

2 Atypical burials and variations in burial customs in the church of Renko, Finland

Ulla Moilanen & Markus Hiekkanen

Abstract

The stone church of Renko was built in the 16th century, abandoned and ruined in the mid-17th century, dismantled, and finally rebuilt in 1783. It was preceded by one or perhaps two consecutive wooden churches built at the same location since the beginning of the 15th century. Extensive archaeological excavations were conducted inside the church in 1984 when the wooden floor was replaced with a stone floor. Seventy-one graves dating from the 15th to the 18th century were found during the excavations. Grave sites under the church floor were expensive and usually reserved for individuals of high social status, such as priests, officials, and wealthy landowners. There is usually little variation in church burial customs, as they follow Christian traditions and contemporary legislation. However, the graves in the Renko church include a few distinctive burials in terms of burial position and treatment of the corpse. This chapter analyses these burials and explains them in the wider contexts of church burials and non-normative graves.

Keywords: Historical period, church burial, atypical burial, infant burial, autopsies, artefacts in graves

2.1. Introduction

The early 1980s can be described as a time of transition in church archaeology, which was officially acknowledged as a specific branch of archaeology in 1981 (Crabtree 2001: 336). Until then, excavations at churches in Finland were almost exclusively carried out by art historians and architects, while scholars with an archaeological background and experience in fieldwork techniques were absent. This was part of a wider European phenomenon, but in Finland, the situation had its roots also in the complex structure of antiquarian work and the indifferent attitude towards medieval and historical archaeology – apart from building archaeology in the strictest sense – since the early 20th century.¹

In the summer and early autumn of 1984, an archaeological excavation was carried out in the stone church of Renko in south-western Häme (Tavastia) (Fig. 2.1) in connection with plans to replace the wooden floor with a stone floor. It was one of the first church excavations carried out by professional archaeologists in Finland, and because of the exceptional history of the church, it was also one of the first excavations to focus on the careful excavation of historical graves located inside a church.

This chapter reviews the excavation in the context of church archaeology in general and reanalyses the burial practices and the most distinctive graves observed in the church. How well do the early modern church burials follow the Christian traditions and legislation? How can the variations in the burial customs be interpreted?



Figure 2.1. The location of Renko and large modern cities. (Map: U. Moilanen.)

Only a few publications on the Renko church are available before the 1980s, most likely because of a lack of interest in the church due to its architectural history (see e.g. Aulanko 1913; Elovaara 1933). Even though a medieval stone church had stood on the site of the present church, it had fallen out of use in the middle of the 17th century apparently because of structural problems. After that, the locals had taken stones and other building materials from the church, accelerating its fall into ruin. According to historical documents, the walls of the ruined church were only a couple of metres high after that. In 1775, a decision was made to rebuild the stone church, but it was not until 1783 when a new stone church was erected on the foundations of the old stone church (Fig. 2.2). The construction of the new church followed the same octagonal nave, which was built between 1510/1520 and 1550/1560 (Hiekkanen 1990: 247-254, 1993: 66, 2007: 323, 2020: 414-418). It is not clear where church services were held immediately after the abandonment of the stone church, but according to a tradition from the 1770s, an abandoned farmhouse near the churchyard was used as a temporary church between the mid-17th century and 1730. Between 1730 and 1731, a wooden church was built in the churchyard (Fig. 2.3). The original 15th-century churchyard around the old stone church was used for burials continuously during all this time, but after the abandonment of the first stone church, relatively few graves had been dug inside its walls.



Figure 2.2. The stone church of Renko, built in the 1780s on the foundation of a medieval stone church. View from southwest. (Photograph: M. Hiekkanen.)



Figure 3.3. The plan of the church and churchyard of Renko in the 1730s. A = Ruin of the medieval octagonal stone church. B = The wooden church built in 1730–1731 and in use until the ruin of the stone church was rebuilt in 1783. C = Plan of the octagonal graveyard of Renko, in use from the beginning of the 15th century to the 19th century. D = Belfry in the south-western part of the octagonal graveyard, demolished probably in the beginning of the 19th century. E = Boundary of the present graveyard. F = The arrow shows the approximate location where the first wooden church building might have stood immediately after the stone church was abandoned in the middle of the 17th century. [Original reconstruction by M. Hiekkanen and drawing by A. Valo, Finnish Heritage Agency in 1992 (after Hiekkanen 1993: 83) with additions by U. Moilanen 2019.]

The architectural history of the stone church turned out to be archaeologically fortunate. Because only a few graves were dug inside the ruined church after the 1650s, older graves dating prior to this were partly intact. The proper excavation of older graves in Finnish medieval churches is usually difficult because of the enormous amount of graves from the late 17th and 18th centuries, as digging these later graves has mostly destroyed the older graves from the medieval and early modern periods (in Finland ca AD 1225–1560/1600).

The excavations took place in July–September 1984, during which time an area of 215.5 m² was excavated in the nave. A total of 71 graves (Fig. 2.4) were carefully excavated, although not comprehensively documented due to the lack of time allocated for the excavation (Hiekkanen 1985b). In addition, 36 skulls and a large number of disarticulated bones from destroyed graves were found. The painstakingly slow excavation process was not expected by the parish of Renko or the National Board of Antiquities. Traditionally church excavations consisted merely of sieving the soil for objects, and excavating individual graves was not seen as productive.

The architectural history of the church provided the opportunity to establish a relative chronology for the graves. It was noted at an early phase of the work that the filling material in certain graves varied from that in the others. In many cases, the grave fill consisted of the same material as the natural layers around the grave pit, namely clay or very fine sand, depending on the part of the church floor where the burial was made. In some cases, the fill also contained large quantities of broken mortar, fragments of brick, and gravel. According to the model formulated, the graves with pure natural clay or sand were dug before the mid-17th century. Mortar and brick rubbish cannot have contaminated the grave fill at the time when the chapel congregation used wooden churches. Even during the use of the stone church, it is highly unlikely that there would have been mortar and brick gravel on the church floor from which it could have ended up in the grave fillings. It is more plausible that rubbish and gravel gathered on the floor of the nave when the building was in a state of decay and used as a quarry by the members of the chapel congregation between the mid-17th century and 1783. Therefore, the graves containing rubbish in the grave fill were likely dug after the mid-17th century but before 1783.



Figure 2.4. Plan of excavated graves in the Renko church in 1984. The two parallel rows of stones in the east-west direction in the nave are part of the founding structure of the church floor and the gallery built in 1895. The stones along the inner walls of the nave and the porch are part of the foundation of the stone church. [Drawing by R. Peltonen and P. Savolainen, Finnish Heritage Agency in 1984 (after Hiekkanen 1993: 84).]

2.2. Aims and methods

The primary purpose of examining graves at the Renko church was to find artefacts. During the 1970s and 1980s, the very few Finnish archaeologists who were interested in the medieval period were keen to establish an object chronology similar to that already formulated decades ago by Iron Age scholars. They hoped that the study of graves in medieval churches would open up possibilities in this area. The church of Renko was the first to present such an opportunity, and it was enthusiastically grasped by Markus Hiekkanen, one of the authors.

The skeletons and traces of coffin structures were documented by means of description, measurement, and photography but left *in situ*, which meant that more detailed osteological analysis and further study of the buried individuals could not be carried out.² However, in addition to the skeletal remains, also the presence of coffins and grave goods, the orientation of the graves, and the positioning of the skeletons and their limbs and skulls were fairly well documented, enabling the reanalysis of burial customs.

Burials were made inside churches from very early on since the introduction of the territorial parish system in Finland between approximately AD 1225 and 1250. The tradition gradually became more common after the 13th century, at first among the clergy and later among other wealthy and high-status members of society (Valk 1994: 62; Paavola 1998: 36; Mytum 2003: 801). The practice of burying the dead under the church floor lost its appeal already in the late 18th century when a royal statute against it was proclaimed in the 1770s. However, the tradition was completely abandoned only at the beginning of the 1820s (Gardberg et al. 2003: 63; Viitaniemi 2018: 53). Until the 17th century, church burials were regulated not only religiously and legally but also socially, as they were mainly practised by socially distinct groups of people. Gradually the regulations became less strict as parishes tried to cope with the dire economies of the 17th and 18th centuries. This was the time when economic status, rather than formal status, allowed families to bury their members inside churches. As a consequence, the number of graves under church floors increased significantly. This increase intrinsically carried the seeds of the eventual prohibition to bury inside churches. The smell of putrefaction from graves that were often left too shallow, as well as insects and their larvae spreading diseases, became increasingly poorly tolerated over time, and this development reached its peak in the 18th century.

Burial customs in churches have usually been perceived as rather uniform, following long-established Christian traditions. Graves were usually aligned in the east-west direction or at least following the axis of the side walls of the churches³, and the corpses were placed in the graves in an extended supine position with their heads to the west, facing the rising sun (O'Sullivan 2013: 261).

Rare features in graves, such as anomalous orientations or unusual body positions, have often been called 'deviant' or 'atypical' (Murphy 2010; Gardeła 2017). These atypical burials have traditionally been interpreted as signs of apotropaic practices or ways of punishment for immoral life and crimes committed (Purhonen 1998: 163; Riisøy 2015), or as reactions towards a 'bad death' (Mytum 2017). However, current studies emphasize individual – and not only negative – interpretations, for example, the varied circumstances at the time of death and burial and the qualities of the deceased (Gardeła 2017; Harjula and Moilanen 2018: 164; Moilanen 2018a: 21, 29–30; Toplak 2018; Koski and Moilanen 2019: 84–85). In this chapter, we discuss how these kinds of 'atypical' features should be interpreted in the context of late and post-medieval church burials. We do not pay attention to arm positions, as previous studies have shown there to be considerable variation in arm positions in

^{2.} The prevailing direction of the stone or wooden churches is from east to west, but in practice, there is variation from church to church. When a grave pit was dug in a church or churchyard, it can be assumed that the orientation of the pit was based on the alignment of the side walls of the church. It would seem unpractical for a grave digger to have to calculate the correct east-west axis independently.

^{3.} Two reasons for this were evident. First, the National Board of Antiquities was not interested in accepting skeletons from historical inhumation graves for storage in its collections (this policy is still followed by the Finnish Heritage Agency, but initially it was the view of the higher staff of the office of archaeology, mainly Aarni Erä-Esko and Paula Purhonen), and it was determined that there was no room for them in the storage. There was also a strong sentiment among the population of the parish of Renko that the remains of the community's ancestors should rest where they were once buried. Thus the excavation leader decided to gather only one inconspicuous bone (right clavicle) from all the graves where it was still present. This was carried inconspicuously at night, as the excavation leader had access to the church. These clavicles were catalogued and are now stored in the archaeological collections of the Finnish Heritage Agency (formerly the National Board of Antiquities)

general, making the interpretations difficult and problematic (Kieffer-Olsen 1993: 78; Gilchrist and Sloane 2005: 15-16, 156). Leg positions is not discussed as often as arm positions, and its significance is somewhat unclear. As there is one significantly different leg positioning in an otherwise 'normal' burial in Renko, we have included it in our list of atypical burials in the church.

2.3. Varied body positions and manipulated bodies

Most of the skeletons in the Renko church were found in an extended supine position. In only four cases out of 71, the position seemed to be different from the rest, and two of these can be explained by natural causes. During the excavation, the skeletons in graves 15 and 26 were interpreted to have been positioned partly on their sides (Hiekkanen 1985a: 19, 21). The interpretation was based on the slightly rotated upper bodies and skulls and the positioning of the upper arms. However, the photographs from the excavation show that the pelvic and thoracic areas, as well as the lower limbs of both of the skeletons, are in a horizontal position (Fig. 2.5). This indicates that the corpses were laid in the grave in a 'normal', supine position. The initial interpretation may have been a result of uneven bottoms in the grave pits, as both burials had been made without coffins. These two graves should therefore not be considered atypical.



Figure 2.5. Grave 15 on the left and grave 26 on the right. (Photographs: P. O. Welin 1984, Finnish Heritage Agency.)

Four of the 71 graves were located under the floor of the porch and named A–D. None of these four graves contained mortar or brick pieces, indicating that they were likely dug before the abandonment of the first stone church in the mid-17th century. It is possible that the graves were dug inside a wooden porch connected to this first stone church (Hiekkanen 2007: 323–324, 2020: 414–417).

Grave A was apparently made without a coffin, and the grave pit was only slightly larger than the corpse accommodating it. The skeleton was lying in a 'normal' supine position, but the lower limbs were crossed at the ankles, the left on top of the right (Hiekkanen 1985a: 27).





Figure 2.6. Grave B under the porch floor was made without a coffin. The flexed position has been supported by the grave fill. (Photograph: P. O. Welin 1984, Finnish Heritage Agency.)

Grave B did not include a coffin either, but the exact size of the grave pit could not be determined. The skeleton was found in an unusual position with knees and elbows flexed (Fig. 2.6). The arms were tightly bent at the elbows, and the hands were on their respective shoulders, apparently palms upwards (Hiekkanen 1985a: 27). Based on the position, the grave was filled immediately after the interment of the corpse. If there had been a void, such as an empty burial chamber, the bones would have been displaced during the decomposition process. For the body position to survive, the grave fill must have provided support for the skeleton (see Duday 2009: 38, 40).

Grave 2 was located between the vault pilasters. It contained the skeleton of an adult who was buried in a seemingly 'normal' position. However, the cranium of the individual had been sawn horizontally in two – a clear sign of post-mortem examination (Fig. 2.7.) It is unclear whether the skeleton had other evidence of autopsy, namely traces of instruments on clavicles, ribs, and vertebrae (see Start 2002; Mitchell et al. 2011). According to the mortar and brick pieces in the grave filling, the burial took place between ca 1650 and 1780. The official instructions on autopsies were taken into use in 1734, and they stated that corpses should be examined in the case of sudden death and suicide, if the corpse had injuries, or if a crime was suspected (Eriksson and Jones 2017: 290). This description and time frame would narrow the grave's dating to a period from the late 1730s to the 1780s, and it may also yield details about the death of the individual.



Figure 2.7. The horizontally sawn skull from grave 2. (Photograph: Hiekkanen 1993: 88.)

2.4. Infant graves and anomalous orientations

Twelve of the excavated graves belonged to infants. The infant graves are a minority, and it seems that no particular place in the church was reserved only for them. This contrasts with evidence for the segregation of graves based on the age of the buried individual noted at the church of Espoo (Hiekkanen 1988, 1989). There are also archival sources from some churches, such as Eurajoki, stating that certain areas in churches should be reserved for the burial of small children and juveniles.

In five cases, infants were buried close to older individuals. Grave 20 belonged to an adult individual, and it was surrounded by three infant graves (34–36) (Fig. 2.8). Infant grave 34 was placed to the left and infant grave 36 to the right of the adult's pelvis. Infant grave 35 was also on the right side, near the foot of the adult. This was the only grave complex with more than one child together with an adult. It was also the only one in the eastern part of the nave, near the altar area. The other children's graves close to older individuals (8 and 47) were located in different, more westerly parts of the nave. Infant grave 8 was found beside an adult (grave 4), close to the adult's left leg.⁴ Infant grave 47 was also dug near an adult or a juvenile⁵ (grave 46). These graves were located in the south-eastern part of the nave.



Figure 2.8. Grave 20 surrounded by infant graves 34–36. (Photograph: P. O. Welin 1984, Finnish Heritage Agency.)

It might be interesting to note that according to the relative dating of the graves, all the adults buried approximately during the same time with children beside them can be dated to the period when the first stone church was not in use anymore, that is, after the mid-17th century. Five of the seven infant graves (3, 48, 50, 55, and 57) that did not seem to have a connection with an adult's grave were also dug after the mid-17th century. This means that only two individual graves of children (37 and 42) were dug earlier, either during the Middle Ages or soon after that. It is quite possible that some of the graves inside the walls of the stone church date to the earliest period of the chapel congregation and thus predate the first stone church, which was built between 1510/1520 and 1550/1560.

Another interesting feature of the children's graves consists of anomalous orientations. Most graves in the church were dug according to the typical Christian tradition in the west–east (head to the west) direction with only minor deviations. The east–west direction seems to have been defined according to the long axis of the nave⁶ of the church. In practice, this means that the graves have been oriented according to the long walls of the church. None of the deceased were found with the head at the eastern end of the grave. In only three cases, the orientation stood out as remarkably different (more

^{4.} The age estimation is based on the field observation of the bones and the coffin size, ca $160 \times 55-40$ cm.

^{5.} The length of the coffin is ca 150 cm and its width at the height of the chest ca 46 cm. The heels seem to have been ca 10 cm from the end plank of the coffin, but the distance between the top of the head and the end plank of the coffin could not be estimated. Thus, the height of the deceased should have been ca 140 cm or a little less.

^{6.} Here the word 'nave' is used to mean the actual church building and not the room between the rows of pillars, as in cathedral architecture, for example. This is because the Renko church was vaulted as a one-aisle building, that is, it had no free-standing pillars with aisles between them.

than 70 degrees), and two of these graves belonged to infants. An infant (grave 47) and an adult or a juvenile (grave 46) were placed side by side but not in the same grave pit, as the distance between the deceased does not support such an interpretation (Fig. 2.9). The digging of these graves had destroyed two older graves (39⁷ and 45). Grave 39 was destroyed from the chest downwards, and the skeleton in grave 45 was destroyed from above the chest. Both of the older graves seem to date from the period before the abandonment of the church because the filling material of the graves was clean clay. The orientation of the younger graves 46 and 47 is NNE–SSW. Thus, they were not dug exactly following the N–S-axis of the nave, but they did not follow the orientation of the SE wall of the building either.⁸ Interestingly, in grave 47, the deceased was buried with the head in the north, while in grave 46, the head was in the south.



Figure 2.9. Infant grave 47 and adult or juvenile grave 46 with the heads to the south and the north. The digging of the grave pits have destroyed two older graves that have been aligned from east to west. The upper part of grave 46 was most likely damaged in 1895 when foundation stones were put to place to support a new floor structure. (Photograph: P. O. Welin 1984, Finnish Heritage Agency.)

The third infant grave with an anomalous orientation (grave 50) was placed along the western side of the foundation structure of the southern vault pilaster. Thus, the grave was situated quite near the main portal of the church but in the 'shade' (as seen from the east) of the massive vault pilaster.⁹ The head of the individual was pointing to the south.

2.5. Artefacts in the graves

Artefacts are quite rare in post-medieval burials, and they are often coins or parts of burial garments, clothes, or shrouds, such as buttons or pins (Kuokkanen and Lipkin 2011; Ruohonen 2018: 8). Sometimes more personal items, such as rings, beads, or tobacco pipes, are found (Varjola 1980; Koski and Moilanen 2019: 72). In Renko, the artefacts consist of coins, beads, and rings, and they were only found in adult graves. It is interesting that even though some remains of fabric were observed in some of the graves, no buttons or pins were found in contact with the skeletons. All the pins (11 in total) and buttons (12 in total) found in the church were stray finds and could not be associated with any specific graves.

A total of 48 medieval coins (mostly bracteates) were found during the excavations (NM Rahakammio 85003). The number is comparatively high compared to many other Finnish medieval churches, especially taking into consideration the relatively late (beginning of the 15th century at the earliest)

^{7.} In the plan of the graves (Hiekkanen 1993: 84) erroneously marked as number 38.

^{8.} The orientations of the graves were measured during the excavations following the assumption that that the nave was built strictly along the E–W axis. This was only to facilitate the measurements: there was no need to use more complex definitions. The actual orientation of the nave is WNW–ESE (See Hiekkanen 1993: 55, 57–58).

^{9.} In the churches of the medieval diocese of Turku, the main portal was in the southern wall, whereas churches in mainland Europe mostly seem to have had the main portal in the western wall (Hiekkanen 1994: 47–48, 361–364).

founding of the first church at the site. The number of post-medieval coins is 38. Twelve or thirteen coins were found in grave fillings (graves 9, 17, 18, 19, 23, 30, 33, 15, 49, 51, and 58, as well as grave A in the porch). The number is partly ambiguous because the original list contains two references to grave 49.¹⁰ Still, the find contexts show that none of the coins can be used to date the graves, and none of the coins was deliberately placed in a grave with the deceased.

Beads (NM 86041) were found in graves 4, 17, and 23, all from the area of the cervical vertebrae and mandible of the deceased (Hiekkanen 1985a, 2006a, 2006b). No remnants or traces of a thread linking the beads were found, indicating that it must have been made of organic material. Grave 4 contained 39 white transparent beads, while 30 black faceted beads were found in grave 17. A total of 54 beads were found in grave 23 (Fig. 2.10). Most of them are black and faceted, but there are also four red faceted beads, as well as one blue and one light blue bead. One of the beads was made of bone or horn. The three graves with beads were located in the south-western part of the nave, but they did not form a group. In grave 4, also fragile textile remnants were found in the skull area. Grave 4 also had an infant buried (grave 8) next to the adult's left leg.



Figure 2.10. Beads found in grave 23. Most of the beads are faceted and made of glass. One round bead is made of bone or horn. (After Hiekkanen 1985b: 304.)

10. This might have been a mistake made during the excavations in 1984, if the wrong grave number was written on one of the find bags.

In addition to the beads, a ring was found in grave 17. According to the stratigraphy, it must have been around the ring finger of the deceased, but it could not be determined whether it had initially been worn on the right or left hand. The finger bones were intermingled after the soft tissues had decayed, and the hand bones had fallen into the abdominal area. Two rings were also found in grave 56, presumably originally worn on the same ring finger of the deceased. Here, too, no distinction can be made between the left and right hands. All the graves with beads and rings date from between 1650 and 1783, according to the chronology based on the material in the grave filling (Hiekkanen 1993: 77, 83, 89).

2.6. Discussion

The most distinct graves in the Renko church are the ones with anomalous body positions (two out of 71), a skeleton with signs of post-mortem examination (one out of 71), the infant burials (twelve out of 71 – two of which also had an anomalous orientation), and the graves with artefacts (four out of 71). Statistically, all these graves are a minority, and in that sense, they may be considered atypical. Another question is whether these graves and features convey other kinds of ideas, messages, symbolism, and meanings than the seemingly 'normal' burials in the church. In previous research, it has been suggested that the variations in burial customs after the Reformation can be explained by the decreasing influence of ecclesiastical authority and the increasingly varied attitudes to human bodies and the afterlife among families and individuals, as well as the fact that it became more acceptable to show emotions in public during the 17th to 19th centuries (Mytum 2017). In this context, we argue that all the different features in the burials should be approached individually. Because of the distinct history of the Renko church, it is also essential to know how the abandoned stone church was perceived as a burial place.

A few burials in the old church in the first half of the 18th century are mentioned in the historical records of deaths and burials in the parish of Renko.¹¹ According to these archived sources, the price for digging graves in the old church was almost thrice as much as the price of a grave site in the churchyard. This proves that the old stone church was still considered a respected place and was used by wealthier families. In 1745, the mistress of the Pietilä house was buried inside the old church, where Pietilä's young son had already been buried a year earlier and the house's old master four years earlier. This indicates that at least some of the families who had already been burying their dead inside the stone church continued doing so after the church was abandoned.

Two skeletons that were initially interpreted as bodies buried in an atypical position were upon later examination concluded to be 'normal' supine burials in a grave-pit with an uneven bottom. Distinctive body positions were observed in graves A and B, both of which were dug under the porch floor before the stone church was abandoned in the mid-17th century. Grave A belonged to an adult individual whose legs had been crossed at the ankles. Different arm positions have been an object of interest in archaeological research, although nothing conclusive has been found in studies related to them. Arm positions do not seem to correlate with the chronology of the graves or the age or sex of the buried individual (e.g. Kieffer-Olsen 1993: 78; Gilchrist and Sloane 2005: 15–16, 156; Holbrook and Thomas 2005; Atzbach 2016). Leg positions have been given less attention, although crossed ankles, for example, seem to be a rare feature everywhere. However, crossed ankles have been observed in different areas and periods from Anglo-Saxon execution cemeteries (Reynolds 2009: 209) to medieval monastic cemeteries (Holbrook and Thomas 2005: 16; Gilchrist 2012: 206). A similar way of crossing the ankles has been noted occasionally also in Late Iron Age Finland. In the Crusade-period (ca AD 1025–1200) Toppolanmäki cemetery, grave 3/1937 contained an individual whose legs had been crossed at the ankles, the right leg on top of the left (Moilanen 2018b: 18–19).

Crossing the ankles has sometimes been viewed as exceptional treatment of the corpse and perhaps an indication of the exceptional status of the buried individual. In the medieval Lichfield cathedral in England, crossed ankles were found in a grave that was interpreted to belong to a priest, as the grave was equipped with a chalice and linen cloths (Gilchrist 2012: 206).¹² Sometimes crossed ankles have even been suggested to indicate that the legs were tied together (Nilsson 2013: 11).

Grave A in Renko did not contain artefacts or any other features that could provide more clues about the buried individual, and nothing in the grave or its location points to the clergy. The location of the burial in the porch does not support negative interpretations either. As crossed ankles occur at different times in a wide geographical area, the feature may not carry consistent meanings, and in general, the interpretation is not likely to be very dramatic. According to Mui (2018: 178), crossing the ankles may simply indicate a desire to maintain consistency in body positioning. The position is still a deliberate arrangement, and therefore should not be entirely overlooked, as it provides information about the preparation of the deceased for a funeral in a wider context.

The most distinctive body position was observed in grave B in the porch area, with flexed knees and extremely flexed elbows. However, it is not clear whether the corpse was deliberately placed in this position or whether it represents the actual position in which the individual died. It is still possible to conclude that the position has been preserved in the grave because the internment had been made without a coffin and the pit was filled immediately after burial. The grave fill has provided support for the bones, and therefore the anatomical connections have survived.

The flexed position of the skeleton in grave B slightly resembles the so-called pugilistic pose, which is often found in bodies exposed to flames and high temperature, for example in house fires. The position is caused by shrinking and contracting muscles (Ubelaker 2015: 215), and it is characterized by the flexion of elbows, wrists, hands, knees, hip, and neck (Symes et al. 2012: 379). From the records of deaths and burials in the parish of Renko, one mention of an adult fire victim in the 18th century can be found. According to the record, the 52-year old Matts Christersson from Oinaala Hakkola had burnt to death in January 1789.¹³ However, as mentioned earlier, grave B should be older than that. The pugilistic pose also includes the abduction of the shoulders and arching of the back, which cannot be observed in the buried individual. The flexed elbows and the hands over the shoulders have sometimes been interpreted as a symbol of prayer or supplication, especially in Catholic contexts (Gilchrist and Sloane 2005: 156; Atzbach 2016), although they could also be a sign of either death occurring in a constricted space or the presence of a medical condition. Severe elbow flexion, which can be observed in the skeleton of grave B, could indicate a spastic position caused by paralysis (Gharbaoui et al. 2016: 39). An illness is supported by the fact that other flexed burials have often been found in hospital or monastic cemeteries and mass burial pits connected with epidemics. These burials are usually thought to belong to individuals who had died in the position and who had been buried while rigor mortis was present (Gilchrist and Sloane 2005: 154-155; Jonsson 2009: 97). It is unknown why the individual in grave B was not placed in a 'normal' supine position. If the individual was paralysed, the person might have died in that position and the burial might have been performed quickly before *rigor mortis* had disappeared. The archived records of deaths and burials in the parish of Renko in the 18th century reveal that sometimes the deceased was buried on the day after death¹⁴, meaning that *rigor mortis* may well have been present during the burial. Paralysis is usually caused by malfunction and damage in the nervous or circulatory system or brain, and the same conditions that lead to paralysis may also cause convulsions and personality changes. Even as late as the early 20th century, these symptoms were sometimes considered mental illnesses (Kinnunen 2012: 59), which traditionally provoked fear and superstition (Virtanen 1988: 260; 266-267). All individuals react differently to medical conditions, meaning that reactions to the same illnesses have likely varied. The

^{12.} In Finland, chalices have been found in two graves. Both were made for a priest, perhaps even a bishop. Both are from the bishop's church in Koroinen, Turku, and can be dated to the late 13th century. (See Immonen 2009: 125–126, 2018: 169, 171–172).

^{13.} National Archives of Finland, Records of deaths and burials in the parish of Renko from 1730 to 1790

^{14.} National Archives of Finland, Records of deaths and burials in the parish of Renko from 1730 to 1790

desire for a quick burial even in the blessed context such as the church porch may well have been a reaction to death after terrifying symptoms, such as paralysis.

Grave 2, which shows signs of a post-mortem examination, is also a compelling case. Autopsies were often performed on a distinct group of people, namely those who had committed suicide or who were murdered. These were usually also socially marginalized people, who were often considered unsuitable for burial in consecrated ground or were interred in less respected places in the cemetery (Rimpiläinen 1971: 275-276; Oravisjärvi 2011; Tarlow 2011). During the 18th century, it had become common for even these individuals to be buried in the churchyard, as their burial place was usually determined by the secular court (Moilanen et al. 2018: 7–8). Burying a dissected corpse inside a church is uncommon, but the historical records from the parish of Renko may provide an explanation. In April 1778, the peasant and churchwarden Christer Laurila had ridden from home alone and was found dead the next morning at Teikari bridge. His corpse was opened and examined by a medic, but nothing pointing to a crime was found, and the cause of death was determined as a lung disease. The corpse of the suspected murder victim could therefore be buried in the usual way.¹⁵ The exact location of Laurila's grave is not mentioned in the records, but it can be speculated that a churchwarden, as someone with a respected position in the community, could have been buried inside the old church. As mentioned earlier, the Renko parish records do show that the grave sites in the abandoned stone church were expensive and therefore comparable to ordinary church burials.

During the excavation, twelve infant graves were also found. Infants and sometimes even prematurely born infants have been buried in churches in Finland and Scandinavia since the Late Middle Ages (Sellevold 2008; Gren 2012: 45; Lipkin et al. 2018: 74–78). Unbaptized children had a distinctively different social status than baptized children, but their burial customs changed after the Reformation. Although unbaptized children were allowed to be buried in remote parts of the cemetery already in the 16th century, they were still sometimes buried in secret even in the 17th century. According to the Church Law of 1686, a remote location was no longer compulsory (Itkonen 2012: 11–14), and nothing in the official regulations prevented their burial inside churches.

As the skeletons in the Renko church were left in situ, it has not been possible to determine the ages of the buried individuals more accurately. It is therefore unknown whether the infant graves also include prematurely born infants. An interesting note in the parish records is from May 1740, when the 30-year-old Agneta Jöransdotter was buried in the old stone church "with a foetus".¹⁶ Perhaps she is the skeleton in grave 4 with the white beads around the neck and a very small child – perhaps a prematurely born infant – buried next to the left leg.

In one case, three infants were found with an adult buried near the altar. A similar placement of infants and prematurely born infants has been noted in other churches in Finland and Scandinavia. The usual and logical interpretation, based on the Church Laws, is that the children were buried close to their relatives and according to the social status of their father (Lipkin et al. 2018: 74, 78). As the members of the clergy were often buried near the altar, the infants in this area may even have belonged to priestly families (Lipkin et al. 2018: 74, 78). On the other hand, burying children close to the most sacred place in the church could also be seen as a symbol of emotion and care (Sellevold 2008: 69). According to the Renko parish records, small children from Mannila, Pietilä, and Iso Palavainen were buried in the old church in 1744, 1745, and 1746.¹⁷ The ages of the children have not been listed, but as digging graves in the old church was expensive, these children likely belonged to wealthier families, who nevertheless used the old church as their burial place. This is already known in the case of the family living in the Pietilä house.

The infant grave (grave 50) seems different from the others in terms of placement. As mentioned earlier, the grave was located in the shade of the southern vault pilaster and was aligned from north to south. If the grave was older than the others, it could have been dug in secret. However, the dating based on the grave fill material does not support this interpretation, as it suggests that the grave dates

^{15.} National Archives of Finland, Records of deaths and burials in the parish of Renko in 1778.

^{16.} National Archives of Finland, Records of deaths and burials in the parish of Renko in 1740.

^{17.} National Archives of Finland, Records of deaths and burials in the parish of Renko from 1730 to 1750.

after the mid-17th century. The question remains: how should the similarly aligned infant and adult/ juvenile graves be interpreted? If the relative chronology holds true, then these two graves were also made after the church fell out of use. Thus, there should not have been any prohibitions to dig the graves against Christian tradition. Although the two graves (46 and 47) with an anomalous orientation seem to be located in the nave of the old church, they may have been dug in the graveyard on the northern side of the wooden church, which stood only a few metres to the south from the 1720s onwards.

Graves aligned from north to south in historical cemeteries have often been interpreted as a form of punishment (Jordan 1982: 30). In Renko, the location on the northern side of the wooden church would, in theory, be suitable for this kind of burial, but it would still be a peculiar choice, as the area of the old stone church was considered an expensive and therefore 'better' place to be buried. In the 17th and 18th centuries in Great Britain, Ireland, and North America, north-south oriented graves are sometimes found in Quaker cemeteries (Tarlow 2011: 56–58). In Quaker cases, the traditional orientation was deliberately rejected in order to exclude the members from the mainstream religion. In Finland, a Lutheran revivalist movement called 'knee-praying' (rukoilevaisuus) spread in the 18th century (Pentikäinen 1975: 92). The followers would have been individuals instead of large congregations. Could the Finnish examples also be deliberate actions to emphasize different beliefs, such as sympathies towards a revivalist movement or a more secular world view? On the other hand, if the north-south orientation was a deliberate choice for an individual with a more secular world view, the same burial custom could have been perceived as a punishment from the church's perspective for the same reason.

Beads and rings were found in four graves likely dating after the abandonment of the stone church (after the mid-17th century). This is interesting, as the Church Law of 1686 had forbidden the use of exquisite burial garments and accessories, including beads (Rimpiläinen 1971: 198–199, 207–208). However, similar artefacts have occasionally been found in other contemporary graves (Hiekkanen 2006a, 2006b). The relatively higher status of those buried in churches compared to those buried in the cemetery explains why rings have more often been found in church burials (Ritari-Kallio in this book). The artefacts may have been perceived as an integral part of the deceased individual and a sign of their social status (Kuokkanen and Lipkin 2011: 149–150; Ritari-Kallio in this book). Personal items in graves can also be a way to show respect and remembrance towards the deceased. Still, it is interesting to note that while it can be presumed that most of the adults buried within the walls at greater cost than elsewhere were married, only two of them had a ring or two with them in the grave. This might lead to the conclusion that wedding rings were taken from the deceased before burial.

2.7. Conclusions

The excavation of late medieval and early modern graves in the Renko church in 1984 was one of the first excavations to lay the groundwork for future archaeological investigations in churches and other contemporary burial places in Finland. The excavation was carried out during a time when standards for the excavation and documentation of historical graves had not yet been established. Although more modern osteological analysis and scientific methods, such as stable isotope studies,¹⁸ could yield more information on the buried individuals, it may be viewed as an ethical choice to leave the skeletons *in situ*, especially as the graves are quite recent and some of the buried individuals may be identified by name. The graves were documented meticulously, enabling the reanalysis of the burial practices at the site.

Graves under the church floor were expensive and usually reserved for individuals of high social status, such as priests, officials, and wealthy landowners. Historical records prove that the first stone church in Renko was occasionally used for burials even after its abandonment and that it was still considered a respected and expensive burial place. The graves are therefore comparable to ordinary church burials. A few of the graves were distinctive, with unusual body positions and orientations. Also a number of infant graves, graves with artefacts, and the burial of a dissected corpse were found.

The seemingly atypical graves represent a wide variety of meanings. The different body positions may be explained by the deliberate actions of those who prepared the body for a funeral or by the manner of death or medical conditions. The majority of the infant graves do not represent marginal or secret burials but can instead be explained by the fact that these children were born to wealthier families. The artefacts found in some of the graves are personal accessories, which can perhaps be interpreted as an intention to leave something of the person in the grave. The deviant grave alignments are the most problematic to study, as their interpretation depends on the perspective taken, namely the identity of the buried individual, those responsible for the burial, and also the church and society. In general, the different orientations may represent deliberate choices to convey feelings, ideas, and ideologies. Some of the seemingly atypical features in body positions can be explained by natural causes, such as taphonomy and medical conditions, but the deliberate actions that can be distinguished may be seen as varied symbols of communication, remembrance, and emotions. Altogether, every atypical feature emphasizes the individual, both the buried person and those responsible for the buriel, in various ways.

Ulla Moilanen is a PhD candidate in archaeology at the University of Turku. Her thesis deals with atypical burials and variations in burial customs. She is also interested in the application of scientific methods in archaeology, new ways to produce holistic interpretations of the past, Late Iron Age and medieval Finland, and community archaeology.

Markus Hiekkanen, retired, Professor (honorary title), has studied medieval and Early Modern churches since the 1980s with emphasis on their structures, paintings, and interiors. His interests and areas of expertise also include urban archaeology, dating methods, burials, and archaeological objects, as well as Christianization and early ecclesiastical organization.

Bibliography

Archives

National Archives of Finland, Records of deaths and burials in the parish of Renko from 1730 to 1790.

Literature

Atzbach, R. 2016. Between representation and eternity: The archaeology of praying in late medieval and post-medieval times. *European Journal of Archaeology* 19(1): 28–47.

Aulanko, V. 1913. Rengon kirkosta ja sen waiheista [On the church of Renko and its past]. Kaikuja Hämeestä VIII: 246–252.

Crabtree, P. J. 2001. Medieval Archaeology: An encyclopedia. New York: Garland Publishing Inc.

Duday, H. 2009. The Archaeology of the Dead: Lectures in Archaeothanatology. Oxford: Oxbow Books.

Elovaara, K. V. 1933. *Rengon seurakunnan omaisuus 31.12.1932* [*The property of the parish of Renko on December 31, 1932*]. Renko: Rengon seurakunta.

Eriksson, A. and A. W. Jones 2017. History of forensic medical sciences in Sweden. In B. Madea (ed.): *History of Forensic Medicine*, pp. 290–315. Berlin: Lehmanns.

Gardeła, L. 2017. *Bad Death in the Early Middle Ages: Atypical Burials from Poland in a Comparative Perspective.* Collectio Archaeologica Ressoviensis Tomus XXXVI. Rzeszów: Wydawca, Fundacja Rzeszowskiego Ośrodka Archeologicznego, Instytut Archaeologii Uniwersytetu Rzeszowskiego,

Gardberg, C. J., H. Degerman, and I. Savolainen 2003. *Maan poveen: Suomen luterilaiset hautausmaat, kirkkomaat ja haudat [Into the bosom of the earth: The Lutheran graveyards, churchyards, and graves of Finland]*. Espoo: Schildt.

Gharbaoui, I., K. Kania, and P. Cole 2016. Spastic paralysis of the elbow and forearm. *Seminars in Plastic Surgery* 2016 Feb; 30(1): 39–44.

Gilchrist, R. and B. Sloane 2005. *Requiem: The Medieval Monastic Cemetery in Britain*. London: Museum of London Archaeology Service.

Gilchrist, R. 2012. Medieval Life: Archaeology and the Life Course. Woodbridge: The Boydell Press.

Gren, J. 2012. Rumslighet, funktion och symbolik: Medeltida skandinaviskt gravskick med fokus på barn i kyrkor. Master's Thesis, Historical Archaeology, University of Lund.

Harjula, J. and U. Moilanen 2018. Poikkeavia piirteitä hautauksissa ja hautarakenteissa [Atypical features in burials and grave structures]. In J. Harjula, S. Hukantaival, V. Immonen, T. Ratilainen, and K. Salone (eds.) *Koroinen - Suomen ensimmäinen kirkollinen keskus*, pp. 154–168. Turun Historiallinen Arkisto 71. Turku: Turun Historiallinen Yhdistys.

Hiekkanen, M. 1985a. *Rengon kirkko: Rakennushistoriallisia ja arkeologisia tutkimuksia 1984* [*The church of Renko: Build-ing-historical and archaeological investigations in 1984*]. Museovirasto, Rakennushistorian osasto. Unpublished excavation report, Finnish Heritage Agency.

Hiekkanen, M. 1985b. Rengon kirkon vanhat haudat [Old graves in the Renko church]. *Suomen historia* 3. Helsinki: Weilin & Göös.

Hiekkanen, M. 1988. *Polvesta polveen täällä... Espoon kirkon esiin kaivettua menneisyyttä* [As generations go by... The excavated past of the church of Espoo]. Espoo: Espoon seurakunnat.

Hiekkanen, M. 1989. Här har släkte efter släkte... Ur Esbo kyrkas framgrävda förflutna [As generations go by... The excavated past of the church of Espoo]. Esbo: Esbo församlingar.

Hiekkanen, M. 1990. Den oktogonala kyrkan i Rengo och andra polygonala byggnader i det senmedeltida Finland [The octagonal church of Renko and other polygonal buildings in late medieval Finland]. *Hikuin* 17: 247–254.

Hiekkanen, M. 1993. Rengon kirkon historia [The history of the church of Renko]. *Rengon historia*. Renko: Rengon kunta ja seurakunta.

Hiekkanen, M. 1994. The Stone Churches of the Medieval Diocese of Turku: A Systematic Classification and Chronology. Suomen Muinaismuistoyhdistyksen Aikakauskirja 101. Helsinki: Suomen Muinaismuistoyhdistys.

Hiekkanen, M. 2006a. Helminauhoja uuden ajan alkupuolen haudoissa [Beads in Early Modern graves]. *Muinaistutkija* 3/2006: 23–48.

Hiekkanen, M. 2006b. Några finska kyrkogravar med pärlor från 1600–1700-talen [Some graves with 17th–18th-century beads found in Finland]. *Hikuin* 33: 249–262.

Hiekkanen, M. 2007. *Suomen keskiajan kivikirkot* [*The medieval stone churches of Finland*]. 2nd edition. Suomalaisen Kirjallisuuden Seuran Toimituksia 1117. Helsinki: Suomalaisen Kirjallisuuden Seura.

Hiekkanen, M. 2020. *Finlands medeltida stenkyrkor [The medieval stone churches of Finland]*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.

Holbrook, N. and A. Thomas2005. An Early-medieval monastic cemetery at Llandough, Glamorgan: Excavations in 1994. *Medieval Archaeology* 49(1): 1–92.

Immonen, V. 2009. Golden Moments: Artefacts of Precious Metals as Products of Luxury Consumption in Finland c. 1200– 1600. Archeologia Medii Aevi Finlandiae XVI. Turku: Suomen keskiajan arkeologian seura.

Immonen, V. 2018. Hauta-astiat ja kysymys piispojen haudoista [Grave vessels and the question of bishops' graves]. In J. Harjula, S. Hukantaival, V. Immonen, T. Ratilainen, and K. Salonen (eds.): *Koroinen - Suomen ensimmäinen kirkollinen keskus*, pp. 169–172. Turun Historiallinen Arkisto 71. Turku: Turun Historiallinen Yhdistys.

Itkonen, J. 2012. Kuolleena syntynyt lapsi Suomen evankelis-luterilaisen kirkon kirkkokäsikirjoissa 1694–2003 [Stillborn children in the funeral service orders of the Evangelic Lutheran Church of Finland 1694–2003]. *Thanatos* 1(2): 1–33. Available at https://thanatosjournal.files.wordpress.com/2012/12/itkonen_-kuolleena-syntynyt-lapsi1.pdf [Visited 1 Jun 2019].

Jonsson, K. 2009. *Practices for the Living and the Dead: Medieval and Post-Reformation Burials in Scandinavia*. Stockholm Studies in Archaeology 50. Stockholm: Department of Archaeology and Classical Studies, Stockholm University.

Jordan, T. G. 1982. Texas Graveyards: A Cultural Legacy. Austin: University of Texas Press.

Kieffer-Olsen, J. 1993. *Grav og gravskik i det middelalderlige Danmark* [*Graves and burial types in medieval Denmark*]. – 8 kirkegårdsudgravninger. Skrifter fra Afd. for Middelalder-arkæologi og Middelalder-arkæologisk nyhedsbrev, 1. Hojbjerg: Afdeling for Middelalder-Arkaeologi og Middelalder-Arkaeologisk Nyhedsbrev. Aarhus: Aarhus universitet.

Kinnunen, A. K. 2012. Johtolankoja hulluuteen: Ilmiön kulttuurisen konstruoinnin tarkastelua [Clues to madness: On the cultural construction of the phenomenon]. Master's thesis in heritage studies, University of Eastern Finland.

Koski, K. and U. Moilanen 2019. Kuolema ja tuonpuoleinen [Death and afterlife]. In I. Pajari, J. Jalonen, R. Miettinen, and K. Kanerva (eds.): *Suomalaisen kuoleman historia*, pp. 61–98. Helsinki: Gaudeamus.

Kuokkanen, T. and S. Lipkin 2011. Hauta-asut elämän kuvaajina: Oulun tuomiokirkon kuolinpuvuista [Burial costumes as images of life: On the burial costumes in the cathedral of Oulu]. In J. Ikäheimo, R. Nurmi, and R. Satokangas (eds.): *Harmaata näkyvissä: Kirsti Paavolan juhlakirja*, pp. 149–164. Oulu: Kirsti Paavolan juhlakirjatoimikunta.

Lipkin, S., T. Väre, and T. Kallio-Seppä 2018. Pappissäädyn haudat Pohjois-Pohjanmaan kirkkojen lattioiden alla: Tapaustutkimuksia 1300–1700-luvuilta [Priestly burials under North-Ostrobothnian Finnish church floors: Case studies from the 14th to 18th centuries]. *Thanatos* vol. 7(2): 60–89. Available at: https://thanatosjournal.files.wordpress.com/2019/01/ lipkin_vare_kallio-seppa_pappissaadyn.pdf [Visited 5 Jun 2019].

Mitchell, P. D., C. Boston, A. T. Chamberlain, S. Chaplin, V. Chauhan, J. Evans, L. Fowler, N. Powers, D. Walker, H. Webb, and A. Witkin 2011. The study of anatomy in England from 1700 to the early 20th century. *Journal of Anatomy* 219(2): 91–99.

Moilanen, U. 2018a. Facing the earth for eternity? Prone burials in Early Medieval and Medieval Finland (c. AD 900– 1300). In: L. Damman and S. Leggett (eds.): *The Others: Deviants, Outcasts and Outsiders in Archaeology.* Archaeological Review from Cambridge 33.2, pp. 19–36. Cambridge: University of Cambridge.

Moilanen, U. 2018b. *Valkeakoski, Toppolanmäki: Haudan nro 3/1937 tutkimuskaivaus 17.–18.6.2017* [Valkeakoski, Toppolanmäki: Excavations of burial number 3/1937 from 17 to 18 June 2017]. Unpublished excavation report, Finnish Heritage Agency.

Moilanen, U., I. Aalto, and V. P. Toropainen 2018. In terra prophana: Kuolemaantuomittujen ja syntisten hautaaminen ja rangaistuspaikkojen arkeologinen potentiaali [In terra prophana: The archaeological potential of the burial sites of the death row]. *SKAS* 2/2018: 2–19.

Mui, S. 2018. Dead Body Language: Deciphering Corpse Positions in Early Anglo-Saxon England. Durham theses, Durham University.

Murphy, E. M. (ed.) 2010. Deviant Burial in the Archaeological Record. Oxford: Oxbow Books.

Mytum, H. 2003. The social history of the European cemetery. In C. D. Bryant (ed.): *Handbook of Death and Dying*, pp. 801–809, Thousand Oaks: Sage Publications.

Mytum, H. 2017. Mortuary culture. In C. Richardson, T. Hamling, and D. Gaimster (eds.): *The Routledge Handbook of Material Culture in Early Modern Europe*, pp. 154–167. Farnham: Routledge.

Nilsson, L. 2013. En mångfacetterad gravplats: På magen gravar och pestoffer i Vintrie Park C2 och C5 [A complex grave site: Prone burials and plague victims in Vintrie Park]. 2nd edition. In K. Brink and K. Hammarstrand Dehman (eds.): *Vintrie Park. Grav och gård 4000 BC–1712 AD. Arkeologisk slutundersökning 2011*. Kristianstad: Riksantikvarieämbetet.

Oravisjärvi, J. 2011. Rikollisten kuolema ja hautaaminen 1200-luvulta 1800-luvulle [The death and burial of criminals from the 13th to 19th centuries]. In J. Ikäheimo, R. Nurmi, and R. Satokangas (eds.): *Harmaata näkyvissä: Kirsti Paavolan juhlakirja*, pp. 285–296. Oulu: Kirsti Paavolan juhlakirjatoimikunta.

O'Sullivan, D. 2013. Burial of the Christian dead in the Later Middle Ages. In S. Tarlow and L. Nilsson Stutz (eds.): *The Oxford Handbook of the Archaeology of Death and Burial*, pp. 259–280. Ozford: Oxford University Press.

Paavola K. 1998. Kepeät mullat: Kirjallisiin ja esineellisiin lähteisiin perustuva tutkimus Pohjois-Pohjanmaan rannikon kirkkohaudoista [Sit tibi terra levis: The church graves of the Northern Finnish coastal area according to written and material sources]. Acta Universitatis Ouluensis B Humaniora 28. Oulu: University of Oulu.

Pentikäinen, J. 1975. Revivalist movements and religious contracultures in Finland. New Religions Vol. 7 (1975): 92-122.

Purhonen, P. 1998. Kristinuskon saapumisesta Suomeen: Uskontoarkeologinen tutkimus [On the arrival of Christianity in Finland: A study in the archaeology of religion]. Helsinki: Suomen Muinaismuistoyhdistys.

Reynolds, A. 2009 Anglo-Saxon Deviant Burial Customs. Oxford University Press, Oxford

Riisøy, A. I. 2015. Deviant burials: Societal exclusion of dead outlaws in Medieval Norway. In A. Lahtinen and M. Korpiola (eds.): *Cultures of Death and Dying in Medieval and Early Modern Europe*, pp. 49–81. Helsinki: Helsinki: Collegium for Advanced Studies. Available at: http://hdl.handle.net/10138/154764 [Visited 23 March 2020].

Rimpiläinen, O. 1971. Läntisen perinteen mukainen hautauskäytäntö Suomessa ennen Isoavihaa [Western burial tradition in Finland before the Great Northern War]. Suomen kirkkohistoriallisen seuran toimituksia 84. Helsinki: Suomen kirkkohistoriallinen seura.

Ruohonen, J. 2018. 'Hijtte sari': Historiallisen ajan kyläkalmisto läntisellä Karjalankannaksella ['Hjitte Sari': A Post-Medieval village cemetery in the Western Karelian Isthmus]. SKAS 1/2018: 2–18.

Sellevold, B. J. 2008. Child burials and children's status in Medieval Norway. In S. Lewis-Simpson (ed.): *Youth and Age in the Medieval North*, pp. 57–72. Leiden: Brill.

Start M. 2002. Morbid osteology. In R. Arnott (ed.): *The Archaeology of Medicine*, pp. 113–124. British Archaeological Reports International Series 1046. Oxford: ArchaeoPress.

Symes, S. A., E. N. L'Abbé, E. N. Chapman, I. Wolff, and D. C. Dirkmaat 2012. Interpreting traumatic injury to bone in medicolegal investigations. In D. C. Dirkmaat(ed.): *A Companion to Forensic Anthropology*, pp. 340–389. Chichester: Wiley-Blackwell.

Tarlow, S. 2011. Ritual, Belief and the Dead in Early Modern Britain and Ireland. Cambridge: Cambridge University Press.

Toplak, M. S. 2018. Deconstructing the deviant burials of Kopparsvik and the rite of prone burials in Viking Age Scandinavia. *META Historiskarkeologisk tidskift:* 79–110.

Ubelaker, D. H. 2015. Case applications of recent research on thermal effects on the skeleton. In T. Thompson (ed.): *The Archaeology of Cremation: Burned Human Remains in Funerary Studies*, pp. 213–226. Oxford: Oxbow books.

Valk. H. 1994. Neighbouring but distant: Rural burial traditions of Estonia and Finland during the Christian period. *Fennoscandia archaeologica* XI: 61–76.

Varjola, Pirjo 1980. Vainajan matkavarusteista [On the items accompanying the dead]. Kotiseutu 4/1980, 118-126.

Viitaniemi, E. 2018. Hautauskäytäntöjen muutos Länsi-Suomen maaseudulla osana 1700-luvun edistysajattelua [The change in burial practices in western Finland rural areas as a part of the 18th century utilitarianism thinking]. *Thanatos* vol. 7(2): 29–59. Available at: 2/2018https://thanatosjournal.files.wordpress.com/2019/01/viitaniemi_hautauskaytanto-jen_muutos.pdf [Visited 15 Jun 2019]

Virtanen, L. 1988. *Suomalainen kansanperinne [Finnish folk tradition]*. Suomalaisen Kirjallisuuden Seuran Toimituksia 471. Helsinki: Suomalaisen Kirjallisuuden Seura.