

On Bells and Bell-Towers: origins and evolutions in Italy and Britain, AD 700-1200

(*The Sixteenth Brixworth Lecture*)

Neil Christie

Introduction

Since his morning on the pillory, the inhabitants in the neighbourhood of Notre Dame thought they noticed that Quasimodo's bell-ringing ardour had grown cool. Formerly the bells were going on all occasions – long matin chimes which lasted from prime to complines; peals from the belfry for high mass; rich scales running up and down the small bells for a wedding or a christening, and mingling in the air like a rich embroidery of all sorts of delightful sounds. The old church, vibrating and sonorous, was in a perpetual joyous whirl of bells...

It is perhaps appropriate to begin with a quote from Victor Hugo's *The Hunchback of Notre Dame* (Book 7, Chapter III, 'The Bells'). The text summarises neatly the former prominence and regularity of church bells in the urban context, their ringing so vital to the character and the very being of both church and congregation: Quasimodo's struggles and the impact of this on his symbiotic relationship with his bells affected the whole of the population of Paris, the bells failing to provide the expected background noise. To a large degree present populations no longer hear church bells as they should do: urban noise pollution through traffic deafens out the chimes; but, more seriously, the level and frequency of bell-ringing have dramatically fallen, and people look more to hourly alarms on computers, watches or wall clocks for timekeeping; the vast reduction in church-going of course has dictated the change, with fewer services for smaller congregations, leading to a near silencing of bells save often for Sundays. When they do ring the bells can still be heard, and in rural contexts the peel of bells helps many people feel they are properly away from the hubbub of urban sprawl. Britain is not atypical: across much of western Europe bell-ringing is nowadays much more regulated and even artificial – set times, mechanised ringing, or taped bells – with a like reduction in church attendance.¹ But as with so many other things, in the present context of heritage and revivals, we are currently witnessing a resurgence in bell-

ringing plus a greater awareness of the value of churches as monuments – a revival fortunately well supported through the Heritage Lottery Fund in the form of the *Ringling in the Millennium Project*² – hopefully more than a short burst of renewed vigour extending beyond millennial interest. These are, therefore, somewhat limited voices, sadly needing external money to stimulate activity. One could say that bells and towers and churches too have, like Quasimodo, lost their spirit and yield *'what the ritual demands, nothing more'*.

Here, however, the case will be made for heightening our interest in bells and their housings; the aim is to highlight the importance of bells and bell-towers and to identify the problems that exist in researching and thus understanding their roles and origins. Towers and bells both form extant parts of our heritage – architectural and material – but their ancient roots mean that they provide a vital link between past and present.

As is well known, and as is patently still visible, church bell-towers are major landmarks, whether in an urban or a rural context. Though nowadays usually dwarfed and obscured in the larger cities and towns by high flats, offices, car parks and shopping centres, and often located in (currently) peripheral zones, all suitable indicators of a powerful religion struggling now in an increasingly secularised Europe, in the countryside, in particular, churches and towers remain prominent symbols and landmarks. These towers range from squat and sturdy models, dating back as far as a thousand years, to vast, pointed and elaborate Gothic spires a mere half millennium old, to 19th- and 20th-century imitations, revivals, and concrete efforts. The immediate mental association with these towers is of course the sound of the bells, set high up, beneath the spires; interestingly, even with the advent of taped music, the tall tower still remains an integral planned unit or feature of the largest modern churches, notably Coventry and Liverpool cathedrals. Although, in contrast, of the few new churches being built, which tend to be small,

many have a nominal belfry at best, or tall, needle-like efforts, thus only part clinging on to past forms.

These modern towers thus pay respect to the past and our ecclesiastical and architectural heritage and simultaneously demonstrate how bell-towers remain essential units of church planning. And yet, perhaps surprisingly, we do not know a vast amount about this heritage – or at least the earlier forms of these towers. They are part and parcel of the church fabric, yet are parts too often overlooked in favour of studies of the internal furnishing, art or sculpture, the plan or the graves. For example, in Taylor's excellent short article in 1976, the value of the tower is implicit but not explicitly stated, whilst minimal reference to towers occurs in any of the CBA volumes on Church Archaeology (Addyman & Morris 1976; Morris 1983; Blair & Pyrah 1996) or in the excellent general textbook by Rodwell 1989, and they seem almost wholly ignored in the otherwise important collection of papers on *The Church in the Medieval Town* (Slater & Rosser 1998). Towers and bells are central to the useful *Towers and Bells Handbook* (1973), although here academic data are skimpy and the emphasis is on the post-medieval tower, the housing of bells, the impact of their ringing on the church and tower fabric and modes of maintenance.

As will be seen, bell-towers are not always well dated or documented, and too frequently are merely lumped into the chronology of the main church body, with the latter the more vital sequence to follow and comprehend. This short contribution therefore attempts to examine the early evidence for bell-towers, to offer something about their evolution and influence, and, more widely, their role. This cannot hope to be an exhaustive survey; so many churches and towers exist, each with their own particular and distinctive history and architecture; indeed, even a regional survey would be problematic as so much variation can exist within a restricted geographical context, linked to physical (location/topography, geology, woodland resources) and human dictates (size of congregation/population, service needs, local wealth, architectural preferences, etc). Full justice can thus hardly be given to the Church's vast heritage. Instead, this paper will merely skim across a series of examples and hope to piece together a coherent image of origins and evolution: to do this, however, it is vital to extend beyond English/British confines, and to pay special attention to sequences in Italy, since Rome in the Early Middle Ages was the focus of the western Church and a city of emulation. Italy is also my own area of archaeological specialism and the paper may bring new information to the attention of readers. A review of early bell-towers should also encompass the important intervening countries of Germany and France, which preserve many fine examples of Romanesque architecture; however, it is hoped that other scholars will be able to follow up my contribution with such a detailed review; here I will merely touch upon a few key sites and examples from Gaul and Spain. Likewise I will

comment upon the famous round-towers of Ireland, but only inasmuch as outlining key features and their (disputed) chronologies. A busy debate on bell-towers in Europe is overdue and I hope this paper marks a first foray.

In terms of chronologies, discussion here will run from the 5th century into the 14th, but with a particular emphasis on the middle period, spanning the late Anglo-Saxon, early Norman to later Romanesque, ie AD 1000-1250 in Britain and the proto- to mid-Romanesque in Italy. We omit, therefore, discussion of fine Gothic and Perpendicular spires, Baroque blocks or Victorian efforts, all of which signify elaborations on the theme of towers and all of which merit their own personal studies, but are beyond the scope of this one. (A few existing books to note – though not all designed as academic reviews – are Smith *et al* 1976; Allen 1932; for Italy, Sparta 1983.)

Bells and towers: origins and functions

Bells have very ancient religious connotations. They are recorded as being used by priests in the Old Testament, attested in Egypt and Babylon, and known in early China and India. Their first link with the early Christian church of the Roman era is not recorded, but it seems logical to assume that the call to prayer was marked by a ringing of a bell, similar to its use in pagan festivals. Certainly bells are intimately connected with calls to divine office in monasteries by the mid-6th century, being noted by Saints Caesarius of Arles and Gregory of Tours, and by Saint Benedict for Montecassino (*de gloria martyrum*, ch75; *Rule*, ch43). By the 7th century Isidore of Seville was able to comment on preferred bell types, even guessing that the Latin name *campana* revealed that the best producers lived in the region of Campania in central Italy (the tradition being that Bishop Paulinus of Nola in Campania in the early 5th century 'invented' the church bell: *Patrologia latina*, vol 82, cols 587, 759 – see references in Sparta 1983, 11. However, the early 5th-century writings of Paulinus himself, although fulsome in discussing his monastic and shrine buildings and their paintings, seem to make no reference to bells. Deichmann's *Archeologia Cristiana* volume, 1993, also omits any reference to bells or towers). Despite such limited mentions, it is clear that bells were important items of the early medieval church furniture, and were worthy of blessings – Alcuin of York comments on this in the early 8th century and Bede mentions bells for his church at Monkwearmouth (see Rollason 1988). Such blessings were often inscribed on the bell's exterior. Two of the earliest surviving examples, both of the 9th century and both small liturgical bells, come from Canino and Tivoli in Italy (Sparta 1983, 14; De Rossi 1890). In the Middle Ages, inscriptions are commonplace and in time begin to inform us also of the craftsman who made the bell; from the 13th century there is good evidence for families of bell-founders in towns like Pisa and Lucca (Blagg 1978, 424; *Towers and Bells* 1973, 8).

Early survivors are extremely rare though: for a city like Rome, the majority of early extant bells date from the 13th century and are large units³ – although, as discussed below, many of the (Romanesque) bell towers themselves belong to the 12th century. A lack of earlier bells must indicate that melting down was the likely fate, perhaps replaced as the need for larger bells grew. But beyond the City, earlier examples are now coming to light through archaeology. For example, from excavations on the late Roman farm estate with a small church complex at Monte Gelato, north of Rome, we can note the find of a small copper alloy bell (possibly a *globular rumbler bell*) of 38mm diameter with decoration attributable to the early 5th century, but not securely associated with the church here (Potter & King 1997, 244 with fig 169). More secure is the discovery of a bronze bell-pit or furnace of 9th-century date at the major monastic seat of San Vincenzo al Volturno in central Italy, yielding a bell of *c* 0.5m diameter and sited near the presumed bell-tower (Francis & Moran 1997, 374-375; forthcoming, 41-45; see also S Cornelia, discussed below).

Since none of the early documentary references say anything really useful about the bells, the implication is that they were commonplace. Also, in the case of the monasteries, as enclosed units of worship, the impression is that these were hand-bells calling the brethren to the various offices and duties. Hand-bells are of course portable elements and need no built housing, bar perhaps a high (or open) point from which to ring them. The small, but heavy, Irish hand-bells of the 10th century, including St Patrick's bell from Armagh, and others from Clogher and Lough (all in the National Museum of Ireland, Dublin) are such examples (on the Irish towers, see below). But from the late 5th century at least we already have indications that in some regions bells were starting to be incorporated into the church architecture. This must relate to the need to house bells too heavy for a person to ring; and heavier bells probably also relate to a need in an *urban* context to compete against a variety of noisy neighbours. Hence at Tours, the church of St Martin, dating to *c* AD 470, can be reconstructed with both a porch and lantern tower with a belfry above. Conant 1979, 40 suggests that the bell could be rung beneath this lantern space, although Gregory of Tours' own description implies that the bell was not rung from beneath the lantern but that there was instead a bell-rope hanging from the entrance tower. Lantern towers begin to appear in the 5th century at the crossing between nave and transept and were designed chiefly to give more light, space and emphasis to the church sanctuary and altar; such towers – in reality a raised space integral to the church structure – could occur also in churches without transepts. Both porch and lantern-towers are a development from the earliest basilican churches, but their points of origin are not clear; Conant (1979, 39) suggests 'constructional expediency' for the lantern-towers, whilst highlighting a possible defensive function behind the

porch-tower, although he is far too sweeping in his comments here: *'In the west the coming of the barbarians and persistent local war made them important; for the church building was usually the most capacious and substantial building in the community, and consequently the refuge'*. I will return to this idea later.

The general absence of reference to bell-towers is perhaps not that surprising, since these must soon have become fairly standard additions to churches and were thus unremarkable to our early sources. Gregory of Tours, for example, in enumerating various churches and monasteries and the miracles of various saints and their relics, occasionally offers longish architectural descriptions – such as those of the church of St Martin at Tours, built by Bishop Perpetuus, or that built by Bishop Namatius at Clermont-Ferrand – but in these he fails to mention any towers (*Historia Francorum*, II 14 and 16; see also Parsons 1987, 20-23). Likewise for late antique and early medieval Italy, the records in the *Liber Pontificalis* (Book of Pontiffs) seemingly ignore the presence of bell-towers, even when the various biographers are constantly at pains to highlight any repairs, buildings or other works, and to stress all the fine cloths, ornaments and vessels that individual popes donated and dedicated to the churches of Rome and its environs – though here the emphasis is often on either a church structure as a whole or its interior and portable wealth (eg for the pontificate of Leo III (795-816), the entry provides a wonderful image of sparkling, busy church interiors, with silver and gold crowns, canopies, candlesticks, bowls, and decorated hung veils and curtains (Davis 1992, 173-230). Note also the excellent paper by Delogu 1988. Perhaps bells, being of bronze, did not sound precious enough to merit entry?).

For Britain, references are equally scarce. Of note, however, is the letter by Alcuin at the start of the 9th century in which he informs Archbishop Eanbald II of York of the arrival of a full 100lb of tin for casing his church's 'bell-house' – presumably meaning the timber roof of a small belfry – *'to help give the place distinction'* (letter 19 of AD 801). Earlier on, by contrast, Bede fails to note the presence of towers: in his description of the founding and building of the Monkwearmouth monastery in the 670s under abbot Benedict Biscop (*Lives of the Abbots*, chaps 5-6; Cramp 1976, 1994), although we hear of the hiring of Gallic masons to build *'a church in the Roman style he had always loved so much'*, and of glaziers too, no bells or tower are noted; again, here the author is much more concerned with what went into the church (ie pictures, books, music) than what it really looked like.

It has been argued that available texts combine overall to suggest that bell-towers, or belfries at least, were quite common by *c* AD 800 (eg Parsons 1987, 27). Potentially this may be so, but it is likely that they may have in fact only become commonplace in the context of major church and monastic foundation in the wider economic upturn and the

so-called Carolingian Renaissance of *c* AD 750-825 (in general, see Krautheimer 1980, 109-142). The later 8th century, as Krautheimer and others have observed, saw a revival and expansion of older, earlier Christian forms of architecture, combined with a partial infusion of Frankish idea, perhaps among them the bell-tower.

Too much weight might be placed on this Renaissance and we might instead try and seek tower developments in the centuries previous. However, we largely lack good texts (excepting sources such as Gregory of Tours and Gregory the Great) between the mid-6th and 8th centuries, and, simultaneously, we lack physical evidence for new churches – in this economically debilitated period, the tendency was to maintain existing churches (more than enough of these were available and the costs of maintenance high) or to convert other structures. But where evidence does exist for the 6th century we find no trace of bell-towers as part of the accepted late antique or post-Roman church form. Hence we can examine some of the mosaic imagery in Italy: for example, the mosaic townscape dating to the end of the 5th century in Sant' Apollinare Nuovo, the palace chapel of king Theoderic at Ravenna, displays churches but no towers; likewise the model of San Vitale held by Bishop Ecclesius in a mosaic of the 530s lacks a bell-tower (Rizzardi 1993, 452-

455). The same seems to be true for Rome, where mosaics also help reveal something of the architecture of the early medieval church. For example, the early 9th-century apse mosaics at Santa Prassede (Fig 1) and Santa Cecilia, both built and ornamented under Pope Paschal I (817-824), depict this pope, in squared halo, presenting models of his churches – again devoid of towers (Krautheimer 1980, 124-134 on these mosaics, but lacking reference to these models).

Is this sufficient evidence, however, to argue that towers were not being built, or were alien to the contemporary church fabric? Or is this merely indicative of the fact that in these two Italian capitals bell-towers were not as fashionable as elsewhere? At the same time we could question whether the mosaic depictions were real as opposed to stylised representations of the actual churches. This is legitimate, since even in the 12th-century apse mosaic at Santa Maria in Trastevere a tower-less church is being presented by the dedicant bishop, even though it is certain that a fine, tall tower was present at that stage (*ibid*, 163-165 with fig 121; this church (rebuilding) phase belongs to 1120-1143). However, in most images from the 11th century, such as for S Angelo in Formis (Fig 2) and the abbeys of Montecassino and San Vincenzo al Volturno, towers are indeed shown (see *Dall'eremo al cenobio* 1982, pls 14 and 168, the latter from

Fig 1 Left: Santa Prassede apse mosaic depiction of Pope Paschal with church model, c AD 820 (P Gallio, The Basilica of Saint Praxedes, pl 16)

Fig 2 Above: Sant'Angelo in Formis, Abbot Desiderius of Montecassino with model plus tower, c AD 1025 (Dall'eremo al cenobio, pl 14)

the *Lezionario* of Abbot Desiderius (1058-1087), produced in 1071, and showing Saint Benedict being presented by Desiderius the lands of the abbey of Montecassino, with the towered church in the background and in the foreground a variety of rural churches with proud, tall campanili). Perhaps it signified that in the 9th century bell-towers were not integral to the church form; alternatively the artist(s) decided to omit the towers, thinking that they would look unwieldy in the arms of the donor. The latter view seems difficult to support: no architect would have appreciated his fine bell-tower being overlooked in any depiction, stylised or not.⁴ More likely, therefore, is the interpretation that, for Italy at least, towers had not yet 'caught on'. One explanation for this may lie in the acknowledged conservatism of Rome and its area, and a possible unwillingness to adopt new, northern trends. Acceptance may instead have been gradual, beginning only from the 9th century under increasing Frankish and German influence. This switch in influence and in architectural expression is best recognised in the earlier take-up of towers on the part of monasteries such as San Vincenzo and Montecassino, which were all particular foci of Frankish patronage. The tower at Farfa, however, is argued by McClendon (1987, 76-79) to be 11th century, although this need not exclude an earlier, demolished predecessor. Hodges (2000: 96) argues that bells were a component of Charlemagne's methods of *'propagating the new ideology... Cast bells [in monasteries were] intended to help the community regulate the services and respect time. Bells marked the major points of the reformed Benedictine liturgy'*. Towns, as strongholds of 'Italian' architectural tradition, would understandably be slower to adopt new trends.⁵ But if so, in such busy urban contexts how were bells rung – from belfries set on the roof pitch over the façade?

The Frankish world thus emerges as an important driving force: as noted, in both Germany and Gaul we can recognise bells and towers on much earlier ecclesiastical units, notably the later 5th-century church of St Martin of Tours. But here too there seems to be a break until the later 8th and 9th centuries when extant buildings begin to provide a coherent vision of architectural trends and styles. Although sites like Fulda, Aachen and St Riquier in part draw on classical and thus Roman models, their design is more adventurous and sophisticated, with greater upward emphasis (Conant 1978, 43-68), so in this proto-Romanesque scheme, towers appear as near constant elements, often sited on the façade, and often twinned flanking the main portal (or beside the apse). A fascinating representation of this early medieval scheme appears on the famous blueprint Plan of St Gallen, dated to c 820-830: this details all of the presumed and required elements of a Carolingian monastery, from church, enclosure and hospice down to latrines and pig-pens (see the monumental three volume Horn & Born 1979). In this plan, two detached towers, 9m in diameter, precede the church façade; internal spiral designs indicate stairways within each tower, whilst the

scribe offers the caption *ascensus per cloceam ad universa super inspicienda* ('ascent by a spiral staircase to survey the entire orbit [of the monastery] from above') (ibid, section II 1.3, pp 129-131; Horn and Born's discussion is otherwise short on these structures). They fail to suggest that portable hand bells could have been employed from the towers to call brethren in from fields or from the precinct; large, hung bells may not even have been required in this non-urban context. On stair turrets, see also Parsons (1978). Both towers feature altars at their summits and the altar dedications to the archangels Michael and Gabriel imply their role as vigilant protectors.

Already at St Gallen, therefore, the façade towers are a powerful architectural feature, inspiring and lofty, forcing the eye to look upward to heaven – matching Quasimodo's Notre Dame (Conant 1978, 121ff). However, these twin turrets seem to have not been intimately connected with bells – the lack of reference by the contemporary scribe must denote this. But if purely for observation, one must question why two towers were required, and why of such size/height. Perhaps, as with much of the St Gallen plan, architectural harmony was an overriding factor, and a single tower would have created an imbalance. How far back this tendency goes is not clear, but contemporary and later churches maintained and indeed integrated the towers into the façade, with their stairways feeding into the two-storied porch/narthex and sometimes into galleries above the church aisles. Where bell-towers are attested, they are instead set at the back of the church over the crossing of nave and transepts; here, bell-ringing could be co-ordinated closely with the services and offices. Only later, but often not until the 13th and 14th centuries, were the façade towers given roles as belfries. A final element to note is the fortress-like appearance of these churches and cathedrals by AD 1050: solid, massive constructions, high towers, forbidding in their elevation (eg Lincoln cathedral, if remodelled: Jones 1993, 23-24. See below on 'Defensive Roles').

Bell-towers: developments

Having identified the likely starting point for the proliferation of towers as church units, the next step is to trace some of the developments in tower building in early medieval Europe. Here I will be focusing on two diverse regions, namely Britain and Italy, partly for the sake of contrast and comparison, but partly also for my need for familiar ground. Britain offers various towers belonging to the period AD 975-1100; perhaps surprisingly, Italy's earliest survivals appear to date only from the 11th century. Analysing these sequences will then allow for an easier discussion of the problems in understanding roles.

(i) Towers in Italy

Rome

The noted French connection ties in neatly with the first documentary reference to a tower on the church of Saint Peter's (the Vatican) in Rome in the 750s, a decade when

strong papal links were being forged with the new Carolingian powers. At this point we hear that *'the blessed pope Stephen II built a [timber?] tower onto St. Peter's; he gilded it in part, and in part coated it with silver, and in it he set three bells to call the clergy and people to divine office'* (*Liber Pontif: 94, vita Stefani*, ch 47). Though there is nothing here to prove a direct link with Frankish architects or models, Frankish architectural inspiration could be argued on the basis of the invitation to the former engineer, Walcharius, bishop of Sens, to advise Pope Hadrian in the 780s on the refurbishment of St Peter's (Krautheimer 1980, 112; see also Priester 1997, 260). One would assume that the Vatican church would have thus set a precedent for tower building in Rome, although, as seen, mosaic images of the early 9th century appear to argue against a rapid take-up. Indeed, there is little in the way of clear or 'secure' Carolingian-style contributions in Rome, although one of the few elements can be seen at the atrium of the church of the Quattro Coronati, near the Colosseum, comprising a sturdy gate tower, datable to *c* AD 840-850, and deprived of the ornamentation visible in Romanesque towers (Krautheimer 1980, 139, here noting how otherwise *'such northern features in Rome are rare and they are ephemeral'*). The gate tower features squat baluster shafts as dividers to the window openings, comparable to those of the porch gallery at Brixworth and in the tower at Earls Barton, Northants.

We must bear in mind of course that churches have undergone numerous changes across time, and for a metropolis like Rome, economic and religious highs will have brought dramatic changes to the ecclesiastical landscape. So many medieval churches, ostensibly dating from the 12th century on the basis of porches, towers and internal ornamentation, in fact overlie and part incorporate early Christian or earlier medieval predecessors. This is best visible in the excavations below San Clemente, San Crisogono or Saint Peter's itself, where one can now literally step down into earlier centuries of worship and activity (eg Claridge 1998, 284-288 on S Clemente). In other cases, earlier edifices have been demolished and new ones built, and in these instances reused (either as material in the walls or remodelled) architectural fragments alone offer a guide – hence it is likely that many early medieval arrangements (such as timber towers, belfries and Carolingian-style entrances and forecourts) have been removed and might now only be discovered through excavation.

Ninth- and Tenth-Century Emergences: Santa Cornelia (Rome) and San Vincenzo al Volturno (Molise)

An indication of the noted conservatism of Rome can be recognised in an excavation in the environs of the city, carried out in the 1960s, at Santa Cornelia (Christie & Daniels 1991). The site was of major importance in the Early Middle Ages, and specifically in this period of Carolingian influence. Santa Cornelia was a papal estate centre or *domusculta*,

founded in 774 on church land and designed to cultivate crops, wine, oil, etc, for distribution to the poor of Rome. Its foundation is well documented, recording how the pope and all the clergy and élite visited the site and how the relics and bodies of four former popes were buried there, effectively making it also a pilgrimage centre. Interestingly, the early church plan here is fairly plain, if with odd proportions, and with adjoining baptistery. Yet, no bell-tower or *campanile* featured in this initial plan. Only as the site's role deteriorated in the later 10th century is a tower added to the façade; this was of dimensions 3.9 x 3.85m, with walls 0.8m thick. By this date the baptistery had fallen out of use, and a bell-pit was cut into the cemetery zone behind the church, producing a bell of approximate diameter 50cm, a quite substantial size, requiring a tower (ibid, 24-26, 184-185. See also Christie (ed) 1991, 329-330, 339-341, discussing the belltower at the rural site of San Liberato, near lake Bracciano north of Rome) (Figs 3a & b). This proximity of bell-pit to tower is quite common across Europe, and presumably simply meant less distance to carry and fit the bell (eg Blagg 1978, 432 on the Torre Civica, Pavia). In England, the bell-pit in the nave of the Old Minster at Winchester is datable to *c* AD 950: Biddle 1965. Even much later the same proximity continues with the bell-pit of the early 14th century (in early excavation interims this was erroneously ascribed to 1617) in the nave of St Martin's at the deserted medieval village of Wharram Percy, Yorks. There was, however, a clapper that could be linked to a putative 12th-century bell. Bell *et al* 1987, 66-67, 115).

Fig.3a: View of 10th-century bell-tower inserted in façade of 9th-century church of Santa Cornelia near Rome (photo C.M. Daniels)

Fig 3b Plan and elevation c AD 900 (Christie & Daniels 1991: fig 34, drawn by Sheila Gibson)

Subsequently the church at Santa Cornelia was enlarged when it was converted into a monastery in the mid-11th century, and the *campanile* rebuilt, probably in stages, in line with emerging Romanesque forms in Rome; the bell-pit for this medieval tower was not identified in the excavations.

At the famous abbey of San Vincenzo al Volturno, to the south-east of Rome, much more recent excavations have identified a bell-pit of earlier date, most probably attributable to the major expansion phase of the abbey in the early 9th century. The tower itself has not been properly located on the ground, but the bell-pit lies close to its presumed position (Francis & Moran 1997, 374-375). What is striking is the political context of San Vincenzo in this epoch, on the border between the Lombard principality of Benevento and Franco-papal territory, but strongly under the sway of the Carolingian monastic movement and under Frankish protection, even if most of the gifts to the monastery were Beneventan.⁶

Ravenna

For Rome we lack 10th-century towers, although the lower portions of that of Santa Sabina on the Aventine Hill are often attributed to this period. Instead, towers abound only from around 1050 onwards. In northern Italy, however, 10th-century examples are claimed in the Venetian lagoon centres of Torcello, Murano and Venice itself (Tractenberg 1971, 158, and pls 308-312; Priester 1997, 260-262 notes early 11th-century structures in north-west Italy), but the

best known are those at Ravenna, which briefly saw a revival in its fortunes under the German Ottonian emperors (Rizzardi 1993, esp 452-455). The striking feature here is the predominance of substantial round towers, superbly preserved in the townscape at Sant' Agata and at Sant' Apollinare Nuovo, and at its former port of Classe beside the church of Sant' Apollinare (Fig 4), although there are a few cases of towers of more typical rectangular/square plan (eg San Francesco). Whilst not mentioned in the writings of the reliably observant Agnellus in the mid-9th century, a 10th-century date is generally accepted: a first documentary reference to a bell-tower in Ravenna is of 1038 when that adjoining the basilica Ursiana was provided with new floors, implying the tower had been present some time before.

Quite why round towers were employed in Ravenna is much debated, but the most probable solution is an emulation of the cathedral, which is claimed to reuse one of the early imperial Roman circular gate towers as its lower storey (Giovannini & Ricci 1985: 72; Bovini 1974). Towers here are chiefly utilitarian at this moment, with high, featureless sides culminating in a top storey with arcaded apertures; most are also detached units, suggesting a need to construct away from the church façade/body, thereby avoiding disruption of the existing church fabric. Materials tend to be *spolia* or reused items (brick, with marble for columns); some external decoration occurs in ornamental brick designs (as found at nearby Pomposa, a tower dated to 1063 according to a lower storey inscription: see Blake & Aguzzi 1990: 114) or with glazed bowls or *bacini*, mortared into the tower face, although such works may denote later towers (see below).

The Roman peak

For Rome, the late 11th and 12th centuries see the boom in church tower or *campanile* building: each church invested in a tower, generally brick built and ornamented in a fashion comparable to those of Ravenna just noted: as a series of levels with blind and then open apertures, and with

Fig 4: The early 6th-century church of Sant' Apollinare in Classe (Ravenna) with the adjoining 10th-century round campanile

decorative brickwork or marble work, and in some instances also *bacini*. Dating of these towers normally comes from cross-referencing to the constructional histories of the churches themselves, since many towers continue to be omitted in such references, but enough examples exist to allow for a developmental sequence to be recognised, leading onto more elaborate and ‘busy’ towers by the mid-13th century. Thirteenth-century bells are still in use in various of these towers. Typical examples of this Romanesque flourish are the towers of San Giorgio in Velabro and Santi Giovanni e Paolo (Christie 1991, 339-341; Spartà 1983, 40-118) (Fig 5). Here we can see the use of levels, defined by mouldings of dog-tooth brickwork and mensoles, with blind brick piers giving way to arcaded openings with impost columns and capitals; in both cases the campanile is topped by a pyramidal roof. Often the tower’s decorative scheme was a direct link to that of the church or porch façade, with inscriptions here confirming date ranges (as at San Giorgio).

Fig 5: The façade of San Giorgio in Velabro, Rome – 12th-century brick tower and porch

Outside Rome

The *bacini* just mentioned (extremely well visible on SS Giovanni e Paolo) are a particular decorative feature of towers (and façades) in various northern Italian centres, notably Pisa, Genoa and Pavia, and first appear in the first half of the 11th century. These are Islamic manufactures and reflect trade between the maritime centres of north Italy and Egypt, Syria and Africa, with Italian merchants stationed in various Islamic ports, purchasing such wares and subsequently reselling them at Italian urban fairs (Blake & Aguzzi 1990, 95-103, 114-116; Berti & Tongiorgi 1981). It seems odd, however, for Islamic items to adorn a Christian building; clearly no religious connotations were contained in

this, but rather a desire to brighten up otherwise unexciting brickwork. In time, banding of stonework was instead employed to give a livelier look. Recently, Anne Priester (1997) has sought to offer a possible direct link between Italian bell-towers and the Islamic world. She has argued that, potentially, the early 11th-century free-standing Italian campanili owe something of their origin to Arab minarets, themselves becoming commonplace from the 10th century. She observes the link between Muslim Spain and the residual Christian kingdom of Asturias, with church bell-towers emerging in the latter as vertical rivals to Islam – noting that bells were prized booty in any Islamic conquest of Christian centres. But the chronological, geographical and physical ties are all somewhat insecure. We could of course even consider that the Italian merchants themselves inspired the rise of church tower building, borrowing and adapting the idea expressed in the minaret as a raised and detached point of summons for prayer. The *bacini* conceivably support this Arab ‘link’ – although there is no indication that minarets similarly displayed these bowls. Were the merchants in fact paying for the churches and towers and displaying their wares – all combined as a show of their wealth? (On mercantile wealth invested in towns in medieval Italy, see the example of Genoa in Burman 1991, 151-175.) Alternatively, one could maintain the theory that Germany and France provided the source for the freestanding 11th century Italian bell-towers, or they might be linked to the spate of secular tower and castle building affecting Italy in the wake of Saracen and Magyar attacks. Again, unfortunately, for all these hypotheses too few data are as yet available.

(ii) Tower forms in Britain and Ireland

For Britain, the Norman Conquest marks a significant moment of architectural change and investment. Problematic, however, is determining the depth of this: ie, how far do developments extend back into the late Anglo-Saxon and Anglo-Scandinavian eras, and how far was the Norman impact merely an imposition of ideas on older and existing forms? Here we can examine examples of the clear Anglo-Saxon heritage, of the blurred Anglo-Norman ‘transition’, and of new directions from the late 11th century. In addition, I will briefly discuss the thorny question of the chronology of the famous Irish round towers.

Late Anglo-Saxon towers

There are two seemingly separate emergences of towers with churches (or *vice versa*) in late Saxon England. Perhaps the oldest can be seen as a development of a high porch entrance at the west end to a church, witnessed in the sequences at Jarrow, Monkwearmouth and Deerhurst (Cramp 1994; Rahtz & Watts 1997). Here we see a formal, almost ‘triumphal’ entry, assumed to have an upper level, either for storing church vessels or indeed for ringing a hand bell. Various examples of these enhanced western entrances are

known for the 8th to 10th centuries, although a transition into a true 'tower' appears to belong chiefly to the 11th or 12th centuries (eg Brixworth).

At Deerhurst (Glos), the detailed excavations and structural analyses of the later Saxon monastic church of St Mary's revealed a complex sequence of modifications across the later 8th to 10th/11th centuries (Period III-VI). The western porch entry gained a first floor chamber or chapel in the early 9th century (Period IV), but at the end of that century (Period V) it appears that the tower-porch was dramatically raised to a possible four storeys, the topmost perhaps in timber. Whilst it is postulated that the third storey held the church/monastery treasures and relics, the top level may have been a belfry (Fig 6) – a role secured in the latest Anglo-Saxon phase (VI), when any remaining timber work was replaced in stone (Rahtz & Watts 1997, 162-183).

The second early type appears to develop in the mid-10th century, with the tower forming the major structural element to a chapel/church. These are termed 'turriform churches' or 'turriform naves' and have been linked directly to the status of the immediate landowner, being viewed as symbols of thegnly status. This view derives from interpretation of the late Anglo-Saxon 'Promotion Law' (Athelstan, promulgated in AD 937), wherein a free peasant or *ceorl*, wishing to elevate himself to the status of thegn or retainer/nobleman (attached to higher lord or noble), was required show possession of five hides of land, a *burhgeat* (probably a gate tower to his *burh* or fortified residence and enclosure), plus both a chapel and a bell-tower. The *burhgeat* is recorded also in Wulfstan's 'Of People's Ranks and Laws' (Stenton 1971, 486-490. See the excellent discussion in Renn 1994, 178-187 on *burhgeat*, arguing for a secular origin as formal, status entrances to fortified enclosures – whether private or public/urban *burhs* – with subsequent transformation into church towers). The thegnly church was held and owned privately and effectively formed a point of income, with tithes brought in from land attached to the church or from donations by the parishioners or attendant worshippers, presumably themselves dependent on the lord, with that church acting as the estate parish (Stenton 1971, 147-156).

Despite this vital piece of documentation, precious little is known of these early private thegnly sub-parishes (which were set within wider minster parishes), although many lie under or are incorporated in larger later structures. We cannot assume a common form, and a small timber and subsequently stone church with west 'porch' might equally equate with such a chapel. However, only rarely can we recognise coherently the other documented units of thegnly status, notably the private *burh*, since most of the latter will have been obliterated by later manor, village or even castle growth. Nonetheless, a few examples can be identified, and in these, substantial and distinctive churches exist, namely the turriform church. One of the best known examples of a

Fig 6 (Above): Isometric reconstruction of the west end of St. Mary, Deerhurst in Period V (from Rahtz & Watts 1997, 177, Fig 105)

late Anglo-Saxon turriform church with adjoining private *burh* is All Saints' at Earls Barton (Morris 1989, 253-255; Audouy *et al* 1995, esp the contribution by Parsons on the historical context of the tower, 87-94; Hart 1997, 2-12; Reynolds 1999, 96). This is a stunning tower, dated usually to around AD 970, featuring the so-called long-and-short work on the angles and vertical pilaster strips and arcading on the tower faces; its base measurements are 7.3m square and the Anglo-Saxon tower rises some 19 metres high. The view is that the tower ground floor formed the bulk of the earliest church or chapel, perhaps with a short western extension on the line of the later nave with a steep pitched roof. The first floor then formed part of a private residence, and the upper tower extensions helped reinforce the status of the owner. The Berry Mound earthworks lie to the north – they have been only partially investigated (as ever, all the most intriguing puzzles seem to be barely touched by archaeologists!) – and so date and function are not clear; whilst the name itself hints at the private *burh* site, the nature of the earthworks suggests no defensive scope, more a symbolic one, although, potentially, of course, the tower offered defensive refuge.

Better understood is the sequence at and around St Peter's church at Barton-upon-Humber, south of Hull, where detailed excavations and building survey work thirty years ago revealed a full and complex site history extending back to Roman rural activity (Rodwell & Rodwell 1982; summary in Morris 1989, 253-254). The studies confirmed that the beautiful tower belonged to a 10th-century turriform church, comprising central tower of design comparable to Earls Barton, western baptistery annexe, and eastern chancel (Fig 7). The church lies in an enclosure dating back to middle Saxon times but reused as the boundary of a manor associated with St Peter's; late pagan burials lay beyond the enclosure, but 8th- and 9th-century Christian burials in the vicinity of the church indicate the presence in the zone of a likely timber precursor; further, the location of a monastery hereabouts recorded from c AD 669 remains to be established. The manorial bond of the 10th-century church is reflected in the high status burials under the altar zone, whilst the baptistery indicates a wider community role (the township west of the church-manor enclosure was well established by the mid-11th century, and a charter of AD 971 shows how the boundaries of the estate match those of the parishes of both Barton and Barrow). Interestingly, the Saxo-Norman church phase at Barton-upon-Humber (mid-11th century) sees the demolition of the small chancel annexe and the construction of a much extended nave with end apse – this suggestive of both prosperity to the lord and the growth of the township congregation.

In his excellent book *Churches in the Landscape*, Richard

Morris argues that 'Perhaps there is a case for seeing the western tower as a popular derivative of what had previously been a more exclusive and aristocratic form. The sharp increase in tower-building after c 1050 might then be explained as a result of the adoption by local lords of a status symbol which had its beginnings at a higher social level' (1989, 255). Morris claims that the turriform towers are slightly earlier, but dating and examples of earlier 10th- and 9th-century churches are few and far between, making this a difficult argument to sustain at present. Brixworth's tower of the first half of the 11th century would fit into this context. Morris further notes the general proliferation of new churches in the late Anglo-Saxon era, from c 950 onwards, and questions whether this is more a blossoming of manorial and lordly wealth and a fashion to display in building, rather than a sign of expanded personal religious devotion (ibid, 193-167). Unfortunately, the sources are inadequate to answer this.

Anglo/Saxo-Norman transitions

Chronologies overall are problematic for assessing how far, for certain areas, tower- and church-building relate to the late Anglo-Saxon phase, to the Saxo-Norman overlap, or fully to the early Norman era. It is perhaps not a vital debate since, for the most part, the builders of the smaller parishes (the ones with the weakest documentation) were natives/locals, serving locals, not Norman newcomers. A danger is present that early dates are offered merely due to a lack of clear 'Norman' influence, or that early Norman or Saxo-Norman dates are offered where a blend of styles is

evident, when this might instead just denote a slow take-up of new ideas and a survival of traditional forms – all being dependent on local wealth, urban influences, and materials (cf Blair 1996, 12-13). This problem is most evident in studies and current debates relating to the well-known round towers in East Anglia (eg sites such as Haddiscoe (Fig 8), Aslacton, Fritton and Roughton. A useful website is provided at www.roundtowers.org.uk). Here the distinctive shape is usually linked to the use of local flint and rubble construction, even though the

Fig 7 (Below): Elevation of the 10th-century tower-nave and western baptistery of St. Peter's church, Barton-upon-Humber. Left: Section viewed from south; Right: South elevation of tower-nave (from Rodwell & Rodwell 1982: Fig 7)



Fig 8: North Norfolk: Haddiscoe church tower with distinctive late Saxon belfry apertures (Photo and copyright S Hart)

adjoining churches are rectangular (see Hart 2000). Continental links are sought also to explain the round form, although German parallels are chiefly 12th-century in date; instead, as Hart has argued, a far more local inspiration may have come from the extant projecting towers of the late Roman Shore Fort at Burgh Castle, although the connection is not easy to prove. Some local enthusiasts have been perhaps too keen to locate full Anglo-Saxon origins, followed by later Norman intrusions such as characteristic chevron-ornamented doors; also often offered is too neat a distinction between Anglo-Saxon round towers at 35ft tall, and 54ft Norman ones (Goode 1982; 2001; but contrast Heywood 1994, 56). Here, as elsewhere, much more detailed architectural and archaeological scrutiny is required to clarify sequences and regional trends, plus wider studies to help determine origins of forms (Hart 2003; see also the Round Tower Churches Society magazine *The Round Tower* – eg Hart 2001 on Fritton). The debate may not be easily resolved, however, without excavations or without dendrochronological dating.

Norman evolutions to the 13th century

From 1066 we recognise an evolution from the quite elegant Anglo-Saxon tower to a solid and generally squat Norman form; frequent also is a shift from a west end location to a central position within new cruciform churches, or attached to the north transept; although in many pre-existing examples the west end location logically persisted and saw upward expansion. This seems true for Brixworth, where both stair-turret and tower appear to belong to a time-span

of c 1050-1150 (Sutherland & Parsons 1984, 60-62), as with the peculiar tower of St Mary's, Sompting, in West Sussex where the tower is topped by an unusual 'Rhenish helm' spire; later rebuilding/remodelling of this spire in the early 14th century, however, means it is not possible to pin down its form of the Norman period (Aldsworth 1989). Similarly, at the Northumbrian monastic churches of Monkwearmouth and Jarrow, whose first phases see tall porches at the west end entrance, only, probably, with the early Norman period, by c 1100, do we observe their transformation into towers, ie higher than the church roof, and equipped with bells. Cramp (1994, 291), however, has suggested that the tower unit at Jarrow *might* be 9th-/10th-century; Harold Taylor prefers to see the belfry stage at Monkwearmouth a 10th-century addition, not Norman (1961/1994, 57; likewise Wormald 1991, 75). This would then fit the Deerhurst sequence of porch>tower transformation in the late Saxon period.

Elsewhere, such as at the well known deserted medieval village of Wharram Percy, Yorkshire, the detailed study of the half ruinous St Martin's church revealed no tower on the late Saxon manorial chapel, but it did point to a putative or planned tower at its west end around AD 1100, although only realised in the later 12th century. This may have marked a change in status, whereby St Martin's then came to function as a parish church, and the addition of the bell-tower signified the need to house higher and louder bells to reach the larger village unit and its lands (see Bell *et al* 1987 on excavations; Morris 1989, 255 on status). Interestingly, however, John Hurst (pers comm) points out that C14 dating of the many skeletons from the St Martin's cemetery would indicate that this was virtually full already pre-1066, which implies that it *must have been either a Minster or an early parish*; but Blair 1996, 12 warns against too early a use of the term 'parish church', stressing that this is applicable only from the 12th century. Perhaps in some cases the creation/addition of a tower marked a parish status?

It is clear that the trend for towers, once begun, developed fairly rapidly. Hence from the middle of the Norman period a strong emphasis is placed on the tower as both functional and decorative with increasing height and display, firstly in the use of octagonal spires (eg Barnack and Brixworth), then with spires behind pseudo-battlemented parapets, and then with ornamented parapets without spire. But here we range into Gothic, Perpendicular, post-Reformation, etc, and into the period in which rings of bells appear, with ever more 'scientific' or mathematical use of bells, and with a concomitant emergence of bell-frames from the 14th century, whose general evolution obviously had implications for tower form and bell placement – all fascinating evolutions, many of which have already been studied, with some meriting more detailed analysis, but not in the scope of this short contribution (see Eisel 1987 and Brooke 1995 for introductions. See *Towers and Bells* 1973, noting in particular

the problems of tower oscillation through ringing and the changing location of bells within towers).

The freestanding round towers of Ireland

Finally, brief mention must be made of the prominent Irish round towers (or *cloicteach*): a full 65 of these chiefly freestanding units survive, although only a few are preserved to their original height – 20 metres in many cases (eg Glendalough in Co Wicklow), but up to 34 metres at Kilmacduagh (Co Galway) (Summarised in Corlett 1998; Edwards 1990, 127-128). These towers are somewhat slim affairs, 5-6m in diameter and with slight foundations; they taper upwards and enclose between three and eight storeys. Irish Annals tells us that these were for bells – hand-bells – as well as for storage and safekeeping of church valuables, but also acting as occasional refuges (on this role, see below). The earliest mention of a tower belongs to 950, but most references are later. They coincide with the turn to church building in stone in the 10th and 11th centuries (though timber precursors cannot be excluded) and with a major phase of development in the late 11th and early 12th century; this is a period of Church reform, revitalised pilgrimage and a celebration of the past, all promoted by local kingships (Corlett 1998, 27). This 12th-century date is demonstrated also by annal references, and supported by some C14 dating evidence (ibid, 25-26). Interestingly, this early 12th-century phase is matched also by the appearance in late Norse Scotland of round-towered churches, such as at St Magnus' at Egilsay (Orkney), with the tower originally attaining *c* 20m in height (Ritchie 1993, 111-112). In central Scotland, the earliest towers include Dunblane and Muthill (square) and Brechin (round), but perhaps no earlier than 11th-century (Macquarrie 1992, 127-128; www.cavennet.ie). One other round tower is at Abernethy, Perth & Kinross. The first phase of Irish stone church building, meanwhile, compares well with the dates of most of the earliest Irish bronze hand-bells (eg the Armagh bell of *c* AD 900, with its inscribed blessing); such artefacts might further confirm that these are not fixed, heavy bells were used in the towers. The derivation of the Irish round towers is unclear: it is perhaps too easy to look to the Continent, especially given the flow of pilgrim traffic, but we should also think of independent native creations; the links between Norse Scotland and Ireland remain to be fully explored in this context. Nonetheless, many Irish towers do possess Romanesque features, especially in terms of windows, doors, and mouldings, implying that they belong largely to a period of Norman influence.

Functions and roles

From discussing these varied examples, it is essential to return to the question of the roles and functions of these towers. The first clearly relates to bell-ringing, but, as we have seen, the towers have other implicit and/or explicit

attributes and roles. Four key aspects can thus be highlighted, each of which links into the theme of origins.

(i) Towers for bells

The prime function of bell-towers attached to or adjoining churches was that of housing and sounding the church or monastic bells. Bells were and are rung for a variety of needs: calls for service, prayer, to mark funerals, weddings, festivals and commemorations, they ring for the hours, and they can be rung for assemblies and for warnings. The latter ringings in some cultures came to be transferred to other arenas – town-criers in Britain, for example, or in medieval Italy, communes (council-led towns/cities) such as Bologna, Lucca, Siena and Florence had civic towers attached to the council's palace in the city centre. Thus in AD 1288, Bonuesin de la Riva, writing a celebratory description of his home city, Milan, records how *'in the city the bell-towers are about 120, and the bells over 200'* whilst the palace of the commune has *'a tower in which are the four bells of the commune'* (ch 2; translated in Dean 2000, 12). In early 14th-century Milan, the tower of Visconti's chapel of the Blessed Virgin Mary is described with its fine brick decoration, small marble columns and a metal sculpture of an angel on the summit, and as well as its many bells there is a clock which sounded each hour *'which is highly necessary for all conditions of men'* (ibid, 42). For Perugia, in 1342, six bell-ringers, each with a scarlet hood as a uniform, were in post for the commune, charged with ringing the large S. Lorenzo bell for public sermons, the large bell of the people for *'needful things'* such as assemblies or fire warnings, and the large 'evening' bell (ibid, 220-221). Clearly local citizens needed well tuned ears to understand the calls of both parish churches and public assembly.

(ii) Visual roles: social and symbolic

Simultaneously, towers were and are visible social symbols, forming points of recognition and foci for congregation and for wider communities. Whilst the church façade was important, the tower, being visible from furthest away, needed to be a beacon of display and craft and a point of pride, as in the Visconti tower just described. Towers thereby act as landmarks: they stand/stood out in both town and landscape; they form points of orientation for both travellers and locals, just as for the noted Italian communes, the civic tower pointed to the urban heart. Some bell-towers, of course, had even more practical roles, such as with various medieval Cornish churches like St Eval and St Enedoc which are tall and set on the coast to act as guides to mariners for the location of the land/beaching, etc; some towers were even whitewashed to help visibility (Daniell 1988, 22). The same functional role was also envisaged for the 20th-century cathedral at Liverpool in the poet laureate John Masefield's address in 1931 (Kennerley 1991, 91-93, 98-101). His pronouncement on bell-towers ran thus:

'It should be, first of all, a place plainly to be seen by the citizens, and by those in the district... The sites of many castles would be perfect for cathedrals. Amiens is well placed, so is Durham; so also York, Gloucester, Salisbury and St. Paul's Cathedral. So is this great Cathedral of Liverpool. A Liverpool Cathedral should be readily seen from many points of the city and, above all, by the life of the city, the river, with its ships and docks. All cathedrals should be specially conspicuous by tower or spire, and these again should be made more conspicuous by some great figure of white or gold, the guardian of the city; and some further glory of windvanes telling the windshifts, and great bells telling the hours and the quarters, and ringing for the city's joys; in this city for the ship launched or the ship come home. And in this city I would have the tower such that mariners, who are the life of the city, could adjust their compasses by it, and see the storm signals and the time signals upon it, so that it should be their tower pre-eminently.'

In these instances, the towers flag the church's presence and thereby advertise the church's parochial or more substantive urban role.

Bell-tower height is significant more in an urban than a rural context, where the clutter of houses and tenement blocks, and the bustle of town life with its attendant noise pollution, will have required the provision of towers to aid both location/orientation and bell audibility (Priester 1997, 271). Interestingly, however, Priester offers limits to tower size. Discussing both bell-towers and minarets, she states: *'Indeed, the fundamental characteristic of both – height – is a functional advantage for sending an audible signal only to a certain elevation. Above that optimal elevation, height becomes a disadvantage but at the same time an expressive advantage'* (ibid). She points out how the platform for the prayer-caller in the minaret of the Great Mosque at Cordoba was over 30 metres from the ground. Priester stresses how the movement of heavy bells hung in a tall tower would create a structurally destabilising effect which could only be countered through buttressing and by blocking of lower storey apertures.⁷

Furthermore, as Masfield implied, towers, through their height, might reinforce the symbolic role of the church as *'local mediator between secular society and God'*, with the eye drawn upwards toward God's Heaven. The same role is undoubtedly (if perhaps less consciously?) still performed today in a period when taped/CD music could easily have removed the need for bell-towers. As Hammond (1960, 48) critically observes, *'A soaring, aspiring tower, dominating the surrounding buildings, is an essential element in the idea of a church which has haunted the western European consciousness since the Middle Ages'*.

(iii) Defensive roles

Defence and observation are often cited as reasons for the emergence of towers. There are certainly references to towers as points of refuge in Ireland, as in 950 when clergy sheltered in a tower at Slane, only to be burnt alive by

Vikings, but such references are uncommon. Corlett (1998, 26) observes that no tower survives at Slane and the source does not state that this was a church or even a stone tower. Besides the Vikings, however, enough native conflict and rivalry may well have given the Irish towers a refuge role. For the Irish towers, in fact, although we can observe doors at first-floor level, this is less a defensive measure than a means to ensure structural stability, ie avoiding weakening the ground level, especially given the slight foundations apparent at many *cloicteach*. For Norfolk and Suffolk, it has been claimed that the equally distinctive round towers appeared first in response to Danish attacks (Cautley 1937), but in reality most towers are low affairs, and, as recent studies suggest, most fully post-date the main Danish conflict and are contemporary with or later than the attached churches (Goode 1982, 7-9; Heywood 1988). But an occasional refuge role cannot be excluded: towers may have been, along with the church, a sanctuary, a first (or last) hiding place and one where God's help could at least be hoped for. After all, church treasures were, it seems, often stored in the upper floors of towers. Presumably a defensive/refuge role was built into *burhgeats* such as Earls Barton, Barton-on-Humber (Renn 1994). Gregory of Tours, in his 6th-century *History of the Franks*, certainly refers to episodes of churches being used as refuges, but they were hardly secure havens and could not hold everybody. Often they were refuges for individuals, such as rejected commanders or officials, but normally these people were dragged out and imprisoned or executed anyway, and the churches sometimes pillaged for their metal wealth. But Gregory writes before towers became built features to churches and in his day the towers of the town walls provided the observation posts, trumpets gave warning, and prayers and saints provided the spiritual back-up.

When bell-towers become commonplace from the 9th and 10th centuries, these might then have performed as observation points and could ring out warning bells. An interesting survival of this into modern times comes from Ravenna in Italy, and the fine early 11th-century round tower at Sant'Apollinare in Classe (Fig 4) which was used in World War II as a German observation post, and as a result was nearly demolished by Allied troops. The idea of observation and defence is applied best to bell-towers in an urban context. In many of the late Saxon *burhs*/boroughs such as Oxford and Wallingford, churches occur either near or at the gates – in the case of St Michael's at Oxford, the tower, 10th/11th century in date, formed part of the north gate (Parsons 1994). Blair (1996, 14-15) notes the dispute over whether these gate churches belong to an early, c 900, phase of the new towns, or to the 11th century. Barrow (2000, 137-138) prefers the latter. An Italian example is the 11th-century cathedral church of San Michele at Susa, in the north-west Alps, which reused one of the round flanking towers of the 4th-century Roman town gate as a bell-tower (Fig 9). Typical

worries – especially in response to the dangers of accidental fires in what were largely timber-built town- and village-scapes. For medieval Italy, it was the civic bells thus used to sound alarms: at Verona a statute of 1295 notes that two lords' palaces were equipped with two bells each, one large and one small, the larger to summon guild members and soldiers to deal with serious fires and disturbances, the small one to call soldiery; at Perugia in 1342 it was the large bell 'of the people' which was rung well and sufficiently for 'needful things' (Dean 2000, 220-221, 233. On Anglo-Scottish churches and defensive roles see also Brooke (2000).

(iv) Prestige/competition

The final key function is that of prestige. In thinking of churches it is important to remember that in the early Middle Ages these were almost the sole stone-built units in either town or country (estate or village); they denoted substantial investment in and visible devotion to God. Donations, grants and endowments served to enhance the standing both of the church and the donors; private chapels, tombs, memorials and plaques, and intra-church burial reinforced these ties. Churches thus reflected on their communities and patrons.

We can perhaps read more into these buildings as time progresses: it is apparent that, even if these were men of God, clergy, bishops and abbots were still open to competition and rivalry – the relic industry of the early Middle Ages is proof enough, with churches and clergy vying for and even fabricating claims on the best of the saints' bodily debris (see Geary 1990). Patronage and display are all apparent in church form and decoration, with a desire to exhibit fully local input and piety (eg Brown 1996). In the full Middle Ages prized architects might be brought/bought in to help design new churches and bell-towers or to redesign church façades. One well documented example is at Florence, where the famous artist Giotto was made architect for the cathedral bell-tower in 1334 (Tractenberg 1971, esp ch1).

Rome is an excellent centre in which to witness this competition in display: a vast array of bell-towers or campanili survive, whose origins lie in the architecturally extremely busy 12th and 13th centuries; examples range from the compact but ornate tower of Santa Cecilia to the slim and lofty tower of Santa Maria in Cosmedin. All are elegant in execution, their brick constructions decorated with blind and open apertures, the latter with slender columns, the divisions between storeys executed with mensoles and dog-tooth brickwork, and with splashes of colour provided by *bacini* or by slabs of prized purple or green porphyry marble. Further north in Italy, 13th- and 14th-century Pisa and Florence abound with stunning churches with varied tower designs – best known being the Leaning Tower of Pisa and the vast campanile of the Florentine cathedral or *duomo*. For Florence, various

Fig.9: The late Roman town gate of Porta Savoia at Susa (NW Italy), whose fabric was incorporated into the Romanesque cathedral church of San Michele – a combination of defence but also prominence in the town and with the church dominating the main entry / exit to the city.

dedications to St Michael as well as to St Peter link into the idea of protecting gates and travellers, implying a role of 'Holy Protectors' (Morris 1989, 197-201, 214-219). Other factors play a role in this locational strategy: bell-towers near the walls would sound out to people in the suburbs or the fields; at the same time the bestowal of blessings by a gate-church would have generally compelled donations from passing travellers – as well as regular movers such as merchants – all aiding in financing church and clergy.

Earlier Norman cathedrals meanwhile betray a somewhat military character, notably in cases of double-tower fronted façades as visible at Lincoln and in various daunting proto-Romanesque examples with powerful façade *Westwerk* of the late 10th and early 11th centuries in Germany and France (eg Paderborn cathedral, c AD 1009; St Michael's at Hildesheim, started AD 1010 and fully consecrated in 1033. See *L'alto medioevo* 1992, 388-391). Castle and cathedral often lay in close proximity as mutual support, both flagships for the new élite: in the case of Lincoln at least in the civil war of 1140, whilst Matilda's supporters held the castle, her enemy Stephen fortified the already bastion-like cathedral; Jones (1993: 23-24) rightly pointing out that contemporary architects, having worked on the castle, may have carried over their military designs to the church, without any actual military function intended.

We need add, of course, that security in these periods generally concerned less external threats but more internal

contemporary documents (accounts, poems and letters) highlight the competition to build and beautify and to make a statement of urban and church pride.

Significantly, such towers link into the wider context of competition between urban élites: we know that from the 10th century, Rome, Florence and much of Italy was carved up, as a virtual battleground at times, between various noble families, who had come to control specific sections or quarters/districts of the towns. But it was no straightforward secular conflict, for the secular Élite also contributed strongly to the ranks of the high clergy. The nobility built their own towers to stake their territory and to show their upward ambitions: Florence had about 150 towers, Bologna 200, Rome up to 900 (in general, see Waley 1988; on towers, see Andrews 1991; Tractenberg 1971, 151-179; and Fasoli 1989 with excellent discussion on origins from the early 11th century; Fig.10). Churches were fully involved in these territorial conflicts, since the parish centres became symbols for districts, and were thus rallying and meeting points. Inevitably, they too displayed architectural rivalry, and the bell-towers of Rome still offer mute testimony to the forest of towers that many towns contained; the much-loved Tuscan hilltop town of San Gimignano still offers a thicket of such towers. By the 13th century the numerous Élite families lost out (though usually one or two continued to control urban affairs) and communal regimes and the Church dominate. Many secular towers were demolished (various bans on building new towers or heightening existing ones came into effect in the 13th and 14th centuries) and many bell-towers were rebuilt as civic, no longer private or local, symbols. For Perugia in 1342, one statute makes it plain that demolition of old private towers would be a *'disfigurement of the city'*; yet it is noticeable that in 1389, when the Rodaldi tower collapsed at Bologna and the land bought up, no new tower was erected but instead *'a beautiful residence'* (see Dean 2000, 39-41). For Florence, the cathedral

bell-tower was the culmination of this communal awakening: at the heart of the city, its form outshone all its rivals in height, bulk and architectural splendour. Interestingly, however, as in today's climate of architectural critique, many contemporaries, whilst awed by the size, were not convinced by its final form – it had suffered from three changes of architect – and were concerned by the cost to the city; later Florentines and visitors, by contrast, offered nothing but praise, as with the modern commentator, Tractenberg 1971, 4-5, who gushes, *'The bells of the Campanile pealed the hour of their birth, and they grew to manhood in its shadow!'*

British townscapes may have lacked the competition of secular tower building, but church towers and façades arguably became showpieces for medieval civic display, with each well-respecting centre keen to show its ability to keep up with architectural and artistic fashion. Villages, too, reveal striking investment in their parish churches. Early English, Decorated and Perpendicular styles from the 13th to the late 14th century particularly take the tower as an external focus, with high, narrowing spires drawing the eye upwards (eg Smith *et al* 1976, 77-78, 119 with plates).

Conclusions, problems and needs

Finally we can draw some conclusions – and concerns – from all the above discussion. We have seen that towers are complex affairs, built for a variety of reasons, but all intimately tied to the society around. The variety of forms and structural developments likewise tell us something about past communities. Different avenues have been explored to seek to follow early tower evolution, but it needs to be admitted that data are currently scarce, meaning that origins remain vague, with great uncertainty as to sources and influences, and as to how far we should consider independent emergences. We have seen a hazy early phase for early Christian and late antique times, when references are few, but certainly not suggestive of any monumentality; a

9th-century monastic phase which registers a stronger symbolic role for bells and a suited housing for these; a 10th- and 11th-century phase wherein status, defence and security appear to play a role; and an 11th- and 12th-century phase when towers are essential and integral components, structures of pride and ornamentation. Yet within this crude sequence important gaps remain and so we still need to enquire in greater depth regarding these key questions: were bells for churches an early Christian invention or were they linked to the growing monastic context of the 5th and 6th century? How early do towers and belfries arise? Is their derivation linked to late Roman town walls or even to fortified villas? Is the spread of towers – single and twin – a largely Frankish inspiration? Is tower upward growth linked to

Fig 10: Early 16th-century cityscape of Bologna, dominated by the commune tower but with bell-towers scattered around the city core (a fresco by Francesco Francia in the Palazzo Comunale of Bologna; Fasoli 1989, 18-19)

urban growth and a concomitant emergence of competition, visual and audible? Need a defensive role be seen as integral to rural towers in Ireland as elsewhere? For Mediterranean Europe, the putative Islamic link is intriguing but remains to be examined in sufficient detail; for north-west Europe, chronologies and continental connections remain too vague at present. Links remain to be made and explained, but these may well reveal far more about cultural and religious flows across Europe: ie the movement of ideas and people (clerics, pilgrims, kings, architects).

Overall it should be emphasised that, despite their survival and prominence, bell-towers in terms of structures and their evolution are poorly understood and studied – even in Britain, where a long tradition of church archaeology exists, as reflected in the fact that in core volumes on church archaeology, notably those published by the Council for British Archaeology (Addyman & Morris 1976; Morris 1983; Blair & Pyrah 1996; within the latter, papers by Gem and Blair simply imply the value of towers), and even in Morris's seminal work on *Churches in the Landscape*, bells and towers are items and structural components barely mentioned. Although, as seen, for a sizeable portion of their history, contemporaries too seem to have paid scant attention to bell-towers! This modern scholarly gap seems bewildering given how integral towers are/were to the church/Church both in structure and in role. At least small dedicated groups have done something to study their local churches and parishes, but their publications, not always stringently academic, too often remain parochial affairs, barely known. A far more concerted effort, ideally regionally-based projects combining architectural and archaeological approaches, is required to put bell-towers back in their rightful place – somewhere to match their structural presence, namely at the front of or at least alongside mainstream church studies.

Neil Christie, School of Archaeology & Ancient History,
University of Leicester⁹

Bibliography

Primary Sources

- Alcuin, *Letters* – translated by S Allott, *Alcuin of York, c AD 732 to 804. His Life and Letters* (William Sessions, York, 1987).
Bede: *Lives of the Abbots of Wearmouth and Jarrow* – translation in J Webb, *The Age of Bede* (Penguin: Harmondsworth, 1965 (rev1988)), 185-210.
Gregory HE, *Gregory of Tours, The History of the Franks* – translated by L Thorpe (Penguin: Harmondsworth, 1974).
Liber Pontificalis – See the translated texts by R. Davis: *The Book of Pontiffs* (Translated Texts for Historians, Vol.5, Liverpool University Press, 1989); *The Lives of the Eighth-Century Popes* (Translated Texts for Historians, Vol 13, Liverpool University Press, 1992); *The Lives of the Ninth-Century Popes* (Translated Texts for Historians, Vol 20, Liverpool University Press, 1995).

Secondary Sources

- Addyman, P, & Morris, R (eds) 1976, *The Archaeological Study of Churches* (Council for British Archaeology Research Report 13, London).
Aldworth, F, 1989, 'Sompting church', *Current Archaeology*, 114, vol.10, no.7, April 1989, 221-224.
Allen, F, 1932, *The Great Church Towers of England* (Cambridge).
Andrews, D, 1991, 'Tower building and upwardly mobile elites in medieval Italy', in E Herring, R Whitehouse & J Wilkins (eds), *Papers of the Fourth Conference of Italian Archaeology, 2. The Archaeology of Power, Part 2* (Accordia Research Centre, London), 81-86.
Arslan, W, 1943, *La pittura e la scultura veronesi* (Milan).
Audouy, M, (ed) 1984, 'Excavations at the church of All Saints', Brixworth, Northamptonshire, 1981-82', *Journal of the British Archaeological Association*, 137, 1-44.
Audouy, M, Dix, B, & Parsons, D, 1995, 'The tower of All Saints' Church, Earls Barton, Northamptonshire: its construction and context', *Archaeological Journal*, 152, 73-94.
Barrow, J, 2000, 'Churches, education and literacy in towns, 600-1300', in D.M. Palliser (ed.), *The Cambridge Urban History of Britain, Volume I: 600-1540* (Cambridge University Press: Cambridge & New York), 127-152.
Bell, R, Beresford, M, and others 1987, *Wharham: A Study of Settlement on the Yorkshire Wolds, vol.III: The Church of St. Martin* (Society for Medieval Archaeology Monograph 11, Leeds).
Bertelli, C, 1999, 'Visual images of the town in Late Antiquity', in G.P. Brogiolo & B. Ward-Perkins (eds), *The Idea and Ideal of the Town between Late Antiquity and the Early Middle Ages* (Brill: Leiden, Toronto & Cologne), 127-146.
Berti, G, & Tongiorgi, L, 1981, *I bacini ceramici medievali delle chiese di Pisa* (Rome).
Biddle, M, 1965, 'Excavations at Winchester, 1964', *The Antiquaries Journal*, 45, 230-264.
Blagg, T, 1978, 'Bell-founding in Italy: archaeology and history', in H. Blake, T. Potter & D. Whitehouse (eds), *Papers in Italian Archaeology I, Part ii* (British Archaeological Reports, International Series S-41, Oxford), 423-434.
Blair, J, 1996, 'Churches in the early English landscape: social and cultural contexts', in Blair & Pyrah (eds), 6-18.
Blair, J, & Pyrah, C, (eds) 1996: *Church Archaeology, Research Directions for the Future* (Council for British Archaeology Research Report 104, London).
Blake, H, & Aguzzi, F, 1990, 'Eleventh century Islamic pottery at Pavia, north Italy: the Torre Civica bacini', *Accordia Research Papers*, 1, 95-152.
Bliss, M, & Sharpe, F, 1986: *Church Bells of Gloucestershire* (Alan Sutton, Stroud).
Bovini, G, 1974, 'Forme, cronologia e derivazione dei campanili cilindrici di Ravenna', in *Corso di Cultura di Studi sull'Arte Ravennate e Bizantina*, 21, 47-52.
Brooke, C, (ed) 1995, *The Archaeology of Bellframes. Recording and Preservation* (IFA Buildings Special Interest Group, Nottinghamshire County Council).
Brooke, CJ, 2000, *Safe Sanctuaries. Security and Defence in Anglo-Scottish Border Churches, 1290-1690* (Birlinn, Edinburgh).
Brown, A, 1996, 'Parish church building: the fabric', in Blair & Pyrah (eds), 63-68.
Burman, E, 1991, *Emperor to Emperor: Italy before the Renaissance* (Constable, London).
Cautley, M, 1937, *Suffolk Churches* (4th edition, 1975, Boydell, Ipswich).
Christie, N, & Daniels, CM, 1991, 'Santa Cornelia: the excavation of an early medieval papal estate and a medieval monastery', in N Christie (ed), *Three South Etrurian Churches. Santa Cornelia, Santa Rufina, San Liberato* (Archaeological Monographs of the British School at Rome, No 4, London), 1-209.

- Claridge, A, 1998, *Rome* (Oxford Archaeological Guides. Oxford University Press, Oxford).
- Conant, KJ, 1978, *Carolingian and Romanesque Architecture, 800-1200* (The Pelican History of Art. Penguin, Harmondsworth).
- Cook, W, 1987, 'The development of change ringing as a secular sport', in Sanderson (ed.), 28-39.
- Corlett, C, 1998, 'Interpretation of round towers – public appeal or professional opinion?', *Archaeology Ireland*, 44, vol 12.2, summer 1998, 24-27.
- Cramp, R, 1976, 'St. Paul's church, Jarrow', in Addyman & Morris (eds.), 28-35.
- Cramp, R, 1994, 'Monkwearmouth and Jarrow in their continental context', in K Painter (ed), *Churches Built in Ancient Times. Recent Studies in Early Christian Archaeology* (Accordial Society of Antiquaries, London), 279-294.
- Dall'eremo al cenobio 1987, *Dall'eremo al cenobio. La civiltà monastica in Italia dalle origini all'età di Dante* (Libri Scheiwiller, Milan).
- Daniell, SV 1988, *The Story of Cornwall's Churches* (Tor Mark Press, Penryn).
- Dean, T, 2000, *The Towns of Italy in the Later Middle Ages. Selected Sources Translated and Annotated* (Manchester University Press, Manchester & New York).
- Deichmann, FW 1993, *Archeologia Cristiana* (L'Erma di Bretschneider, Rome. Italian trans of German original, 1983)
- Delogu, P, 1988, 'The rebirth of Rome in the 8th and 9th centuries', in R Hodges & B Hobley (eds), *The Rebirth of Towns in the West, AD 700-1050* (Council for British Archaeology Research Report No 68, London), 32-42.
- Eisel, J, 1987, 'Developments in bell hanging', in Sanderson (ed), 18-27.
- Fasoli, G, 1989, 'Le torri: realtà, incognite, ipotesi', in G Roversi (ed), *Le torri di Bologna* (Grafis Edizioni, Casalecchio di Reno), 13-27.
- Francis, K, & Moran, M, 1997, 'Planning and technology in the early Middle Ages: the temporary workshops at San Vincenzo al Volturno', in S Gelichi (ed), *I Congresso Nazionale di Archeologia Medievale (Pisa, 29-31 Maggio, 1997)* (All'Insegna del Giglio, Florence), 373-378.
- Francis, K, & Moran, M, forthcoming: *Ora et Labora. The Monastic Workshops of San Vincenzo al Volturno* (University of East Anglia/Soprintendenza Archeologica del Molise, Norwich).
- Gatti Perer, ML, (ed) 1995, *La Basilica di S. Ambrogio: il tempio ininterrotto* (Milan).
- Geary, P, 1990, *Furta Sacra: Thefts of Relics in the Central Middle Ages* (Princeton University Press, Princeton).
- Gem, R, 1996, 'Church buildings: cultural location and meaning', in Blair & Pyrah (eds), 1-6.
- Giovannini, C, & Ricci, G, 1985, *Ravenna* (Editori Laterza, Rome-Bari).
- Goode, W, 1982, *East Anglian Round Towers and their Churches* (Friends of the Round Tower Churches Society, Lowestoft).
- Goode, W, 2001, 'Origins of round tower churches, 2: separating Saxon from Norman work', *The Round Tower*, xxix, no 1 (Sept 2001), 18-20.
- Hammond, P, 1960, *Liturgy and Architecture* (Barrie and Rockliff, London).
- Hart, A, 1997, *All Saints' Church, Earls Barton* (Earls Barton).
- Hart, S, 2000, *Flint Architecture of East Anglia* (Giles de la Mare, London).
- Hart, S, 2001, 'St Edmund, Fritton near Yarmouth', *The Round Tower*, xxix, no 2 (Dec. 2001), 28-31.
- Hart, S, 2003, *The Round Church Towers of England* (Lucas Books, Thorndon).
- Heywood, S, 1988, 'The round towers of East Anglia', in J Blair (ed), *Minsters and Parish Churches. The Local Church in Transition, 950-1200* (Oxford University Committee for Archaeology Monograph No 17, Oxford)
- Heywood, S, 1994, 'Round-towered churches', in P Wade-Martins (ed), *An Historical Atlas of Norfolk* (Norfolk Museums Service, Norwich), 56-57.
- Hodges, R, (ed) 1993, *San Vincenzo al Volturno 1: The 1980-1986 Excavations, Part I* (Archaeological Monographs of the British School at Rome, No 7, London).
- Hodges, R, 1995, 'San Vincenzo al Volturno and the Plan of St. Gall', in Hodges (ed), 153-175.
- Hodges, R, (ed) 1995, *San Vincenzo al Volturno 2: The 1980-1986 Excavations, Part II* (Archaeological Monographs of the British School at Rome, No 9, London).
- Hodges, R, 2000, *Towns and Trade in the Age of Charlemagne* (Duckworth, London).
- Horn, W, & Born, E, 1979, *The Plan of St. Gall*, 3 vols. (University of California Press, Berkeley, Los Angeles & London).
- Jones, M, 1993, *Lincoln: History and Guide* (Sutton, Stroud).
- Kennerley, P, 1991, *The Building of Liverpool Cathedral* (Carnegie, Preston).
- Krautheimer, R, 1980, *Rome: Profile of a City, 312-1308* (Princeton University Press, Princeton).
- L'Alto Medioevo 1990, *L'Alto medioevo. L'arte bizantina e musulmana. Da Roma al preromano* (Storia Universale dell'Arte vol.3) (De Agostini, Novara).
- Macquarrie, A, 1992, 'Early Christian religious houses in Scotland: foundation and function', in J Blair & R Sharpe (eds), *Pastoral Care before the Parish* (Leicester University Press, Leicester, London & New York), 110-133.
- McClendon, C, 1987, *The Imperial Abbey of Farfa: Architectural Currents of the Early Middle Ages* (Yale Publications in the History of Art, 36, Yale University Press, New Haven & London).
- Morris, R, (ed) 1983, *The Church in British Archaeology* (Council for British Archaeology Research Report 47, London).
- Morris, R, 1989, *Churches in the Landscape* (Dent, London).
- Parsons, D, 1978, 'Barrel-vaulted staircases in England and on the continent, with special reference to Brixworth church, Northamptonshire', *Zeitschrift für Archäologie des Mittelalters*, 6, 129-147.
- Parsons, D, 1987, *Books and Buildings: Architectural Description Before and After Bede* (Jarrow Lecture 1987), reprinted in *Bede and his World. The Jarrow Lectures, Volume II: 1979-1993* (Variorum, Aldershot, 1994), 729-774.
- Parsons, D, 1994, 'St. Michael by the Northgate, Oxford', appendix to Renn 1994, 193-196.
- Platt, C, 1981, *The Parish Churches of Medieval England* (Secker & Warburg, London; reissue 1995, Chancellor Press, London).
- Potter, TW & King, AC 1997, *Excavations at the Mola di Monte Gelato: A Roman and Medieval Settlement in South Etruria* (Archaeological Monographs of the British School at Rome, No 11, London).
- Priester, A, 1997, 'The Italian campanile: where did it come from?', in R Colella, M Gill, L Jenkins & P Lamers (eds), *Pratum Romanum (Festschrift: Richard Krautheimer)* (Ludwig Reichert Verlag, Wiesbaden), 259-276.
- Rahtz, P & Watts, L, with H Taylor & L Butler 1997, *St. Mary's Church, Deerhurst, Gloucestershire. Fieldwork, Excavations and Structural Analysis, 1971-1984* (Society of Antiquaries of London Research Reports, No 55) (Boydell Press, Woodbridge).
- Renn, D, 1994, 'Burhgeat and Gonfanon: two sidelights from the Bayeux Tapestry', *Anglo-Norman Studies*, 16, 177-198.
- Reynolds, A, 1999, *Later Anglo-Saxon England. Life and Landscape* (Tempus, Stroud).
- Ritchie, A, 1992, *Viking Scotland* (Historic Scotland/Batsford, London).
- Rizzardi, G, 1993, 'Il romanico monumentale e decorativo a Ravenna e nel suo territorio', in A Vasina (ed), *Storia di Ravenna. III. Dal Mille alla fine della signoria Polentana* (Marsilio Editori, Venice), 447-480.
- Rodwell, W, 1989, *Church Archaeology* (English Heritage/Batsford, London).
- Rodwell, W, & Rodwell, K, 1982, 'St. Peter's church, Barton-upon-Humber: excavation and structural survey, 1978-81', *The Antiquaries Journal*, lxii, part ii, 283-315.
- Rollason, D, 1988, *Two Anglo-Saxon Rituals: Church Dedication and the Judicial Ordeal* (Fifth Brixworth Lecture, 1987; Vaughan Paper No 33, University of Leicester).
- Sanderson, J, (ed) 1987, *Change Ringing: The History of an English Art. Vol 1. Its Development up to 1699* (The Central Council of Church Bell Ringers, Cambridge).
- Slater, TR, & Rosser, G, (eds) 1998, *The Church in the Medieval Town* (Ashgate, Aldershot).
- Smith, E, Hutton, G & Cook, O, 1976, *English Parish Churches* (Thames and Hudson, London).
- Spartà, S, 1983, *I campanili di Roma* (Newton Compton Editori, Rome).
- Stenton, F, 1971, *Anglo-Saxon England*. Oxford History of England 2 (Clarendon Press, Oxford).
- Sutherland, D, & Parsons, D, 1984: 'The petrological contribution to the survey of All Saints' church, Brixworth, Northamptonshire: an interim study', *Journal of the British Archaeological Association*, 137, 45-64.
- Taylor, HM, 1961, *English Architecture in the Time of Bede* (Jarrow Lecture 1961), reprinted in *Bede and his World. The Jarrow Lectures, Volume I: 1958-1978* (Variorum, Aldershot, 1994), 51-70.
- Taylor, HM, 1976, 'The foundations of architectural history', in Addyman & Morris (eds), 3-9.
- Taylor, HM, & Taylor, J, 1965, 1978, *Anglo-Saxon Architecture*, vols I, II, III (Cambridge University Press: Cambridge).
- Towers and Bells 1973, The Towers and Bells Handbook*. Compiled by the Towers and Belfries Committee of the Central Council of Church Bell Ringers (Brackley).
- Tractenberg, M, 1971, *The Campanile of Florence Cathedral: "Giotto's Tower"* (New York University Press, New York).
- Waley, D, 1988, *The Italian City-Republics* 3rd ed. (Longman, London & New York).
- Wickham, C, 1995, 'Monastic lands and monastic patrons', in Hodges (ed), 138-152.
- Wormald, P, 1991, 'Monkwearmouth and Jarrow', in J Campbell (ed), *The Anglo-Saxons* (Penguin, London), 74-75.

Notes

- 1 In rural Italy, however, especially in hilltop villages, bells and towers do remain prominent, and church-going remains somewhat more commonplace – if again chiefly a Sunday activity, with weekday services mainly the domain of elderly black-clad widows. My archaeological field projects have tended to be based in such villages – on the most recent one, at Tornareccio in the beautiful Abruzzo province, the presence of two churches, with clocks/bells divided by about half a minute, and their regularity of quarter-hourly tolling (mechanical, not with eager campanologists), gave a constant reminder – sometimes very useful in encouraging students to rouse themselves for the day's work.
- 2 A project co-ordinated by Prof Lin Foxhall (also at the School of Archaeology & Ancient History, University of Leicester); my thanks to her for discussing various bell-related topics.
- 3 Eg the bell of 1238 in S Cosimato or that of 1289 in S Maria in Cosmedin: see entries in Spartà 1983. Blagg 1978, 424, drawing on Rossi 1949, cites the bell from the tiny bell-tower of San Benedetto in Piscinula as of 11th-century (1069), but Spartà 1983, 42 (citing the study by the aptly surnamed Prof Augusto Campana!) notes that the inscription style is in fact 13th-century in date and either the date inscribed is erroneous, or, more likely, it repeats that of an older bell replaced two centuries later. Rome also features a high number of 15th-century bells.
- 4 There are, it must be admitted, many problems in using such images, since interpretation is never straightforward, especially where chronologies are disputed. Two examples suffice: firstly, the mosaic in the apse of the church of Sant Ambrogio at Milan, often dated to the mid-9th century, although this early chronology is not generally agreed (see Gatti Perer 1995, 32-34; Bertelli 1999, 143). On the flanks of the mosaic, two sites are portrayed, Milan and Tours, using the churches of San Lorenzo and the abbey as the respective symbols. For each structure a tower and cupola are illustrated. On the one hand, this could be seen as evidence of the early use of towers on each; alternatively, one might argue that the towers in fact reveal the mosaic to be later. In the church/monastery of Sant'Ambrogio itself, two towers were present: one argued to be of the 9th or 10th century, and the other documented as begun/built in 1128 – but finished only in the 19th century! A second important example is the so-called *Iconographia Rateriana*, a remarkable townscape sketch/drawing of Verona, traditionally associated with an exiled bishop Raterius of the 10th century, although the surviving image is a post-medieval copy of the original (Arslan 1943, 38-43; Ward-Perkins 1984, 225-228, who accepts a likely Carolingian period date). As well as various Roman survivals depicted (walls, amphitheatre, theatre, marble bridge), the scene also contains one church over the theatre, with others possible in the busy townscape: on the left side, seemingly within the wall is one tall tower with triple window opening in its upper storey, and single openings scattered on the lower storeys; potentially this is an early bell-tower, although if so, it is a design not in keeping with, say, the Ravennate towers; alternatively its form may denote that the drawing as a whole is medieval in date; it could also be a secular, Elite tower (see discussion at end of paper); another possibility still is that it is a displaced circuit tower, since those in the foreground, clearly attached to the town walls, have closely similar designs. Whatever the answer, there is insufficient secure ground on which to build hypotheses regarding early (Carolingian) towers in north Italy.
- 5 In the case of Ravenna, it is important to note that the city had lost its major role after the 7th century and saw minimal new building work, only picking up again, briefly, in the 10th century, again under German influence, when, noticeably, towers start to appear.
- 6 The context is fully explored by Wickham 1995, who summarises: *'In its Beneventan period it paradoxically fitted Carolingian cultural-imperialist aspirations almost as well as it would have done if explicitly built and controlled by the Frankish rulers themselves; as a great rural Benedictine monastery, with an immunity from secular jurisdiction, it would remain a symbol of a world view that owed far more to Frankish (and north Italian) preconceptions than those of the Lombard south'* (147). On the ongoing excavations at San Vincenzo see the publications edited by Hodges (1993, 1995). See also Hodges 1995 on the possible links with the St. Gallen plan.
- 7 A suitable quote on tower 'mobility' comes again from Victor Hugo's *Hunchback of Notre Dame* (Book 4, Chapter III): *'Meanwhile, the motion of the bell was accelerated, and as it went on, taking an ever-increasing sweep, Quasimodo's eye, in like manner, opened more and more widely, phosphorescent and flaming. At length the great peal began – the whole tower trembled – rafters, leads, stones – all shook together, from the piles of the foundation to the trefoils of the parapet. Then Quasimodo boiled and frothed; he ran to and fro, trembling with the tower from head to foot. The bell, let loose, and in a frenzy turned first to one side and then to the other side of the tower its brazen throat from whence issued a roar that was audible at four leagues' distance...'*
- 8 This is the annotated and extended version of the paper delivered as the 16th Annual All Saints' Brixworth lecture on 31st October, 1998. It was a great honour to be invited to speak at Brixworth and to be allowed to deliver the paper from the high pulpit – being more used to students peering down at me in staggered lecture theatres! My many thanks to the vicar, the Rev AJ Watkins, and to the organisers, notably Dr David Parsons, for their kind hospitality. And the paperweight is still serving me well! My thanks also to the editor of *Church Archaeology*, Carol Pyrah, for including this paper in the journal, and to the anonymous referees for their perceptive comments. I am grateful also to Matthew Moran for supplying me with information on the monastic bell for San Vincenzo, Italy; to Stephen Hart for his time in providing information on his work on round towers in East Anglia; to John Hurst for discussing (and correcting me on) the towers and bell-pits of Wharram Percy; to my colleague at Leicester, Deirdre O'Sullivan, for views on the Irish round towers; to Victor Freund for the Corvey and Hildesheim images; to Tamar Hodos at Bristol for trimming my dashes and semi-colons; and to David Parsons for various leads and directions.