The Currency of Power in Late Anglo-Saxon England

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Abstract

England between the early 970s and 1066 had a remarkable monetary system, consisting of silver pennies of standardised type which were reminted frequently. Each penny carried the name of the individual responsible for its manufacture, and identified where he was based. This formidable currency came about thanks to unique conditions in the late tenth and early eleventh centuries. An initial reform by Edgar was followed by a rapid sequence of recoinages under his son Æthelred II, which constituted one means of asserting morally responsible governance in the face of perceived divine displeasure. It follows that the chronology and motivation behind the coinage need to be seen as products of central, courtly developments. Actual minting, however, was a matter of individual moneyers dealing with individual customers. Here, it is argued that moneyers and mint-places need to be seen as part of the wider landscape of formal and informal social power, and that production of coin generally came about through networks of lordship and authority. Integration of the moneyers (typically drawn from the lower elite) across England into centrally controlled mechanisms such as the coinage was one of the underpinning strengths of the late Anglo-Saxon kingdom, linking different forms of power and giving a large swathe of the political community a stake in the realm's institutions.

Keywords: Coinage, Money, England, Medieval, Anglo-Saxon, Power, Lordship.

The bond between money and power has a long pedigree, and works in many ways. This contribution examines how it worked in late Anglo-Saxon England, between about the early 970s and the Norman Conquest of 1066. The coinage of this period offers unique potential as a case-study. Every silver penny carried the name and image of the king, together with details of who had made that coin and where, with up to seventy locations and two or three hundred such 'moneyers' operating at once. Coin-types were standardised across the kingdom and changed frequently, with the bulk of the circulating medium being reminted each time. These characteristics mean that we can learn a great deal from the coinage as such. When we situate this information alongside other economic, institutional and political developments, the coins take their place as one of the foremost resources for the historian. The argument here is that, to do so fully, the coinage needs to be recognised as a product of its time in two ways. First, in the same way as charters, law-codes and other sources, it responded to pressures and concerns at the heart of the late Anglo-Saxon royal regime. Second, while the overall shape of the coinage was fixed very centrally, its implementation depended on a body of manufacturers spread across the kingdom, grounded in local communities and local concerns.

These two approaches amount to thinking of *coinage* on the one hand, in the sense of a larger system directed from the centre, and *currency* on the other, meaning the mechanisms that put money into circulation and mediated between royal direction and the mass of the population. The synergy between these two sides of the monetary system was what made the late Anglo-Saxon coinage into a currency of power. Decisions and policies made at the highest levels – that is to say, recoinages but also tribute payments and other expenses associated with the demands of warfare – heaped financial pressures on the populace, and had to be met with coined money. A significant proportion of the currency was hence created as members of Anglo-Saxon society negotiated how those exactions would be paid, exacerbating the impact of hierarchy and inequality on minting. The making and exchange of coin were thus deeply embedded in networks of dominance as well as currents of trade.

The Coinage of Power

The late Anglo-Saxon coinage consisted essentially of silver pennies. Some of these would be cut into halves or quarters to provide relatively small change. While the buying power of silver pennies put them beyond most day-to-day needs (Farmer, 1988, pp. 716–17), the bulk

of the population would still have had to deal with them periodically (Naismith, 2014b). Pennies had been the standard denomination in England and its neighbours in continental northern Europe since the late seventh century, but the coinage of late Anglo-Saxon England was the product of more recent processes. Most mint-places had only become active since the time of Alfred the Great (871–99), and Alfred's heirs in the tenth century had imposed coinage in their names in newly won areas of eastern and northern England. But, although there were periods of more strenuous effort at standardisation in design (most notably under Æthelstan (924–39)), the main regions of the tenth-century kingdom still tended to go their own way in a number of respects (Naismith, 2014a; Molyneaux, 2015, pp. 116–41).

A more thoroughgoing overhaul of the coinage was undertaken by Edgar (959–75). He succeeded in imposing a standardised design in all parts of the kingdom, and even in centralising the distribution of dies used to make the coins. Inspiration for the appearance of Edgar's new coinage came from his uncle Æthelstan's, setting the trend for broadly Roman-style busts that persisted until the mid-eleventh century (Naismith, 2014a, pp. 80–2; Naismith 2017b, pp. 265–6 and 274).[1] Edgar's new coinage was a truly remarkable achievement: one of several that displayed the king's energetic commitment to ideals of unity and renewal (Naismith, 2014a, pp. 80–3; Keynes, 2008, pp. 24–5 and 48–51). No contemporary written source makes any reference to Edgar's reform of the coinage, so its exact date is not known for sure, but it probably came towards the end of the reign (Naismith, 2014a, pp. 39–40).[2] An influential strand of modern scholarship assigned it to 973, partly because this was also the year of Edgar's coronation at Bath and ceremonial rowing on the Dee, but also because it fitted into what was known as the 'sexennial thesis'. This held that recoinages took place according to a rigid timetable: every six years from 973 until the death of Cnut in 1035, and on a similar but more frequent basis (every two or three years) in subsequent decades.[3]

The chronology of the 'sexennial thesis' relied heavily on correlations between individual hoards and military events recorded in the *Anglo-Saxon Chronicle*. There are now good reasons to challenge the association between hoards and warfare (Armstrong, 1998; Andrews, 2018, pp. 122–33), and also to question how rapidly the system emerged (Stewart, 1990). Edgar's new type persisted in essentially the same form into the reigns of his sons Edward the Martyr (975–8) and Æthelred II (978–1016); the only occasion in the late Anglo-Saxon period when a coinage did so, at least for any length of time.[4] This was explained under the 'sexennial thesis' as the waiting out of a full cycle, but if approached without a preconceived structure in mind, it suggests a coinage that was simply not yet part of a systemic series of reforms. Importantly, the first new coinage that came after this initial issue (probably in the 980s) was also complicated. It carried an image of the Hand of God on the reverse, and included three main variants, one produced in large quantities everywhere, and two which were significantly restricted in geographical distribution. Some of the main northern and western mint-towns in particular issued very few of the latter two groups. This was always one of the weakest points of the 'sexennial thesis', which represented the two main Hand variants as discrete issues, one substantially smaller than the other. But it makes more sense when viewed as a single, long coinage with significant regional variations: a pattern which harks back to issues of the earlier tenth century (Brand, 1984, pp. 18–25; Stewart, 1990, pp. 471–4; Naismith, 2016, pp. 125–9).

A more stable series of coin reforms developed only gradually in the reign of Æthelred II (Naismith, 2016, 2018). The later coinages of Æthelred are on the whole more discrete, though still with signals that they did not operate according to a fixed timetable. There were several small, abortive issues, some of them apparently coming before the end of a main type (Naismith, 2017, pp. 261–8). Other coinages seem to reflect dynamic reactions to changing circumstances. The most suggestive such case is the remarkable *Agnus Dei* coinage from the troubled last years of the reign. As the name suggests, it replaced the image of the

king with that of the Lamb of God, while the cross that was customary on the reverse was replaced with the Holy Dove. There are signals that this was a very special coinage in ways that went beyond its design. Only 22 specimens of the *Agnus Dei* coinage survive, in contrast to thousands of each of the major types from the reign. They were, however, issued quite widely, for the most part at small to middling mint-towns. *Agnus Dei* pennies also tend to be very heavy: a feature generally associated with the first products of a recoinage. These features suggest that the *Agnus Dei* coinage was a special, short-lived issue that had the trappings of a new type. Its extraordinary iconography is thought to reflect the desperate circumstances of this phase of the reign, most probably the year 1009, when a new viking army pillaged southern England and the king could do little except marshal the hopes and prayers of his people. The coinage seems to have formed part of this response to a sudden, desperate situation (Keynes and Naismith, 2011).

While the *Agnus Dei* coinage is exceptional for its iconography and background, it is in some ways key to understanding the whole system. Cleansing and restoring the currency through coin reform had become a highly meaningful act. The legal tracts and sermons written by Archbishop Wulfstan (d. 1023) in Æthelred's later years associated *feos bot* ('improvement of the coinage', presumably meaning coin-reform) with general maintenance of moral standards.[5] There was also a deeper tradition, going back to scripture and early patristic authors, of viewing coined money and its quality as a metaphor for the inner purity of a Christian soul. For those charged with the spiritual wellbeing of a kingdom, that equation could also be thought of as working in reverse: a reliable and uniform coinage, free from forgery, reflected the good moral fibre of the community as a whole (Naismith forthcoming). These ideas seem to have found a fertile reception at the court of Æthelred II. Educated by monastic reformers, Æthelred was steeped in a tradition which held that a king's actions and the fate of his realm were interwoven in the eyes of God (Roach, 2011, 2013, 2014, 2018; Cubitt, 2012, 2013; Molyneaux, 2015, pp. 223–30). This perspective emerges most strongly from Æthelred's charters, and it is instructive to place the coinage alongside these documents, both being products of acts and decisions taken within the immediate orbit of the king (Keynes, 1980; Keynes 2013, pp. 102–26). One might associate the appearance of the Hand coinage with the firm guidance in Æthelred's early years of his tutor St Æthelwold (who may well have been behind Edgar's initial reform as well), while the relaxation of subsequent years reflects the period of what Simon Keynes memorably described as 'youthful indiscretions', which in turn came to a sudden end in the early 990s when the king came to view renewed viking incursions as punishment for having lost his way (Keynes, 1980, pp. 176–208; Roach, 2016, pp. 91–185). This may well have been when the next major coin-issue, 'Long Cross', came into being (Naismith, 2016, pp. 126–30).

The rapid sequence of coin reforms that is characteristic of late Anglo-Saxon England can thus be seen as a product of the unique religious and political climate of Æthelred's reign. Several consequences follow. First, the chronology of the coinage cannot be pinned down as precisely as the 'sexennial thesis' advocated. Most types cannot be dated exactly, and there is no reason to assume that they were all of equal duration. Second, Æthelred's recoinages were not undertaken primarily for financial motives. There is no doubt that the king, and especially the moneyers, did profit from the process, but that gain was incidental to the larger goal of reasserting the quality of the coinage as a metonym for the spiritual condition of the kingdom. But, third, this was not necessarily the case under subsequent rulers. Financial or other concerns could well have come to the fore as priorities changed, and yet recoinages persisted in more or less the same form.

A final point brings us back to coinage and power. Appreciation of the monetary system as a product of its time adds to how one sees it reflecting the king's authority. Acts of recoinage, as they evolved under Æthelred, took on new meaning. They were not part of a

disembodied mechanism that rolled along regardless of what went on in the orbit of the court. On the contrary, they were intimately linked to developments at the heart of the kingdom. When Æthelred ordered a recoinage, and the considerable weight of late Anglo-Saxon government was brought to bear in implementing it, the population would have been compelled to share in the hand-wringing self-examination that took place in the king's inner circle. Recoinage was a way of projecting those concerns across the whole kingdom.

The Currency of Power
Even if the late Anglo-Saxon coinage was guided firmly by the king, it was experienced in real terms on a much more local, personal basis, represented by the names of moneyer and mint-place. Both existed in large numbers. A total of about 113 locations were named on coins at this time, of which 86 can be identified with confidence (Naismith, 2017, pp. 337–51). Most of these were towns, to the extent that minting has often been taken as one definition of an urban settlement (Biddle, 1976, p. 100; Loyn, 1961, pp. 130–2); certainly the largest towns (above all London, Lincoln, York and Winchester) were by far the most productive mint-places, London alone sometimes accounting for 40 per cent of coins in circulation (Naismith, 2013, pp. 56–8). This correlation between urbanisation and minting was not exact, however. Some sense of the divergence is gained by comparing the corpus of late Anglo-Saxon mint-places with towns (boroughs) in Domesday Book: the great survey of English landholding conducted in the 1080s, but looking back to conditions in 1066 (Williams and Martin, 2002; Morris, 1973–86). Neither record is complete. New coin-finds might yet unveil additional mint-places, while Domesday Book was far from systematic in its recording of towns (Reynolds, 1987; Darby, 1977, pp. 289–320); moreover, the urban landscape evolved over the century before 1066, meaning that Domesday is not necessarily an exact guide to earlier conditions (Holt, 2011; Astill, 2006). Nonetheless, the exercise is illuminating (Figure 1). Of the 112 places H. C. Darby listed as likely towns in Domesday (Darby, 1977, p. 297), 26 (almost a quarter of the total) are *not* known to have hosted minting before 1066.[6] Five more only issued coin briefly and on a minute scale. Conversely, 13 of the 86 identifiable mint-places were *not* Domesday towns. These do include three locations that hosted markets according to Domesday Book, and which presumably had a substantial commercial role.[7] Of the remainder, two were hill-forts brought into service as temporary retreats for minting during periods of viking aggression,[8] one was a monastery,[9] one was undistinguished in Domesday Book but had served as a fortress in earlier times,[10] and two were important Domesday estate centres.[11] This leaves four places where the rationale for minting is obscure, but it is likely that many of the 27 unidentifiable mint-places also belong to this last category – meaning that apparently non-urban minting was not an unusual phenomenon (Naismith, 2017, pp. 346–51).
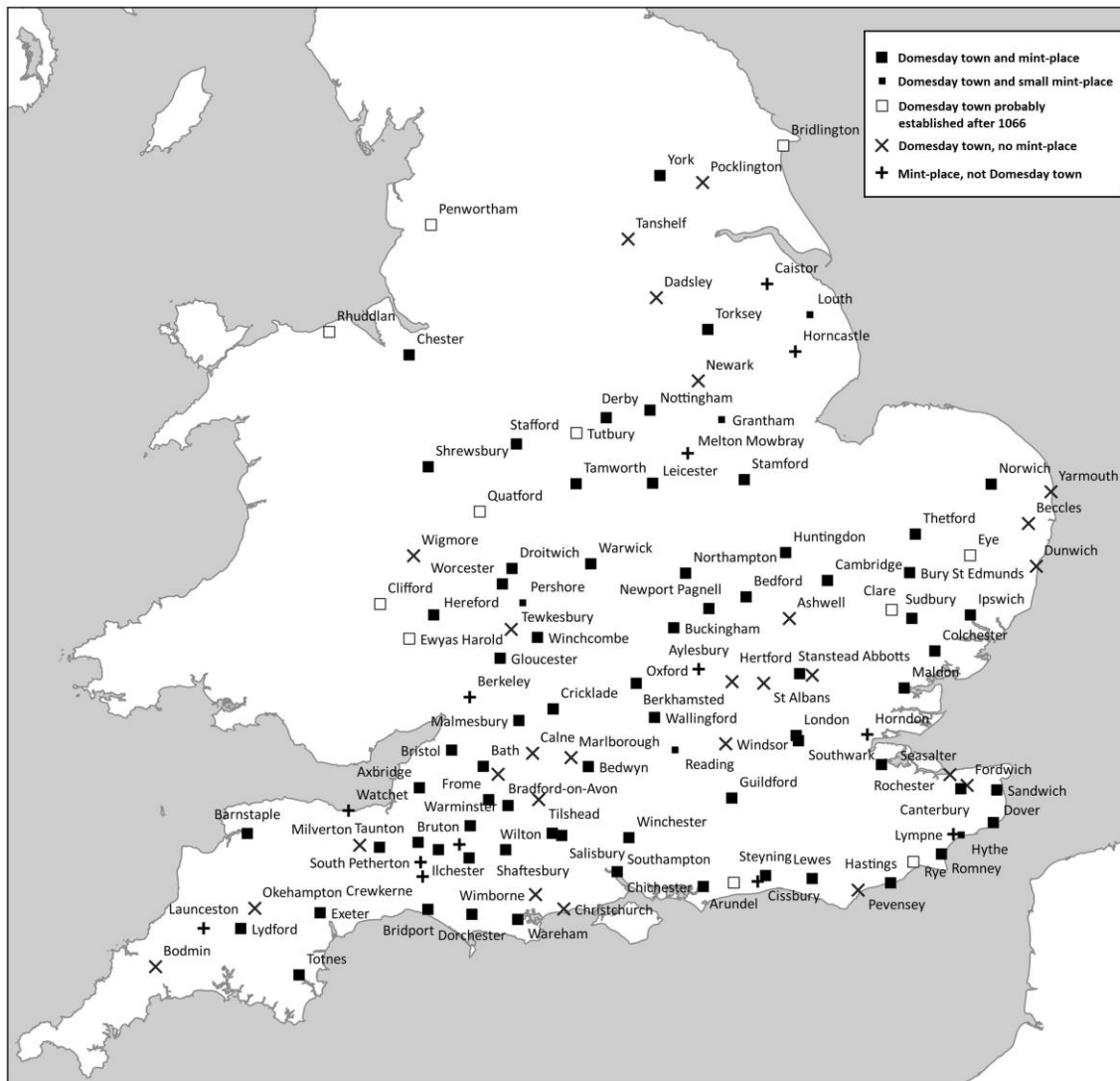
Figure 1: Map showing correspondence between known Anglo-Saxon mint-places and towns in Domesday Book.

Numismatic geography in late Anglo-Saxon England was hence considerably more complicated than the traditional association of minting with urbanisation would imply. Tenth-century legislative attempts to limit minting, like high-value trade, to a *port* or *burh* evidently fell by the wayside or were relaxed (Molyneaux, 2015, pp. 106–9; Lambert, 2017, pp. 244–7).[12] What is clear is that minting was not dictated by convenience for customers (*pace* Dolley and Metcalf, 1961, pp. 148–52; cf. Stewart, 1990, pp. 466–7). While it is true that much of the population south of Yorkshire would have been within easy distance of a mint-place, in some areas they were within reach of several, while other regions that were rich and well populated according to Domesday Book had few mint-places. It is difficult to explain such a pattern as responding straightforwardly to economic demands, especially as production was highly uneven. The majority of late Anglo-Saxon mint-places issued relatively few coins: many are represented by only a handful of surviving specimens. And while commerce was one reason minting gravitated towards large towns, their role as focal points in local government and society, where a plurality of interests from the surrounding area came together, was just as important (Roffe, 2007, pp. 120–7). The distribution of mint-places was essentially a function of the administrative landscape. This goes some way towards explaining why a plethora of small towns in close proximity in the southwestern

shires could all issue coins, and why there was a separate mint-place immediately across the Thames from London at Southwark.

Minting, in short, was tied up with jurisdiction and power – but to explore this nexus further, it is necessary to turn to the moneyers. Anywhere from one to several dozen of these individuals could be found in a single mint-place: London (with its adjacent mint-town of Southwark) lay at one extreme, with a peak of 79 in a single type; at the opposite, Bedwyn in Wiltshire was a one-man operation that began in the 1040s, and ceased when that one moneyer apparently decamped to nearby Marlborough in the aftermath of the Norman Conquest. These moneyers played a pivotal part in the minting process. They were responsible for organising and implementing the actual production of coin, and also served as money-changers (Naismith, 2017, pp. 240–3; Allen, 2012, pp. 1–15; Kinsey, 1958–9, pp. 27–31). The moneyers' role was hard-wired into the Anglo-Saxon coinage, which had long been thought of as an essentially personal matter. Customers dealt with a moneyer, not a 'mint', which was simply a location where one or more moneyers could be found. Tellingly, the name of the moneyer had been engraved on coins on its own long before that of his location began to be added, and the latter was probably seen first and foremost as an aid for officials in finding an offending moneyer.

Broadly speaking, it is possible to identify one group of moneyers who were prominent because they were moneyers, and another who were moneyers because they were prominent for other reasons. The first is exemplified by men who were referred to first and foremost as moneyers by others. Some of them perhaps stemmed from families with a long-standing involvement in minting.[13] The second was drawn from the lower ranks of the elite. Substantial mint-towns might contain representatives of both groups. A survey of mid-eleventh-century Winchester refers to some men as moneyers (*monetarii*), while other probable moneyers appear in different capacities: as goldsmiths or even priests (Biddle and Keene, 1976, pp. 400–5). Other important citizens are thought to have also worked as moneyers at Lincoln, London and elsewhere.[14] Minting was evidently a role that eminent townsmen took on, if not always exclusively or permanently. The position often brought, or went to individuals who held, thegnly status, meaning privileged standing in return for performance of a prestigious service for the king (Stewart, 1988; Smart, 1990, pp. 444–5; Roffe, 2007, pp. 121–2). Yet although moneyers were important members of society, they were not drawn from the high landowning elite. The overlap between moneyers and landowners was limited to a minority of individuals with relatively modest wealth who could move seamlessly between rural and urban settings (Fleming, 1993, pp. 34–6), such as Hunwine and Viking 'the boatswain', both in the southwest.[15] Moneyers drawn from these elite constituencies were probably more numerous overall, yet also more likely to be sporadic in operation: that is, they participated in minting when either local or larger-scale developments made it opportune to do so. This power dynamic goes some way to explaining why so many moneyers could appear and disappear in short order, and is crucial to understanding how the currency worked in real terms.

Demand, negotiated between such moneyers and their customers, was the central factor in the money supply, but that demand should be thought of as only partly a response to depersonalised, open market forces. Because silver pennies survive as a thing apart from writs, charters, Domesday Book and the like, there is an inherent temptation to see them as a window onto a parallel but distinct world. That temptation should be resisted. Despite their association with money, moneyers were not proto-entrepreneurs striding onto a level economic playing field. Nor were they simple jobbing craftsmen: moneyers were more akin to specialist, state-sanctioned financiers, sometimes with interests at multiple locations, and enough underlings to keep them at some distance from the physical process of minting (Tsurushima, 2012, pp. 41–5).[16] The moneyers' acts of making or exchanging coin amounted

to a material manifestation of dominance, meaning that we should see the minting and initial distribution of coin working through overarching structures of society such as lordship and patronage at least as much as through the to-and-fro of the marketplace.[17] Processes particular to late Anglo-Saxon England magnified the moneyers' role as brokers of material power by forcing the population to produce more and more silver. On top of rent, ecclesiastical dues and other regular exactions, people had to contend with occasional recoinages, frequent requirements to drum up cash to pay for army service, sporadic tribute payments from 991 and systematic taxation for large-scale military expenditure after 1012 (Abels, 1988, pp. 132–45). The peasantry might have had to meet some of these demands by dealing directly with moneyers, and other impositions could have been met by selling additional goods at market to obtain silver instead, but that simply shunted the minting, exchange and distribution of necessary coin onto the shoulders of wealthier, better-connected middlemen who would profit from greasing the wheels of the fiscal system (Naismith, 2014, pp. 30–7). The tightening of the screws on the English meant that the monetary system went into overdrive to facilitate the extraction of wealth, and as the crucial point of contact between the wider organisation of the coinage and its role as currency, the moneyers were ready to step up to the mark. It is no coincidence that the era when this series of pressures were at their most severe in the early eleventh century was when the number of mint-places and moneyers peaked.

The moneyers would, on this reading, have been deeply embedded in formal and informal networks of power that guided a large proportion of their business. Relationships that could drive people to give up resources would have involved a blend of authority and potential coercion, meaning that 'vertical' bonds should be looked to as a key mechanism in pumping money into (and out of) society. The various interactions loosely described by lordship – landholding, soke, commendation, military service and other forms of patronage – had the potential to affect minting in several ways (Baxter, 2009b; Roffe, 2007, pp. 147–62; Williams, 2011, pp. 63–84). If a moneyer was lord over others, his commended men or tenants might come to him for minting or exchange of coinage. One such case can probably be seen with the Norwich moneyer Hringwulf in the reign of Edward the Confessor, who was (according to Domesday Book) a minor landowner in 1066 with lordship over ten freemen.[18] A moneyer might alternatively be the tenant or man of another lord, in which case he would have been well placed to support his superior and his other dependants as part of a larger bloc. Arrangements of this kind could be rigidly structured, with the moneyer's position and profits – possibly even his premises and equipment – being thought of as the property of his lord. A number of ecclesiastical institutions held one or more moneyers in this way (Allen, 2012, pp. 9–12), as did at least some laymen (Kelly, 2009, no. 31(xi)), but other, more flexible kinds of lordship were probably much more common, in which the moneyer featured as a dynamic actor in his own right. It was possible, for instance, to be both lord and dependant: Hringwulf whom we met before as lord to his ten freemen in turn had as his lord one Æthelsige, nephew of Earl Ralph (who may have been a moneyer himself at one point).[19] Intersections of this kind were commonplace, and underpinned a society that was shot through with – yet highly adaptable in enacting – lordship.

The implications of viewing the currency as inflected by the major structuring forces of late Anglo-Saxon society are numerous. Mint-places emerge as nodes in networks of power and patronage, and their catchments should be thought of in human rather than strictly geographical terms. Small, temporary operations can most likely be put down to an exercise of the authority of a powerful local lord. Such places could easily co-exist in physical proximity to each other because they served discrete and select clienteles. At large towns too, the number of moneyers depended essentially on how many interest groups did business there, albeit with enough complexity to support a larger 'horizontal' clientele of customers of status comparable to the moneyers.[20] But major mint-towns and their moneyers probably also

fed into the hands of wealthy individuals who sought to capitalise on the need for cash of those with less mobility and fewer resources: that would explain why London and its ilk shouldered, and profited from, a disproportionate share of late Anglo-Saxon minting. It follows that exchanging may have been much more important than actual coin production at smaller 'mint'-places, the point being for lords to facilitate and control acquisition of coin.

Another key conclusion is that the apparent exclusion from the late Anglo-Saxon coinage of elite interests is thoroughly misleading. On the face of it, Anglo-Saxon coinage was the preserve of the king and his moneyers, with no pennies in the names of aristocrats, abbots or bishops. Yet the influence of these groups is obliquely omnipresent. Minor mint-places and numerous moneyers in larger towns were probably tied to them, making coins on their behalf even if superficially everything was done through the framework of 'royal' moneyers. In fact, the coinage was a potent tool for binding together local and wider interests through the mediation of the lower elite. The comparison that suggests itself is contemporary Germany, where a great many powers below the level of the king or emperor operated mints (Kluge, 1991). Formally, England was a completely different, much more unified world. Behind the scenes, however, a range of English magnates probably had wider and more articulated involvement in the coinage than their German counterparts.

Conclusion

This brief essay proposes two shifts in thinking about late Anglo-Saxon coinage, both in their own way intended to integrate the coinage into the bigger picture of Anglo-Saxon exercise of power and authority. One stresses how the overarching structure of the coinage, at least in its key period of evolution under Edgar and above all Æthelred II, was a material enactment of moral and ideological projects at the core of the kingdom. The second shift relates to how and why this coinage was implemented so effectively under Æthelred and his heirs. The answer seems to be that minting of coin flowed with the tides of social power, meaning informal hierarchical and associative bonds as well as formal offices and relationships. It should not be thought that there was any friction between these two perspectives; on the contrary, they complemented one another. Coinage was one of many projections of royal will and authority that was set forth through a seemingly formal, depersonalised infrastructure, yet which could only work when it had the willing co-operation of agencies with local clout and connections, often founded on a less formal basis. This was one of the great strengths of the late Anglo-Saxon kingdom: its administrative strata were numerous, granular and interlocked in several ways, giving individuals at even relatively low levels a stake in maintaining the larger machinery of government (Campbell, 2000, pp. 37–40 and 221–5; Baxter, 2009a, p. 507). This grand partnership was built up by ingratiating those who were already influential, and by enhancing their status, influence and wealth yet more. In other words, local elites were the building blocks of royal institutions (Innes, 2000, esp. pp. 4–12), and expressions of that axis, including the coinage, depended on the nexus between hard and soft power. Moneyers and mint-places represent how these constellations of authority channelled England's flow of liquid wealth.

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[1] In the later years of Edward the Confessor (1042–66), German-inspired busts became popular, though even these were modeled on Roman and Byzantine predecessors: Archibald 2004.

[2] The only mention of it comes in the thirteenth-century chronicle of Roger of Wendover, who placed the reform in 975 but associated it with a range of other events from the early 970s: Dolley, 1979.

[3] The 'sexennial thesis' was the work of Michael Dolley, and gradually emerged in a large number of publications; for summations see Dolley, 1964 and 1978.

[4] Some short-lived kings are not known from surviving coins: Swein Forkbeard as king of England (December 1013–February 1014), Edmund Ironside (April–November 1016) and Edgar the Ætheling (October–December 1066). It is presumed that in each case either production ceased or the last type of the preceding king remained in use.

[5] V/VI Æthelred, 26.1, 31, 32.1–2 (Liebermann, 1903–16, I, 242–3 and 254–5); Napier 1883, 266–74.

[6] This figure excludes 11 towns that probably sprang up in the period 1066–86; some others may also belong to this group. Three more Domesday towns issued coin for the first time 1066–1100.

[7] Berkeley in Gloucestershire, Crewkerne in Somerset, and Melton Mowbray in Leicestershire.

[8] Cissbury in Sussex and South Cadbury in Somerset.

[9] Launceston in Cornwall.

[10] Watchet in Somerset (cf. Hill, 1996, pp. 223–4).

[11] Horncastle in Lincolnshire and South Petherton in Somerset.

[12] Cf. II Æthelstan 14; IV Æthelred 9 (Liebermann, 1903–16, I, 158–9 and 236). On the latter text (which is of uncertain date), see Naismith, 2019.

[13] Possible families of moneyers are reconstructed in Piercy, 2018; cf. Tsurushima, 2012, pp. 35–7.

[14] For six lawmen of Lincoln who served as moneyers, see Hill, 1948, p. 40; Williams and Martin, 2002, p. 882 (f. 336r); Mossop, 1970. For a possible dynasty of moneyers at London: Nightingale, 1982.

[15] Viking worked as a moneyer at Lydford and Exeter, and also appears in Domesday Book and other documents (Lewis, 2016, p. 192; Symons, 2003, pp. 92–3). Hunwine minted at Axbridge, Exeter, Ilchester, Lydford and Totnes, and appears in documents as a witness and thegn (Stewart, 1988, p. 170; Blackburn, 1974, pp. 19–22).

[16] For moneyers' employees see IV Æthelred 9.1 (Liebermann I, 236).

[17] Market processes could of course play a more prominent part in the subsequent circulation of coin, though even these were often far from neutral: Naismith, 2014b, pp. 20–37.

[18] His and other relevant details are most easily consulted on the PASE Domesday database (http://domesday.pase.ac.uk/). On this, see Hringwulf 9–11 (here divided up into three individuals, though quite possibly referring to the same man).

[19] Æthelsige 45 on PASE Domesday.

[20] Such structures were important in sustaining tradesmen later in the Middle Ages: Davis, 2012, pp. 346–7.