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THE KIRKKOMÄKI CEMETERY AT KAARINA

Abstract

Found in 1950, the late Iron Age inhumation cemetery of Kirkkomäki at Kaarina has been the site of repeated archaeological investigations. The aim of this article is to present the main finds and observations of the excavations conducted by the author in 1983 and 1984 and to give an archaeological background to the coin finds discussed in the appendix to this paper by Tuukka Talvio. Evidence of other prehistoric activities within the excavated area and the question of the transition period between late prehistoric times and the Middle Ages are also briefly discussed. A new major excavation was carried out at the site in 1991 and will be continued in 1992. The results of this research, which may greatly renew the picture at hand, will be published later by the excavators.

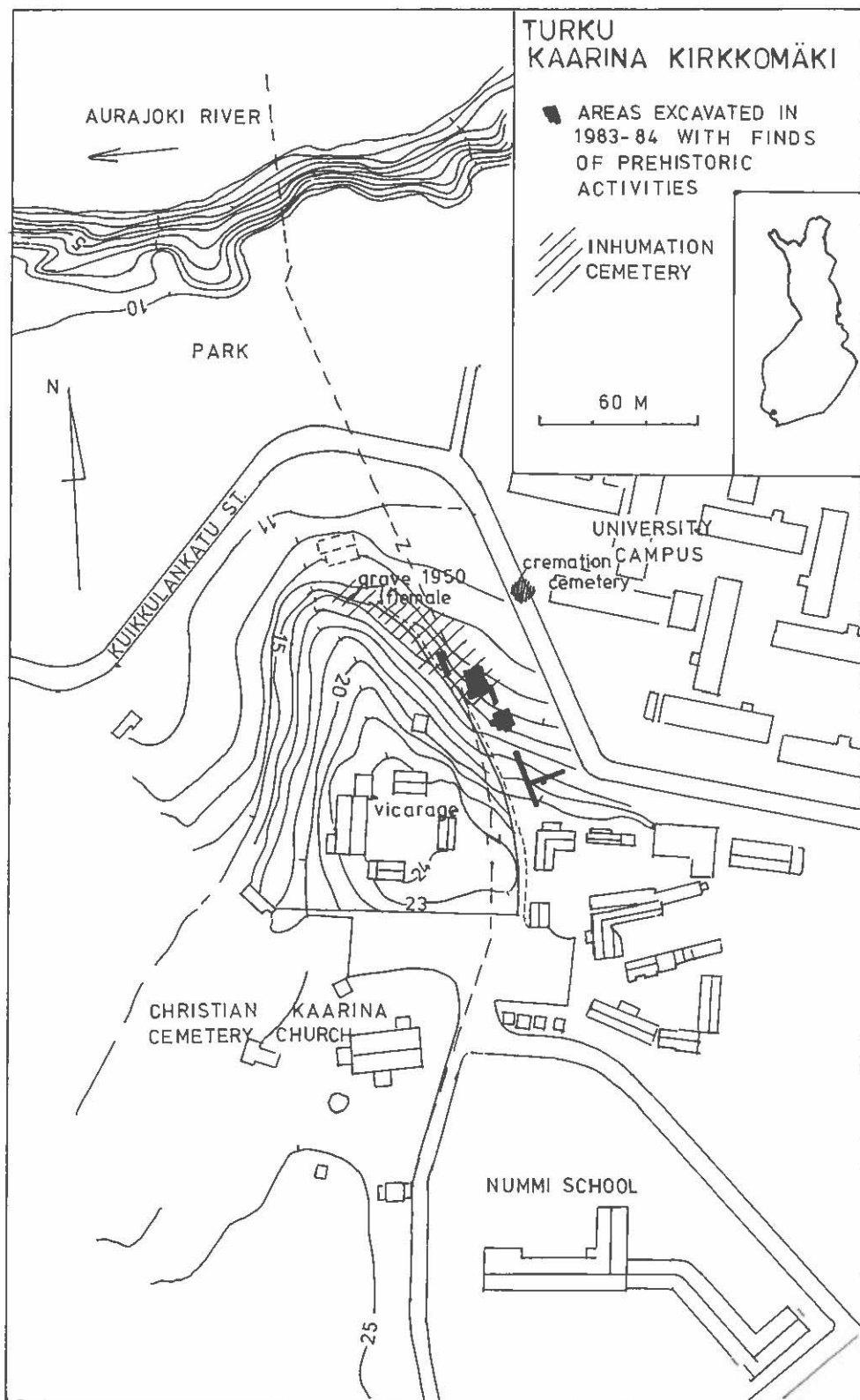
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INTRODUCTION

The late prehistoric inhumation cemetery of Kirkkomäki ('Church Hill') at Kaarina is situated some 150 meters north of the medieval parish church of Kaarina (Sw. S. Karins, prev. Nummi), dedicated to St. Catherine, within the present boundaries of the city of Turku (Åbo) (Map 1). In 1950 two burials containing grave-goods of both sexes and dating to the late Viking Period were found at a distance of about 45 meters from each other at the site (Salmo 1951; NM 12687:1-20). A pair of D-type round brooches and a bracteate imitation, probably of local work, of an Anglo-Saxon penny of King Æthelred II, allow a dating of the woman's burial to the first half of the 11th century (Talvio 1978, 185). A reconstruction has been made of the clothing of the woman (Riikonen 1990). Only weapons were found in the man's grave which had been destroyed in cable works. A silver-ornamented sword resembling Petersen's types S and Z, a G-type spearhead, and a battle axe are dated roughly to the same time or to the Crusade Period (Kivikoski 1971, 843). Another male grave, which was partly demolished, remained unnoticed and was not excavated until 1991. It contained, among other objects, a bronze balance and a set of weights in a pouch

made of fur (Riikonen 1991, 21). Considering the distance between the burials it seemed obvious that there was a major cemetery on the sandy north-eastern slopes of the vicarage hill of Kirkkomäki.

Trial excavations were carried out at the site in the 1960s and 1970s in connection with local building plans. A single inhumation of a female in a nailed coffin was found in 1962 about 15 meters further southeast of the weapon grave (Hirviluoto 1963). Remains of clothing with spiral ornaments and glass beads were found (NM 15807:1-35). The grave may be given a rough dating to the 11th or 12th century. In 1973 and 1974 a large area was excavated in the fields east of Kirkkomäki, but no more certain inhumations were detected (Bergström 1974 & 1975). Some 30 to 40 meters northeast of the known graves an area interpreted as a minor cremation cemetery (so-called field cemetery laid on level ground) of 50 square metres was discovered. Burnt bone and various fire-worn artifacts from the Viking Period were found at this location. There was also a cultural layer 20 to 50 cm thick to the south and southeast of this location, with finds mainly consisting of ceramics and pieces of burnt clay daub. These can be interpreted as remains of various settlement activities and are mainly dated to the Middle Ages and later times,



Map 1. The Kirkkomäki cemetery and environs.

but even partly to the late prehistoric period (NM 19272:1–292, NM 19433:1–47).

EXCAVATIONS IN 1983–84

The excavations in 1983 and 1984 were carried out because of plans for enlarging the present Kaarina parish graveyard into the area of the Iron Age cemetery (Katiskoski 1984, 1985, 1990). An overall area of some 370 m² was excavated around the hill of Kirkkomäki. The areas on the eastern slope gave positive results (NM 22078:1–182, 22631:1–424). Excavation revealed graves among and between previously detected ones. The remains of a dwelling site with artifacts, a clay-pit related to metallurgical activities, and a fossil field were also found close to the graves.

The results of the excavations of 1983 and 1984 will be discussed in the following section. The emphasis is on the chronology of the site, in which the coin finds play an important role. Kirkkomäki and its relation to a number of other archaeological sites in the near vicinity will be dealt with in view of the problem of continued settlement from the prehistoric period into the Middle Ages and from pagan times to the Christian era.

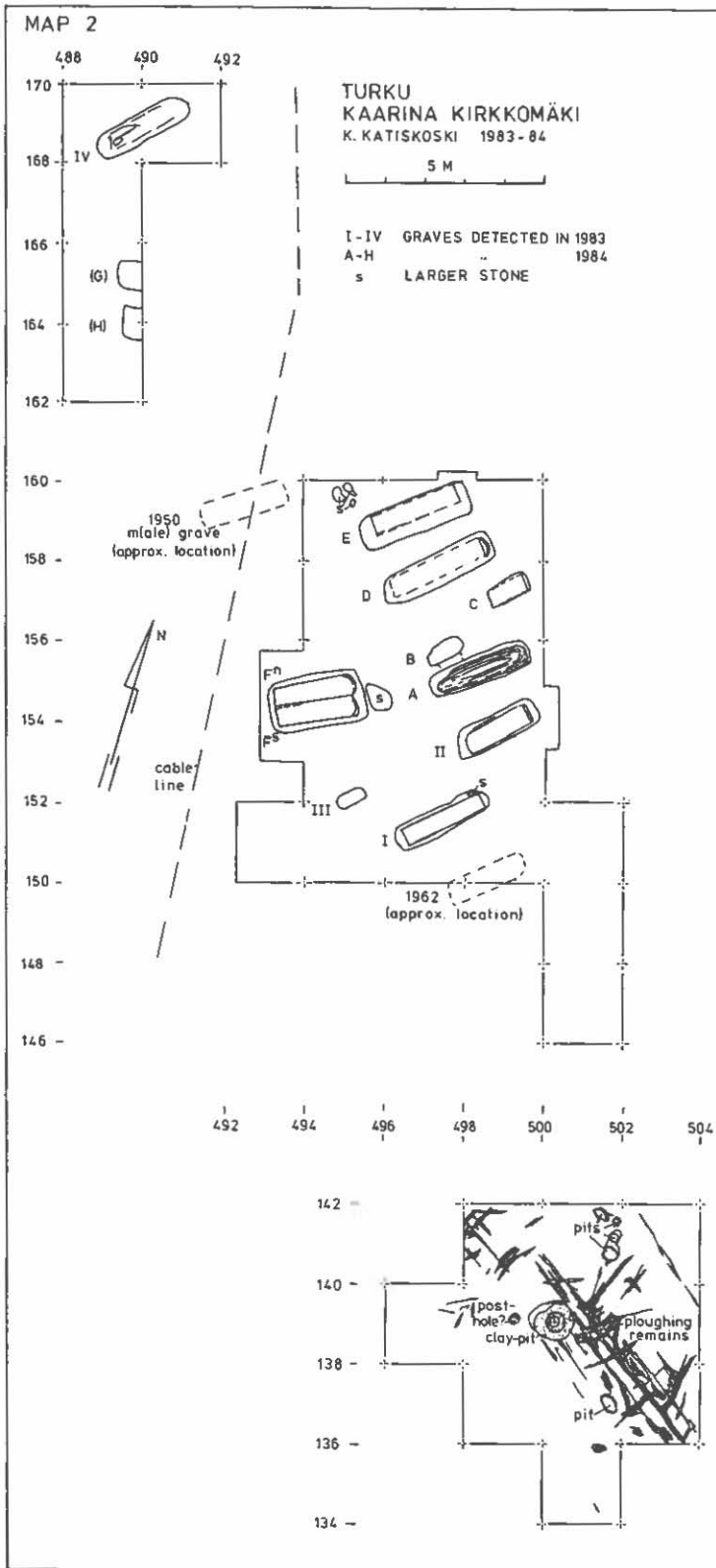
THE GRAVES

The burials excavated in 1983–84 are presented in Table 1, containing various observations on the graves and including the inventory numbers of the finds. All in all, eleven burials were excavated (graves I–IV found in 1983 and A–F detected in 1984) in two separate areas totalling 80 m² (Map 2). Of these, three can be described as probable burials of children (III, B, C). The broad grave-pit F turned out to contain a double burial. Only minor remains were left of the corpses as vague figures and deposits of molar enamel. These have not been analysed. The estimation of the sex of the deceased is based on grave-goods and the size of the graves. It appears that graves I, IV, A, D–E and Fn belonged to men, and II and Fs were women's graves. Two other patches of dark soil were interpreted as graves (G and H) but these were not excavated until 1991.

Various burial constructions were observed in the grave-pits. Rectangular carbonized lines with nails were interpreted as the remains of the side-planks of wooden coffins (I, C–F). In graves I and E a larger number of nails with mostly transverse fibres of wood, and also lengthwise ones in some cases, were found at the corner joints and sides of the coffins (Fig. 1). In grave A the deceased was clearly laid in a hollowed tree-trunk (Fig. 2), possibly in grave II as well. There were remains of birchbark, probably covering the corpse. The deceased in grave IV may have been buried without a coffin. Vague decayed remains of other materials, probably of furs or fabrics obscured the interpretation of these constructions. The graves were neatly laid side by side in rows, as if the cemetery had been planned in a regular form. They were all oriented in a SW–NE direction and in each observed case the head-end was towards the southwest. This was also true of the graves found in 1950 and 1962. This direction in late Iron Age graves has been commonly interpreted as a striving towards the W–E direction of Christian burials (Pälsi 1938, 30–31; Nordman 1939, 13–15; Cleve 1978, 78). However, for example in the cemetery of Luistari at Eura, where most of the later and unfurnished graves were oriented SW–NE, the graves already from the early Merovingian period that almost exclusively laid in that direction (Lehtosalo-Hilander 1982 I, 19, 21; cf. Gräslund 1985, 298–299).

The furnishing of the graves varied to a great degree. In most cases there were remains of knives or parts of bronze sheaths. Graves I, D, E and Fs may be described as rich or well-furnished. Graves II and IV, on the other hand, were practically unfurnished and contained mainly rusted remains of what may have been knives. A large proportion of the grave finds consists of highly corroded fragments of unidentified iron objects. The main finds are briefly discussed from a chronological point of view.

The five silver coins, identified by Tuukka Talvio and discussed in detail in the appendix, were found in three graves. Of the two German coins in the male grave D one was struck c. 1100 in Goslar and the other for Bishop Conrad in Deventer (1070–1099, NM 22631:53–55; there may have been even a third coin broken into pieces). These unperforated coins may be described as Charon coins as judged by their location near the head of the body, and not in the probable pouch found in the grave (cf. Gräslund 1967, 168–197, Sarvas 1972, 8–9) with thin sheets of silver with stamped ornamentation (NM



Map 2. Kirkkomäki, Kaarina, Turku. Graves excavated in 1983 and 1984, clay pit and ploughing remains.

Table 1
GRAVES EXCAVATED AT KAARINA KIRKKOMÄKI IN 1983 & 1984

GRAVE	SIZE of		CONSTRUCTION	ORIENTATION	DECEASED		GRAVE GOODS					NM n:os	
	grave-pit length cm	coffin/constr. width cm			decayed remains	sex	weapons	personal ornaments	dress	tools	others		coins
I/ 1983	275/85	210/45	coffin nails	SW-NE	bones shape	male	disc-pomm. sword	penann. brooch	fabrics buckle	scythe knife	wooden vessel	22078:1-44	
II/ 1983-4	230/70	170/50	hollowed trunk?	SW-NE	tooth enam.	female?			fabrics tiny fabrics	knife		22078:45-47 & 22631:1-11	
III/ 1983	80/50		?	SW-NE		child?							
IV/ 1983-4	250/70	210/35?	no coffin?	SW-NE	tooth enam. jaw, shape teeth enam.	male?						22631:12-18	
A/ 1984	275/75	255/50	hollowed trunk	SW-NE		male?	battle-axe M-type	necklace ?(braid)		knife (knives)	wooden trough? slag	22631:19-38	
B/ 1984	100/50		?	SW-NE		child?						22631:39-40	
C/ 1984	80/50	75/45?	coffin nails	SW-NE		child			spirals fabrics			22631:41-52, 319	
D/ 1984	330/80	225/55	coffin nails+?	SW-NE	bones	male	spearhd G- type	bead penann. brooch	spirals buckle	knife (knives)	pouch	1076-99 c. 1100	22631:53-136
E/ 1984	290/90	220/40	coffin 37 nails	SW-NE		male	2 spearhds. G-type		1 spiral star	knife	bridles?	1097- 1122	22631:137-194, 318, 322?
F ⁶ / 1984	260/140	210/50?	coffin nails+?	SW-NE	tooth enam.	female		7 beads	spirals fabrics	shears knife(s)	wood. casket?	(pendant 786-815)	22631:195- 317
F ⁿ / 1984		210/45?	coffin nails+?	SW-NE		male?			spirals	axe, flint whetstone			



Fig. 1. Grave E, bottom level with spearheads and nails, NE view.

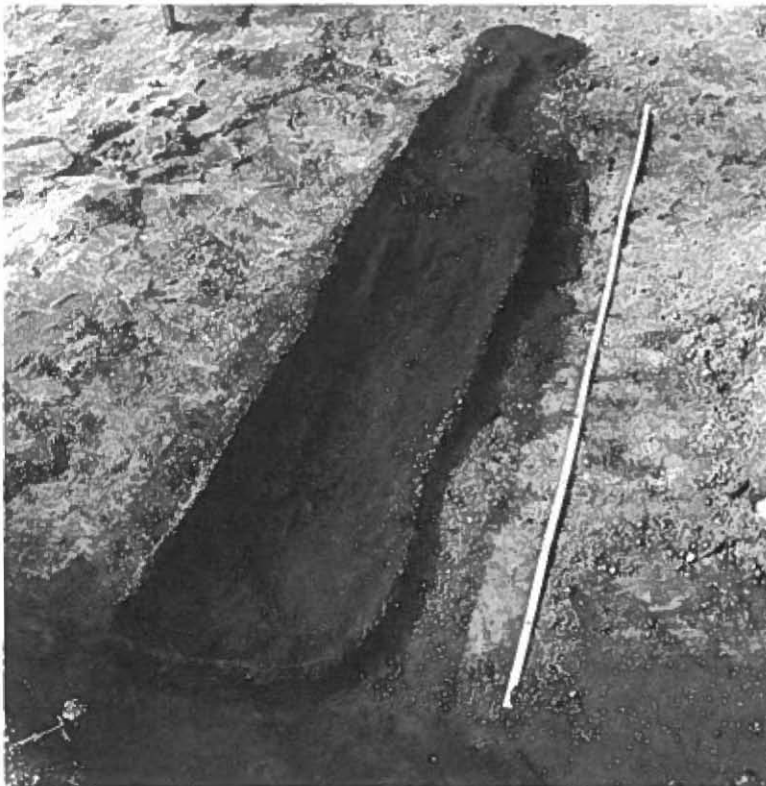


Fig. 2. Grave A, the hollowed tree-trunk with battle-axe, NE view.

22691:60 a–b; Leena Tomanterä, pers. comm.). However, the Merseburg coin of Bishop Albuin (1097–1112) lay in the mid-part of the adjoining grave E on the right-hand side of the deceased male, albeit without any remains of a purse (NM 22631:137). Of the two coins from the twin grave F the English penny of King Stephen (1135–1154) from Norwich was also located in the mid-part of the northern burial, apparently belonging to a man (NM 22631:196). The other one was a badly worn Arabic dirham twice perforated, a pendant already over three hundred years old at the time of the burial (NM 22631:195). It was not in the coffin, however, but in the grave-pit southeast of the foot-end of the woman's burial.

Only three of the graves contained weapons. In grave I a disc-pommel sword (NM 22078:2) dated to the Crusade Period at the earliest was found on the left side of the body (Kivikoski 1973, 1165). Two spearheads (Fig. 3, NM 22631:59, 22631:138–139) of Petersen's type G in graves D and E were almost identical in size and in their composition of decoration in silvered sockets in rune-stone style (type G1 and animal composition 1 in Lehtosalo-Hilander 1985, 7, 17–22). Only the figures in the upper part of the socket varied (cf. handles of silver-ornamented swords in Leppäaho 1964, Taf. 33). A close parallel with these rune-stone animals is the one depicted on the spear of Lieto Hulkkunanmäki, dated to around the middle of the 11th century (NM 9562:2, Kivikoski 1934, 193–200; Kivikoski 1971, 63). These spearheads are generally dated to the 11th century and are regarded Gotlandic in origin (Taavitsainen 1990, 188–189 and op. cit.). An undecorated smaller spear, a variant of type G as well, was also found in grave E (NM 22631:140, type G2 in Lehtosalo-Hilander 1985, 8, 14–15). A battle-axe from the grave A (Petersen's type M) with remains of a helve some 50 cm in length is dated to the 11th and 12th centuries (NM 22631:19, Kivikoski 1973, 874, 1192).

The woman's burial of the double grave (Fs) was the only one containing a larger number of different bronze spiral ornaments, obviously belonging to the decorations of an apron and mantle. There were various kinds of spiral stars in male graves Fs, D and E as well, obviously sewn on to woollen cloaks spread over the corpses. Even the probable child's burial (C) contained a number of spiral ornaments and textile fragments.

Two penannular silver brooches were found in men's graves I and D (Fig. 4, NM 22078:3, 22631:56). The larger one in the former grave



Fig. 3. Silverornamented spearheads (NM 22631:138 and 22631:59) from graves E and D.

had long rolled ends (Group 17 in Salmo 1956, 72–75; cf. Kivikoski 1973, 692), which had broken but had been mended by soldering, and was attached to a blue woollen mantle. The brooches with long ends are among the late variants of the type, which is broadly dated to between the late 10th and the 12th centuries. The small brooch at

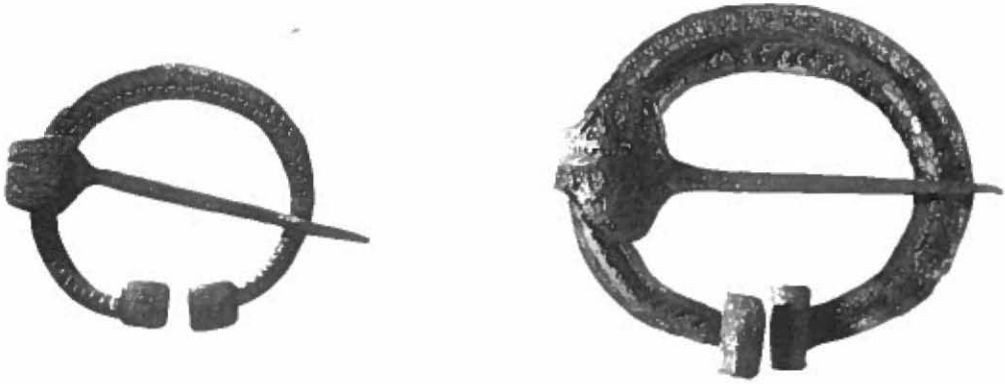


Fig. 4. Penannular brooches (NM 22631:56 and 22078:3) from graves D and I. 1:1

the neck of the deceased in grave D was of a type with flat section and end knobs. This late and apparently heterogenous type is mainly dated to the 12th and 13th centuries (Group 16 in Salmo

1956, 71; cf. Kivikoski 1973, 1033; Taavitsainen 1990, 207). The two bronze belt-buckles also found in these two graves (NM 22078:7, 22631:57) were of types with a double rim. The one in grave I, regarded as Gotlandic, is dated to the 11th and 12th centuries (Kivikoski 1973, 888, 1196–97). Also found was a simple strap-divider of the same fitting with mounts of the same style (NM 22078:9). The other small buckle with a decorated mount is dated to the same period (cf. Kivikoski 1973, 886, 1197).

The six glass beads of barrel shape found with a fragmentary undecorated clay bead around the apron hem in grave Fs were mostly white with yellow or green bands of decoration belts and one red band with black and white abstract designs (NM 22631:200–206). These seem to belong to a bead type rare in Finland (Helena Ranta, pers. comm.). They also differ from the more common type with floral decorations which was found in the woman's grave in 1962 and is dated to the 11th and 12th centuries (NM 15807:1–3,:7; a similar one was discovered as a stray find in 1983 apparently in this grave, NM 22078:166; Lehtosalo-Hilander 1982 II, 139). A gold-foil glass bead (NM 22631:58) found in the man's grave D was of the type found in the woman's grave in 1950, which is regarded as a type of the 11th century (Lehtosalo-Hilander 1982 II, 138; Riikonen 1990, 18–20).

The small plates (rivets) of bronze and silver with fibres of birch-bark in grave A (NM 22631:22–26) may have belonged to a braid or necklace resembling those found in men's graves at Tuukkala in Eastern Finland and on the Karelian Isthmus during the Crusade Period (Heikel 1889, 27–28; Schwindt 1893, 141; Lehtosalo-Hilander 1988, 206).



Fig. 5. Bronze mount with iron sleigh-bell (NM 22631:356) from the dwelling site. 1:1.

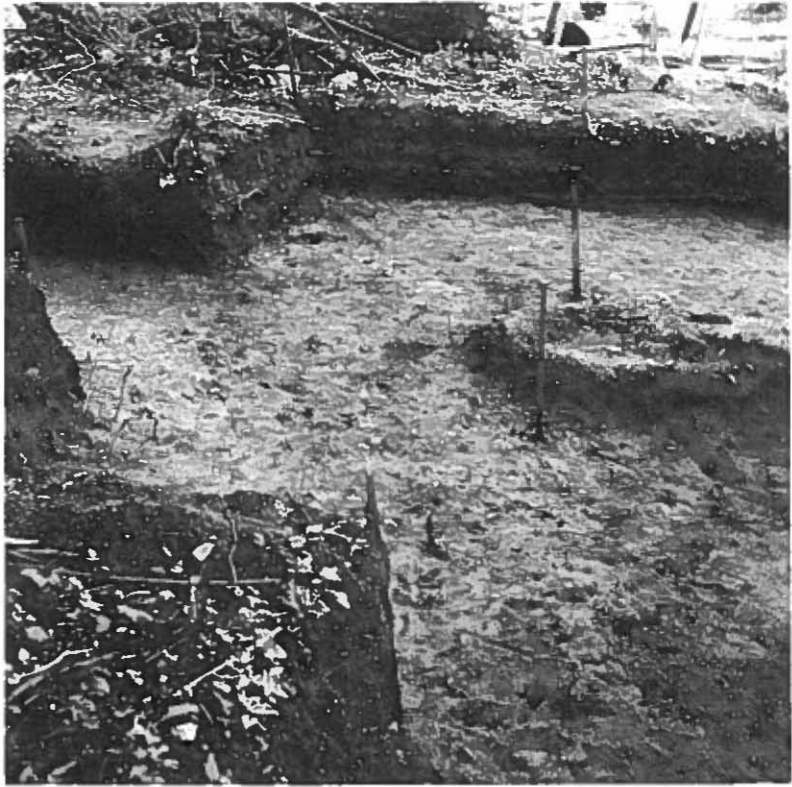


Fig. 6. The clay-pit and ploughing remains.

The two bearded shaft-hole axes (NM 22631:197–198) in grave F belong to types dated to the 11th and 12th centuries (Lehtosalo-Hilander 1982 II, 51–53). The smaller one was at the foot-end of the man's grave. The one with a wider blade was found against the southeastern wall of the grave-pit.

A number of remains of vessels must be mentioned. In the mid-part of grave A, were the badly decayed remains of what may have been a wooden trough (NM 22631:32; cf. Blomqvist & Mårtensson 1963, fig. 160). The others consisted of a bronze plate riveted to a vessel of birch at the foot end of grave I (NM 22078:14) and flat bronze plates with rivets possibly belonging to a wooden box or vessel of some kind at the foot end of grave Fs as well (NM 22631:209–210). No clay pots were placed in the graves but two potsherds were found.

REMAINS OF SETTLEMENT AND CULTIVATION

A thick cultural layer of discovered soil with clay and soot was encountered at a depth of 30 to 50 cm in an area of 44 m² excavated southwest of the cemetery (Map 2). The finds from this area can be dated to both the historic and prehistoric periods, and mainly consist of potsherds, burnt clay and iron artefacts such as nails and small bronze mounts and pieces of wire. A bronze ring with punched decoration (NM 22078:130) and a bronze-mount decorated in the shape of a Maltese cross with an iron sleigh-bell and remains of leather, possibly from horse gear were also found in at the lower levels (Fig. 5, NM 22631:356; Salmo 1952, 405–406, fig. 365; Lehtosalo-Hilander 1982 I, 64). This area may be interpreted as a dwelling site with related activities.

Within this area and only some 12 meters from the southernmost burials a roundish clay pit approx. 35x45 cm and 15 cm deep, with a bowl-shaped bottom, was found at a depth of c. 40 cm in discoloured soil containing soot and clay (Fig. 6). The pit and its sides were burnt red appar-

ently at a high temperature, the bottom of it to a thickness of 2.5 cm. On the edge there were impressions in burned clay of a pair of open rings thickening towards the ends and measuring approximately 10 cm in diameter. Beneath the clay was a dirt pit with charcoal, penetrating into the underlying layer of sand. The clay pit was interpreted as a primitive iron-making pit. The bottom, however, was solid with no canal for smelting products or a blasting system. About 2.5 kg of iron and clay slag was found in this area, but none in the pit itself.

The clay-pit at Kirkkomäki resembles a number of primitive iron-making pits excavated in Scandinavia. According to Thun (1967, 35–38), simple bowl-shaped pit-kilns made an even draught possible without a proper system of air-blasting. These were mainly used in smelting bog ore. About 3 kg of burnt clay was also found in the area. It may be the remains of a superstructure of some kind, possibly a cupola kiln or some other construction made to improve the draught. Some of the lumps of clay bear round impressions indicating blast inlet of some kind with an inner diameter of a couple of centimetres (cf. Thun 1967, 37 et op. cit.). There were, however, no indications of superstructures in direct contact with the pit itself. A possible post-hole with a stone lining was located right beside the pit and was possibly connected with the hypothetical superstructure. A number of dirt pits, two of which contained slag, charcoal and a burnt stone, were observed scattered around the pit. One of the radiocarbon samples taken from the layer corresponding to the pit was analysed and dated with greatest probability to the early 12th century, being contemporary with the cemetery (Hel-2110, 920 bp \pm 110, one Sigma ** minim. / maxim. of cal. age ranges AD 1010 – 1221, Stuiver & Pearson 1986).

In the bottom sand layer beneath both the clay-pit and the cultural layer narrow and shallow lines of dirt soil were observed (Map 2, Fig. 6). These were mainly in a SE-NW direction following the contours of the terrain, but also partially crossing. The lines were interpreted as crosswise ard-ploughing remains of a fossil field undoubtedly more ancient than the overlaying pit (cf. Gren 1991, 10–12). They were not observed to have extended to the area of the graveyard. These interpretations were supported by the results of the 1991 excavation (Riikonen 1991).

THE CHRONOLOGY OF THE SITE

According to the grave finds the cemetery of Kirkkomäki can be broadly dated to the 11th and 12th centuries. Only the woman's grave discovered in 1950 clearly belongs to a late Viking Period horizon (Sarvas 1972, 19–20). Since the cemetery was used for only a relatively short time and has been only partly excavated, there are few possibilities for constructing a relative chronology. A more precise relative chronology of the cemetery may be proposed partly with the aid of the coin finds. The terminus post quem of grave E is AD 1097 and the adjoining grave D is being dated to c. 1100 at the earliest. There is practically no gap between the minting of the two coins from the latter grave. In both of these graves almost identical spearheads were found. These adjoining graves may be regarded as practically of the same age. They also seem to indicate the first dating of the spearheads of type G to the 12th century with greatest probability (Sarvas 1972, 44–45; Taavitsainen 1990, 188–189 et op. cit.).

Grave F is possibly a generation later according to the coin, which has a *terminus post quem* of 1135. Because of the circumstances of the find, it was assumed that the burials in the double grave-pit were simultaneous. However, the male body on the north site was observed to have been laid approximately five centimetres deeper than that of the woman. This may point to a difference in the dating of the burials. The Arabic coin, being a worn-out pendant and found between the coffin and the wall of the grave-pit cannot be used to date the body on the south side

A comparison can be made with the cemetery of Taskula in Maaria, only some 1.5 km northwest of Kirkkomäki. The latest grave there (no. 5) has been dated with an English penny of Stephen (1135–1154), similar to that from Kirkkomäki. However, this grave also contained a much earlier German coin (Henry IV, 1056–1105, struck before 1084) indicating a minimum circulation time of more than 50 years for the latter coin (Sarvas 1972, 40, 52). In times of a greatly reduced coin import such as the late 11th and the 12th centuries, coins may have remained in circulation for considerable periods (Sarvas 1968, 1972, 10–14; cf. Thunmark-Nylén 1991, 169–170). A dating of the grave F at Kirkkomäki to later than the last possible year of minting (AD 1154) may thus be assumed. This also indicates a late use of various bronze spiral ornaments in clothing.

Judging from the dating of the woman's grave (discovered in 1950 and apparently located at the NW corner of the graveyard) to around the second quarter of the 11th century and the later graves close to the southeastern boundary, a general horizontal stratigraphy may be suggested, running NW-SE (cf. Modin & Damell 1987, 456). Regarding the two coin-dated graves D and E, laid side by side, a close simultaneity may be expected. If we assume an organic growth from northwest to southeast for the entire graveyard and take into account the *terminus post quem* dating (1135) of grave F, the latest burials were the one excavated by Hirviluoto in 1962 and weapon-grave I, probably dating to well after AD 1150. Such a late dating would be in no conflict with the finds of grave I and it is even in agreement with the woman's grave with coloured glass beads (cf. Lehtosalo-Hilander 1982 II, 139). The weapon grave of 1950 was probably approx. of the same age as graves D and E, i.e. from the early 12th century. Even various constructions observed in adjacent graves were in use practically simultaneously and no changes were observed in grave orientation within a time-scale that may exceed 150 years.

However, there is a possible direction of growth of the cemetery towards the southwest and the unexcavated slopes of the vicarage hill. There is unverified information on graves seen in profiles of the cable ditch in 1950 on the slope east of the vicarage (Hirviluoto 1963) and also of a quantity of Iron Age artefacts found 'somewhere at Kirkkomäki' (Salmo 1951). The latter may refer to an Early Iron Age cremation cemetery located somewhere on or near the hill (cf. Salo 1968, 124-126). In view of the growth of the cemetery, however, we must take into account the possibility of smaller, separate graveyards within the cemetery which were reserved for different estates or families and in time expanded towards each other.

A stray find of a late German coin from the end of the 12th century (NM 19272:262, AD 1184-1192; Bergström 1974, 7) was found just to the east of the graves in the 1973 excavation. Even this may derive from a late destroyed grave or it may be an indication of other early medieval activities at the site. Considering, however, only the closed finds, Kirkkomäki is among the few cemeteries in Southwestern Finland with coin-dates concentrated in the 12th C (cf. Sarvas 1968, 1971 & 1972).

Regarding the above sketched growth of the cemetery, the existence of the poorly furnished graves II and IV among the well-furnished ones

may be considered an indication rather of social and economic meaning than a chronological one. It may also be regarded as a reflection of Christian beliefs among an otherwise heathen population around the time of the possible First Crusade to Finland traditionally dated to the 1150s (on this cf., however, Suvanto 1987, 149-160).

Thunmark-Nylén has recently (1991, 141-202) dealt with grave-finds from Gotland in an attempt to revise the chronology of the transition between the Viking Period and the Middle Ages in Sweden. She has demonstrated that finds and heathen burial customs traditionally dated to the Viking period prior to 1100, are often from the 12th century and even as late as c. 1200. According to the revised dating of double combs, among other material, a belt-buckle with a double rim of much the same type as that in grave I is now dated to as late as c. 1200 (Thunmark-Nylén 1991, fig. 11, 167-8). These conclusions may also have consequences for the chronology of the transition period in Finland.

In 1971 Sarvas already dealt with the question of late furnished inhumation graves and revised the dating of the concluding Crusade Period in Finland (Sarvas 1971, 51-63). In a number of cemeteries (Vesilahti Rukoushuone, Halikko Rikala and Nousiainen Myllymäki) furnished graves have been coin-dated to the late or closing 12th century at the earliest and certain artifacts such as penannular brooches and glass beads were in use at least at the end of the 1100s or even in the early 1200s. This brooch type, as the leading form of the Crusade Period, was gradually replaced by ring brooches apparently during the 13th century, as an indication of the Hanseatic period (Sarvas 1971, 59-61), or already in the late 12th century (Taavitsainen 1990, 84, 208-209). Both of these brooch types are represented in the cemeteries of Nousiainen Myllymäki and Hollola Kirkkailanmäki; the latter only dates back to the 13th and 14th centuries. Even excavations in a number of medieval churches have brought to light both penannular and ring brooches (in the churches of Karkku, Tyrvää, Laitila, and Lempäälä; see Sarvas 1971, 62; Tapio 1966, 57-59; Hiekkänen 1986, 95-96, 99-100).

Even the single 14-C dating of the settlement layer connected with the smelting pit at Kirkkomäki indicates simultaneity with the cemetery, most probably in the Crusade Period in the early 12th century. The fossil field under the settlement layer in this area must be of earlier date,

most probably the 11th century at the latest. Cultivation was possibly simultaneous with the early use of the northwestern part (Viking Period) of the inhumation cemetery or with the nearby cremation field cemetery. Cultivation in there ceased with the establishment or expansion of the dwelling site and the cemetery during the Crusade period. The fossil field layer was conserved because no later ploughing extended to this area.

KIRKKOMÄKI AND ITS VICINITY DURING THE TRANSITION PERIOD

In the valley of the Aurajoki River there are a number of other inhumation cemeteries, of which the nearest and most important ones are Taskula in Maaria as referred above, and Ristimäki II in Kaarina. They are both only a couple of kilometres from Kirkkomäki, and contain furnished graves dated to the late Crusade Period. At both sites there is an earlier cremation cemetery nearby. These two cemeteries, however, lack a church in their immediate vicinity (Kivikoski 1971, 54–57; Taskula being church property, however). Ecclesiastical tradition is connected with the large cemeteries of Ihala in Raisio and Ristinpelto in Lieto containing both poorly furnished and unfurnished burials oriented W-E (Oja 1960, 47; Kivikoski 1971, 64, 93, 99). Even because of its name, Ristinpelto (literally 'Cross Field' or 'Field of the Cross') is commonly assumed to have been a Christian cemetery (cf. Ristimäki = 'Cross Hill') with the remains of an ecclesiastical building. These two cemeteries did not come into use until the 12th century (Cleve 1952, 159–167; Kivikoski 1971, 99).

The moat-ringed site of the early Christian church and see of Koroinen, most probably founded in AD 1229 at the confluence of the Aurajoki and Vähäjoki rivers, is situated only some 400 metres northwest of Kirkkomäki (Fig. 7). A silver-ornamented sword and spearhead were discovered nearby, possibly indicating an earlier cemetery at the site. Even finds interpreted as a settlement preceding the moving of the see to Koroinen have been found (Gardberg 1971, 149–152, 157–159; Kivikoski 1971, 64; cf., however, Salo 1979, 23). According to coin finds, the most intensive period of occupation at Koroinen was from the 1210/20s to the 1260/70s (Koivunen 1979, 7–71; Sarvas 1979, 313–323). After the second relocation of the see downstre-

am to Turku in AD 1286 (Gardberg 1971, 151, 171) or AD 1300 (Gallén 1978, 312–324), the church may have been a parish church (Koivunen 1979), possibly used by the nearby parishes of Rântämäki (Maaria) and Nummi (Kaarina). However, a church seems to have been erected already after AD 1250 at the site of the present Cathedral of Turku possibly by or for tradesmen and merchants (Gardberg 1979, 39–51; cf. Taavitsainen 1989, 84), or as a mission church (Kostet 1984 100–107, 111–115, 117).

The transition period in the Aurajoki River valley has mainly been discussed by scholars from an historical perspective. Regarding the age of settlement in Kaarina, it has been suggested that the oldest villages were located upstream of the Halistenkoski rapids, a threshold caused by land uplift which had already formed at the river estuary in the early Viking Period (cf. Gardberg 1971, 126–140 et op. cit.). There is no definite knowledge of a main trading centre preceding the present city of Turku, which was established in the late 1200s, although the earlier dwelling sites or villages of Sauvala in Lieto and Ristimäki (Kuralla) in Nummi have been suggested on archaeological grounds (Oja 1946, 276–277), as well as Koroinen and Nummi on the lower course downstream of the rapids as somewhat later more hypothetical sites (Gardberg 1971, 140). Colonization downstream during the 1100s and 1200s has also been suggested (Oja 1946, 152–153). Even the parish of Nummi may have been established already in the late 12th century as a result of the division of the ancient parish of Lieto. The village of the same name with the Kirkkomäki cemetery must be considered among the oldest (Oja 1946, 44, 278–279). Kivikoski (1971, 61) has suggested that the cemetery of Taskula with some 20 excavated graves was used by a single estate. Kirkkomäki seems to have been larger, with more than the 30 graves excavated by 1991 (Riikonen 1991, 14). It was probably the cemetery of the village of Nummi.

Rinne and Oja have suggested that the church of Nummi was founded in the late 1200s in connection with moving the see to Turku (Rinne 1941, 85–86; Oja 1946, 166–167, 173, 282, cf. even Kostet 1984 104, 107, 114). The first historical document of the church of Nummi, dedicated to St. Catherine of Alexandria, is only from AD 1309, but the dedication to this saint may have occurred earlier in the 1200s. The sacristy, dated to the early 14th century, is the oldest part of the present church building of stone (Riska



Fig. 7. An early-20th-century view of the excavations at Koroinen with Kaarina Kirkkomäki in the background.

1964, 19). An archaeological excavation in the sacristy was carried out in 1983 in connection with the restoration of the church. This, however, yielded coin finds dating to the early 15th century at the earliest and nothing there was observed to be of earlier date (Markus Hiekkänen, pers. comm.). There is unverified information of inhumations with finds of spiked spurs from around AD 1300 to the west of the present churchyard (Rinne 1941, 91; Riska 1964, 9,11,18). This is a possible site of the first wooden church of Nummi already in the late 12th century (Gardberg 1971, 137). A stray find from the Nummi schoolyard of a tiny cross of local work unsuccessfully cast in tin probably originated from a sand-pit to the south of the church of Kaarina. Kivikoski (1963, 13–18) has dated this pendant or pilgrimage cross to the Crusade Period or the early Middle Ages.

The congregational or church parish of Nummi may have been a Christianized civil parish of heathen times. It can be suggested that around the turn of the 12th and 13th centuries the Iron Age inhumation cemetery was abandoned, and a Christian cemetery was established and a wooden church was built somewhere closer to the building of the present church. At an early stage this may have been a private church (cf. Taavitsainen 1989, 84–85 et op. cit.). This may have been replaced around the turn of 13th and 14th centuries by the single parish church of Nummi, dedicated to St. Catherine and referred to in the earliest documents. However, there is so far no verification of these.

According to the suggested dating of the cemetery of Kirkkomäki, the latest of its kind in Kaarina, the practice of burying the dead in furnished graves continued into the period generally described as Christian, i.e. the second half of the 12th century. The continued use of the site from the Late Iron Age to the Middle Ages has become even more obvious with the narrowing gap between the last finds of heathen tradition and the first historical documents. Establishing the church at the site of the central village that was to give the name of Nummi to the whole parish Nummi was a most natural development. It is a more plausible location of the first church of Nummi with local traditions in prehistory as opposed to the lack of those at the site of the Cathedral of Turku. There have so far been no finds of ring brooches, the leading form of the Hanseatic period from about AD 1200 onwards. However, at least during the early 13th century when the see was moved to nearby Koroinen, the position of the Church may be considered strong enough to have brought about the established Christian custom of burying the dead in this central part of Finland.

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ABBREVIATIONS

- FFT = Finska Fornminnesföreningens Tidskrift
FM = Finskt Museum
HTF = Historisk Tidskrift för Finland
SM = Suomen Museo
SMYA = Suomen Muinaismuistoyhdistyksen Aikakauskirja