

The Ring Fort Gråborg on Öland, Sweden

A New Interpretation of Its Secondary So-Called Inner and Outer Walls

BY GUNILLA MALM

Abstract

This paper concerns the secondary so-called inner and outer walls at the ancient ring fort of Gråborg on Öland, Sweden. An ocular building-archaeological examination 1997–2002 led to the conclusion that these walls have a building technique and construction that gives reason to re-evaluate earlier interpretations regarding their age, function and rise. I argue that these secondarily built walls might represent the work of farmers or craftsmen clearing the area inside and surrounding the ring fort in order to facilitate farming after the prehistoric and medieval building phases. This might also be the reason we do not have any crop marks inside or outside Gråborg today.

The ocular examination 1997–2002 gave a chance to study walls, rows of stones, single stones, drained areas etc. linked to different building phases of Gråborg, which will be commented upon, too.

Introduction

Öland is the second largest island of Sweden. It is located in the Baltic close to the south-east coast of Sweden. On Öland there are remains of 15 to 20 ancient ring forts, quite evenly distributed on the island. The largest is Gråborg in the midland forest with an interior of about 34,000 m². Artefacts as well as construction and building technique tell us that the original surrounding wall of this ring fort – called the high wall – like most ancient ring forts on the island, was built in the Early Iron Age or the Migration Period (Stenberger 1933, 228).

Studies of the ring forts on Öland have

suggested the interpretation that they were planned for and built by the elite of society – i.e., the protectors of the Ölandic ancient ring forts came from the upper class. Studies also say that it is obvious there is a correspondence between the size of the forts and the size of the villages and farms to which each ring fort is connected. For instance Gråborg, the largest ring fort on Öland, is located on the largest common land in the wealthiest area of the island and is surrounded by the largest villages or farms with the largest and most numerous buildings. These facts indicate that the islander with most power on Öland built



Fig. 1. The western part of Gråborg from the inside. Beyond the wall to the right the ruin of St Knut. Beyond the wall to the left the village of Borg. Photo by G. Malm 1997-2002.

and controlled Gråborg in the Early Iron Age or the Migration Period (Fallgren 2008, 119).

Some 100 metres north-west of Gråborg we have the medieval chapel ruin of St Knut. Just west of St Knut are the buildings of the village of Borg (fig. 1). We do not know the age of this village. Gråborg and St Knut are located on the land of the village. Since the mid 20th century Borg and its ancient remains, Gråborg and St Knut, have been the property of the Royal Academy of Letters, History and Antiquities, i.e. Kungliga Vitterhets, Historie och Antikvitets Akademien or simply Kungliga Vitterhetsakademien (Kvarning 2008, 9)

When in charge of the Swedish Historical Museum, Stockholm, Dr Ulf-Erik Hagberg was the secretary of Kungliga Vitterhetsakademien. He by then initiated minor archaeological fieldwork at Borg, Gråborg and St Knut. The investigation included an ocular examination of walls by a buildings archaeologist. The work took place two months each year between 1997 and

2002. By then it was some 80 years since field research of that kind had been done at the monuments (Sturesson 2008, 33).

One text about this research was published during the ongoing fieldwork (Malm 2001). Reports have been handed over to Vitterhetsakademien (Malm 2003a; 2003b; 2003c). One text for publication in the edited volume about Gråborg (Tegnér 2008) has been presented to the Academy (Malm 2008).

Aim

After centuries of cultivation there are no crop marks inside Gråborg or in its close surroundings today. In 2007 the inside and surroundings of Gråborg were scanned with magnetometer. Only a few signs of buildings were seen, a result that corresponds to what can be seen above ground today (Danielsson 2007, 17). Concerning remains of buildings, the interior of Gråborg does not look like, for

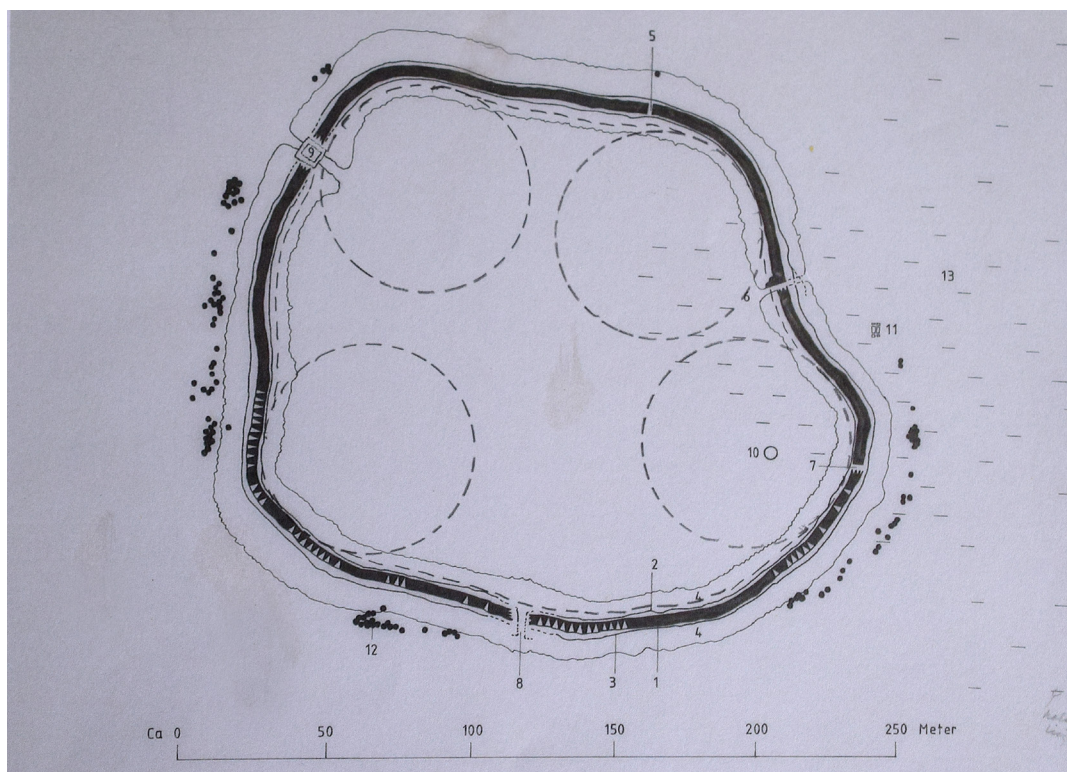


Fig. 2. Gråborg. If you want an irregular squared shape like Gråborg you make four circles close to each other and connect them as in the figure. 1/ The high wall. 2-3/ The inner and outer walls. 4/ Heap or row of stones inside and outside the ring wall, 5/ North origin gate way. 6/ East origin gate way. 7/ Signs of regularity in the high wall (part of a gate way, a window or perhaps remains of an origin parapet with pinnacles?) 8/ South medieval gate way. 9/ North west medieval gate way. 10-11/ Older kiln and well. 12/ Stones of immense sizes. 13/ Wet land. Drawing by G. Malm 2017.

instance, the inside of Ismantorp, Eketorp, Sandby or Triberga ring forts where large numbers of stone buildings can be seen above ground, or have been found in archaeological excavations (Näsman 1976, 48, fig. 25; Steinborg 2003:2, 8 ff.; Wegraeus 1976, 37, figs. 9, 10).

In view of the large number of Early Iron Age and medieval artefacts found in Gråborg, a lot of people must once have lived there, and lot of activities must have taken place inside the ring fort (Brorsson & Lindahl 2008, 75 ff.; Hansson & Bergström 2008, 59 ff.; Jonsson 2008, 81 ff.; Näsman 2008, 109;

Palm 2008, 89; Stenberger 1933, 228; Trotzig 2008, 113). Therefore, the aim of the 1997–2002 fieldwork mainly was to find layers with artefacts and building remains in situ, i.e. layers and remains untouched by cultivation.

The surrounding wall of Gråborg has three parts: a *high wall* (i.e., the oldest or original surrounding wall) built in the Early Iron Age/Migration Period, and an *inner* and *outer wall* secondarily built on either side of the high wall (fig. 2). The main aim of the ocular archaeological examination in 1997–2002 was to find an answer to the question *why* the secondary walls were built.

The aim of this paper is an attempt try to find out and discuss who the building protectors and building craftsmen of the secondary built walls were and what building workshop they belonged to, or did not belong to. Discussions like that are rare and can shed new light to the building history of Gråborg. The ocular examination of Gråborg gave an opportunity for a broader study of the building remains, and therefore I will also present some thoughts about the stone walls, rows of stones, single standing stones of immense size and why the choice was made to build the ring fort partly on wetland.

The four building phases of Gråborg

With different functions, Gråborg has been used continuously since it was built in prehistoric times. Maps, research by archaeologists and buildings archaeologists as well as written sources indicate four building phases (Malm 2019, 158 etc). The original construction of the high wall, built in the middle of the Iron Age/Migration Period, shows that fortification was one of the reasons for building the ring fort, together with the need for a local meeting place to discuss common matters of administration as well as of an economic, judicial, fortificational and ritual/ceremonial kind (Näsman 1997, 146; Fallgren 2008, 119).

The next building phase is in the Middle Ages. Judging by artefacts, the peak of this phase dates to 1175–1245/50 (Brorsson & Lindahl 2008, 75 ff.; Jonsson 2008, 83 ff.). The function of the fort in this time is unclear. Trade and military use has been suggested. Perhaps these two activities took place at the same time (Axelsson 1996, 175 f. and cited literature; Blomkvist 1976, 63 ff., 77 ff.; 1979, 197; 2008, 16; Borg 2000, 17 f.; Hermansson 2008, 137; Näsman 1997, 154;

Stenberger 1933, 228; Trotzig 2008, 115 ff.; Wallin 1975, 30 ff.).

The third phase is a phase of cultivation. Historical maps, archaeological, building-archaeological and written sources date this activity from late medieval times or the middle of the 16th century up to the present day (Malm 2019, 158; Sallnäs 2008, 23 and cited literature). The fourth phase of Gråborg is the use of it today as pasture land and a place for recreation and studies.

Historical account

In a will dated April 1371 Bothild Benesdotter of Broxvik on Öland gives everything she owns in Borg and Bettorp on Öland to the Vadstena Nunnery. From 1371 to the middle of the 16th century the Nunnery had properties in Borg. In the middle of the 16th century the Nunnery and St Knut were confiscated by the Crown. The decline of the two monuments started and gradually they became ruins. Maps of Gråborg from the 17th to the 19th centuries tell us that the area inside the ring fort was partly under cultivation, but this area gradually changed. (Sallnäs 2008, 23, 30 f. figs. 1–5, cited literature). No map shows cultivated land close to the original east gate of the high wall, an area that in prehistoric times was wetland.

Description of the ancient ring fort Gråborg as it is today

As said, the surrounding ring wall of Gråborg has three parts: a *high wall* and an *inner and outer wall* built against each side of the high wall. Each side of the high wall – i.e. the original surrounding wall – is covered by the inner and outer walls. Where they are partly demolished, the secondary walls make the high wall visible, which enables examination.



Fig. 3. The inside of the eastern original gate way of Gråborg during a rainy season of today. Photo by G. Malm 1997-2002.

It seems as if the outer wall completely surrounds the high wall, while the inner wall seems to be missing in the eastern part of the ring fort. The building material of the three walls is mostly limestone but crystalline bedrock (“grey stone”) also occurs. The stones are taken from the ground. Cut stones are rarely or never seen.¹

Like many other ring forts on Öland, Gråborg was partly built on wetland. In prehistoric times wetland covered a larger area than today, but later extensive drainage has changed the landscape (Stenberger 1933, 228; Hylander 1994, 15 f.). The eastern part of Gråborg, where we have an original gateway, most probably was deliberately built on the wetland (fig. 2:6, 13). We have similarities for instance in Eketorp and Triberga ring forts on Öland (Edgren 2000:2, 21; Stein-Borg 2003:2, 3, 29 f.). In rainy seasons, the water level still rises inside and outside the east of Gråborg as a mirror of the former range of the wetland (fig. 3).

Building Gråborg on wetland meant that there was a water supply close to the humans and cattle in the fort. I argue that the construction of ring forts on Öland on wetland also must

be understood in the context of an ancient society that valued water. I am referring here to the sacrifices or cult ceremonies that took place in the wetland of Skedemosse and at the water hole just outside the ring fort of Eketorp, both contemporary with the prehistoric phase of Gråborg (Edgren 2000:2, 21; Hagberg 1967). However, we do not know of any sacrifices or cult ceremonies at Gråborg.

Water was provided from the beginning, thanks to the wetland. But inside and outside Gråborg we also have *remains or signs of springs or wells*. We have just one outside the east gateway and one just inside the surrounding wall in the east (fig. 2:10–11). Variations of the grass inside the surrounding wall might reflect more wells or springs. No well or spring is archaeologically excavated, so we do not know their ages.

The top of the high wall – the original surrounding wall – has remains of an *original parapet with pinnacles* in the southern half of Gråborg. The arrangement was built during the prehistoric building phase, just like the high wall as a whole. They have nothing to do with the inner and outer walls (Edgren & Herschend 1987, 37). The top of the high



Fig. 4. Gråborg. The medieval north western gate way from the outside. Photo by G. Malm 1997-2002.

wall in other directions is demolished, so we do not know its original height or if the northern and eastern parts also once had a military design.

In the high wall there are today *remains of four gateways*, two original (maybe three) from the prehistoric building period and two built in the medieval period. The original gateways are in the north and the east part of the high wall (fig. 2:5–6, perhaps also 2:7). This means that the eastern gateway was built on wetland (fig. 2:6, 13). This gateway is demolished today.

Building the secondary inner and outer walls stopped passage through the prehistoric gateways. At these gateways the secondary walls were later demolished because of drainage or in order to make thoroughfare possible again. The width (about one metre) and building technique of the prehistoric gateways seem to be of the same kind as the gateways of Eketorp-II and Ismantorp – a width and technique different from the medieval gateways in Gråborg.

The two medieval gateways of Gråborg are located in the north-west and south (fig.2: 8–9). We do not know whether they were a rebuilding of prehistoric gateways. The north-

west gateway was built using mortar and quite large limestone slabs in the technique that was current in the Middle Ages (fig. 4). It has a barrel vault. This gateway once had at least one more storey above the vault. According to old drawings, that storey had openings going to the inside and outside of the fort (Ahlqvist 1922–27, 267; Broström 2008, 187, fig. 4). We do not know today whether the openings were windows or doors but through them it was possible to keep an eye on activities going on inside and outside Gråborg.

The south gateway is almost totally demolished today. There are building details in situ, however, showing it once had a vault and that it was built with mortar. We do not know, however, whether this gateway also had a storey above the vault.

There are no clear joints revealing the difference in age between the medieval gateways and the outer and inner walls. According to my interpretation of the joints in the walls, the medieval gateways are older than the outer and inner walls. These gateways were built to meet a new need during the medieval building phase of Gråborg. They are much wider than the older, narrow prehistoric gateways.



Fig. 5. Gråborg. Wall or row of spread stones south east of Gråborg. Note the stones of large size and the slight depression in the ground between Gråborg's secondary wall and this wall or row. Photo by G. Malm 1997-2002.

Outside the south-west side of the surrounding walls, some spread *single stones of immense size* can be found (fig. 2:12). Single stones of this size are also found outside the Öland ring forts of Triberga, Sandby and Ismantorp. Here they are properly placed, making some kind of outer arrangement. These stones are much larger than the stones of the surrounding walls and the stone buildings inside these ring forts. The Sandby and Ismantorp ring forts do not have any medieval building phase. These stone at Sandby and Ismantorp, as well as the similar types of stones of Triberga and Gråborg, must belong to the prehistoric building phase in the Iron Age. They might have had a military function (note 2).

At Gråborg we find these large stones outside the south side where the high wall has the remains of an original parapet and pinnacles at the top. At least the south side of

Gråborg had strong military fortifications in prehistoric times. The north and east part of the top of the high wall is demolished today, making it impossible to tell whether a parapet also existed here.

On the south-east side of Gråborg, some ten metres outside the surrounding ring wall, we have *an outer row of spread stones*. One or two stones of immense size are mixed in this row (fig. 5). There is also a similar outer stone row outside the ring wall in the north-west. Here the stones are more scattered, however. We do not know whether these rows of stones once belonged to one and the same outer stone wall, as can be seen for instance at Triberga and Eketorp ring forts and on old drawings of for instance Eketorp and Gråborg ring forts (Wegraeus 1976, 34, fig. 4; Näsman 1976, 45, fig. 22; Weber 1976, 81, fig. 66, 153. fig. 199 p).



Fig. 6. Gråborg. The inside of the ring wall (or the high wall) with the inner secondary wall marked with a black line. The wall has been made free from the heap of fallen stones during the ongoing archaeological excavation. Photo by G. Malm 1997-2002.



Fig. 7. Gråborg . The secondary inner wall leaning against the stepped inner side of the high wall. Beyond you see the heap or row of stones against the inside of the wall. Photo by G. Malm 1997-2002.

There is a *slight depression* in the ground between the surrounding ring wall of Gråborg and the outer row of spread stones in the south-east (fig. 5). The depression is dry today but was most probably filled with wetland water when Gråborg was built. Just outside the north-west gateway some large limestone flags cover a trench with water. We do not know whether the slight depression in the south-east and the trench outside the gateway in the north-west once were connected as a moat. New archaeological research work might resolve this question.

A row or heap of stones of different sizes runs close to each side of the surrounding ring wall (fig. 2:4). These stones are partly from the collapsing ring wall, partly from times when the inside and outside of Gråborg was cultivated and stones found in the earth were thrown away (against the wall).

Cultivation for centuries has left a *massive*

stone wall around and outside Gråborg. Inside and outside Gråborg we also have *draining ditches* as a reminder of the cultivation phase when wetland water was undesirable inside the ring fort.

Finally, maybe it is a curiosity but it should be noted that Gråborg has *good acoustic properties* – at least today when there are no buildings inside the fort. This raises the question whether the good acoustic properties are a mere chance or if the builders had the skill or knowledge to build structures that included good acoustic properties. It also leads to the question whether good acoustic properties were involved in the original function of Gråborg. Were loud voices or sound part of cult ceremonies? So far, no traces of cult or ceremonies have been found in Gråborg – or was the spring just outside the east gateway of Gråborg (fig. 2:11) used on ceremonial occasions like the waterhole just east of Eketorp (Edgren 2000, 21 ff.)?

The high wall

As we have seen, the high wall of Gråborg is the original surrounding wall. We do not know whether it was built on older remains. It is the largest ring fort on Öland and encircles an irregular, almost square area, covering roughly 34,000 m². The smaller ring forts of Öland have almost circular forms, and therefore the irregular form of Gråborg raises questions. I would argue that you will get a regular circle if you fasten a rope to a pole driven down into the ground where you intend to have the centre of the fort. Holding the other end of the rope and with the rope stretched, you go all the way round and get a perfect circle. If you want an irregular square shape like Gråborg, you make four circles close to each other and connect them as in figure 2.

The high wall has a height of 4–6 metres and a breadth of 9–11 metres at the base. It gets narrower at the top (Stenberger 1933, 228). Mortar was not used. The wall was built

with a base consisting of two or three courses with a height of some 75 cm. The stones of the base seem to be slightly larger than the stones in the wall above. The courses of the base have a vertical profile. From the base to the top of the wall, the inside courses are gradually stepped. The outside of the high wall is not stepped and rather steep. The lowest of the stepped courses on the inside is retracted 0.1–0.2 m, giving a ledge between the base and the stepped wall above (figs. 6, 7, 8). We also seem to have a similar base and ledge at Eketorp-II and Ismantorp ring fort on Öland (Weber 1976a, 79 ff.). Mostly the stones of the high wall are stacked so that the joint between two stones lies on a joint in the overlying and underlying courses. It is reminiscent of the building technique of the secondary inner and outer walls, but there are no exact similarities (fig 6, 9, 10).

The high wall has no traces of different building phases. Building material and technique seem uniform, indicating that a single organizing power was in charge of planning and building it.

The inner and outer walls

The secondary inner and outer walls of the surrounding wall of Gråborg lean against the sides of the high wall from the ledge to the top (fig. 6, 7–8). These walls are seldom as tall as the high wall. Mortar was used only to build the outer wall. We see the mortar in the joints between the high and the outer walls, not in the joints between each stone as is the usual technique with mortar. The reason is the steep inclination of the outer side of the high wall. The use of mortar here was necessary as a binder to avoid collapse. The inside of the high wall protrudes more and therefore a binder was not necessary (Stenberger 1933, 233).

The examination 1997–2002 made clear that at their base on the ledges the inner and outer walls are 1–2 stones in breadth and at the top 2–4 stones in breadth (fig. 7, 8). In other

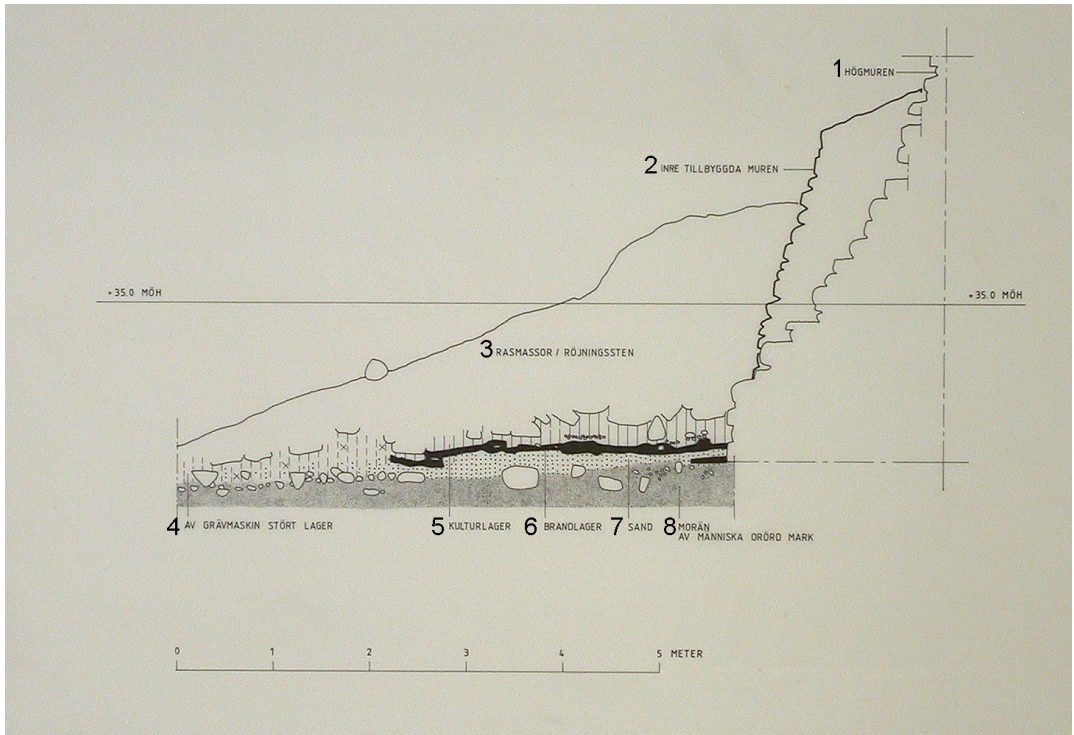


Fig. 8. Gråborg. Drawn sections of walls and layers. 1/ the high wall, 2/ the inner wall, 3/ heap of fallen down stones, 4/layer disturbed of excavator, 5/ medieval cultural layer, 6/ layer of a fire dated to the end of the Iron Age/Migration Period building phase, 7/sand, 8/ layer never touched by humans. Measuring and drawing by I. Hansson, V. Palm, E. Sturesson, G. Malm 1997-2002.

words the inner and outer walls are broader at the top than at the base and sometimes the tops lean outwards. All in all, these walls seem very unstable.

Former interpretations with critical comments

The oldest drawing of Gråborg we know of was made by Jonas Haquini Rhezelius in 1634. The irregular ring wall is drawn with a curving form that has no support in reality. This wall is surrounded by a regularly formed outer wall, which Rhezelius calls “Förborgen or Skantzturen”, i.e. a military arrangement. At the beginning of the 19th century the parish priest Abraham Ahlqvist was travelling

on Öland, noting carefully what he saw and heard. Among other things he saw that Gråborg was surrounded by a moat. According to evidence from Ahlqvist and Rhezelius, Gråborg had military functions (Ahlqvist 1822–27, II, 270; Rhezelius, J. H. 1634 in Weber 1976, 153, fig. 200).

Ahlqvist was told that seven kings once ruled Öland. Each had a castle or a ring fort. The king of Gråborg was named Bugislef. He waged warfare against the other kings, killed them and then ruled the whole island alone. Today scholars discuss this story and the existence of a medieval Bugislef (Blomkvist 2008, 161; Borg 1979, 196 ff.; Borg 2000, 17 ff.; Edgren & Herschend 1992:1, 14 f.; Hermansson 2008, 137; Hansson 2008, 157; Stenberger 1933, 232, note 2).

Further, Stenberger argues that the wetland to the south-east of Gråborg gave excellent protection against advancing enemies from this direction, in both prehistoric and medieval times. To the south-east, the high wall is at its lowest – according to him a consciously chosen height. The wall does not need to be higher since the wetland offers enough protection against hostile attacks (Stenberger 1933, 228).

Stenberger argues that the slight depression in the ground between the surrounding wall and the outer row of spread stones in the south-east is the remains of an old moat used in both prehistoric and medieval times. According to him, the depression had a military purpose. Also according to Stenberger, the lower height of the high wall in the south-east is explained by the existence of the outside moat, and the wall was deliberately made weaker at this part of the fort. He also argues that the height of the high wall was raised for military reasons during the Middle Ages (Stenberger 1933, 288).

Only fieldwork might answer questions concerning the choice of wetland as well as the slight depression between the surrounding wall and the outer row of spread stones in the east and its original planned function.

Stenberger dates the high wall of Gråborg to prehistoric times due to its construction and building technique, as well as the artefacts found inside or outside Gråborg. He dates the secondary inner and outer walls to the Middle Ages because of the moat between the surrounding wall and the outer wall – a moat of both prehistoric and medieval type as he says – and because of the mortar between the high wall and the outer wall as well as the almost similar building technique of the inner and outer walls (Stenberger 1933, 232).

The ocular examination in 1992–2002 did not give any observations of joints caused by changes to the high wall. One can see how stones have fallen down as a result of age and poor support. But we cannot say anything

about the former height of the wall or its connection to a moat. According to older drawings the north-west gateway of Gråborg had a second floor. Stenberger argues that this floor was a tower built for military reasons (Stenberger 1933, 230 f.). I would argue this “tower” might have been used as a tollhouse, a place for administration or as a military tower, all according to the function of Gråborg in medieval times.

A new interpretation

When and for what reason were the inner and outer walls of the surrounding wall of Gråborg built?

Mortar was used when building the outer wall against the rather steep outer side of the high wall. But no mortar can be seen in the joints between the stones. Mortar might disappear because of bad weather. However, there is original mortar in the joints between the stones in the medieval north-east gateway of Gråborg, and in the walls of the medieval chapel ruin of St Knut near Gråborg. They are both exposed to the same weather as the outer wall. This indicates that the reason for the absence of mortar in the joints between the stones in the outer wall of Gråborg must be something other than just the weather.

Regarding the secondary built inner and outer walls the stones sometimes are stacked. Once stacked stones seem to rest on demolished built material, i.e. the wall has collapsed while building it, but the building workers have continued stacking stones (fig. 9). Exceptions to this building technique can be found in one small part of the outer wall where the stones seem to have been laid with an ordinary medieval building technique, although without mortar.

At regular intervals, there are vertical joints going from the base to the top of the inner and outer walls (fig. 9-10). At least in the



Fig. 9. Gråborg: Part of the secondary inner wall. Note the vertical joints, the building technique and the part of the wall where stones are disturbed (or have fallen down?). Photo by G.Malm 1997-2002.

inner wall the part between two joints seems to have been stacked to its full height before the adjoining part was built. This manner of building is done clockwise. One cannot see vertical joints like these in the part of the outer wall, which was built using an ordinary medieval building technique. In other words, the building technique of the inner and outer walls is similar but it does not follow medieval or later norms of building.

The inner and outer walls – age, purpose, building protectors and building workshops

The building technique of the inner and outer walls is so rare that we must ascribe the construction of these walls to one and the same building workshop, one and the same time and most probably one and the same reason for building them. Furthermore, the

inner and outer walls are hard to date. They are not medieval but have medieval or modern elements.

Further on, the base of the inner and outer walls on the ledge in the high wall some 75 cm above ground means these walls and the layers of the ground are not stratigraphically linked to each other. This circumstances make a stratigraphic linkage between the walls and the layers in the ground impossible – i.e., the walls cannot be archaeologically dated in the normal archaeological way. Because of the similarities in building technique, I would say that the inner and outer walls are the same age, though. They might be from the Middle Ages, as Stenberger argues (Stenberger 1933, 234), but they also might be from another building phase of Gråborg. Because of the use of mortar they are certainly not from the prehistoric building phase.

When trying to find the reason behind the construction of the inner and outer



Fig. 10. Part of the secondary outer wall. Compare the building technique and the vertical joints with the secondary inner wall, figure 9. Photo by G. Malm 1997-2002.

walls, one must keep in mind that building them (collecting and piling the stones) was a large and heavy undertaking. The building protectors must have calculated that the profit of this work corresponded to their expectations. Those who made the decision to carry out and organize the work must have had the authority, power, economy and workers required. There also must have been a need to drain wetland, another large and heavy job. Here I want to add that I do not have the feeling that the inner and outer walls are a hurried piece of work.

Concerning building methods and technique, let us compare the medieval St Knut, the north-west gateway of Gråborg and the inner and outer walls. St Knut and the gateway are both built according to normal medieval building methods, unlike the walls. The differences indicate different building workshops. Building with stone and mortar in a medieval building technique started

in the 11th century in Sweden. It was fully developed and well known on Öland in the medieval building phase of Gråborg. Yet normal medieval building techniques were not used to construct the inner and outer walls of Gråborg. Does this indicate that the builders of the inner and outer walls of Gråborg had not taken part in building practices on Öland (for instance building the churches)? Or did the builders of the walls of Gråborg come from another category of building workers? In that case the question is: what category?

In my view, the building of the inner and outer walls against the high wall of Gråborg might have been connected to the change of Gråborg to cultivated land. Most probably there were remains of an older settlement (stone buildings) inside and outside Gråborg when that decision was taken, and it must have been necessary to make the ground free from these older settlement remains. The question is whether stone buildings from an

older settlement in a preliminary period were demolished and the stones stacked against the high wall. As said above, arranging cultivation in Gråborg also required draining wetland. Who had the power, economy and authority to demand, plan and organize that grand kind of work?

A map from 1641–42 shows part of Gråborg as cultivated land, but the change to cultivation might have come earlier, as some artefacts and other sources imply. From 1371 to the middle of the 16th century a farm in Borg seems to have belonged to Vadstena Nunnery. In the middle of the 16th century, St Knut's chapel loses its sacral function and the king confiscated its valuables (Sallnäs 2008, 23 ff.). According to artefacts and written material Gråborg by then was in decline. Most probably either the Nunnery or the Crown had by then realized that the area could be used in a lucrative way, i.e. for cultivation. Both these powers possessed the authority and economy to start such an enterprise. The first step must have been to drain the area and clear it of older building remains. Did the clearing up include demolishing older stone buildings and piling the stones against the high wall? In that case the inner and outer walls against the high wall are not walls in a proper sense, but a way of clearing land from stones for cultivation.

This way of clearing land and stacking the stones against the sides of the high wall might seem an unnecessarily circumstantial and painstaking job. But that is far from unique or rare. Farmers on Öland and the Swedish mainland until our own times have cleared land of stones and built stone walls with great care. Good examples of this can be found in Borg.

The building workshop behind the inner and outer walls in Gråborg might represent generations of farmers with a tradition of carefully and neatly building stone walls. An interpretation like this would be an

explanation why the inner and outer walls of Gråborg are not built according to normal building technique, which is associated with totally different craftsmen. It also explains why there are no crop marks to be seen inside or outside Gråborg

Conclusion

Following the result of a building-archaeological ocular examination of Gråborg in 1997–2002 it has been possible to give a new description of the ring fort as well as to make a new interpretation of the secondary inner and outer walls. This ring fort has had four building phases. The first dates from the middle of the Iron Age/Migration Period. The second building phase belongs to the Middle Ages with the peak in use between 1175 and 1245/50. The third building phase of Gråborg lasted from the late Middle Ages or the middle of the 16th century up to our days. It was a phase of cultivation inside Gråborg. The fourth phase of Gråborg is today's use as pasture land and a place for recreation and study. An archaeological artefact from this phase is a magnifying glass – a biologist studying the flora surely was sad to have lost it.

Each phase has left memories of activities. From the prehistoric building phase, the top of the high wall has remains of a parapet with pinnacles in the south and gateways on the surrounding high wall. One gateway is close to the wetland in the east. From the medieval phase the surrounding wall have wider gateways. During this phase St Knut was built. From the cultivation phase we have the so-called inner and outer walls secondarily built against the sides of the high wall – the original surrounding wall of Gråborg. As these walls are unstable, it is very unlikely they had a strengthening function. I argue they were constructed in the process of clearing the land for cultivation.

Probably it was Vadstena Nunnery or the Crown that initiated the process which led to the construction of the inner and outer walls that surround the prehistoric high wall. They were the authorities with the power and wealth to start such an enterprise. Most probably a collective of local farmers demolished the old stone buildings inside the ring fort and stacked the stones from the buildings against the high wall, and also drained the area of water. They used the same building technique as when constructing stone walls in the landscape.

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Notes

- 1 Noted by stone cutter Stellan Martinsson during the archaeological fieldwork 1997–2002 (personal communication).
- 2 Interpretation in discussion with Anders Andrén, Professor of Archaeology, Stockholm University, and Ulf Näsman, Professor of Archaeology, Linnaeus University, during the archaeological fieldwork 1997–2002.

References

- Ahlqvist, A. 1822–27. *Ölands Historia och Beskrifning*. Del 2. Brombergs Faksimilserie. Carolina Rediviva. Uppsala (1979).
- Axelsson, R., Janzon, K. & Ramquist, S. (eds.). 1996. *Det medeltida Sverige*. Öland. Riksantikvarieämbetet. Stockholm.
- Blomkvist, N. 1976. Medieval Eketorp and Contemporary Turn-over Places on Öland. In Näsman, U. & Wegraeus, E. (eds.), *Eketorp. Fortification and Settlement on Öland/Sweden. The Setting*. KVHAA. Stockholm.
- 2008. Kung Bugislav på spåren? Gråborg och den gåtfulla Kalmarna leidangr 1123/24. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Borg, K. 2000. *Eketorp III. Ett medeltida arkeologiskt projekt*. University of Lund. Institute of Archaeology. Reports Series No. 72.
- Boström, R. 2008. Sankt Knuts kapell. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Brorsson, T. & Lindahl, A. 2008. Keramiken i Gråborg och Sankt Knuts kapell – en resa i tid och rum. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Danielsson, R. 2007. Gråborg på Öland intas av geofysiker. *Populär Arkeologi*. 4/2007. Stockholm.
- Edgren, B. 2000. Eketorp – offer – och tingsplats. *Borgbrevet 2000:2*. Stockholm.
- Edgren, B. & Herschend, F. 1987. Att rekonstruera. Varför inte för Ulf Näsman? *Populär arkeologi 1987*.
- Fallgren, J.-H. 2008. Fornborgar, bebyggelse och odlingslandskap. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. 2008. Stockholm.
- Hagberg, U.-E. 1967. *The Archaeology of Skedemosse II. The Votive Deposits in the Skedemosse Fen and their Relation to the Iron Age Settlement on Öland*. KVHAA. Stockholm.
- Hansson, I. 2008. Bugislavs grav. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Hermansson, L. 2008. Gamla och nya strukturer. Gråborg mellan vikingatid och medeltid. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Hylander, K. 1994. *Vätmarksinventering av Öland 1993*. Länsstyrelsen i Kalmar län inventerar 1994:3.
- Jonsson, K. 2008. Myntfynden från Gråborg och Sant Knuts kapell. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Kvarning, L. Å. Borgs by och kulturminnesvården. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Malm, G. 2001. Aktuella arkeologiska utgrävningar i Gråborg och Sankt Knut på Öland. In Andrén, A., Ersgård, L., & Wienberg, J. (eds.), *Från stad till land. En medeltidsarkeologisk resa tillägnad Hans Andersson*. Lund Studies in Medieval Archaeology 29. Stockholm.

- 2003a. *Rapport över arkeologiska undersökningar och metalldetektorsökning vid fornborgen Gråborg i Borgs by, Algutsrum socken, Öland, utförd under två höstmånader varje år mellan åren 1997–2002*. Unpublished preliminary report. Kungliga Vitterhetsakademien, Stockholm.
- 2003b. *Rapport över arkeologiska undersökningar vid Sankt Knuts kapellruin i Borgs by, Algutsrum socken, Öland, utförd under två höstmånader varje år mellan åren 1997–2002*. Unpublished preliminary report. Kungliga Vitterhetsakademien, Stockholm.
- 2003c. *Rapport över arkeologiska undersökningar och metalldetektorsökning i Borgs by, Algutsrum socken, Öland, utförd i oktober år 2001*. Unpublished preliminary report. Kungliga Vitterhetsakademien, Stockholm.
- 2008. *Gråborg, Sankt Knuts kapellruin och Borgs by på Öland – fakta och funderingar kring en gammal bebyggelse*. Unpublished manuscript. Kungliga Vitterhetsakademien, Stockholm.
- 2019. *Gråborg – Ölands största fornborg*. In Ljung, C., Andreasson Sjögren, A., Berg, I., Engström, E., Hällans Stenholm, A.-M., Jons-son, K., Klevnäs, A., Qvistrom, L. & Zachris-son, T. (eds.), *Tidens landskap. En vänbok till Anders André*. Stockholm
- Näsman, U. 1996. Introduction to the descriptions of Eketorp -I,-II & -III. In Borg, K., Näsman, U., & Wegraeus, E. (eds.), *Eketorp. Fortification and Settlement on Öland/Sweden. The Monument*. KVHAA. Stockholm.
- 1997. Strategies and tactics in Migration period defence. In Jørgensen, A. N. & Clausen, B. L. (eds.), *Military Aspects of Scandinavian Society in a European Perspective AD 1–1300*. PNM. Copenhagen.
- 2008. Mäktiga personer i Gråborg. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Palm, V. 2008. Lyx och vardag i Gråborg. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Rhezelius, J. H. 1634. *Propugnacula Ölandica*. Handskrift F.c.3. Kungliga biblioteket, Stockholm.
- Sallnäs, M.-L. 2008. Borgs by. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Stein-Borg, Maria. 2003:2. *Triberga fornborg på sydvästra Öland. Borgbrevet*. Stockholm.
- Stenberger, Mårten. 1933. *Öland under äldre järnålder. En bebyggelsehistorisk undersökning*. KVHAA. Stockholm.
- Sturesson, E. 2008. Tidigare Gråborgforskning i närbild. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Tegnér, G. (ed.) 2008. *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Trotzig, G. 2008. Metallkärl i Gråborg. In Tegnér, G. (ed.), *Gråborg på Öland. Om en borg, ett kapell och en by*. KVHAA. Stockholm.
- Wallin, C. 1975. *Knutsgillena i det medeltida Sverige. Kring kulten av de nordiska helgonkungarna*. Historiskt Arkiv 16. KVHAA. Stockholm.
- Weber, K. 1976a. The Ring Wall around Eketorp II. In Borg, K., Näsman, U. & Wegraeus, E. (eds.), *Eketorp. Fortification and Settlement on Öland/Sweden. The Monument*. KVHAA. Stockholm.
- 1976b. The Gateways of Eketorp-II. In Borg, K., Näsman, U. & Wegraeus, E. (eds.), *Eketorp. Fortification and Settlement on Öland/Sweden. The Monument*. KVHAA. Stockholm.
- 1976c. The Outer Ring Wall. In Borg, K., Näsman, U. & Wegraeus, E. (eds.), *Eketorp. Fortification and Settlement on Öland/Sweden. The Monument*. KVHAA. Stockholm.

Gunilla Malm, Kungsklippan 11, 112 25 Stockholm, Sweden, gunilla.k.malm@gmail.com