

Prehistoric Activities in Megalithic Graves in Falbygden, Sweden

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Abstract

The different types of use of megalithic graves are discussed in this article. Based on new AMS analyses and the re-examination of materials from excavated graves in Falbygden, a multitude of later modifications and activities are demonstrated. A long-term perspective of the use of dolmens, passage graves and the less studied gallery graves is applied and it is shown that the extent as well as the location of activity differed during the various periods. In this study, it is argued that the reuse of megalithic graves occurs more often than previously described and also that times of abandonment needs to be considered. The analyses indicate that despite similarities to several megalithic areas in Sweden, the prehistory of Falbygden is unique. In contrast to other regions, there is a significant level of megalithic reuse during the second part of the Late Neolithic. The results imply that the monumentality of the graves, which has often been claimed in previous research, is of less importance. Instead, megalithic graves were transformed through time and adapted to the prevailing practices.

Introduction

The prehistoric reuse of graves and monuments is a well-known phenomenon which has been recognized in many parts of Europe (Leclerc & Masset 1980; Hingley 1996; Holtorf 1998; Billard *et al.* 2010). Although the reuse of older graves is noted, its potential for gaining knowledge about prehistoric societies has been more or less overlooked. Previous research on reused megalithic graves has been limited to studies with a focus on landscape perspectives and social memory. Accordingly the reuse has often been associated with the monumentality and surrounding landscape

of the graves (Tilley 1994; Bradley 2002; van Dyke & Alcock 2003; Arwill-Nordbladh 2013). This study emphasizes the importance of including reused graves in archaeological research, in order to gain a more complete understanding of prehistoric societies.

The reuse of megalithic graves and Bronze Age mounds in Sweden has been described in earlier literature (Montelius 1873; Arne 1909; Enqvist 1922; Sahlström 1954; Malmer 1962; Strömberg 1971a; Bägerfeldt 1987; Weiler 1994; Sjögren 2003; Olausson 2014), but most of the research has focused on the

Bronze and Iron Age (Jennbert 1993; Thäte 2007; Strömberg 2005; Artelius 2004, 2013; Fornander 2011; Wollentz 2012; Arwill-Nordbladh 2013). The previous studies have concentrated on one single period or one specific grave type only. In contrast, this article considers dolmens, passage graves and the less researched gallery graves. A long-term perspective is implemented to gain new insights into the life cycles as well as activities and disruption of use of these graves.

The material included in this study derives from a number of megalithic graves in Falbygden, an inland area of south-western Sweden (Fig. 1). This is an exceptional place for studying the use of these graves as it holds one of Northern Europe's largest concentrations of passage graves, a large amount of gallery graves and a couple of dolmens. Moreover, the calcareous soils of Falbygden have resulted in a large amount of preserved bone material. The availability of ancient human remains and the increasing precision of AMS dates offer possibilities to study the use of the different graves.

The main part of the previous megalithic research in Falbygden has focused on the Middle Neolithic passage graves (Bägerfelt 1987; Persson & Sjögren 2001; Sjögren 2003; Sjögren 2008), with some exceptions (Weiler 1994; Stensköld 2004). When including the less visible gallery graves, new aspects of reuse, which do not necessarily include monumentality, can be explored.

This article aims to highlight the diversity of use in prehistory, focusing on later burials and various types of structural modifications. An updated compilation of artefacts combined with new and published ¹⁴C analyses on human remains from excavated megalithic graves will be used to demonstrate that the graves were transformed through time and periodically became part of the prehistoric present.

Chronology of megalithic graves

Three main types of megalithic graves are usually distinguished in a Scandinavian context: dolmens, passage graves, and gallery graves. According to the conventional chronology dolmens are associated with the Early Neolithic, passage graves with the Middle Neolithic, and gallery graves with the Late Neolithic. This is based on Montelius' typological seriation of chamber forms and axes (Montelius 1874). New studies reveal that dolmens and passage graves were built over a rather short period at the transition between the early and the middle Neolithic periods, 3300–3000 cal. BC, in the cultural setting of the Funnel Beaker Culture (Persson & Sjögren 1995; Sjögren 2003; Sjögren 2011). The various types of gallery graves and their introduction, on the other hand, have not been studied to the same extent. Gallery graves are mainly associated with the Late Neolithic and in some cases with the early Bronze Age. However, Middle Neolithic artefacts and human bones are present in some gallery graves, which could indicate either an earlier date of these graves or depositions of older material (Weiler 1977; Blomqvist 1989b; Algotsson 1996; Blank in prep.). With this said, the dolmens and passage graves will be analysed as one unit and the gallery graves separately.

Falbygden and its megalithic graves

Falbygden was an influential region for much of prehistory. Its location makes it a natural link between the two big lakes Vänern and Vättern. The area is rich in archaeological finds throughout the entire Middle Neolithic and the Late Neolithic (Blomqvist 1989b, 25) and one of Northern Europe's largest concentrations of passage graves and a large number of gallery graves have been found

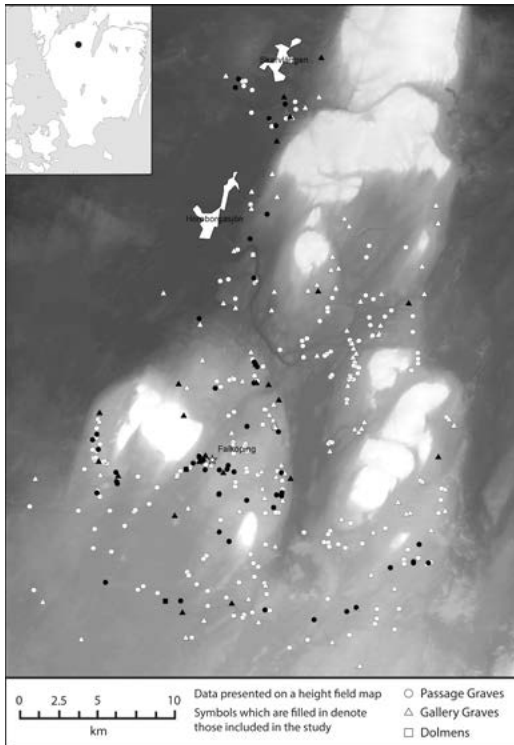


Fig. 1 Distribution map of registered megalithic graves in Falbygden. Graves used in the study are marked by solid symbols.

here. The passage graves are concentrated in clusters and lines in the landscape, with the gallery graves mostly placed close by (Fig. 1). The gallery graves tend to have a greater topographic spread in the landscape, which has been explained as an expansion of settlements and an increase of agriculture and population. A high frequency of Bronze Age artefacts has been documented in the area. The Bronze Age graves are not so prominent; instead of the common monumental mounds, most of the graves consist of relatively low-profiled cairns (Sahlström 1940, 20; Weiler 1994, 167; Sjögren 2003, 107). There is a rather rich archaeological material from the Iron Age, but the area does not seem as dominant as in the previous periods (Sahlström 1940, 35; Bergström 1980, 159 ff.).

Previous research on reuse of graves and monuments

Prehistoric reuse of graves and monuments has gained a lot of attention among archaeologists with a special interest in landscape perspectives and social memory (e.g. Hingley 1996; Thomas 1996; Holtorf 1998; Nilsson & Skoglund 2000; Bradley 2002; van Dyke & Alcock 2003; Arwill-Nordbladh 2013, Díaz-Guardeamino *et al.* 2015). Gosden and Lock (1998, 4 ff.) have discussed social memory based on the coexisting genealogical and mythical history; the genealogical history is linked to the past through known ancestors and goes back a few generations, while the mythical history can go back several centuries and involves a recreation of the past where the landscape and monuments may play a significant role. Megalithic graves have often been referred to as a place for displaying mythical histories, where the graves are given new values and meanings. According to Tilley (1994) and Bradley (2002), the reuse of megalithic graves can be explained as the legitimation and control of locations by manifesting an ancestral link with past dwellers. Mizoguchi (1993) has highlighted the mythical aspects and, by using examples from reused Late Neolithic and Bronze Age flat graves in Yorkshire, he states that mythological stories generate long-lived structures and awareness of grave practices. Furthermore, the abandonment and destruction of monuments have been debated in terms of social memory as *remembering by forgetting* (Leclerc & Masset 1980; Bradley 2002).

The reuse of megalithic graves in Sweden has mostly been linked to their monumentality and the surrounding landscape (Strömberg 2005, 35; Fornander 2011, 60). However, the reuse of gallery graves has not been elaborated upon, although it has been mentioned in a few cases (Lagerås 2000; Andersson & Ragnesten 2005).

Approach

Reuse implies that the construction was put to *another* use when the first use was complete. Here reuse also refers to use after closure or after a period of no visible activity. The term is especially problematic as it concerns successive burials in collective tombs, which can be seen as continuous reuse. In archaeology, time is problematic since typology, stratigraphy and absolute dating are rather blunt tools. Hence, continuity can be difficult to separate from reuse. In my opinion change can come about as small shifts in a repeated practice or as more abrupt events. Thus continuous use does not necessarily mean a static way of relating to the grave. Furthermore, a change in burial practices and an appropriation of a grave can appear equally as use and as reuse. In order to discuss the use of megalithic graves throughout prehistory, both continuous use and reuse are touched upon, although the primary phase of the megalithic graves is not included in this article.

The use of the megalithic graves from different archaeological periods will be compared using a quantitative approach. Adjustments are made to allow for variable period lengths. The statistical analyses should be seen as estimations and as a tool for the comparative study. Patterns of use are revealed by relating the occurrence of various kinds of activity in different parts of the grave. Included in the analysis are: depositions, burials and modifications. To avoid any confusion with the concept of a *secondary burial*, the term *later burial* is used in this text. Relative and

absolute dates of human and animal bone, artefacts, charcoal and alterations of the grave are the basis of this overview. Some previously published ¹⁴C dates have been ignored due to their imprecision. In contrast to Wollentz (2012, 185), I do not interpret cupmarks and cremated bones as traces of Bronze Age reuse. Cupmarks are quite common on roof slabs of dolmens and passage graves in Sweden. The dating is unclear; even though they are usually associated with the Bronze Age, there are examples from the Late Neolithic as well as the Middle Neolithic (Glob 1969). Smaller stones with cupmarks which do not derive from slabs have been found in Late Neolithic and Bronze Age contexts (Glob 1969; Strömberg 1982). Hence only the smaller stones are taken into account and interpreted as Late Neolithic or Bronze Age artefacts. Cremated bones without any given context are not included in this study. The conventional view is that the cremated bones in the passage graves originate from Bronze or Iron Age burials, but there are known examples of Middle Neolithic and Late Neolithic cremations (Larsson 2003; Hallgren 2008; Blank in prep.).

In Falbygden 254 passage graves, 2 dolmens, 125 gallery graves and 115 megalithic graves of uncertain type have been registered (Persson & Sjögren 2001, 6) (Table I). In this study 85 of the megalithic graves defined as dolmens, passage graves or gallery graves are discussed; these are marked in black in Figure 1 and listed in Appendix 1. Stone cists are used in the Bronze Age and Iron Age, but the examples referred to in this paper are the gallery graves of Late Neolithic type

Megalithic grave types	No. of registered graves in Falbygden	No. of investigated/ documented graves included in the study	% of the investigated/ documented graves included in the study
Passage graves	254	55	22
Dolmens	2	2	100
Gallery graves	125	28	22
Megalithic graves of uncertain type	115	0	0
Total number	496	85	17

Table I. Number of documented and analysed megalithic graves.

intended for more than two individuals and successive burials (Weiler 1994, 56). I have not included megalithic graves of uncertain type.

Use of passage graves and dolmens

This study includes 57 excavated or surveyed passage graves and dolmens where documentation of some sort has been found (Appendix 1, Table I). The extent of the investigations and the quality of the documentation varies greatly. The Rössberga passage grave is the only fully excavated megalithic grave (Cullberg 1962). In the early excavations only the chambers were investigated, while in the most recent excavations the mound and the entrance area were the focal points. This gives us an uneven picture of how the megalithic graves have been used, but by putting them together the activity in the various parts of the graves can be clarified.

The primary phase of use has been estimated at 3400–2800 cal. BC (Persson & Sjögren 2001, 226). Only 5 of the 57 graves lack evidence of use from later phases. Of the 52 graves, 48 can be interpreted as *another* use or as use after a long period of no visible

activity. Whether the use during the different archaeological periods can be classified as reuse is further discussed under “Various activities in gallery graves in different periods”.

As mentioned earlier, at least 256 passage graves and dolmens were constructed in Falbygden. The reused graves are spread throughout the entire area of investigation, and the analysed graves can be considered good representations of the graves in Falbygden. Table II presents the minimum number of used passage graves and dolmens per century during the different periods following the initial period of use ((no. of reused graves/ no. of investigated graves) × no. of registered passage graves and dolmens/no. of centuries of the period)).

Reuse during the Late Neolithic is the most prominent (Table II). Of the 57 analysed graves, 60% were reused. Late Middle Neolithic A and Middle Neolithic B material has been identified in 32% of cases whereas activity strictly associated with the Middle Neolithic B was traced in 14% of the investigated graves. Bronze Age use was documented in 21% and Iron Age use in 35% of the analysed passage graves and dolmens. Correcting for the different time spans of the Middle Neolithic B, Bronze Age and Iron Age, we see that the frequency of used graves was quite similar (Table II).

Period	Reused graves of the 57 analysed graves	Calculated reused graves of the 256 registered graves	Used graves/ century of registered graves
Pitted Ware Culture & Middle Neolithic B (3100-2350 cal BC)	18 (32%)	81	11
Middle Neolithic B & Battle Axe Culture (2800- 2350 cal BC)	8 (14%)	36	8
Battle Axe Culture (2800- 2350 cal BC)	7 (12%)	31	7
Late Neolithic (2350- 1700 cal BC)	34 (60%)	153	24
Bronze Age (1700- 500 cal BC)	12 (21%)	54	5
Iron Age (500 cal BC- 1050 cal AD)	20 (35%)	90	6
Late Neolithic/ Bronze Age	3	16	
Bronze Age/ Iron Age	4	21	

Table II. Number of used passage graves and dolmens per archaeological period.

The extent of use seems to be related to the quality and extent of the documentation. Some of the graves have been subjected to looting and destruction and others have only been sporadically surveyed or partly restored. To get a more accurate picture of the prehistoric reuse, 18 graves with relatively good documentation where large parts of the grave have been excavated were selected (Appendix 1). All of them showed evidence of reuse, most of them from several different periods, and 95% of them were used during the Late Neolithic. This demonstrates that these grave constructions played an important role in many prehistoric societies. If the length of the different periods is included, a similar result can be seen, although the Late Neolithic use stands out even more (Appendix 1).

Modifications of passage graves and dolmens

The analyses above include artefacts and ¹⁴C-dates from human bone, animal bone and charcoal. The later alterations of the grave structure are not included in the results shown in table II as they are often difficult to date. However, there are a considerable number of graves that were modified in prehistory. Identified modifications from the graves in question are: new constructions such as mounds, stone packings, floor constructions; separating layers between burial strata and stone cists, as well as alterations to the original construction such as clearance of the graves, passages turned into gallery graves and the removal of stone slabs.

Several graves show signs of moved or removed slabs. This may be interpreted as a way to gain access to the chamber without using the passage and/or the recycling of stone slabs. In Gökhem 17, two of the slabs in the passage were removed to make room for placing an Iron Age individual across

the passage (Bägerfeldt 1987). In Falköping östra 1 the passage was rebuilt into a gallery grave during the Late Neolithic (Axelsson & Jankavs in prep.; Blank in prep.). The practice of rebuilding the passage graves into gallery graves is known from Scania, for example at Öllsjö, and is associated with the Late Neolithic (Magnusson 1947; Bagge & Kaelas 1952).

A common interpretation of human remains outside the entrance and chamber slabs, or graves with only Late Neolithic finds, is that earlier burials were removed to accommodate new ones. Among the analysed graves, six show signs of being cleared out, but this is only one of many possibilities (Appendix 1). Human bones were excavated outside the northern end of the chamber of Hångsdala 15; they could be inhumations cleared out from the chamber, later or contemporaneous burials, or foundation deposits. In Falköping östra 1, a human bone dated to the Middle Neolithic was found outside the entrance, which might indicate the remains of a cleared-out skeleton, but it cannot be ruled out that the bones were moved by animal activity or were buried there in the first place. However, it is likely that bones were cleared out from the passage when this was rebuilt into a gallery grave in the second part of the Late Neolithic (Appendix 1).

Bone layers separated by flat stones were observed in five passage graves (Appendix 1). The separation of the burials can be explained by a return to a grave which was temporarily closed (Leclerc & Masset 1980). According to Ahlström (2009, 135), a passage grave can fill up quite quickly but the decomposition of the bodies can take up to 100 years. He suggests the graves are not used when the soft tissues are decomposing as the body is in a liminal state and new burials can only take place when the bones are dry. The disturbed bones in the passage graves are mostly interpreted as bones from older burials pushed aside for new burials.

Blomqvist (1989a, 149) claims the mounds of the passage graves were built higher during Late Neolithic, but so far no evidence of this has been noted (Sjögren 2003, 111). However, two passage graves and one dolmen were completely covered by a mound or a cairn when they were found. Underneath one of the mounds, Norra Lundby 41, an early Iron Age sword and a shield buckle were found on top of the roof slab, indicating that the upper layer of the mound could not have been constructed prior to this deposit (Montelius 1885, 42 f.). Iron Age artefacts appeared in the other mound covering Vartofta-Åsaka 8, and a Bronze Age cist was placed in the passage (Appendix 1). The dolmen, Kinneved 21, was covered by a cairn when it was found, and Iron Age artefacts both in the chamber and in the mound point to an Iron Age date for this modification. The practice of constructing mounds on top of megalithic graves is more common in Halland and Scania and is often associated with the Bronze Age (Sjögren 2003, 110; 1972 Lundborg, 13 ff.).

There are two examples of small stone cists placed in the mound or in the passage (Vartofta-Åsaka 8 & Falköping stad 9). One of them is unquestionably Bronze Age and already mentioned above, while the second one is most likely a Bronze Age or Iron Age cist (Appendix 1). There are two graves where secondary stone floors have been observed in the entrance area (Gökhem 71 & Skärv 82). Secondary floors in the chambers with Middle Neolithic burials underneath and Late Neolithic on top are known from the Tågarp, Öllsjö and Carlshögen passage graves in Scania (Bagge & Kaelas 1952; Strömberg 1971a; Strömberg 1971b). It was further noted that the entrance was blocked by a stone in the passage grave at Tågarp (Strömberg 1971b), in a similar way as in Skärv 82 (Appendix 1).

The most common modification is stone packings in the entrance areas. This was described at ten of the graves (Appendix 1).

Dating of the stone packings is problematic and finds from the structures or underneath have been used to estimate the construction phase. However, these finds may not necessarily be contemporaneous with the construction as they could have derived from the filling or later depositions. The stone packings in the entrance areas were probably built in several periods for different reasons. Two of the packings most likely originate from the Middle Neolithic B or early Late Neolithic, a third one is dated to the early Bronze Age and a fourth to the Iron Age (Appendix 1).

Burial constructions are a possible explanation for some of the stone packings in the entrance. Another suggestion is that they could have been built at the same time as the reuse, which may indicate a transformation of the passage graves into new types of graves (Sjögren 2003, 107). Wollentz (2012, 187 f.) proposes that they were constructed in the Bronze Age as a terminating act of the passage grave, with later burials taking place in the mound instead. The bones and some artefacts in Gökhem 71 were dated to the transition from the Middle Neolithic B to the early Late Neolithic, 2479–1984 cal. BC (Ua-66: 3810±85 BP, oxCal 4.2.4, IntCal13, sigma 2) (Bågenholm *et al.* 1993, 38). Very few burials

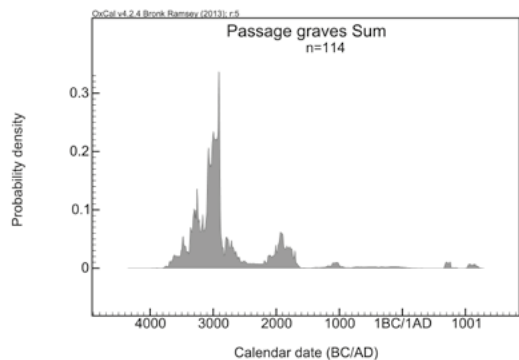


Fig. 2. 14C dates, human bones, passage graves, Falbygden (Blank in prep.).

have been found in the passage graves during this phase (Fig. 2).

Various activities in passage graves and dolmens in different periods

Middle Neolithic B (2800–2350 cal. BC)

The Middle Neolithic B activity involves single artefacts placed in the entrance areas and in the chambers (Fig. 3). The Pitted Ware artefacts mainly consist of flint artefacts such as blades, while the documented Battle Axe Culture finds include mostly ceramic shards, some axes and a bone artefact (Appendix 1). It is difficult to determine whether this represents reuse or a more continuous use of the graves. Even though the Pitted Ware Culture in this particular area is not well known, it is reasonable to suggest that these artefacts were already present in the late Middle Neolithic A (3100 cal. BC) (Sjögren 2003, 106). Some of the Pitted Ware Culture presence can be part of the successive burials and ritual activities of the Middle Neolithic A. In a couple of graves both Pitted Ware and Battle Axe material was found. Artefacts from the Pitted Ware Culture were identified in 23% of the graves and from the Battle Axe Culture in 12% (Table II). Battle Axe Culture material in megalithic graves is slightly less frequent than in Scania, where 15% of the passage graves show traces of Battle Axe Culture activity (Olausson personal communication).

It seems as if the Funnel Beaker tradition of depositing flint and ceramics in the entrance area continued into the Middle Neolithic B. On the other hand, the burials are few; only in two cases were inhumed human bones found in the chamber (Valtorp 2, Falköping stad 28). There is a possibility that these inhumations are the last burials of the initial use of the graves or burials ascribed

to a later reuse of the graves. In Valtorp 2 it seems more likely that the individual dated to the Middle Neolithic B represents the end of a primary continuous use (Sjögren 2011, 111). Battle Axe Culture use seems primarily related to depositions of single artefacts rather than to burials (Fig. 2). Accordingly this could be considered *another use*, that is, reuse. However, a miniature battle axe was found in the stone packing in the entrance area of Valtorp 42 (Persson & Sjögren 2003, 133). Battle axes, which are rare in megalithic graves in Sweden, have often been associated with burials (Malmer 1962; Persson & Sjögren 2001; Olausson 2014). In studies performed on Scanian megalithic graves Olausson (2014, 273) concludes, in contrast to Malmer, that the Battle Axe Culture reuse is more likely attributable to ritual activity than burial. As discussed earlier, some of the stone packings in the entrance area were most likely constructed during this phase. This could be interpreted as an act of closing the grave when new burial practices were taken into use.

Late Neolithic (2350–1700 cal. BC)

The most common signs of use during the Late Neolithic are flint artefacts and inhumations mainly in the chambers, although numerous other parts of the graves have been used (Fig. 3). Considering the time gap to earlier activities, this can be defined as reuse. In some cases there are traces of Late Neolithic activities in several parts of the same grave. The artefacts consist of flint daggers, flint arrowheads, bone needles, slate pendants and ceramics, which are also common in gallery graves.

Sjögren and Price (2006, 95) claim that the Late Neolithic burials in the passage graves are a marginal phenomenon. This may be true for some passage graves, but according to my findings there is a significant presence of Late Neolithic burials in a number of passage graves. Late Neolithic dates are identified in seven out of twelve passage graves with

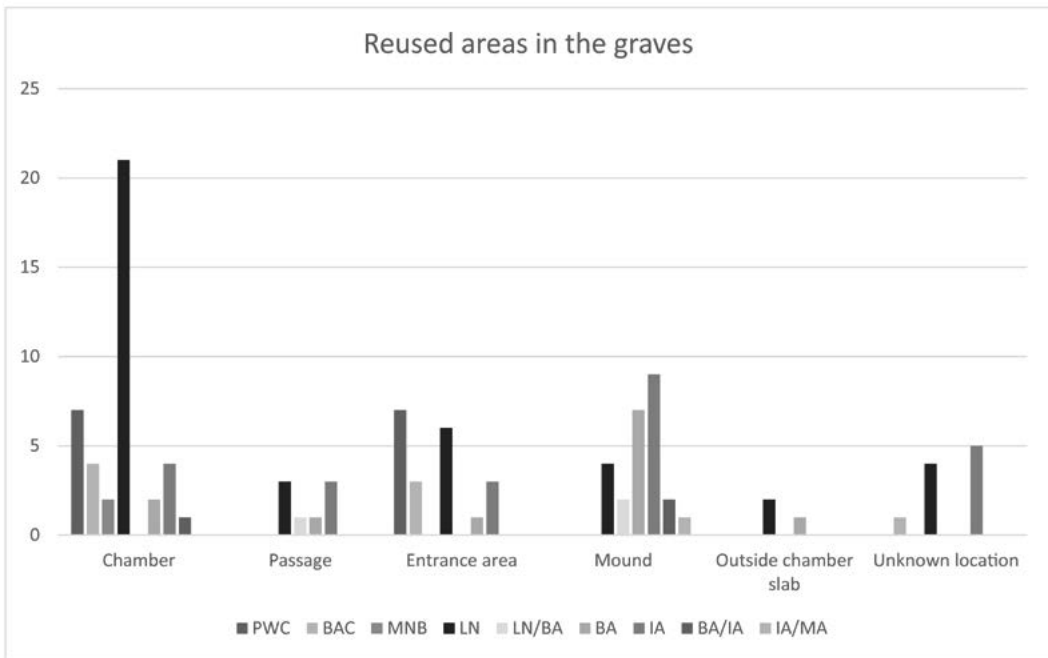


Fig. 3. The use of different areas in passage graves and dolmens.

AMS-dated individuals (Blank in prep.). In Falköping stad 19 only Late Neolithic artefacts were discovered and in Karleby 59, three out of six ¹⁴C dates derive from the Late Neolithic. In Luttra 16, seven of the nine individuals are dated to the Late Neolithic (Blank in prep.).

According to the ¹⁴C dates, the graves were mainly reused in the second half of the period (Fig. 2). Reuse during the Late Neolithic can almost exclusively be associated with burials, including the alterations of the grave constructions. In the first part of the Late Neolithic, as in the final part of Middle Neolithic B, there is low activity in the passage graves. The stone packings in the entrance areas could indicate the importance of closing the graves in an early phase, while in the later phase a return to successive burials in megalithic graves can be seen. Some graves were opened by moving slabs and others were rebuilt.

Bronze Age (1700–500 cal. BC)

Activity at the passage graves was rather low during the Bronze Age and can only be confirmed in 12 graves (Table II & Appendix 1). Evidence of reuse consisted of artefacts and human bones but in one case a hearth in the mound of the passage grave Falköping stad 1, dated to the late Bronze Age, was documented (Weiler 1994, 82). The examples found can be defined as reuse and can not be related to earlier reuse of the graves. No difference can be seen in the frequency of reuse during the the Bronze Age. The majority of the finds were placed in the mounds (Fig. 3). Most common were artefacts associated with burials, such as razors, tweezers and ceramics (Appendix 1).

Five depositions which can be ascribed with certainty to burials were found in four passage graves. In Valtorp 2, two inhumations were placed in the chamber: one of them derives from the later part of the period (Persson & Sjögren 2001, 162). An inhumation of an

adult man with prestigious finds was found and dated to period III/IV in the mound of Falköping östra 1. A stone cist with cremated bones and Late Bronze Age artefacts was excavated in the passage of Vartofta-Åsaka 1. Furthermore, a deposition of Bronze Age ceramics and cremated bone was noted in the mound of Gökhem 24 (Appendix 1). Thus, the Bronze Age reuse of dolmens and passage graves in Falbygden was sporadic and involved single burials.

Iron Age (500 cal. BC–1050 AD)

The passage graves were subject to various kinds of reuse in the Iron Age. There are traces of hearths, burials, depositions and different modifications such as stone packings in the entrance areas as well as the removal of slabs (Appendix 1). In three possible cases the passage grave was covered by a mound or a cairn during the Iron Age. Single burials, both inhumations and cremations, were placed in various parts of the graves. In the entrance area of Falköping stad 3, charcoal from a hearth was dated to the early Iron Age. In the mound of the same grave an infant inhumation was dated to the transition Viking Age/Middle Ages (Axelsson & Persson 1995). Some of the graves have traces of reuse in different parts of the grave and the activities are less sporadic and more elaborate than during the Bronze Age. The passage graves were used for burials, but also for other activities and reconstructions of the grave.

Looking at the reuse determined to the Early (500 cal. BC–500 AD) or Late (500–1050 AD) Iron Age, an increase in the reuse during the later part can be detected (Appendix 1), which correlates with Artelius' claims of Iron Age reuse in western Sweden (2013, 348).

Discussion

In the earlier studies, the presence of Late Neolithic artefacts in particular is

underestimated (Blomqvist 1989b, 34; Weiler 1994, 82; Fornander 2011, 57; Wollentz 2012, 180 ff.). Sjögren suggests that the Bronze Age reuse of passage graves dominates in the provinces of Bohuslän and Halland, while the Iron Age reuse is the most common in the province of Västergötland (Sjögren 2003, 107). The high frequency of Iron Age passage grave reuse has been explained by the relatively low profile of the Bronze Age graves in Falbygden, since Bronze age mounds have often been associated with Iron Age reuse (Artelius 2004). However, there is a great deal of evidence of Iron Age reuse of both gallery graves and passage graves in areas with monumental Bronze Age graves (Andersson & Ragnesten 2005; Edring 2006). According to Fornander, Late Neolithic finds are common in the passage graves on the west coast and in the province of Scania, while they only occur in one third of the passage graves in Falbygden (Fornander 2011, 57). In this study Late Neolithic artefacts alone can be observed in more than 50% of the graves, which is similar to Sjögren's earlier results (2003, 107). Wollentz (2012) highlights the rise of reuse during the Bronze Age. Burials from the Bronze Age are more common than from the Late Neolithic in the Mysinge passage grave on Öland, if the AMS dates are taken into account exclusively (Linderholm 2008). The same pattern can be seen in the ¹⁴C results from some of the Scanian passage graves where the later burials peak in the Bronze Age (Strömberg 1971a, 35–59, 203; Strömberg 1971b, 40 ff.). This is not the case in Falbygden where the ¹⁴C dates indicate an increase of reuse in the second part of the Late Neolithic (Fig. 2).

Use of gallery graves

Gallery graves in Falbygden are poorly documented. In this study 28 investigated

Period	Reused graves of the 28 analysed gallery graves	Calculated reused graves of the 125 registered gallery graves	Used graves/ century of estimated graves
Late Neolithic (2350- 1700 cal BC)	5 (18%)	22	3
Bronze Age (1700- 500 cal BC)	8 (29%)	36	3
Iron Age (500 cal BC- 1050 cal AD)	9 (32%)	40	3

Table III. Number of used gallery graves per archaeological period.

gallery graves with some kind of documentation were registered. Of the 28 graves, 13 show proof of use during both the Bronze and the Iron Age. In one of these, Falköping stad 22, a Bronze Age artefact found in the chamber could be ascribed to a continuous use rather than a later reuse, as many gallery graves were used continuously from the Late Neolithic to the early part of the Bronze Age (Fig. 4). Furthermore, Middle Neolithic artefacts and human remains have been documented in eight of the investigated graves (29%). In two of them only Middle and Late Neolithic material was observed. If the Middle Neolithic absolute and relative dates are understood as the initial phase of these gallery graves then the Late Neolithic activity must be seen as an act of reuse. Accordingly the number of reused gallery graves is 15 (12+3) or 54% (Appendix 1).

It might seem as if the reuse of passage graves and dolmens is more common than the reuse of gallery graves. Possible explanations are: the lack of investigation as well as poor excavations of the gallery graves where the cairns, mounds and the surroundings of the cists have been neglected. As gallery graves are often dug into the ground, they may have been more vulnerable to damage linked to agriculture than passage graves. It is also likely that many graves are still unknown in the ground or covered by cairns. A common explanation for the reused passage graves is their monumentality. This may indicate that the gallery graves were not subjected to as much reuse because they were less visible and accessible than passage graves.

As already shown, however, the reuse was substantial during the Late Neolithic. If we only take the Bronze and Iron Age use into account, the amount of activity in the previously analysed graves and gallery graves does not differ significantly. Bronze Age use has been traced in 29% of the gallery graves; this can be compared to 21% of the dolmens and passage graves. Iron Age reuse has been verified in 32% of the gallery graves compared to 35% of the dolmens and passage graves (Table II, Table III).

There are 125 registered gallery graves in Falbygden, which could be considered an absolute minimum number as megalithic graves of unspecified type are numerous (Blomqvist 1989b, 34; Persson & Sjögren 2001, 6). Table III presents the number of gallery graves used per century in the different periods. The initial period of use is not included. The results show that the frequency of use during the different archaeological periods is similar.

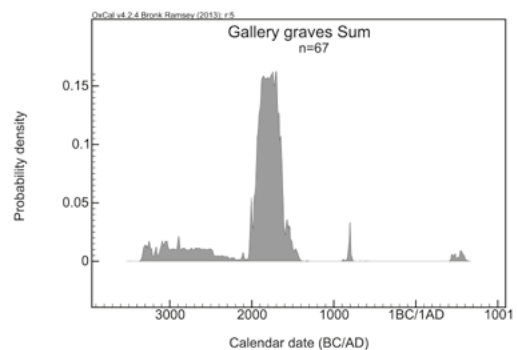


Fig. 4. 14C dates, human bone, gallery graves, Falbygden (Blank in prep.).

Activities in gallery graves in different periods

Late Neolithic

The Late Neolithic use of the stipulated eight Middle Neolithic gallery graves can be defined as reuse as there is a gap of visible activity in these graves for at least 500 years (Appendix 1). The reuse consists of successive burials in the chambers, and in four out of five graves this is indicated by directly dated human bones. The ¹⁴C dates of these graves and some of the other gallery graves show the same pattern as the reused passage graves; the burials are concentrated in the Middle Neolithic A and the Late Neolithic II (Figs. 2 & 4). The burials in the remaining gallery graves are mainly dated to the second part of the Late Neolithic (Fig. 4). This is not consistent with Blomqvist's analysis (1989b, 37) based on artefacts, which concluded that there is a significant presence of early Late Neolithic burials in the gallery graves.

Bronze Age

About 29% of the gallery graves were used during the Bronze Age (Table III). Artefacts and ¹⁴C dates from Falköping stad 22, Karleby 71 and Torbjörntorp 18 indicate that several gallery graves were used for successive burials in the early phase (1700–1300 cal. BC) (Fig. 4). In these three graves it was most probably a continuation of the Late Neolithic burial customs. In contrast, the late Bronze Age activity can be explained by sporadic single burials, both inhumations and cremations. In Falköping 26, cremated bone from the cairn was ¹⁴C-dated to period V and in Torsagården a cremated individual was ¹⁴C-dated to period V/VI, while in Vilske-kleva 26, inhumed bones were found in the antechamber along with tweezers from period IV (Appendix 1).

Iron Age

Almost one third of the studied gallery graves

show evidence of Iron Age use which may be interpreted as later burials. In Torbjörntorp 31 an infant was ¹⁴C-dated to the late Iron Age and in Varnhem 116 an inhumation was dated to the Viking Age; both of them were discovered in the chambers. During the excavation of Värkumla 25 and Blinningsberg cremated bones were found along with Iron Age ceramics. The practice of covering gallery graves with cairns has been confirmed in three cases and is most probably dated to this time. In Norra Lundby 103:4 Iron Age artefacts were located in the chambers, suggesting that the covering cairn must have been constructed in association with or after this deposition. The gallery grave Karleby 71 was found under a cairn with the roof slab placed next to it (Retzius 1889, 68). There is a possible Iron Age ¹⁴C date from animal bone in the chamber, suggesting that the roof was removed and the grave was covered by the cairn at this time (Oldeberg 1976). The remains of a hearth, an erected stone slab and an iron artefact were found in a flat round stone setting connected to the cairn covering Torbjörntorp 18 (Ullenius 1948). Similar examples of Iron Age reuse of the Bronze Age mounds in Halland are described by Artelius (2013). Further examples of Iron Age practices where stone constructions were placed on top and in connection to gallery graves can be found in the provinces of Bohuslän and Småland (Lagerås 2000, 76; Andersson & Ragnesten 2005, 109). Iron Age reuse appears to involve single burials and various activities of linking and covering by stone construction.

Megalithic graves – monumentality – memory

In this article I have tried to separate reuse from a more continuous use, even though this is not unproblematic. A continuous use is often associated with genealogical history

whereas reuse is linked to mythical history (Gosden & Lock 1998). Connecting to older graves and mythological ancestry can be explained by the legitimization of power or a strengthening of the local identity (cf. Tilley 1994; Arwill-Nordbladh 2013). Strategies of control over the landscape through the manifestation of ancestral links is a recurring theme in previous research, but conquering by erasing ancestral links is not as common in the discussion of use. Nevertheless, the reuse of older graves might indicate the conquest of, or a distancing from, the local ancestors.

On the other hand, a continuous use of a grave does not necessarily imply a static relation to the ancestry or a continuity of burial practices. Change can appear in many ways for different reasons. A grave can be appropriated by another group of people and new ideologies can be implemented by using already existing practices. It is difficult to say whether the Middle Neolithic B activities in the passage graves and dolmens are a continuation or even a final phase of the Middle Neolithic A use or reuse of the graves. In any case, it seems as if the Battle Axe Culture practice at the megalithic grave shifted to a more ritual use.

A return to the collective burials can be observed in the second part of the Late Neolithic. The chamber was used for burials and the body becomes an indistinguishable part of the dead collective, although a different relationship to the ancestors or different descendants can be expected. New gallery graves are constructed near passage graves, and already existing megalithic graves are taken into use again. The reuse during this time indicates a rather strong intention to relate to the earlier users of the graves, especially in the many graves where older skeletons were not removed. However, there are some indications of old burials being cleared out and new burial layers which separated the earlier collective from the new

one being constructed. If we assume that some of the Middle Neolithic artefacts and human bone in the gallery graves were taken from old tombs and deposited at the time of the grave's construction, a custom which has been described in both archaeological and anthropological works (Bloch 1982; Richard 1988; Jones 2008), this could be interpreted as an act of connecting with older graves and ancestry. The Late Neolithic alterations of the graves are not about destroying, but instead remodelling to convey the new context.

The stone packings or stones used to block the entrance could be regarded as a transformation of the passage graves through the abandonment of the use of passages, compare *condemnation* (Leclerc & Masset 1980; Bradley 2002). However, as some of the packings can be dated to the transition Middle Neolithic B/Late Neolithic I, when the burial activity in the megalithic graves is low, a more likely explanation is that the intention was to close and abandon the graves due to new optional or imposed practices. During this time the grave monuments seem to have been avoided. The abandonment of the grave can likewise be explained through population movement or decline.

If the grave is seen as a symbol of the ancestral, the destruction of the grave can instead be comprehended as an aggressive display of power and compared to iconoclasm (Latour 2001). The interest in the older graves took many different expressions in the Iron Age. There are obvious signs of physical connections to the megalithic grave structures, but there are also other alterations which can be seen as more aggressive. The covering of graves with mounds and cairns can be explained by intentions of including an old grave in the Iron Age setting or erasing it from the landscape.

The reuse of megalithic graves does not seem to be connected to monumentality. First of all the visibility of the passage graves from

a long distance seems to be limited, regardless of their monumentality (Sjögren 2003, 337). Secondly the gallery graves, which in many cases were dug into the ground, have been used to the same extent during the Bronze and Iron Ages. The common trait of the reused grave is not monumentality, but that they are containers for dead people. Moreover, the tradition of building monumental mounds during the Bronze or Iron Age cannot be seen in Falbygden, which could explain the small number of megalithic graves covered by mounds. The megalithic graves during the Bronze and Iron Age could have been regarded as substitutes for mounds and cairns. Sjögren (2003:107) suggests that the sparse occurrence of Bronze and Iron Age burials is the result of a high frequency of reused passage graves. Falbygden was an important area in the Neolithic and Early Bronze Age and was strongly connected to collective burial practices. The reused megalithic graves and relatively low Bronze and Iron Age graves are rather indications of a tradition of monumentality that did not have any significant impact in this particular area where the Neolithic tradition was instead persistent.

To sum up, theories of memory can be applied with different success and various outcomes. Most of the megalithic graves have physically changed and surely have also been given new meanings and values through mythical histories. However, more functional reasons cannot be excluded. Practical explanations are more common when the reuse of settlements is discussed, even though it is highly likely that the placement of the graves was determined by the location of the settlement and the appropriate characteristics of the landscape as well as the convenience of already existing graves. The burials within the megalithic structures all seem to be consistent with the conventional burial methods at the specific time. This is not obvious. If the later burials were only intended for selected or

odd persons, the treatment of that individual would be expected to differ from the others. No patterns of gender, social standing or age could be noted among the later burials in any time period.

Conclusion

In Falbygden, most of the dolmens and passage graves, as well as a substantial number of gallery graves, were reused during prehistory. Revisiting the documentation of megalithic graves in Falbygden combined with new ¹⁴C dates shows reuse to be more common than previous research has claimed (e.g. Blomqvist 1989b; Weiler 1994; Fornander 2011, Wollentz 2012). The amount of calculated reuse is related to the extent of the excavation and the quality of the documentation. Reuse can be traced in at least 84% of the passage graves and dolmens and in 54% of the gallery graves. The importance of older graves in prehistoric societies is here shown by analysing all three types of megalithic graves with a long temporal perspective. Disruption of use and various kind of reuse such as burials, depositions and alterations of the grave structure have been traced in the archaeological record. The extent of activity fluctuates throughout time but the reuse is by far the most frequent during the Late Neolithic. Bronze Age reuse was more sporadic whereas the Iron Age reuse was more elaborate and varied. The focus of activity differs over time in the dolmens and passage grave (Fig. 3). In the late Middle Neolithic use was concentrated in the entrance area and chamber, in the Late Neolithic most activity is found in the chambers, and in the Bronze and Iron Age the major focus was the mound.

Most of the traceable prehistoric use of megalithic graves seems to be related to burials. In dolmens, passage graves and gallery graves a similar pattern of use over different

periods can be observed. Concerning burials, the prevailing practices appear to be followed, but during the Middle Neolithic B and the first part of the Late Neolithic burials are almost absent in the megalithic graves. Artefacts in the entrance area of the passage graves from this particular time span can be related to ritual activity and/or to a closure of the passage by stone packings, which can be associated with a temporary abandonment of the grave. In the second half of the Late Neolithic there was an increase of burials in the megalithic graves, which sets Falbygden apart from other megalithic areas in Sweden where the rise seems to take place in the early Bronze Age (Wollentz 2012; Strömberg 1971a; Strömberg 1971b). During the Late Neolithic, alterations of the passage graves can be confirmed and explained by adjustments to prevailing burial practices. In the Early Bronze Age successive inhumations continued in the chambers, particularly in the gallery graves, while in the Late Bronze as well as in the Iron Age single burials, both cremations and inhumations, were above all placed in the mounds or cairns of the megalithic graves. Further activities during the Iron Age include covering megalithic graves with mounds or cairns, as well as linking to megalithic graves by stone constructions, depositions and nearby hearths.

Obviously it is not possible to find one universal explanation for the reuse as there are most likely numerous reasons even for apparently similar traces. Sustaining, claiming and disrupting ancestral links for different reasons as well as more practical causes are plausible. However, the reuse of megalithic graves does not appear to be connected to monumentality or the manifestation of ancestral links to control the landscape as even the less visible graves were the subject of a lot of the later activity. Instead, the megalithic graves were transformed and included in social practices throughout prehistory in this

specific area, where the Neolithic tradition was persistent.

Consequently, the use of older graves can contribute to, and ought to be more prominent in, the research into burial customs during the various periods. By including the reuse of graves a more complete picture of prehistoric burial customs can be shown and the active role of prehistoric grave constructions in social life during different periods can be discussed. More detailed studies on separate graves combined with a longer series of isotope analyses are also desirable in order to observe active use periods, variability, and change over time.

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Appendix 1: Megalithic graves included in the study

Raä no.	Inv. no.	Ref.	Reuse (artefacts, bones, charcoal)- Period	Modification- Period
Passage graves				
Bolum 59	Svensson 1926 nr 44	ATA	-chamber: LN	
Falköping stad 1	SHM: 32192	Weiler 1994, ATA	-mound: LBA	
Falköping stad 3*	SHM 4032	Strinnholm 1995, Axelsson & Pers- son 1995.	-chamber: MNB (PWC), LN -entrance: LN, EBA, EIA -mound: LIA/EMA, LN/BA	-stonepacking-en- trance- BA?
Falköping stad 4	SHM 4033	ATA	-chamber: MNB (BAC)	
Falköping stad 7*	SHM 4840	ATA	-chamber: LN	
Falköping stad 9	SHM 24692	ATA	-mound: BA/IA -passage: IA	-small stone cist in mound- BA/IA
Falköping stad 11	SHM 4034:a, 4840	ATA	-chamber: LN	
Falköping stad 18*	SHM 4840, FM 1347, 2101	ATA	-chamber: LN -outside slab: LN -mound: LN, EBA, LIA	
Falköping stad 19*	SHM 4034:b, 4840	ATA	-chamber: LN	-cleared out? - LN
Falköping stad 25	SHM 31986	ATA		
Falköping stad 28	SHM 18833, FM 2112	ATA	-chamber: MNB, LIA	
Falköping östra 1*	SM	Axelsson	-passage: LN II & LN -mound: LBA	-passage rebuilt into a gallery grave- LN -cleared out? - LN
Friggeråker 1	SHM 19160	ATA	-mound: EBA	
Gudhem 7	SHM 6261	ATA	-next to grave: LIA	
Gudhem 112	SHM: 4840:50- 53	ATA	-chamber: LN	
Gökhem 17*	SHM 32201	Bägerfeldt 1987	-chamber: LN, BA/IA -passage: EIA	-passage rebuilt- IA -stonepacking-en- trance
Gökhem 24	SHM: 21426	ATA	-mound: BA, LBA	
Gökhem 31	GU/SM	Persson & Sjögren 2001	-entrance: MNB (PWC)	
Gökhem 71	GU/SM	Persson & Sjögren 2001	-entrance: MNB (BAC), LN I -mound: IA	-stonepacking-en- trance- BAC/LN -secondary stone floor- BAC/LN
Gökhem 72	SHM 24626, FM 129	ATA	-chamber: LN	
Gökhem 78	GU/SM	Persson & Sjögren 2001	-mound: LN, EIA & IA	

Gökhem 94:1*	GU	Sjögren 2008	-chamber: MNB (PWC), LNII, IA -mound: LBA, IA -unknown: EIA	-stonepacking-entrance
Gökhem 94:2	GU	Sjögren 2008	-unknown: LIA	
Göteve 41	SHM 12644	ATA		
Hornborga 31	SHM 23594	ATA	-chamber: MNB (PWC)	
Hornborga 53	SHM: 10158	ATA	-mound: EBA	
Hångsdala 2	SHM 3095	ATA	-chamber: LN	
Hångsdala 14	SHM 3097	ATA	-chamber: MNB (BAC)	
Hångsdala 15*	SHM: 3096	ATA	-chamber: LN	-cleared out??
Hångsdala 25		Säve 1863		-bone layers separated by flat stones
Karleby 3	Svensson 1927 nr 35	ATA		
Karleby 37	SHM 9736:a	ATA		
Karleby 55*	SHM 9736:b	ATA	-chamber: LN	
Karleby 57*	SHM 5157	ATA	-chamber- MNB (BAC), LN, LIA & IA	-bone layers separated by flat stones
Karleby 58	SHM 4840,FM 1268, 1660, 1737, 974	ATA	-mound: LN	
Karleby 59*	SHM 5386:b	ATA	-chamber: MNB (PWC) -chamber, passage: LN II & LN	-bone layers separated by flat stones
Karleby 82	SHM 18050, SM	ATA, Axelsson	-mound: LN -passage: LN	
Karleby 105	SM	Axelsson	-entrance: MNB (PWC) -chamber: LN -outside slab: BA -mound: IA	-cleared out??
Kinneved 19	SHM 3878	ATA	-chamber : LN	
Luttra 16*	SHM 3165	ATA	-chamber, passage: LN, LN I, LN II -outside slab: LN	-bone layers separated by flat stones
Norra Lundby 38	SHM 21425	ATA	-entrance: MNB (PWC)	
Norra Lundby 41*	SHM 7494:B	ATA	-chamber: LBA -mound: EIA -passage: LN/BA	-covered by mound- IA
Norra Lundby 66	SHM 7494:C	ATA	-chamber: LN	
Näs 6	SHM:21476	ATA	-unknown: EIA	
Näs 7*	SHM 32196	Bägerfeldt 1986	-chamber: MNB (PWC) -unknown: LN	
Skärv 8	SHM 439	ATA	-unknown: MNB (BAC), LN, IA	

Skärv 82	GU/SM	Persson & Sjögren 2001	-chamber: MNB (PWC)	-stonepacking-entrance -secondary stone floor- -passage closed by stone
Slöta 24*	SHM 3166, 16959	ATA	-unknown: LN	-bone layers separated by flat stones
Torbjörntorp 12	GU/SM	Persson & Sjögren 2001	-entrance: IA	-stonepacking-entrance
Valstad 8*	GU/SM	Persson & Sjögren 2001	-entrance: MNB (PWC), LN, IA -passage- IA	-stonepacking-entrance- IA -cleared out??
Valtorp 1*	GU/SM	Persson & Sjögren 2001	-entrance: MNB (PWC), LN -mound: IA	-stonepacking-entrance
Valtorp 2*	SHM 27911	Cullberg 1963	-chamber: MNB (PWC & BAC), LN II & LN, LBA & BA -entrance: MNB (PWC & BAC), LN II & LN	-stonepacking-entrance
Valtorp 42	GU/SM	Persson & Sjögren 2001	-entrance: MNB (PWC & BAC), LN -mound: BA/IA, LN/BA	-stonepacking-entrance- BAC/LN
Vartofta- Åsaka 8*	SHM 5386:c-e	ATA	-passage: LBA -mound: IA	-small stone cist in passage- BA -covered by mound- BA/IA
Värkumla 45	FM 2302	Falbygdens museum	-unknown: LN	
Dolmens				
Falköping västra 7	SHM:24625, FM: 2326	Cullberg 1961	-chamber: LN	
Kinneved 21	SHM: 14217	ATA	-chamber: IA -mound: IA -unknown: LN	-covered by cairn- IA
Gallery graves				
Borgunda 106	SHM: 6846+7591:100	ATA	-chamber: LN	
Brunhem 48	SHM: 19202	ATA		
Dimbo 18:2	FM 852, 1327	Melin 1927 nr 1	-chamber: LN	
Falköping stad 5:2	SHM: 32384	Weiler 1977	-chamber: MNB -chamber : LNII	
Falköping stad 15:1	SHM: 4840:29-32	ATA	-chamber: LN	
Falköping stad 20:2	SHM: 4840: 13-22	ATA		
Falköping stad 22	SHM: 6593	ATA	-chamber: LN, BA	
Falköping stad 26	SM	Algotsson 1996	-chamber: MNA - cairn: LBA	
Blinningsberg	SHM: 20317	ATA	-chamber: MNA, IA	

Kapellgatan	SHM: 19409	ATA		
Gudhem 159:1	FM: 1300:3, SM	Falbygdens museum		
Gudhem 159:2	FM: 1300:3, SM	Falbygdens museum	-chamber: LN	
Gökhem Ledsgården	SHM: 21426	ATA	-chamber: MNA, LN	
Gökhem Tor-sagården	SHM: 23802	ATA	-chamber: LN, LBA	
Karleby 71	SHM: 5386:a	ATA	-chamber: MNA, LNII, EBA	-covered by cairn- IA?
Kinneved 73	SHM: 22987, FM:2028	ATA	-chamber: LN	
Norra Lundby 103:4	SHM: 8059:1	ATA	-chamber: LN, LBA, IA	-covered by cairn- IA
Norra Lundby 110	SHM:6163	ATA	-chamber: LN	
Norra Lundby 119	SHM: 21851	ATA		
Torbjörntorp 16:3	SHM: 21675	ATA	-chamber: LN, EIA	
Torbjörntorp 18	SM: 88966	ATA	-chamber: MNA, LNII, EBA & BA - ante chamber: EBA & BA	-covered by cairn- IA
Torbjörntorp 31	SHM: 18522, 18832	ATA	-chamber: MNA, LN, LIA	
Valtorp 2:2	SHM: 27911	Cullberg 1963	-chamber: LN	
Varnhem 116	SHM: 5386:f, 17709	ATA	-chamber: LN, LIA	
Vilske-Kleva 26:1	SHM: 22681	ATA	-ante chamber: LBA, IA	
Värkumla 25	SHM: 18170	ATA	-chamber: IA	
Östra Thunhem 22	SHM: 24211	ATA	-cairn: LN, BA	
Östra Thunhem 26	SHM: 20362	ATA	-chamber: MNA, LN	

*: Passage graves with relatively good documentation, where large parts have been excavated, E: early, L: late, MNA: Middle Neolithic A, MNB: Middle Neolithic B, LN: Late Neolithic, BA: Bronze Age, IA: Iron Age, MA: Middle Ages, Raä: Riksantikvarieämbetet, ATA: Antikvarisk topografiska arkivet, SHM: Statens Historiska Museum, SM: Skara Museum, GU: Göteborgs Universitet, FM: Falbygdens Museum.