. The posthole is from either a fenceline or the windbreak for a post-built roundhouse. Other sherds from the site that were thought to be late Bronze Age in character include a hemispherical bowl and an upright but slightly flared rim from a small, necked jar. It is most likely that this assemblage is later in date than the Twyford Down vessels, based on the thinner vessel walls, the lack of any decoration and the presence of the expanded base, but the similarity in simplicity of the vessel profiles is important to note.

One more site from Hampshire needs to be mentioned: Grange Road, Gosport (Hall and Ford 1994). This site, located 1km from the shore on a relatively flat terrace of the River Alver, consists of pits and postholes which have been reconstructed into various possible structures and associated features. The pottery from Area A is flint-tempered and undecorated, with one exception. The vessel forms, once again, consist of flower pot profile, straight-sided, and convex/ovoid jars with two upright rims, slack-shouldered jars, one sharply everted rim vessel, and expanded bases. The only bowl is straight-sided as well, and is decorated with pinching of the rim on the interior and exterior. One of the convex-profile, nearly hooked rims illustrated was perforated at the pre-firing stage 20mm below the rim. The pottery from this site is not typical of the late Bronze Age, as is mentioned in the pottery report, although it is assigned to the post-Deverel-Rimbury repertoire of the late Bronze Age as a plain assemblage and compared to Yapton in West Sussex (Timby 1994).

An assemblage of late Bronze Age-earliest Iron Age pottery from Balksbury, Andover (Wainwright and Davies 1995) provides a useful closure to the discussion of dated deposits of later Bronze Age date in Hampshire. The pottery was recognised as typical of this period both on the basis of stratigraphic relationships and the types present (Rees 1995), and subsequently confirmed by two radiocarbon dates: phase II bank, 1395–410 cal BC (95% confidence; HAR-442, 2740±170 BP) and posthole 3464, 1160–820 cal BC (95% confidence, HAR-5127, 2800±70 BP). The range of vessels illustrated from the posthole (ibid., fig. 63, 7–14) includes two tall shouldered/carinated bowls, a round-shouldered bowl, four necked jars including one with fingertip decoration on the exterior of the rim, and a vessel with a sharply inturned rim profile. This group of pottery in particular and a similar key group from a pit (ibid., fig. 63, 2–6) would not be out of place within a plain assemblage of late Bronze Age pottery from the Thames Valley. The pottery from this phase is overwhelmingly made from coarse or fine flint-tempered non-sandy fabrics (ibid., fig. 62a, fabrics 7 and 9).

East of Hampshire, there are two important assemblages from Sussex which need reviewing. Black Patch is one of the most famous later Bronze Age settlement sites in southern Britain (Drewett 1982), and reinterpretation has demonstrated that it consists of two chronologically distinct occupation phases (Russell 1996). The pottery was originally examined as a single phase assemblage and it was declared that "no late Bronze Age types can be identified within the Black Patch groups" (Ellison 1982, 362) but there is now scope for re-examination of the material in the light of this rephasing. The pottery contains obvious middle Bronze Age types, including several bucket urns and at least five globular urns (ibid., figs 30.6, 30.18–24, 31.25–6, 31.32, 31.34–6). However, there is a common vessel form, Sussex type 2, an ovoid or straight-sided jar, which may represent a non-Deverel-Rimbury component within the Black Patch assemblage (ibid., figs 30.2, 30.7–15). Its similarity to vessels from Green Park does not require further emphasis, but the presence of knobs on some examples demonstrates the transitional nature of these vessels. Radiocarbon dating of six samples of grain from three pits located at Hut Platform 4 (pits 3–5) produced significant results but only ten body sherds (210 g) were associated with the food deposits: 1130–800 cal BC (95% probability, HAR-2939, 2780±80 BP); 1430–1040 cal BC (95% probability, HAR-2940, 3020±70 BP); 1400–990 cal BC (95% probability, HAR-2941, 2970±70 BP); and 1020–820 cal BC (95% probability, BM1643, 2790±40 BP). A similar range of dates was established for three samples of grain from another pit (49) from Hut Platform 1: 1410–970 cal BC (95% probability, HAR-3735, 2970±80 BP); 1520–1120 cal BC (95% probability, HAR-3736, 3080±70 BP); and 1220–830 cal BC (95% probability, HAR-3737, 2850±70 BP). These dates are recognised by Ellison as confirming the general middle Bronze Age dating of the assemblage, "although they are rather later, on average, than the only other date obtained for such an assemblage in Sussex (Itford Hill: GrN-6167, 2950±35 BP)" (ibid., 364). The Itford Hill settlement pottery curiously consists predominantly of middle Bronze Age urns (Burstow and Holleyman 1957, 194–200, figs 20–4) but there is a statement that several sherds are late Bronze Age in type (ibid., fig. 24.d-j). This distinction between obvious middle Bronze Age urn assemblages and those which have both elements of middle Bronze Age and non-Deverel-Rimbury types was first recognised in Sussex at Plumpton Plain. The Site A assemblage was typical of the middle Bronze Age but that from Site B belonged to a non-Deverel-Rimbury range of forms but still maintained some elements of middle Bronze Age character (Hawkes 1935; Barrett 1980). Research to determine whether carbonised residues remain on any of this material needs to be conducted in order to provide samples for radiocarbon dating of these vessels.

In addition, what is most unusual is that there are two base sherds illustrated for Black Patch, one made from a fabric consisting of a micaceous clay matrix with sand and flint inclusions in it and the other made from a sandy fabric, which are distinctively not middle Bronze Age in character (ibid., fig. 31.37, 31.39), but no mention of their considerable difference from the heavily flint-tempered middle Bronze Age pottery is made. Therefore, there is every possibility that one of the Black Patch phases of occupation could represent a transitional ceramic phase during the later Bronze Age. Plain assemblages of late Bronze Age type are well-recognised in Sussex, such as those from Yapton (Hamilton 1987) and Selsey (Thomas 2001).

The evidence from Wessex would not be complete without briefly mentioning sites in Dorset. The Eldon's Seat assemblage from the Isle of Purbeck, one of the most famous sites where non-Deverel-Rimbury pottery was recovered along with late Bronze Age pottery (Cunliffe and Phillipson 1968), should be seen as a classic example of the transitional phase in the earliest levels at the site, referred to as Eldon's Seat I. The pottery actually consists of a few middle Bronze Age urns (ibid., fig. 12.31–2, 12.36, 12.39–41) as well as transitional types (ibid., fig. 12.43–5) and regional variants of these (ibid., figs 10.1, 11.10–14, 11.17). There are also shouldered vessels and straight-sided vessels with thin walls, which were recovered from occupation layers and structural features stratified beneath deposits containing more typical decorated late Bronze Age types. There is only one bowl from this phase and it is not closely stratified. More recently, excavations just outside of Dorchester at Coburg Road revealed a later Bronze Age post-built settlement beside a line of Bronze Age ring ditches (Smith *et al.* 1992). The pottery has been recognised as similar in many respects to the Eldon's Seat I assemblage (Cleal 1992).

Back to the Lower Kennet Valley: Green Park 1–3 and Moores Farm

As mentioned above, the primary fill of waterhole 2690 at Green Park 3 was dated to the 15th and 14th centuries cal BC. Five plain body sherds from three different fabrics were recovered from this context (2689), comprising fabrics F5 and F20 (middle and late Bronze Age type) and F6 (late Bronze Age type). A large quantity of middle Bronze Age, transitional and late Bronze Age pottery was found stratified above this fill (Tables 2.8–9; Figs 2.17.6, 2.18.7–12 and 2.19.13–22). Similar situations occur for three of the four other features sampled for radiocarbon dating. Radiocarbon samples from waterhole 3091 produced dates of 1388–1130 cal BC (KIA19180) and 1395–1047 cal BC (KIA19181), and the feature contained sherds from a middle Bronze Age globular urn as well as plain body sherds from various vessels made from either middle Bronze Age, middle/late Bronze Age and late Bronze Age fabrics in other contexts. Waterhole 2373 produced dates of 1501–1307 cal BC (KIA19184) and 1383–1051 cal BC (KIA 19185) from a context with no pottery, but contexts above this produced plain sherds of middle/late Bronze Age and late Bronze Age fabric pottery. Waterhole 3263 produced dates of 1434–1214 cal BC (KIA19186) and 1388–1129 cal BC (KIA19187) and 11 sherds in fabric F22 from a single, probably middle Bronze Age urn (based on fabric alone).

At Green Park 2 large quantities of transitional and late Bronze Age pottery were identified, but were found separate from the middle Bronze Age pottery, which was associated with field boundary ditches and cremation burials. The Moores Farm collection contains an impressive amount of middle Bronze Age pottery from settlement occupation but no evidence of any transitional or late Bronze Age forms or fabrics.

TRANSITIONAL LATER BRONZE AGE (TLBA) POTTERY

This survey has shown that serious consideration must be given to assemblages of later Bronze Age type which appear to be: (1) not typical of the plain assemblage array of shouldered jars and bowls of the late Bronze Age, but (2) do include specific types from the full repertoire, in particular the straight-sided vessels and convex-profile jars, and (3) may be found directly in association with middle Bronze Age urns or (4) without any evidence of associated middle Bronze Age material. It is not best practice to label this material post-Deverel-Rimbury, as the types may be contemporary. This pottery is difficult to recognise or to separate from other later Bronze Age pottery, especially when plain body sherds are the most frequent material. The contexts whence the sherds may derive can be funerary locations, settlement features or special deposits. This material appears to date to the second half of the second millennium cal BC, predating the plainware pottery of the late Bronze Age. This transitional material has been recovered throughout central southern England on all types of landscapes. It is suggested that the terminology 'transitional later Bronze Age' or TLBA may suitably describe this material. It is certainly less common than truly late Bronze Age pottery of 10th to 9th centuries cal BC date, and therefore seems to have a role more similar to that of pottery in the middle Bronze Age.

THE FUTURE

The characterisation of later Bronze Age pottery is very challenging, due to the gradual evolution of forms, the similarities of fabrics and the deposition of different types within the same deposits. The significance of the Green Park 1–3 and Moores Farm discoveries has been placed within a local context by discussing other sites on which TLBA pottery has been identified, such as Pingewood and Brimpton. The subtleties of the pottery from the distinct, transitional period has been emphasised in this project and TLBA pottery has been placed well within the second half of the second millennium cal BC. It is now no longer possible to ignore these special assemblages or hide behind the label 'post-Deverel-Rimbury'. This important pottery is now a well-recognised, wider regional phenomenon which may have local variations. However, we still know very little about the dating of this material, its manufacture and its use. Therefore the following points are suggested to improve this situation.

When middle Bronze Age and late Bronze Age pottery is encountered or expected in a field project, ceramic specialists of this period must be able to advise on the focus of further excavation. At Gosport, Hampshire, features were only half excavated and yet the pottery was reported at the post-excavation stage to be extraordinarily significant and unique for the area. A more flexible approach to fieldwork is important for the future, with features fully excavated in order to provide the best possible pottery assemblage sample available. For example, the careful excavation and recording of the first half of features would be normal practice, but once middle or late Bronze Age pottery is recovered a different strategy of rapid scooping of the contents from the second half should be considered. For ditch sections, a tactic of machining out the contents of ditches in additional 2–5m sections, after detailed hand-excavated sections have been recorded, should be considered. We know so little about later Bronze Age pottery assemblages that every opportunity of recovery within financial limitations must be attempted in order to maximise the size of the assemblage.

Always, wherever suitable samples are encountered, radiocarbon dating must be considered an essential aspect of fieldwork and publication. Financial provision of at least six pairs of samples from every project suspected of having middle

Bronze Age-late Bronze Age pottery should be estimated for at the budgeting stages. In addition, a regional radiocarbon dating assessment should be organised to determine whether any of these assemblages are associated with suitable samples for C14 determinations. Such a re-assessment produced important new dating evidence which contributed to the understanding the sequences and timespan of occupation at Rams Hill (Needham and Ambers 1994).

In order to determine what later Bronze Age pottery was used for, records should be kept of the surface treatments and usewear evidence and middle Bronze Age-late Bronze Age pottery fabrics and forms should be quantified by context. This information should be either published or made available online. Illustrated vessels should always detail this information. This would provide basic data about the pottery recovered and provide the means for assessing the archaeology and past human behaviour without recourse to time-consuming re-examination of the individual sherds or vessels in archive stores. A research project using absorbed lipid residue analysis should also be conducted to find out what middle Bronze Age and TLBA pots were used for.