Anglo-Saxon Smiths and Myths

DAVID A. HINTON*

Department of Archaeology, University of Southampton

Knowledge of the metalworking and jewellery-making abilities of the Anglo-Saxons has been much enhanced in recent years by metallurgical and other technical studies. Just as great skill was required to cut garnets, to create gold wires or foils, to inlay, and to gild base metals, so too was great patience to punch a tiny triangle 500 times on to a single brooch or to remake moulds for almost every new one.¹ Most of the artefacts on which such studies are based have derived from graves, but information on metalworking is also now coming from a few early settlement sites, such as the failed casting of a saucer-brooch and broken fragments of an unused mould for a square-headed brooch, both sixthcentury, from Mucking, Essex,² the metal waste, crucible

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¹ M. Bimson, 'Dark-Age garnet cutting', Anglo-Saxon Studies in Archaeology and History, 4 (1985), 125-8; N. Whitfield, 'Round wire in the early Middle Ages', Jewellery Studies, 4 (1990), 13-28; W. Duczko, Birka V: the filigree and granulation work of the Viking period (Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien, 1985); K. East, 'A study of the gold foils from Sutton Hoo', Anglo-Saxon Studies in Archaeology and History, 4 (1985), 129-42; N.D. Meeks and R. Holmes, 'The Sutton Hoo garnet jewellery: an examination of some gold backing foils and a study of their possible manufacturing techniques', Ibid., 143-57; S. La Niece, 'White inlays in Anglo-Saxon jewellery', Science and archaeology, Glasgow 1987, eds E.A. Slater and J.O. Tate (Oxford: British Archaeological Reports British Series 196i, 1988), 235-46; W.A. Oddy, 'Fire-gilding in early medieval Europe', in D.A. Hinton, The gold, silver and other non-ferrous alloy objects from Hamwic, and the non-ferrous metalworking evidence (Stroud: Alan Sutton Publishing, 1996), 81-3; D. Leigh, 'Aspects of early brooch design and production', Anglo-Saxon cemeteries: a reappraisal, ed. E. Southworth (Stroud: Alan Sutton Publishing, 1990), 107-24; T.M. Dickinson, 'Early Saxon saucer brooches', Anglo-Saxon Studies in Archaeology and History, 6 (1993), 11-44; C. Mortimer, 'Lead-alloy models for three early Anglo-Saxon brooches', Anglo-Saxon Studies in Archaeology and History, 7 (1994), 27-33; M. Barnet, 'Anglo-Saxon garnet cloisonné composite disc brooches', Journal of the British Archaeological Association, 148 (1995), 6-28.

² H. Hamerow, Excavations at Mucking. Volume 2: The Anglo-Saxon settlement. Excavations by M.U. Jones and W.T. Jones (London: English Heritage Archaeological Report 21, 1993), 60 and 117; L. Webster, 'The brooch mould', Ibid., 62–3. M.U. Jones, 'Metallurgical finds from a multi-period site at Mucking, Essex', Aspects of early metallurgy, ed. W.A. Oddy (London: Historical Metallurgy Society and British Museum Research Laboratory, 1977), 117–20 referred also to a Roman tile with a brooch impression, presumably for use as a mould. fragments and possibly a mould fragment, perhaps 'part of the collection of a metalworker', from the settlement adjacent to the mainly cremation cemetery at Spong Hill,³ the crucible debris and copper-alloy scrap from Witton, both in Norfolk,⁴ and the sixth-century saucer-brooch casting from Cassington, Oxfordshire.⁵

The ironworker's skills are also now better understood, whether those of a sword-maker pattern-welding a blade,⁶ or those of a knife-maker making the best use of available ores by butt-welding a steel edge to an iron core.⁷ Here also recent excavations are contributing new information. Although West Stow, Suffolk, produced no evidence of the smelting of ore, but only smithing slags and the remains of hearth bottoms, slags from both iron smelting and smithing have been found at sites like Mucking and Witton, at the former with quantities of charcoal.⁸ Most excavations of larger settlement complexes have produced evidence at least of smithing. It has been suggested that because some of the Mucking slag was probably from a shaft rather than from a bowl furnace, there was quite a sophisticated production operation, perhaps indicating evidence of Romano-British continuity, or of an overseas workman from a non-Germanic area, since bowl furnaces may have been all that were known there.9

Because the demand for iron must always have been greater than that for other metals, as the greater frequency of the debris from its production found on settlement sites demonstrates, some smiths would probably not have needed the knowledge to work in non-ferrous metals. There is no known early Anglo-Saxon equivalent to the grave at Hérouvillette, Normandy,¹⁰ in which

³ C. Hills, R. Rickett and K. Penn, 'Early Saxon objects of copper alloy', in R. Rickett, *The Anglo-Saxon cemetery at Spong Hill, North Elmham, Part VII: The Iron Age, Roman and early Saxon settlement* (Gressenhall: East Anglian Archaeology 73, 1995), 74-6 at 76; see also J. Bayley, 'Objects used for metalworking', Ibid., 82-4.

⁴ K. Wade, 'The early Anglo-Saxon period', in A.J. Lawson, *The archaeology of Witton* (Gressenhall: East Anglian Archaeology 18, 1983), 50-69, at 58.

⁵ Dickinson, 'Saucer brooches', 37–8. For other sites, C.J. Arnold, An archaeology of the early Anglo-Saxon kingdoms, new edition (London/New York: Routledge, 1997, 135–7). The Portchester crucible cited there is probably Roman.

⁶ R.F. Tylecote and B.J.J. Gilmour, *The metallography of early ferrous edge tools and edged weapons* (Oxford: British Archaeological Reports British Series 155, 1986); J. Lang and B. Ager, 'Swords of the Anglo-Saxon and Viking periods in the British Museum: a radiographic study', *Weapons and warfare in Anglo-Saxon England* (Oxford University Committee for Archaeology Monograph 21, 1989), ed. S.C. Hawkes, 85–122.

⁷ J.G. McDonnell, 'Ore to artefact — a study of early ironworking technology', *Science and archaeology*, eds Slater and Tate, 283–93.

⁸ F. Macalister, 'The slags', in S. West, West Stow. The Anglo-Saxon village (Gressenhall: East Anglian Archaeology 24, 1985), 69; G. McDonnell, 'Slags and ironworking residues', in Hamerow, Mucking, 82-3; J. Bayley, 'Iron slag', in Lawson, Witton, 58. Problems of deciding whether Anglo-Saxon ironsmiths were sedentary or itinerant, and blacksmiths only or also smelters, are summarized by Arnold, Anglo-Saxon kingdoms, 135-6.

⁹ R. Cramp, 'Northumbria and Ireland', *Sources of Anglo-Saxon culture*, ed. P. Szarmach (Kalamazoo: Studies in Medieval Culture 20, 1986), 185–201, at 190–1.

¹⁰ J. DeCaens, 'Un nouveau cimetière du haut moyen age en Normandie, Hérouvillette (Calvados)' Archéologie Médiévale, 1 (1971), 1–187, grave 10, at 12–7 and 83–90.

tools seem to signal someone equipped for both heavy and light metalworking, but there is the slightly later, seventh- or early eighth-century assemblage in a grave at Tattershall Thorpe, Lincolnshire, which included tools, scrap and finished items appropriate to someone working in precious metals and copper alloys, and also a heavy hammer, a punch, an anvil and a drawplate or nail bar, suggesting that he was able to supply iron weapons and implements as well.¹¹ There was biblical precedence for this duality, since the original instructor of all smiths, Tubal-Cain, was 'egder ge goldsmib ge isen smib' (Genesis 4:22),¹² but normal practice may have been different. The 'Gifts of Men', which has been taken as one of the earlier strands in the 'Exeter Book',¹³ refers both to the 'cunning craftsman in gold and gems, when a leader of men bids him prepare a jewel in his honour' and to the 'skilled smith, [who] can make many weapons for the use of men'.¹⁴ This certainly implies distinct craft specialisms at least by the tenth century. Nor would every ironsmith necessarily have had the skill to make a pattern-welded sword-blade; King Alfred's law-code referred to a 'sword-furbisher [who] receives a weapon or a smith [who] receives a tool' for repair,¹⁵ which implies a distinction that may well have applied earlier.

The extent to which there were specialist producers of particular types of metalwork therefore remains an open question, analogous to that of identifying whether individual practitioners can be recognized through their products. Several recent studies have grappled with the problem of establishing whether fifth- and sixthcentury brooch-makers were itinerant or sedentary, and with the difficulty of recognizing an individual's work from the use of personalized motifs or from the marks left by a particular tool, such as a die stamp.¹⁶ The ambivalence of much of the evidence is shown by Mucking, where the broken mould and the failed casting were not accompanied by any copper-alloy slag residues or

¹¹ D.A. Hinton, 'A smith's hoard from Tattershall Thorpe, Lincolnshire', Anglo-Saxon England, 22 (1993), 147–66. The assemblage does not seem to be quite complete, however: see 161.

¹² J. Bosworth and T.N. Toller, An Anglo-Saxon dictionary (Oxford: Clarendon Press, 1898), 889.

¹³ P.W. Conner, Anglo-Saxon Exeter: a tenth-century cultural history, Studies in Anglo-Saxon History 4 (Woodbridge: Boydell, 1993), 116, 152 and 154.

¹⁴ D. Whitelock (ed.), English Historical Documents. Volume I, c. 500–1042, second edition (London: Eyre Methuen, 1979), 874.

¹⁵ Ibid., 412. Many such documentary references were asssembled by C.R. Dodwell, Anglo-Saxon art: a new perspective (Manchester: Manchester University Press, 1982).

¹⁶ Particularly Dickinson, 'Saucer brooches'; R. Brownsword and J. Hines, 'The alloys of a sample of Anglo-Saxon great square-headed brooches', *Antiquaries Journal*, 73 (1993), 1–10; Leigh, 'Early brooch design'; and for gold bracteates, N. Wicker, 'On the trail of the elusive goldsmith; tracing individual style and workshop characteristics in Migration Period metalwork', *Gesta*, 33 (1994), 65–70. Itinerancy is argued for a comparable craft, comb-making: A. MacGregor, *Bone, antler, ivory and horn* (London/Sydney: Croom Helm, 1985), 46–8.

crucibles;¹⁷ they might represent a very occasional visit by a travelling smith, or they could have been discarded by a patron who had visited a workshop and had brought back the remnants to prevent their reuse by someone not of the right kin. There were no such finds at all at West Stow, and the Spong Hill material might relate to special demands created by the large adjacent cemetery, although evidence from another near-by settlement indicated by surface finds suggests similar production there.¹⁸ Other factors which favour interpretation in terms of relatively few workshops in the sixth century include the degree of standardization of certain designs; the larger the number of centres, the greater the divergence that might become apparent — the differences in burial rites observable in two cemeteries only twelve miles apart show how local variations could arise in at least some spheres of activity.¹⁹

That metal objects might have been distributed over quite long distances from a particular centre is given further credence by the increasing number of finds of pottery in a fabric that is identified as coming from the Charnwood Forest area of Leicestershire, travelling as far east as Lincolnshire and as far south as Buckinghamshire and the west of modern London.²⁰ Even if it is eventually demonstrated that the granite fragments which characterize this pottery derive from somewhere on the continent and are not unique to Leicestershire, it still adds a seemingly mundane product to other evidence of long-distance transport of objects to a number of socially undistinguished settlements. Quernstones and whetstones indicate even longer distances travelled by functional objects in materials not available locally.²¹ Settlement excavations are showing that small luxury items were not only treasured for burial but were common enough to be casually broken and lost. Jettisoned at Mucking were brooches, beads of jet, amber and amethyst, glass, including a claw-beaker fragment, and a pin with garnets and gold foil set in its head.²² The West Stow settlement produced less metalwork, but four

¹⁷ M. Heyworth, 'Analysis of the copper alloy objects from the Anglo-Saxon settlement at Mucking', in Hamerow, *Mucking*, 81–2.

¹⁸ West, *West Stow*; Rickett, *Spong Hill*, 156; a craftworking area has been suggested at West Heslerton, Yorkshire, but there is as yet no published evidence about its extent or date: see K. Steedman, 'Excavation of a Saxon site at Riby Cross Roads, Lincolnshire', *Archaeological Journal*, 151 (1994), 212–306, at 222 — Riby Cross Roads is later than the sites discussed above.

¹⁹ E.-J. Pader, Symbolism, social relations and the interpretation of mortuary remains (Oxford: British Archaeological Reports International Series 130, 1982).

²⁰ Steedman, 'Riby Cross Roads', at 235-6; T. Pearson, 'Saxon pottery', in D.C. Mynard and R.J. Zeepvat, *Great Linford* (Buckingham: Buckinghamshire Archaeological Society Monograph 3, 1992), 241-5; P. Andrews and A. Crockett, *Three excavations along the Thames and its tributaries* (Salisbury: Wessex Archaeology Report 10, 1996), 33-6 (identification by D.F. Williams).

²¹ Summarized by Arnold, Anglo-Saxon kingdoms, 133-4.

²² Hamerow, Mucking, 60-2.

claw-beaker fragments, luxury items probably from Kent.²³ Material culture linked these small communities into a system of contacts beyond their immediate localities, distributing ideas as well as objects, and the quantity of miscellaneous losses suggests that gift-exchange and marriage alliances were only parts of the exchange system operating.

When King Ine legislated for 'men from a distance' to make their presence known or be treated as thieves,²⁴ was he thinking of pedlars hawking small items that country dwellers wanted? How were such people, or metalworkers supplying brooches or buckles beyond the confines of their immediate locality, recompensed in a non-monetized society? 'Special-purpose' money probably already existed — the term 'lord-ring' in the earliest English lawcode suggests familiarity with the concept by the end of the sixth century, though the documentary context does not demonstrate that it existed outside the higher social levels or could serve for minor transactions.²⁵ The same code talks of 'shillings', a word meaning 'cuts', as though they were subdivisions from a ring or bar of metal; 'sceat' has a similar origin, the modern 'shatter' giving the right impression of very small pieces, but also suggesting a less applicable randomness.²⁶ Balances and weights show that very fine measures could be obtained, but are not sufficiently common to allow the inference that they were used on an everyday basis.²⁷ Small collections of scrap metal could have been one way in which an exchange might occasionally have been effected. Even though the assemblages in graves may have had amuletic purposes, routine foraging for scrap for more mundane purposes seems likely from the wide range of alloys in cast brooches, and the Roman objects at places like Saxon Southampton also suggest frequent rummaging in archaeological sites.²⁸

²³ V.I. Evison, 'The glass', in West, West Stow, 75-6.

²⁴ Whitelock (ed.), *E.H.D.*, i, 401.

²⁵ Ibid., 391.

²⁶ P. Grierson and M. Blackburn, *Medieval European coinage. I: The early Middle Ages* (5th to 10th centuries) (Cambridge: University Press, 1986), 15; see also M. Gaimster, 'Scandinavian gold bracteates in Britain. Money and media in the Dark Ages', *Medieval Archaeology*, 36 (1992), 1–28, at 1–2.

²⁷ C. Scull, 'Scales and weights in early Anglo-Saxon England', Archaeological Journal, 147 (1990), 183–215.

²⁸ A.L. Meaney, Anglo-Saxon amulets and curing stones (Oxford: British Archaeological Reports British Series 96, 1981), 249–55; Brownsword and Hines, 'Alloys', 2; C. Mortimer, 'Anglo-Saxon copper alloys from Lechlade, Gloucestershire', Oxford Journal of Archaeology, 7 (1988), 227–34; Hinton, Hamwic, 93. Similar collection of iron scrap is shown by two assemblages of slightly later date: C.A. Morris, 'A late Saxon hoard of iron and copperalloy artefacts from Nazeing, Essex', Medieval Archaeology, 27 (1983), 27–39; C.A. Morris, 'Note on iron objects', in T. Darvill, 'Excavations on the site of the early Norman castle at Gloucester, 1983–84', Medieval Archaeology, 32 (1988), 1–29, at 32–9. Both sedentary and peripatetic workers could have expected most of their raw materials to be brought to them by their customers, though mercury for gilding, and pure tin for white-metal plating (e.g. Heyworth, 'Analysis', 81–2) would have been more difficult as they could not have been obtained from scrap. Gold for gilding would also have been needed, and only available to a few patrons.

The material culture which served to link fifth- and sixth-century communities does not suggest a hierarchical division in which only an elite had access to understanding of the symbolic language represented; at any rate, the motifs occurring on the relatively few decorated sword fittings seem the same as on brooches, implying the patronage of the same smiths by such elites as existed,²⁹ and there are occasional silver brooches cast in moulds not obviously different from those used for copper alloy. Even if iron weapons were produced by a small number of special smiths, the distinction does not seem to have existed amongst other metalworkers. Whether they worked at the residences of high-status patrons when they received commissions, or remained at their own workshops, remains unknown, as no occupation sites in the areas where Anglo-Saxon culture predominated have produced the range of metalworking evidence that suggests smiths serving princes and their entourages at Garranes in Ireland or Dinas Powys in Wales, the sort of places where Gildas might have seen gold and silver creating the 'chains of all royal power'.³⁰ All elite British sites do not yield the same data: only a single ingot came from South Cadbury in its presumed British phase.³¹ In Northumbria, Yeavering produced no metalworking evidence, only finished objects, and few enough of them;³² near-by Bamburgh has yielded a fine gold plaque, but again metalworking debris has not been reported.³³ If there was a stratum of high-status sites in the 'English' world, they may be disguised by having been kept clean, and would therefore be devoid of identifying evidence.³⁴

One place where metalworking is now known to have taken place in early Anglo-Saxon England is Canterbury. There, in a sunkenfeatured building near the old Roman amphitheatre, has recently been found a late fifth-century Merovingian gold coin, which had been deliberately cut and had jeweller's rouge adhering to it;

³⁰ M. Winterbottom (ed.), Gildas. The ruin of Britain and other works (Chichester: Phillimore, 1978), 33.

³¹ L. Alcock, Cadbury Castle, Somerset: the early medieval archaeology (Cardiff: University of Wales Press, 1995), 125 — and see the splendid index entry 'Crucibles, absence of'! Tintagel, Cornwall, has only recently yielded its first definite evidence of metalworking: C. Batey et al., 'Tintagel Castle: steps area', Cornish Archaeology, 32 (1993), 47–66. The 'other' Somerset Cadbury had a penannular building interpreted as a possible workshop: P. Rahtz et al., Cadbury-Congresbury 1968–73 (Oxford: British Archaeological Reports British Series 223, 1992), 233, Structure IV.

³² M. Welch, Anglo-Saxon England (London: English Heritage/Batsford, 1992), 111, referred to unpublished moulds from Yeavering.

³³ R.N. Bailey, 'Gold plaque', 59 in *The making of England: Anglo-Saxon art and culture* A.D. 600–900, eds L. Webster and J. Backhouse (London: British Museum Press, 1991), 59; see also Cramp, 'Northumbria and Ireland', 192.

³⁴ Alcock, Cadbury Castle, 126.

²⁹ E.g. A. MacGregor and E. Bolick, A summary catalogue of the Anglo-Saxon collections (non-ferrous metals) (Oxford: British Archaeological Reports British Series 230, 1993), 234-8.

another cut piece of gold was near-by.³⁵ The Roman city may have survived, perhaps uniquely, as a place where high-value craftworking was carried out. There may have been no permanent workshops, however, production taking place only on an occasional or seasonal basis, perhaps when the king visited and assemblies were held.

Kent was always exceptional, and its particular ability in the century from c. 550 to acquire gold and garnets in some quantity³⁶ would almost certainly have intensified the degree of craft specialization, signalled by the very rich finds from the cemetery at Faversham, 'the homestead or village of the smith', a name unique in England;³⁷ it is surely no coincidence that the cemetery is in King's Field, for Faversham was probably a royal estate.³⁸ From Kent also comes the first documentary reference to a smith, though not to what he produced. King Aethelberht's early seventhcentury law, clause 7, states that 'If anyone kills the king's own smith, or his messenger, he is to pay the ordinary leodgild'.³⁹ Taking the last word as a synonym for wergild, and at face value clause 21 which makes the *wergild* of a free man 100 shillings, the implication is that that was a king's smith's value also, although he was unfree. Assuming that these clauses have any reality, the smith was highly rated, but could have been bought with the Crondall hoard, if the gold thrymsas of the period were worth a shilling.⁴⁰ The availability of gold and garnets probably had several

³⁵ K. Blockley, M. Blockley, P. Blockley, S.S. Frere and S. Stow, *Excavations in the Marlowe Car Park and surrounding areas* (Canterbury: Archaeology of Canterbury Volume 5, Canterbury Archaeological Trust, 1995), 335; J.P.C. Kent, 'The tremissis', Ibid., 947–8; and W.A. Oddy, 'Anglo-Saxon [objects of gold]', Ibid., 1068.

³⁶ S.C. Hawkes, 'Anglo-Saxon Kent, c. 425–725', Archaeology in Kent to A.D. 1500, ed. P.E. Leach (London: Council for British Archaeology Research Report 48, 1982), 64–78.

³⁷ A.D. Mills, A dictionary of English place-names (Oxford: Oxford University Press, 1993), 129. The place gave its name to a region, presumably a mark of its distinction: G. Fellows-Jensen, 'Place-names as a reflection of cultural interaction', Anglo-Saxon England, 19 (1990), 13–21, at 20.

³⁸ Hawkes, 'Kent', 75.

³⁹ Whitelock (ed.), *E.H.D.* i, 391. For discussion of Welsh laws and other sources about smiths, see W. Davies, *Wales in the early Middle Ages* (Leicester: Leicester University Press, 1982), 49–50, and L.A.S. Butler, 'Domestic building in Wales and the evidence of the Welsh laws', *Medieval Archaeology*, 31 (1987), 47–58, at 50; and for Ireland, B.G. Scott, 'The status of the blacksmith in early Ireland', *The crafts of the blacksmith*, eds B.G. Scott and H. Cleere (Belfast: Ulster Museum, 1985), 153–6.

⁴⁰ As argued by Grierson and Blackburn, *Medieval European Coinage*, i, 106, 157; for a caveat: D.M. Metcalf, *Thrymsas and sceattas in the Ashmolean Museum*, Oxford. Volume 1 (London: Royal Numismatic Society and Ashmolean Museum, Oxford, 1993), 29. The point is worth labouring because of a recent attempt by J. Campbell, 'The impact of the Sutton Hoo discovery on the study of Anglo-Saxon history', Voyage to the other world: the legacy of Sutton Hoo, eds C.B. Kendall and P.S. Wells (Minneapolis: University of Minnesota Press, Medieval Studies at Minnesota 5/17, 1992), 79–102, at 87, to downplay the value of the Sutton Hoo metalwork, where too many of his comparisons are with the different currency of the later seventh century. The purse, the gold buckle and the gold in a few of the other objects at Sutton Hoo would probably have bought a Kentish freeman's life, or a king's smith's.

effects. Filigree and granulation work requires special skills, as does the cutting of the stones,⁴¹ and it is likely therefore that the craftsmen who could work to the necessary standards were highly prized — hence the mention in the Kentish law-code. They would have operated most efficiently in permanent workshops, where they could concentrate for long periods, and to which raw materials could be supplied, reducing their non-productive hours. They would have needed to learn, and by regular practice to retain, skills beyond the level required of mould-makers.⁴²

At the same time, the existence of the high-quality objects would have reduced the status value of anything in copper alloy, even though gilded. The decline in deposition of base-metal dress items in graves may have had less to do with changing beliefs than with their increasingly lower social place. It is very difficult to quantify whether there was an actual fall-off in demand, as it is not only the number of furnished graves that declines, but also the number of sunken-featured buildings in settlements, the other very fruitful source of artefacts. As in the few but highly visible barrow burials, status signalling by dress fittings and accoutrements could have been confined to the elites. If it is correct to see assemblages like that at Taplow, Buckinghamshire,⁴³ or the belt buckle from Alton, Hampshire,⁴⁴ as gifts from a Kentish king to a client, they would have been displayed to show the prestige of the alliance. Similar gifts may have included sword-blades, all of which were patternwelded in the seventh century,⁴⁵ further restricting access to them. And kings would have needed the craftsmen to make all these things.

To achieve a monopoly of control over access to prestigious objects would necessitate also control over the smiths who produced them, and the implication of King Aethelberht's lawcode is that some at least were not free agents. At the end of the same century, King Ine's law directed that a Wessex *gesith* who moved elsewhere could take his reeve, his children's nurse and his *smip* with him.⁴⁶ The smith seems to have been in no position to

⁴² Barnet, 'Disc brooches', especially 26-7.

⁴¹ I find it difficult to accept that garnet cutting was practised only on the continent, and that English smiths were merely assemblers, even sending drawings to a centre like Trier, as advocated by B. Arrhenius, *Merovingian garnet jewellery: emergence and social implications* (Stockholm: Amqvist & Wiksell, 1985), 157–61, a stimulating and informative work.

⁴³ L. Webster, 'Pair of clasps', *Making of England*, eds Webster and Backhouse, 55-6; D. Stocker and D. Went, 'The evidence for a pre-Viking church adjacent to the Anglo-Saxon barrow at Taplow, Buckinghamshire', *Antiquaries Journal*, 152 (1995), 441-50.

⁴⁴ V.I. Evison, An Anglo-Saxon cemetery at Alton, Hampshire (Hampshire Field Club and Archaeological Society, 1988), 45.

⁴⁵ Lang and Ager , 'Swords', 107.

⁴⁶ Whitelock (ed.), *E.H.D.*, i, 406.

refuse to go, but the bond was clearly likely to be a close personal one — smiths may have been uniquely able to 'communicate' with their lords, acting as intermediaries between aristocrat and peasant.⁴⁷ It may not have been possible to tie down all smiths in this way, however. On the continent, Bishop Eligius was a senior cleric and craftsman, who was able to work at various centres during his career,⁴⁸ and the Eusebius who put his name with that of Canterbury on a seventh-century gold thrymsa may also have been a Frankish cleric, unlikely therefore to be in thrall.⁴⁹ It is possible that individual craftsmen might have been brought together for specific purposes, to work on the Sutton Hoo treasure for instance — a lapidary to cut the garnets, a goldsmith, even a Celtic specialist, perhaps an East Anglian of British descent, for the millefiori.⁵⁰ There may never have been a 'Sutton Hoo school', or permanent workshop, tied to an East Anglian royal court; instead, the craftsmen dispersed after their commission was complete, so that their work may appear again elsewhere, not only in England but on the continent.⁵¹ The smith at Tattershall Thorpe may have been someone of this sort, free to roam but tied into an overlordship pattern by the chiefs' control of materials; he had with him virtually no gold, and very little silver, though he had at least two garnets as well as exotic ornaments from overseas.⁵²

The lengths to which a king might go to procure a smith is told in the story of King Nithad and Weland, a story well enough known in England at the end of the ninth century for King Alfred to be able to refer to it in the knowledge that his allusion would be understood,⁵³ just as the author of *Deor* could lament upon the protagonists' sufferings without having to set out the story that

⁴⁷ R. Fossier, Peasant life in the medieval west (Oxford: Blackwell, 1988), 55.

⁴⁸ H. Vierck, 'Werke des Eligius', Studien zur Vör-und Fruhgeschtlichen Archaölogie; Festschrift für Joachim Werner zum 65. Geburgstag, eds G. Cossack and G. Ulbert (Munich: C.H. Beck, 1974), 309–80.

⁴⁹ M.M. Archibald, 'Anglo-Saxon shilling', *Making of England*, eds Webster and Backhouse, 37.

⁵⁰ R. Bruce-Mitford, The Sutton-Hoo ship-burial. Volume 2, Arms, armour and regalia (London: British Museum Publications, 1978), 594–601; C. Scull, 'Further evidence from East Anglia for enamelling on early Anglo-Saxon metalwork', Anglo-Saxon Studies in Archaeology and History, 4 (1985), 117–24; G. Speake, Anglo-Saxon animal art and its Germanic background (Oxford: Clarendon Press, 1980), 51, argued also for a Scandinavian element.

⁵¹ Examples in Speake, Animal art, 50-1.

⁵² Hinton, 'Tattershall Thorpe'; the garnets were not reported in the interim publication, as they were not revealed under layers of corrosion products until further cleaning by Robert White at the Conservation Laboratory, City and County Museum, Lincoln. In the Bronze Age, chiefs' control of tin may have been equivalent: P. Budd and T. Taylor, 'The faerie smith meets the bronze industry; magic versus science in the interpretation of prehistoric metal-making', *World Archaeology*, 27 (1995), 133–43, at 140.

⁵³ A. Smyth, Alfred the Great (Oxford: Oxford University Press, 1995), 569.

linked them.⁵⁴ A tenth-century charter refers to the Neolithic long barrow in Ashbury, Oxfordshire (formerly Berkshire) as *welandes smiððan*.⁵⁵ Weland's story is of a smith who was captured and forced to serve a king, on whom he gained his revenge in ways that are clearly illustrated on the front panel of the Franks Casket,⁵⁶ usually taken to be to English work of the first half of the eighth century, famous for its eclecticism and range of meanings.⁵⁷

No model on which the Weland picture, the earliest representation of a smith in the Anglo-Saxon world, might have been based has been identified. Fifth- and sixth-century Italian works like the Augustine Gospels and the Codex Grandior were in England during the seventh century, and their illustrations were a source for much that was done by illuminators in the new monasteries. Others included panel paintings and perhaps paper or parchment *picturae*.⁵⁸ Something similar may underlie the Weland image, the idea for the scatter of space-filling tools, for instance, probably coming from representations of smiths, such

⁵⁴ C. Fell, 'Perceptions of transience', *The Cambridge companion to Old English literature*, eds M. Godden and M. Lapidge (Cambridge: Cambridge University Press, 1991), 172-89, at 183-4. The best short discussion of the Weland story is by C.L. Neuman de Vegvar, *The Northumbrian Renaissance: a study in the transmission of style* (London/Toronto: Associated University Presses, 1987), 261-2.

⁵⁵ P.H. Sawyer, Anglo-Saxon charters (London: Royal Historical Society, 1969), no. 564. ⁵⁶ L. Webster, 'Stylistic aspects of the Franks Casket', The Vikings, ed. R.T. Farrell (Chichester: Philimore, 1982), 20–31, at 29. Dodwell, Anglo-Saxon art, 2, cited R.I. Page, An introduction to English runes (London: Methuen, 1973), 181, as throwing doubt on the identification; in fact, Page was only doubtful about the lid's association with the Egil who features in one version of the Weland story — Page did not question the identification of the front panel scene.

⁵⁷ L. Webster, 'The Franks Casket', Making of England, eds Webster and Backhouse, 101-3. To the arguments in favour of the date attribution might be added the appearance on the Casket at several places of the triquetra knot, associated with Woden but given Christian meaning as a symbol of the Trinity; it is shown twice between the legs of the horse (possibly Woden's Grani) on one of the side panels, and again behind the last of the Magi: K. Wickham-Crowley, 'The birds on the Sutton Hoo instrument', Sutton Hoo: fifty years after, eds R. Farrell and C. Neuman de Vegvar (Miami University: American Early Medieval Studies 2, 1992), 43-62 at 45. It was linked to the Cross on the reverses of a 'group' of sceatta coins probably minted in eighth-century East Kent; some of the obverses have them on either side of the busts, where they take the place of wreath-ties: D.M. Metcalf, Thrymsas and sceattas in the Ashmolean Museum, Oxford. Volume 3 (London: Royal Numismatic Society and Ashmolean Museum Oxford, 1994), 422-5. Other sceattas have triquetra knots between the legs of a horse; these are within Series Y, a series found mostly in southern Yorkshire: Ibid., 581-90. Had sceatta-minting kings appropriated to themselves an image that still had associations with Woden, from whom almost every royal dynasty claimed descent: B. Yorke, Kings and kingdoms of early Anglo-Saxon England (London: Seaby, 1990), 15-6? It is tempting to claim that the horse-and-triquetra coins' similarity to the Casket is a further reason for ascribing it to Northumbrian workmanship, but East Anglian pennies with the she-wolf suckling the twins, the same image as one side-panel, urge caution — cf. K. Hauck, 'Vorbericht über des Kastchen von Auzon', Frühmittelalterliche Studien, 2 (1968), 415-8.

⁵⁸ E. Kitzinger, 'Interlace and icons: form and function in early Insular art', *The age of migrating ideas: early medieval art in northern Britain and Ireland*, eds R.M. Spearman and J. Higgitt (Edinburgh: National Museum of Scotland and Alan Sutton Publishing, 1993), 3-15, at 7.

as the gravestone from Aquileia,⁵⁹ although Weland's hat, beard and kilt are more like that of the smith on the Romano-British Corbridge pot.⁶⁰ Behind the smith is a semi-circular object, probably derived from the sort of open-domed, raised forge shown in the catacomb of Domatilla, behind which bellows set at waist level are being pumped.⁶¹ Use of models of that sort is shown by the high-backed, round-topped furnace shown in the ninth-century Utrecht Psalter.⁶² Just because there is no known direct model for

⁵⁹ W.H. Manning, 'Blacksmithing', Roman crafts, eds D. Strong and D. Brown (London: Duckworth, 1976), 143-53, ill. 233. Smiths' tools, probably symbols of the cult of Vulcan, occur as individual appliqués on some Romano-British pots: J.M.C. Toynbee, Art in Roman Britain (London: Phaidon, 1962), pl. 191. A British origin is unlikely, however, as so many other scenes on the Casket have been shown as being similar to, for instance, mosaics from the same part of north Italy — compare the Three Magi on the Casket to those on a Ravenna mosaic, where the northern artist appears to have confused the palm trees of Paradise in the background of the mosaic, and turned frankincense and myrrh into flowering plants grasped in the Wise Men's hands. Similarly, the battlement-like protrusions around the enclosure on the lid may be stylized misunderstandings of the column capitals on the enclosure of the Temple of Solomon, seen in the Codex Amiatinus, fos 2v/3r, illustrated in R.L.S. Bruce-Mitford, 'The art of the Codex Amiatinus', Journal of the British Archaeological Association, 32 (1969), 1-26, pl. D. The fight at the enclosure, with the archer at the gate, also has overtones of pictures in the Utrecht Psalter, such as the illustration to Psalm LIV, fo. 31r (E.T. de Wald, The illustrations of the Utrecht Psalter (Princeton: Princeton University Press, 1933), pl. 50), which seem to derive from illustrations of the Siege of Troy. That scene is an example of similarity to Gotlandic stones: S. Lindqvist, Gotlandes Bildstene (Stockholm: Kungl. Vitterhets Hist. och Antik. Akad., 1941), 85-6; cf. C. Hicks, Animals in early medieval art (Edinburgh: Edinburgh University Press, 1993), 152, 196-8.

⁶⁰ Manning, 'Blacksmithing', Roman crafts, eds Strong and Brown, ill. 238; Toynbee, Art, pl. 256. A bearded male holding tongs and an axe at an anvil is on a tombstone from Dringhouses, Yorkshire: S.R. Tufi, Corpus Signorum Imperii Romani, Great Britain, Vols I, 3 (Oxford: Oxford University Press, 1983), no. 56. One of the very few points on which I do not agree with Neuman de Vegvar, Northumbrian Renaissance, 262, is that she saw Weland as bare-chested, but I think that he is wearing a short tunic that hangs slightly over his kilt and had a sleeve-band, like the figure with the birds to the right.

⁶¹ Manning, 'Blacksmithing', Roman crafts, ill. 234. As Neuman de Vegvar, Northumbrian Renaissance, 262, noted, the object has also been identified as a semi-circular bow-saw. Until modern alloys arrived, however, a metalworker would have had little use for a saw of that sort, although they would have been used by, for example, comb-makers. There is a hacksaw in the Mästermyrr hoard, so the blade fitting was known: G. Arwidsson and G. Berg, The Mästermyrr find: a Viking-age tool chest from Gotland (Stockholm: Kungl.Vitterhets Hist. och Antik. Akad., 1983), no. 41, and there is the curious folded-up blade from South Cadbury: Alcock, Cadbury, 77–8.

⁶² Fo. 6v (de Wald, Utrecht Psalter, pl. 10) illustrating Psalm XI, verse 7, 'The words of the Lord are pure words; as silver tried in a furnace of earth'. A figure is also standing behind the forge shown in the Psalm CXXVIII illustration on fo. 74r (Ibid., pl. 113). The Utrecht Psalter drew on many Classical protoypes, probably transmitted through fifth- and sixth-century Italian work: D. Tselos, The sources of the Utrecht Psalter, second edition (Minneapolis: privately published, 1960); K. van der Horst, 'The Utrecht Psalter; picturing the psalms of David', The Utrecht Psalter in medieval art (Utrecht: Museum Catharijncourt/ Utrecht University Library, 1996), eds K. van der Horst, W. Noel and W.C.M. Wuistefeld, 22-84. The artist of fol. 6v did not appreciate the three-dimensional rendering of the model, in which the man standing behind the forge would have been operating bellows blowing into a raised hearth. (Nor did the illustrator of fo. 35v (de Wald, Utrecht Psalter, pl. 58) understand sword-polishing, as the operation is shown taking place on a flat table; in fact, the sword would have been raised on props, so that both sides could be treated at once: e.g. V. Husa, Traditional crafts and skills (London: Paul Hamlyn, 1967), ill. 102.) There is no evidence that metalsmiths used a raised hearth in the northern world, though McDonnell ('Ore to artefact', 284) has suggested that it is likely; Weland on the Franks Casket, however, seems to have driven his iron anvils into a log, which would have had to have been at ground level for stability, and a supply of heat at the same level would have been wanted.

the scene does not imply that it was taken from life, though the unchanging nature of the smith's tools means that parts of the scene are not actually unlifelike.

The representation of Weland's story on the Franks Casket probably had many different meanings. A learned cleric could well have been reminded by the juxtaposition of stories of Weland and the Magi of the triumph of good over evil through the birth of heroes with fathers from an 'Other World', Princess Beadohild's son Widia, and Mary's son Christ;63 at other times he may have contrasted the transient earthly glory of the one, and the heavenly glory of the other. Since Weland's story was interwoven with some about Woden,⁶⁴ the Gnomic Verse 'Woden wrought idols, the Almighty wrought Glory'⁶⁵ would be another contrast that might have been drawn. Similarly, the theme of the Fall and the Redemption can be seen, with Weland taking the role of Adam. Another is Weland's abuse of his wealth-creating gifts, and the Magis' offering of theirs to Jesus.⁶⁶ Both used magic — Weland used shaman-like powers to transform himself into a bird to escape from King Nithad,⁶⁷ the Magi were giving up such secret knowledge because it was superseded by Christ's coming.68

Weland's story has a smith whose mysterious skills amounted to magic, with no very clear division between the real world of tools, weapons and ornaments, and the supernatural world of cloaks made from feathers that enabled the smith to escape from his captor. Were craftsmen in metals generally regarded as magical by the Anglo-Saxons? The current absence from the earliest part of the period of evidence of iron-working complexes, as opposed to the debris of production in the fills of sunken-featured buildings and pits within settlements like Mucking, may be because they were kept at a slight distance from the living areas;⁶⁹ functional explanations for this would include proximity to fuel and the removal of a source of danger from fire. A consequence of this can be seen in many comparable societies as having the effect of

⁶³ Webster, 'Franks Casket', Making of England, eds Webster and Backhouse, 103.

⁶⁷ Neuman de Vegvar, Northumbrian Renaissance, 262.

⁶⁸ V.I.J. Flint, The rise of magic in early medieval Europe (Oxford: Clarendon Press, 1991), 372-3

⁶⁴ Hauck, 'Kastchen', 416; H.R.E. Davidson, 'The smith and the goddess: two figures on the Franks Casket from Auzon', *Frühmittelalterliche Studien*, 3 (1969), 216–26.

⁶⁵ W.S. Mackie, *The Exeter Book. Part II: Poems IX-XXXII* (London: Early English Text Society, 1934), 41.

⁶⁶ M. Osborn, 'The lid as conclusion of the syncretic theme of the Franks Casket', Old English runes and their continental background, ed. A. Bammesberger (Heidelberg: Carl Winter, 1991), 249–68 at 251; A. Becker, Franks Casket: Zu den Bildern und Inschriften des Runenkästchens von Auzon (Regensburg: Hans Carl, 1973).

⁶⁹ Hamerow, *Mucking*; it will be very interesting to know whether the iron-working site at Little Totham, Essex, to which an interim report ascribes later sixth-/seventh-century dates, has any 'ordinary' occupation associated with it: P. Adkins, 'Rook Hall', *Current Archaeology*, 115 (1989), 114–15.

distancing smiths and their skills from others' experience, so that they are people to be treated with care; those who have the knowledge to change metals into objects may have other powers of transformation ascribed to them, although they may not have high status. Anthropology also shows that a wide range of taboos can exist among different groups living in close proximity, so that only the most general of comparisons with the Anglo-Saxon period should be made.⁷⁰

One smith who was kept at a distance was Weland, whose captor kept him away from the royal court on an island to prevent him escaping, but also therefore in the sort of 'liminal' situation appropriate to one with his mysterious skills. The Tattershall Thorpe grave with its smith's equipment is in a similarly distant situation, isolated and on the periphery of the kingdom of Lindsey. This looks like the burial of a craftsman of no ordinary sort, as he was not carrying the sort of dross that an ordinary craftsman could be expected to have had, but rarities like garnets and ornaments from overseas.⁷¹ Yet by contrast another, broadly contemporary, grave, from the opposite end of (pre-1974) Lincolnshire, at Barton-on-Humber, may also be that of a metalworker, as it contained a die, scrap metal, scales and weights; but it was found within a cemetery notable for a number of well-furnished seventhcentury graves, near to where a major church was later to be built.⁷² This suggests an accepted member of the community and a very different ideology.

There may always have been a small number of smiths whose skills transcended the norm; even in the fifth century about half the blades of swords were pattern-welded.⁷³ The skill to make them may have been 'reserved knowledge', guarded by a few. King Alfred's law seemingly distinguishing between the sword-maker and the tool-maker⁷⁴ may imply something more than merely practical, having behind it the concept that a weapon should not be the work of an ordinary smith, even if he could quite well have

⁷⁰ E.g. J. Brown, *Traditional metalworking in Kenya* (Oxford: Oxbow Monograph 44, 1995); see also M.J. Rowlands, 'The archaeological interpretation of prehistoric metalworking', *World Archaeology*, 3 (1971), 210-24.

⁷¹ Hinton, 'Tattershall Thorpe'.

⁷² W. Rodwell and K. Rodwell, 'St Peter's Church, Barton-on-Humber: excavation and structural survey, 1978–81', Antiquaries Journal, 62 (1982), 283–315, at 308; Scull, 'Scales and weights', 196–7 and 203. The only other Anglo-Saxon non-ferrous metalworker's hoard in England, at Sevington, Wiltshire, does not include tools, and is not associated with a burial; it probably results from the need to conceal property during Viking raids, and is coin-dated to before c. 850: D.M. Wilson, Catalogue of the Anglo-Saxon ornamental metalwork 700–1100 in the British Museum (London: British Museum, 1964), 167–71. That at Talnotrie, Kirkcudbrightshire, coin-dated to c. 875, which has a weight and a piece of wax, may be Northumbrian rather than Viking : J. Graham-Campbell, The Viking-Age gold and silver of Scotland, A.D. 850–1100 (Edinburgh: National Museums of Scotland, 1995), 4.

⁷³ Lang and Ager, 'Swords', 107-8.

⁷⁴ Whitelock (ed.), E.H.D., i, 412.

made at least a passable spear. The weapons in many graves may show that some males' status went with the right to bear arms, while the paucity of iron tools implies that they were not prestigious,⁷⁵ but such beliefs may have been furthered by a perception that an ordinary smith could not imbue his work with the qualities that a weapon acquired from the mystique of its manufacture.

Archaeological evidence may often be open to misinterpretation by ascribing supernatural explanations to it, but that the Anglo-Saxons lived in a world in which the supernatural co-existed with them is clearly shown by such survivals as the 'Charms', in one of which six smiths sit making war-spears, in a poem that acknowledges that some iron may be the work of witches, and that elf-shot is best avoided.⁷⁶ Smiths were not just skilful, like a good carpenter; when they poured liquid metal into moulds and produced something totally different, or took ingots and forged them into objects, they were practising a closed and hidden art. A hint of this may be found in riddles such as Aldhelm's on the wonders of glass, though there with the 'magic' attributed to Nature and God's creation.⁷⁷

One concept about smiths found in many societies that is not signalled in early Anglo-Saxon England is that of the chief who is also a craftsman. This seems to be the message given by the grave at Hérouvillette, in which tools seem appropriate to a smith and weapons to an elite warrior, a chief whose role was to arm and to adorn as well as personally to defend his people; this was the original interpretation, and the quantity of weapons and the size of the grave still make it preferable to the more recent one which sees it as that of a freeman selling his services.⁷⁸ Some Bronze-Age burials are interpreted in the same way,⁷⁹ but the difficulty of establishing status and ideology is well illustrated by current disagreement over whether finds of smiths' equipment in Viking graves in Scandinavia should be seen merely as signifying craftsmen with their tools, or if the weapons that are with many are an indication that the majority of these graves were those of high-status people who were more than just smiths.⁸⁰ Although the

⁷⁵ C.A. Morris, 'Finds connected with wooden artefacts, woodworking and other tools', in C. Hills, K. Penn and R. Rickett, *The Anglo-Saxon cemetery at Spong Hill, North Elmham. Part V: Catalogue of cremations (nos 2800–3334)* (Gressenhall: East Anglian Archaeology 67, 1994), 30–5, at 34–5, for examples.

⁷⁶ L.J. Rodrigues, Anglo-Saxon verse charms, maxims and heroic legends (Pinner: Anglo-Saxon Books, 1993), 37, 143.

⁷⁷ J.H.Pitman, The riddles of Aldhelm (New Haven: Yale University Press, 1925), 47-9.

⁷⁸ De Caens, 'Hérouvillette', 12 and 86–90; S. Lebecq, 'Routes of change: production and distribution in the West (5th–8th century)', *The transformation of the Roman world*, eds L. Webster and M. Brown (London: British Museum Press, 1997), 67–78.

⁷⁹ Budd and Taylor, 'Faerie smith'.

⁸⁰ A. Wollander, 'Smedgraver eller gravar med smides-och snickarverkty? Genomgang av definitioner och redskaps-kombinationer', *Tor*, 22 (1988–89), 105–59.

axe-hammer and 'whetstone' at Sutton Hoo might together or separately represent the concept of a leader as a smith, one of Woden's *personae*, they were not buried close together, as they might have been if their symbolism was intended to be associated.⁸¹

As in so many things, it may be that Christianity was a principal cause of change, in this case in perceptions of smiths. The 'Gifts of Men' does not suggest that such craftsmen were particularly to be viewed askance; the goldsmith is *searo-craeftig*, which Bosworth and Toller interpreted as 'ingenious ... cunning', but in a good, not a bad, sense in the context, and the weapon-smith is *mód-craeftig*, 'intelligent, skilled'; neither term seems intended to carry overtones.⁸² Christianity had by then turned the skills of someone like Billfrith, eighth-century embellisher of the Lindisfarne Gospels cover, to the service of the Church, but even he was an anchorite, as though it was part of his culture to be something of an outsider.⁸³ Such liminality may gradually have diminished, not least as craftsmen not only served the Church, but might be amongst its senior members.⁸⁴

This change in attitudes to metalworking can perhaps be seen in the evidence of iron production sites, the best investigated being Ramsbury,Wiltshire,⁸⁵ where the furnace complex was close to the church and so may have been part of an eighth-/ninth-century manorial operation, with no suggestion that it should be kept away from normal society. Other sites show intensification, as at Gillingham, Dorset,⁸⁶ and perhaps outside Wareham, where a mill may have worked a bellows and perhaps a hammer.⁸⁷ Ramsbury and Gillingham had smithing as well as smelting slags, so it is highly likely that they were places where ores were turned into usable items. Another iron-production site, not yet published, was

⁸¹ J. Werner stressed the need to consider the proximities of each of the Sutton Hoo objects to each other, and posited a feasting symbolism for the axe-hammer: 'A review of the Sutton Hoo Ship Burial Volume 3: some remarks, thoughts and proposals', *Anglo-Saxon Studies in Archaeology and History*, 5 (1992), 1–24, at 15–6. For the use of an axe-hammer apparently as a votive offering, Alcock, *Cadbury Castle*, 29–30 and 75; it was lying close to a ring with Style I ornament — the objects at this site suggest considerable cultural contact between 'English' and 'British'.

⁸² Bosworth and Toller, Dictionary, 853.

⁸³ Cramp, 'Northumbria and Ireland', *Sources*, ed. Szarmach, 193, suggested that he was 'living a pious life' near to, but not in, the Lindisfarne community.

⁸⁴ Dodwell, Anglo-Saxon art, 49–51, cautioned against accepting that senior clerics necessarily had the skills later attributed to them, but there is less reason to doubt the ability than the probity of the bishop of London who absconded with the gold with which he had been entrusted to make Edward the Confessor's crown: Ibid., 46–7.

⁸⁵ J. Haslam, 'A middle Saxon iron smelting site at Ramsbury, Wiltshire', Medieval Archaeology, 24 (1980), 1–68.

⁸⁶ M.J. Heaton, 'Two mid-Saxon grain-driers and later medieval features at Chantry Fields, Gillingham, Dorset', *Proceedings of the Dorset Natural History and Archaeological Society*, 114 (1992), 97–126, at 124–5, and G. McDonnell, 'The slag', Ibid., 114–5.

⁸⁷ D.A.Hinton, 'Revised dating of the Worgret structure', Ibid., 258–9. Other sites include Baston Hall Farm, Lincolnshire: *Medieval Archaeology*, 38 (1994), 234.

close to where there was a tenth-century nunnery under royal patronage, at Romsey, Hampshire;⁸⁸ all these Wessex sites have documentary or other evidence that suggests royal or Church ownership.

Such evidence of increased iron production probably goes hand in hand with more intensive estate exploitation generally, by kings, aristocracies and the Church. Late seventh-century charters show how well-organized land holdings already were and occasionally include references to iron resources.⁸⁹ The link between estate production and smiths is not unambiguous in King Ine's law allowing a gesith to take his smith with him when he moved, as the smith's responsibilities are unspecified,⁹⁰ but the aristocrat may have been taking someone who could make the tools that would be needed to clear and colonize new land, a blade-maker whose products would help to guard it, or a jeweller who would turn its profits into status symbols — or someone who could do all three, as continental capitularies state that all such skills were needed on a well-run estate; the Carolingian De Villis demanded '... good workmen, namely, blacksmiths, goldsmiths ... carpenters, shieldmakers ...'.⁹¹

The later seventh century also saw the establishment of the *wic* sites, where metalworking was one of the crafts taking place on what may have been a larger scale than at any earlier site.⁹² The dress items were not of the highest quality, and few are individually distinctive enough for their place of manufacture to be recognizable, unlike some of the contemporary coin series. The objects are distinctive for their uniformity, however; any pin found in Saxon Southampton is likely to have parallels anywhere in England — the scroll-headed type has been found as far afield as Carlisle, for instance. In the same way, the English language seems to have been becoming a *lingua franca* with dialects,⁹³ rather as the sceatta coins had an underlying un⁷ rmity with regionally diverse designs.⁹⁴

The *wic* sites did not achieve monopolies; older systems continued alongside. Metalworking material at Wharram Percy includes moulds of the eighth or early ninth centuries,

⁹² N.S.H. Rogers, Anglian and other finds from Fishergate (York: Council for British Archaeology, Archaeology of York 17/9, 1993); Hinton, Hamwic.

⁹³ M. Gelling, 'Why aren't we speaking Welsh?', Anglo-Saxon Studies in Archaeology and History, 6 (1993), 51-6, at 54.

⁸⁸ B.S. Nenk, S. Margeson and M. Hurley, 'Medieval Britain and Ireland', *Medieval Archaeology*, 35 (1991), 126–238, at 158.

⁸⁹ Arnold, Anglo-Saxon kingdoms, 136.

⁹⁰ Whitelock (ed.), E.H.D., i, 406.

⁹¹ H.R. Loyn, 'Currency and freedom: some problems in the social history of the early Middle Ages', *Studies in history presented to R.H.C. Davies*, eds H. Mayr-Harting and R.I. Moore (London: Hambledon Press, 1985), 7–19, at 17.

⁹⁴ Metcalf, Thrymsas and sceattas 3, 297-319.

contemporary with Anglian York,95 and a punch for ring-and-dot ornament from Aldbourne, Wiltshire, would have caused no surprise if found in Saxon Southampton.⁹⁶ The goldsmith who lost a touchstone in Winchester that was found in a ninth-century context within the stone building that is thought to have been either part of a private high-status burh or of the Minster was presumably working while the Southampton wic was in operation.97 Nor is the quantity of metalworking finds from mid-Saxon Southampton or York especially great when the number of excavated pits and the sites' timespans of up to two hundred years are remembered; tenth-century York and Lincoln have produced much more.⁹⁸ Many of the sceattas are likely to have been struck in places that saw little enough commercial activity, as the distributions of the various different types do not suggest a few controlling centres.⁹⁹ Some types are known in small numbers; did people with the specialized knowledge of die-making travel from place to place, as later moneyers have been shown to have done - or were there already only a few who made dies, and a larger number who struck coins from them?¹⁰⁰ The itinerant moneyer, a metalworker who may have had other strings to his bow, would therefore have been an occasional but not unfamiliar figure. Consequently, the wic sites never had a monopoly of metalworking production in their areas, and their disruption in the second half of the ninth century did not significantly disrupt manufacturing; they were not deeply embedded in the social and economic fabric.

From the end of the eighth century, most coins carried a moneyer's name, which may have been one reason why smiths' names begin to occur on sword-blades and other objects.¹⁰¹ They

⁹⁵ J. Bayley, 'The metalworking evidence, with a note on the stylistic evidence of the moulds by J.T. Lang', in G. Milne and J.D. Richards, *Two Anglo-Saxon buildings and associated finds* (York: York University Archaeological Publications 9, 1992), 59–66. Two unused crucibles from Meonstoke, Hampshire, are less well dated: M. Hughes, *Excavations at Meonstoke 1985/6* (Winchester: Hampshire County Council, 1986), 9–10. As well as Steedman, 'Riby cross roads', preliminary reports from Quarrington in *Medieval Archaeology*, 38 (1994), 234 and 39 (1995), 231–2, suggest another rural site in Lincolnshire with metalworking evidence, with a provisional attribution of sixth to eighth centuries.

⁹⁶ P.H. Robinson, 'Devizes Museum', Council for British Archaeology Wessex Newsletter (April 1994), 24-5.

⁹⁷ M. Biddle, Object and economy in medieval Winchester (Oxford: Clarendon Press, 1990), 167. The possibility of the Minster's control of the area has been mooted by G. Scobie (pers. comm.).

⁹⁸ J. Bayley, Non-ferrous metalworking from Coppergate, Archaeology of York 17/7 (London: Council for British Archaeology, 1992); L. Adams Gilmour, Early medieval pottery from Flaxengate, Lincoln, Archaeology of Lincoln 17-2 (London: Council for British Archaeology, 1988), 71-7.

99 Metcalf, Thrymsas and sceattas 3, 297-9.

¹⁰⁰ I. Stewart, 'Reflections on some Wessex mints and their moneyers', Numismatic Chronicle, 15 (1975), 219-45.

¹⁰¹ E. Okasha, 'Literacy in Anglo-Saxon England: the evidence from inscriptions', Anglo-Saxon Studies in Archaeology and History, 8 (1995), 69–74. Luda, who repaired the Harford Farm brooch, is an early example: Medieval Archaeology, 35 (1991), 176. had personal reputations — or wanted them. Elite sites like Cheddar¹⁰² and Faccombe Netherton¹⁰³ were visited by smiths, whether bondmen in the retinues of the sites' owners, or freelance itinerants. Manumissions record goldsmiths who were being freed from household service, and charter grants to craftsmen refer to them as personally bound in some way, but Domesday shows that some were rich, free and urban, as well as owners of rural estates.¹⁰⁴ Metalworking evidence has been found in excavations at several boroughs, and suggests a more intensive scale than in the wic sites, so that smithing became one of the crafts that distinguished those places that took on an urban appearance in the tenth century, with York of course being particularly well-known because of the discovery of die-makers' equipment.¹⁰⁵ Moneyers and goldsmiths were merely the top end of a range of metalworking, however,¹⁰⁶ and the development of a market for cheap trinkets is an indication of new demands.¹⁰⁷

Evidence of travelling or sedentary metalworkers creating dress items at rural settlement sites seems to disappear during the tenth century, as urbanization took hold. Of necessity, ironworking in the service of agriculture remained, but derogatory comments were made on the blacksmith in Aelfric's Colloquy, in which for the first time an English document spells out the different sorts of metalsmith that were to be found in a church compound.¹⁰⁸ It was only the blacksmith who was derided, however, unsurprisingly if other smiths included at least some senior clerics and some churches were selling objects, such as the drinking-horn bought from the Old Minster bequeathed by the Aetheling Athelstan.¹⁰⁹ A hint of older beliefs still lingering may be traceable, however, as in two religious contexts it was smiths who were intermediaries, in a vision of St Swithun,¹¹⁰ and in the discovery of the Cross at Montacute;¹¹¹ this seems a marvellously high success-rate for the craft.

¹⁰² P. Rahtz, Anglo-Saxon and medieval palaces at Cheddar (Oxford: British Archaeological Reports British Series 65, 1979), 381–2.

¹⁰³ J.R. Fairbrother, Faccombe Netherton. Excavations of a Saxon and medieval manorial complex (London: British Museum, 1990), 244–72.

¹⁰⁴ Dodwell, Anglo-Saxon art, 74-8.

¹⁰⁵ Bayley, Coppergate; Adams Gilmour, Flaxengate; Biddle, Object and economy, 75–200. For dies, E.J.E. Pirie, Post-Roman coins from York excavations 1971–81, Archaeology of York 18/1 (London: Council for British Archaeology, 1986), 33–45, and note also the recent finds of dies at London and Lincoln: M.D. O'Hara, 'An iron reverse die of the reign of Cnut', The reign of Cnut, ed. A.R. Rumble (Leicester: Leicester University Press, 1994), 231–82.

¹⁰⁶ J. Bayley, 'Anglo-Saxon non-ferrous metalworking: a survey', World Archaeology, 23 (1991), 115–30.

¹⁰⁷ E.g. the Cheapside hoard, London: J. Clark, Saxon and Norman London (London: Her Majesty's Stationery Office, 1989), 22.

¹⁰⁸ Loyn, 'Currency and freedom', Studies, eds Mayr-Harting and Moore, 104.

¹⁰⁹ Dodwell, Anglo-Saxon art, 22.

¹¹⁰ B.A.E. Yorke, Wessex in the early Middle Ages (London/New York: Leicester University Press, 1995), 215-6.

¹¹¹ N. Rogers, 'The Waltham Abbey relic-list', England in the eleventh century, ed. C. Hicks (Stamford: Paul Watkins, 1992), 157-81, at 158.

After the Norman Conquest, evidence of goldworking and the like drops out of the archaeological record at elite sites also. It was no longer appropriate to have such craftsmen in a household retinue, and it is a sign of a changing society that barons used towns for their requirements. Even armourers' activities are scarcely represented archaeologically at castles,¹¹² and the presence of Spileman the sword-maker as a citizen of mid-eleventh-century Winchester, paying quite a high rent,¹¹³ suggests that just before the Conquest it was possible to go into one of the larger towns to buy weapons commercially. Did Norman barons go to the nearest market to get their gear? Unfortunately Spileman seems to be a unique case; twelfth-century Winchester surveys record only smiths, and Canterbury likewise.¹¹⁴

A Canterbury story shows that there were still some involved in the metal industry who were prepared to travel, for three citizens from there went round the country buying up scrap metal, broken crucibles and so on which they crushed up and melted down for recycling — one reason perhaps for fewer crucibles and slags entering the archaeological record. They received deplorable treatment in Bath, one of them requiring a miracle to get him out of prison.¹¹⁵ That he was helped in that way could be a hint that there may still have been a touch of the Other World ascribed to such people. As for Weland, his story re-emerges in post-medieval Berkshire with folk speaking of him as a mere blacksmith, who would shoe a horse left overnight at his smithy - downgraded, recast, but still with something of the magical about him. Successors to the smiths of the Anglo-Saxon world were much more prosaic figures, yet an aura of the supernatural may still have hung invisibly around them.

¹¹² J. Kenyon, Medieval fortifications (Leicester: Leicester University Press, 1990), 157.

¹¹³ M. Biddle (ed.), Winchester in the early Middle Ages (Oxford: Clarendon Press, 1976), 68.

¹¹⁴ W. Urry, Canterbury under the Angevin kings (London: Athlone Press, 1967). ¹¹⁵ Ibid., 113.