OLD WORLD TRADE AND INTERACTION

VOL. 1(1): pp. 3-11, AUGUST 2025
ISSN: 2978-4123
DOI: 10.5281/zenodo.16447759
http://www.owti.uk

Gnosis from the Silk Roads: Exploring the Medieval Lifestyle of Littlemore Priory, Oxford, Through Monastic Archaeology

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Abstract

Christianity spread both eastward and westward along the Silk Roads, leading to an exchange of worship practices and liturgies over centuries. The fusion of lifestyle and monasticism might have been evident in the medieval English priories if most were not in a poor state of preservation. The present study investigates the medieval way of life at Littlemore Priory and its connections to the Silk Roads exchange of religious customs. It examines non-metrical traits linked with habitual kneeling to determine if the community practised religious rituals. It also evaluates funerary inclusions to shed light on the social status of the group. No significant difference was found in the incidence of kneeling facets between the Littlemore assemblage and non-church burials from Scalloway cemetery, although the results might have been skewed with a small sample size. Mortuary practices implied a high social status of the individuals buried within the church grounds. The historical accounts indicated that nunneries were used for social purposes that were disallowed by Benedictine rule, leading to the merging of religious and secular lifestyles. The study serves as a foundation for further research on this isolated and under-researched topic.

Keywords: Silk Roads Exchange, Christianity, Monastic Lifestyle, Genuflection

Introduction

The Middle Ages are widely recognised for Christianity peaking in Western Europe, with the Church achieving its spiritual goals by gaining influence and authority in the physical world. Like most modern corporations, yearning for economic and political power, it required access to capital markets to thrive and expand, despite its teachings against accumulating wealth and prioritising worldly riches over serving God. As such, the Church threaded at the intersection of religion and trade, arguably maintaining an intertwined relationship with the Silk Roads.

Historically, the trade routes facilitated spiritual culture exchanges between China, Central and West Asia, Persia, and ancient Greece and Rome, making it a unique phenomenon in the history of world religions (Trivellato *et al.* 2014). The diversity of beliefs coexisted side by side, which led to the gradual integration of religious cultures and the faiths moving away from their original principles, adapting to human experiences and the secular world (Foltz 1999). Zoroastrianism, Buddhism, Christianity, and Islam have all come into contact with each other, resulting in the exchange of spiritual forms of expression such as deity worship or pilgrimage to holy sites (ibid.).

In the Middle Ages, in particular, religion was a vital component of cultural identity, where all cultures reflected the religious spirit in some form (Theuws 2004). It formed an integral part of culture and politics

and as such served as a concentrated reflection of society's ideology, mode of thinking, and moral values (ibid.). It was in this sense that the Silk Roads were more than just a network of trade routes; they were channels for religious and cultural exchange, a veritable way of their integration.

For instance, the Assyrians (the Church of the East), were particularly strong in eastern Syria. When Islam arrived, its influence flourished and greatly impacted Muslim learning in philosophy, astronomy, medicine, and astrology (Blake 2016). In Central Asia, Assyrian Christians also influenced the Sogdians, who were already established as commercial masters of the trade routes. Consequently, the Sogdian language, which became the common language of the Silk Roads, helped spread Christianity further east to China and north among the Turks. As a result, the Assyrians converted large numbers of Turks in Central Asia from the 7th to the 11th centuries (ibid.)

In England, the Roman Catholic Church continued as the primary form of Christianity from the 6th century until the Reformation. The Norman Conquest in the 11th century led to the Submission of the Clergy and the Acts of Supremacy (1532-59), making the Church of England independent from the Pope, with the King as its Supreme Governor. With support from royalty, these changes in the Church's power dynamics increased its social status, surpassing the Pope's authority (Rex 2006). Consequently, monasteries often included schools and libraries, and the clergy lived a stable and privileged life (Marshall 2022). Therefore, the accumulation of wealth and power likely facilitated good communication and trade networks, leading to a fusion of religious and clerical life. This was particularly evident in medieval English nunneries, which mostly drew women from the upper classes, primarily because if marriage was not an option, no other occupations were open to them, in contrast to those of the working classes (Power 1922). Affluent aristocratic families, in turn, supported the nunneries, many of which they had founded (Keeping 2000).

Christian women who chose to live modest and celibate lives to honour God have been documented in secluded areas of Egypt and Syria since the 4th century AD, an example being the reformed prostitute Saint Mary of Egypt, c. 344-c. 421 AD. Over time, female ascetics began living together in structured communities, eventually becoming nunneries (Brock 1992). The spread of monasticism from the East was shown through figures such as the Italian abbot Saint Benedict of Nursia (c. 480-543 AD), who developed rules of conduct for monasteries that established themselves across Europe as the Benedictine Order. In England, the first Benedictine monastery was set up by Augustine of Canterbury in 597. The nunneries of the same Order arrived later in history, the first being Cluny Abbey, founded by the Duke of Aquitaine in 910 (Crawford 1993). Between 1270 and 1536, some 138 nunneries were registered, half of which were Benedictine (ibid.). Most were kept in practice until the 16th-century dissolution (Bernard 2011).

The typical priory consisted of a nun community, labourers and sometimes parish children whom nuns were teaching (Olivia 1998). The vows of obedience, chastity and poverty meant prayer to be the most regular daily practice (Southern 1970), followed by sleep and work (Janin and Carlson 2023). Because Christianity emerged from first-century Judaism, it retained Jewish influences in its customs and practices during its early years (Hexter 1995). Believers prayed while kneeling (Acts 20:36), standing (Mark 11:25), with hands lifted upward toward God (1 Timothy 2:8), with heads covered or uncovered (Corinthians 11:4), or prostrating (e.g. Emperor Theodosius before Bishop Ambrose, c.338-397). Early Celtic monks are recorded at times praying crosfigel (e.g. standing with their arms stretched out to their sides in the shape of a cross (Hammerling 2008), and others prayed standing facing east (e.g. The Martyrdom of Polycarp 5.1; Origen *De Oratione* 32). With time, kneeling as the traditional posture for requesting favours from a king became the traditional posture for prayers in Western Christianity. It came to signify simple humility and submission (Hammerling 2008).

Musculoskeletal markers in bones can identify prolonged kneeling and have been used as indicators of lifestyles in past societies (e.g. Barnett 1954; Ubelaker 1979). Habitual movement at the ankle joint is noted in the form of ‘kneeling facets’ on the neck of the talus and the associated distal end of the tibia (Boulle 2001a; Figure 1). Modification of the bones appears due to the compression of body structures during maximal angle dorsiflexion. The proximal tibia and foot move

simultaneously until the lower part of the proximal tibia approaches the proximal talus (Barnett 1954; Bautch 1999; Rao 1966). If activities involving dorsiflexion, such as kneeling or squatting, are hence intensively repeated, the cartilage on the bone wears off, causing inflammation and modification to the bones (ibid.).

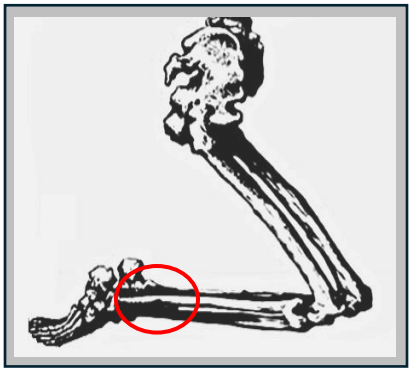

Figure 1: Nonmetrical traits suggestive of genuflection pose. A digital image of a line drawing by the author.

Burial contexts, such as a stone coffin/cist, may in addition indicate a religious individual and/or a person of high status (Gilchrist 1994), as could grave inclusions including a black surplice, white vestments, a chalice, jewellery, and pins and beads (Hunt 1995; Keeping 2000). Unfortunately, a limited number of English monastic houses have been archaeologically investigated. Out of 142 nunneries that existed at the time of the dissolution, 17 were excavated, yielding human remains (Bernard 2011). Poor bone preservation meant that statistical analysis was only conducted on four (Yeates and Murray 2016).

A rare skeletal collection, which may provide insight into aspects of medieval gender and social attitudes, is Littlemore Priory. A small nunnery dedicated to St Nicholas is thought to have been established by Robert de Sandford (Page 1907; VCH 1907) with the initial construction taking place during the reign of King Stephen, 1135-1154. The main phase of development took place between 1245 and 1247, after which limited information is available until a series of visitations under the Bishop of Lincoln towards the end of the 15th century and early 16th century. Historical records from 1445 note the Priory of Littlemore as a small monastic house with a maximum of seven religious women (British History Online 2024). Sources from the 15th and 16th centuries described it further as a stone-built structure with two floors, an attic, and a clay tile roof consisting of a parlour, cloister, chapterhouse, dormitory, lavatorium, and church (Pantin 1971). The nunnery remained active until Cardinal Wolsey dissolved it in 1525 due to inappropriate practices reported by royal visitations in 1517 and 1518 (Hamilton 1936, lxxvi-lxxviii).

This study aims to explore the connections between the medieval lifestyle of Littlemore Priory and the spread of religious customs along the Silk Road. It first examines non-metrical traits of the lower limbs and ankles, as well as joint disease, to determine if habitual kneeling was prevalent among women dedicated to religious life. Secondly, it assesses funerary inclusions that may provide insight into the social status of the assemblage.

Materials and Methods

The site is located in the southern part of Littlemore civil parish, 2.5 miles southeast of Oxford Centre (NGR SP 545 023). In 2012, a geophysical survey by John Moore Heritage Services revealed archaeological features at Minchery Farm. In 2006, Archaeology East Oxford targeted the results of this survey and excavated part of the paddock. The final excavation in 2014, prompted by Oxford City Council's plans to develop an adjacent site for a hotel, revealed the 13th-century church complex and an earlier church dating to the mid-12th century. Ten phases have been identified, with medieval (phase 1-4) being the earliest, covering the period from 1111 to 1525, and phase 10 being the newest, covering the period from the late 20th century (Yeates and Murray 2016). The excavation uncovered 92 skeletons, some believed to be the remains of the medieval Benedictine nuns of Littlemore (Yeates and Murray 2016).

John Moore Services provided the author with research access to the skeletal collection to carry out non-metric analysis, which formed the basis of this study. Secondary data pertaining to burial rituals was obtained from the John Moore Services excavation report (Yeates and Murray 2016). Nineteen adult female samples from the 13th to 16th century, buried within the Littlemore church

grounds, were compared to seventeen adult non-church burials from Scalloway cemetery in Shetland. These consisted of seven male and ten female skeletal remains dating from the 14th to 16th century.

The left and right tibiae were examined and scored for the presence or absence of the medial and lateral facets. The left and right tali were also scored for the presence or absence of the medial and lateral facets and medial and lateral extension. The patellae, proximal tibias and distal femora could not be analysed due to poor preservation. The scoring system for the bones followed the standards for skeletal data collection by Buikstra and Ubelaker (1994) and Finnegan (1978). Intra-observer error from gross observation was minimised by the additional analysis from digital photographs. To reduce inter-observer variability, two independent observers repeated the analysis. A chi-square was used to test the prevalence of kneeling facets between the samples.

Results

Non-metric traits and bone damage associated with genuflection

The statistical analysis yielded no significant difference in the incidence of non-metric traits in the talar and tibial bones between the two tested sites ($X^2 = 346.8$; $p > 0.05$; 4 df). The observed bone markers were mediolateral tibial facets, mediolateral talar facets, and the lateral extension of the talus (e.g. Figures 2 to 4).

The Littlemore sample showed a higher percentage of scores for right and left medial tibial facets (79% in Littlemore vs 11.6% in Scalloway; Figure 5), left and right medial talar facets (80% in Littlemore vs 6% in Scalloway), lateral talar facets (73.3% in Littlemore vs 0% in Scalloway), and right and left lateral tali extension (60% in Littlemore vs 17.8% in Scalloway). In addition, 74% of the Littlemore skeletons showed evidence of joint disease; the hands (1/19)|, the spine (6/19), and a combination (7/19). This is in contrast to 24% of the Scalloway samples.

Figure 2: Medial kneeling marker on the tibia, Littlemore sample. Photo by the author.

Figure 3: Lateral kneeling marker on the tibia, Littlemore sample. Photo by the author.

Figure 4: Lateral kneeling marker on the talus, Littlemore sample. Photo by the author.

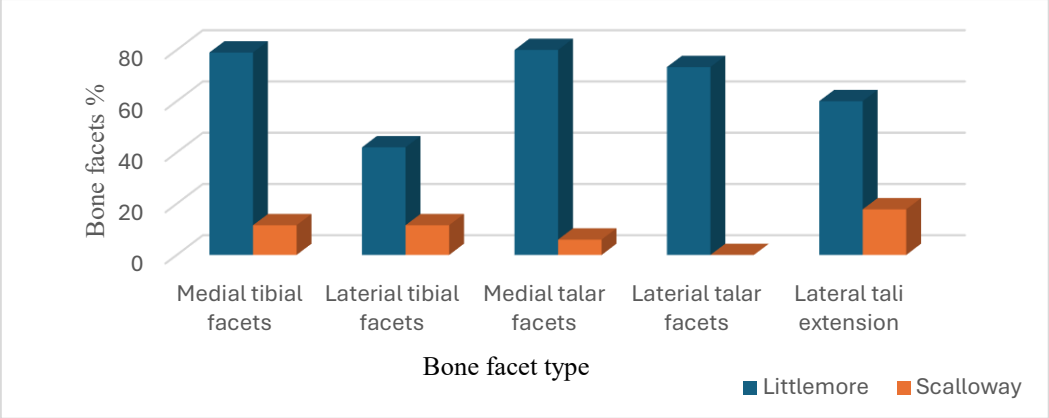

Figure 5: Observed non-metrical traits on tibia and tali

Grave locations and inclusions

Of the 92 burials, 37 were excavated within the church grounds, and 51% were female (Yeates and Murray 2016; Table 1). Two female burials were located in the nave, one of which was a young adult female buried in a prone position with a neonate. There were two female graves in the tower, four in the choir, nine in the choir extensions, and two in a well-constructed limestone cist at the centre of the transept. Most of the female burials included copper alloy shroud pins. A grave east of the choir had roof tiles around the skull to structure a niche, and two cist burials came with head niches. Other notable findings included a gold ring excavated from the abdomen of a female skeleton in the choir and a silver ring on the finger of the right hand of another female burial in the north transept choir extension (Yeates and Murray 2016). Green staining on the hands and arms of two female adults indicated possible jewellery, mantle closures or a non-specific metal object.

Table 1: Number of burials within the church grounds by sex

Sex	Nave	Tower	Transept	Choir	Choir extensions
Female	2	2	2	4	9
Male	1	0	0	3	3
Undetermined (Adult)	0	0	0	2	0
Undetermined (Subadult)	2	1	1	2	3

Discussion and Conclusion

Worship practice

The presence of tibial and talar facets in the Littlemore assemblage may be associated with the act of kneeling during prayer, where nuns' repetitive and habitual postures involving transferring body weight onto the knees and exerting pressure on the ankle joint led to the appearance of mediolateral markers and bone flattening (Sheridan 2020; Walker 1986). A joint disease, such as arthritis, is in addition, known to develop from bone stress due to repetitive activity (Chou 2000), linking the joint pathologies of the assemblage with vocational kneeling (Lovell and Dublenko 1999). Non-metric traits, nevertheless, are believed to have genetic roots and can also be caused by different types of mechanical stress (Kenedy 1989) and environmental factors (Trinkhaus 1978). For example, the medieval assemblage at Wharram Percy exhibited high levels of bone markers on the ankles along with pathology and fractures on the backs and legs, which were attributed to squatting after carrying heavy loads such as water or firewood. Additionally, Mays *et al.* (2007) suggested that spending a prolonged time in a squatting position by the

hearth could also lead to these bone stress indicators. Different conclusions, hence could have been reached if the Littlemore samples had not been buried within the church grounds. With this in mind, and because kneeling was practised often enough to yield considerably higher percentages of nonmetric traits compared to non-church burials, it is likely that the statistically insignificant results were skewed due to the small sample size.

Mortuary practice and social status

The majority of the burials within the church grounds at Littlemore were of females, with a smaller number of subadult and male graves (Table 1). This indicates that the area was likely reserved for the monastic community, as well as important patron figures and their families (e.g. Immonen 2015; Talbot 2009). Although the evidence of religious grave artefacts was limited to draw firm conclusions, the presence of coffins and cist burials suggests the significance of female figures to the clergy, implying a high social status. A prone position burial in the nave may be indicative of disgrace, sinning, or witchcraft (Handler 1996), it is paradoxical—punishment and reward simultaneously. The woman must have been of great significance to the Church to allow her burial in the prime spot, yet she seems to have been buried in a state of dishonour.

Brown (1987) explains that many nuns kept an elite lifestyle and, although nominally surrendered through vows, would become brides of God, in theory. This was evident in historical accounts such as the promulgation of The Rule of Enclosure by Pope Boniface VIII in response to the 'worldly' manners of nuns, which prohibited them from being seen alone in public places or engaging in conversation with secular men (Power 1922). For example, the nuns of Cookhill were ordered not to wander about in the town, the nuns of Wroxall were forbidden to go on foot to Coventry or Warwick, the nuns of Romsey were instructed not to enter the houses of laymen or drink with them (Power 1922). The Priory of Studley, Oxford, was further mentioned in 1445 by Bishop Alnwick, instructing the nuns to desist from receiving Oxford scholars to the premises. Worse still, in 1290, a bishop excommunicated Agnes de Shene from the Abbey of Godstow, Oxford, for leaving with a monk from another establishment (British History Online 2024).

Littlemore Priory was not an exception. In 1517, an emissary of the bishop, Edmund Horde, reported on the scandalous state of the nunnery, stating that the prioress had an illegitimate daughter, and the father of the child, Richard Hewe, a priest in Kent, was regularly visiting the nunnery. Despite warnings from the bishop, nine months later, Edmund Horde noted that the situation was 'as scandalous as ever'. One of the nuns was reported to have been romping with boys in the cloister and playing during mass, even at the solemn moment- the elevation (British History Online 2024). This way, the social status of the nuns may have been the basis for the establishment of 'secular priories', where the nuns only partially observed Benedictine vows. Indeed, going by the results of this study, the kneeling facets indicate a nunnery and congenital and developmental bone abnormalities in the remains of subadults, a nursing place (Yeates and Murray 2016). Yet, historical accounts suggest a liberal lifestyle behind the walls.

Conclusions

The concept of social freedom in the context of female monasticism existed in Britain, but it did not stem from Christianity. The Anglo-Saxon acceptance of royal women as 'peace weavers' with enough power to bring wars to an end (Shank and Nichols 1987) may have played a role in shaping English nunneries. Living in a cloister provided continuous grounds for authority and power in secular affairs, and although the Church did not favour any liberated form of female monasticism, it was receiving money from them, financially supporting clergy (Yorke 1989). The social status of the nuns was the link between two conflicting interests and arguably a strong contestant for the rise of nunneries in England. This way, even though the moral philosophy of female monasticism spread along the Silk Roads from the East, wealth and power in the West fused religious and secular influences, giving female monasticism a voice, a concept far from what was once primarily ecclesiastical thought.

Competing Interests
The author has no competing interests to declare.

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