Change, desertion and survival

An archaeology of the late-medieval crisis

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An interdisciplinary approach to the late-medieval crisis in Sweden

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Per Lagerås

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Front cover: Wall painting from 1437 in Tensta Church, Sweden.
(Photo: Per Lagerås)
Back cover: Traditional agricultural landscape at Åsens by, in the South-Swedish Uplands.
(Photo: Per Lagerås)

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Change, desertion and survival – an archaeology of the late-medieval crisis

Lars Ersgård

Introduction

Historical archaeology in Sweden has not provided any comprehensive approach to the late-medieval crisis. There are several reasons for this. One is that later parts of the Middle Ages have never been perceived as important as the earlier parts of this epoch, often being reduced to just a transitional phase between the High Middle Ages and the Renaissance. Furthermore research on crisis as a general societal process has by tradition not been a topic of primary interest within Swedish historical archaeology compared to phenomena like state formation, urbanisation, Christianisation etc. Finally, earlier influential research by historians, especially within *The Scandinavian Research Project on Deserted Farms and Villages*, which significantly reduced the impact of the crisis on society in medieval Sweden, probably has played a role for a certain lack of interest among Swedish archaeologists.[1]

On the whole the awareness of the crisis has been highly varying in historical archaeological research, also in projects explicitly dealing with the late Middle Ages. The different attitudes represent a wide range from an almost total absence of interest to a more problematising approach to the phenomenon. Usually looked upon as an agrarian crisis, it has been regarded as just a matter of desertion with no closer connection to societal changes during the late Middle Ages. In this respect the crisis has often been referred to as a general historical background and as an explanation to different archaeological phenomena such as deserted farmsteads or discontinuities in the construction of churches etc. The role played by archaeology has often been a confirming one, supporting conclusions by written history.

Such an approach characterised the historical archaeological part of the interdisciplinary research project on the development of the cultural landscape in the southern part of the province of Scania, denominated *The Cultural Landscape During 6000 Years in Southern Sweden* (The Ystad project).[2] Historical archaeology was well represented in this project, collaborating with several disciplines.[3] Formation of villages, establishment of manors and ecclesiastical development being the main problems, no special focus was put on the late-medieval crisis. There was an awareness of the latter, however being just a matter of desertion and regression in the landscape.

A wider and more complex perspective on the late-medieval crisis has been presented

by Anders Andrén in his dissertation on medieval towns in Denmark. Including the towns in the discussion on the crisis, he emphasises the period 1350–1400 as a time of stagnation and decline as well as a time of change towards a more uniform urban structure.[4]

This chapter will present an archaeological picture of the late-medieval crisis with a primary starting point in the idea that this discipline may provide an independent contribution to the study of the phenomenon. The following archaeological study will not focus on the crisis only in the traditional way, that is tantamount to desertion of agrarian settlement, and repeat earlier questions, formulated by historians, concerning economy and demography. The crisis will be looked upon in a wider sense, as a movement affecting the society as a whole, not only economically and demographically but also culturally. In this way also the material culture becomes important, as a source for the study of strategies and acting on a cultural and mental level.

Janken Myrdal has considerably vitalised and widened the debate, presenting a three-phase model of the development of the crisis.[5] An initial phase, *catastrophe*, covering the two decades after 1350 when plague raged Scandinavia in three horrific outbreaks, was followed by a phase called *societal reaction,* which lasted up to 1450. This phase was characterised by a dysfunctional acting of the elite, which exacerbated the crisis and highly hampered the recovery of society. The final phase, *recovery and reconstruction*, which lasted 1450–1530, saw the beginning of a new expansion of society accompanied by technological changes and the emergence of a new effective political structure. This model will be of importance for the following analysis, not as a final answer but as a starting point and source of inspiration.

The late-medieval crisis was not only a matter of decline and decrease of population in the later part of the fourteenth century, followed by recovery in the fifteenth century – it was also a matter of change. Hence it is necessary to look upon it in a wider perspective of societal development. Profound changes characterised the early centuries of the Middle Ages, the landscape being successively transformed by population growth, land clearance and agrarian innovations. The large estates of the Early Middle Ages, which were based mostly on labour force of thralls, were replaced by farms based on the single family, and the peasants became either tenants or freeholders. Other important changes were the emergence of landowning nobility, the territorially defined parish and an extensive urbanisation in some parts of the country.

In the thirteenth century a new regionalisation of the country started, the regions from now on developing in different cultural directions. A socio-political shift of emphasis towards the eastern parts of southern Sweden occurred in the late thirteenth century, the areas around Lake Mälaren becoming a dominant region.[6] Several towns were founded here in the thirteenth century of which Stockholm became the most important. This region will from now on stand out as the centre of the Swedish realm. Characteristic of the countryside in the east was settlement of villages and hamlets organised in a highly regulated system of land division.[7]

The western parts of southern Sweden differed significantly from the eastern region. The urbanisation of the high Middle Ages was not as extensive as in the east, the towns being small and in some areas notably instable in their spatial structure.[8] In the countryside, the settlement lacked the regulated structure that characterised the eastern parts of the country.[9]

Northern Sweden differed significantly from the other parts. Towns, landowning nobility and a social system of tenants were practically absent in the north. The population

was dominated by freeholders with duties only to the royal kingship. However, there are indications of a socially stratified society in northern Sweden in the Viking Age and the early Middle Ages, such as big barrows with prestigious objects and manifest stone churches. Thus, a transition from an elitist society to an egalitarian one must have characterised the medieval development in parts of northern Sweden. The underlying causes of this process are still not fully understood, neither its possible connections with the late-medieval crisis.[10]

Formulating an archaeological approach to the late-medieval crisis, some decisive questions have to be raised. Firstly, how did the crisis affect the physical realities of the late-medieval society at the middle of the fourteenth century in terms of decline and stagnation? Here, problems concerning desertion of settlement and changes of the building of houses and churches will be included.

Secondly, how did the late-medieval society respond to the crisis? What did the people surviving the plagues of the 1350s and 1360s actually do in the new societal situation, the population being reduced by as much as 50%. How were they forced to change their everyday life in a material respect, searching for new strategies of survival?

A third question concerns regional variations. Did specific characteristics of a region affect the choice of survival strategies or were people acting in a similar way to withstand crisis and decline?

Searching for answers to these questions, an extensive, archaeological source material is available, including the traditional material categories of medieval archaeology, i.e. excavated structures as well as extant monuments. In this text it is used in two different ways. The first part of the analysis will work broadly, searching for the "good examples" all over the country, aiming for a synthesising overview.

The second part will change focus, working with a few settlement units. Studying three single farmsteads in different parts of the country, the aim will be to try to identify survival strategies in the time of the crisis in different regional contexts.

The primary area of investigation for the studies is Sweden with its present boundaries but some comparative outlooks towards other parts of the Nordic countries will complete the analyses. In a geographical sense, medieval Sweden was not the same as Sweden of today, several of its present provinces in the south and in the west belonging to Denmark

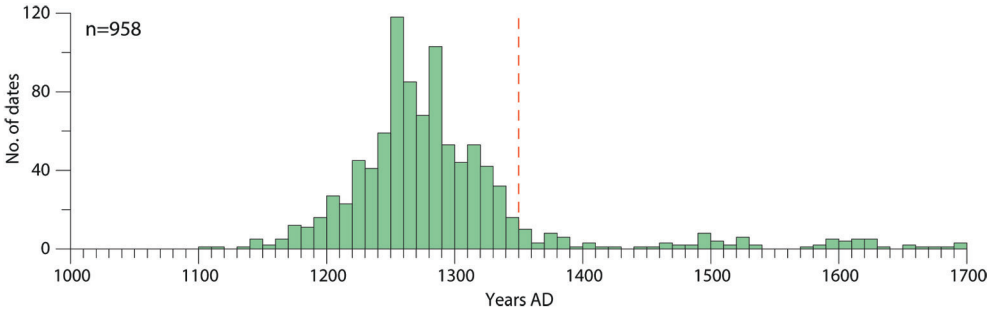


Fig. 20. All the dendrochronological dates (felling years) from medieval towns in the province of Östergötland performed by the National Laboratory for Wood Anatomy and Dendrochronology at Lund University. Bars show the number of dates per 10-year time slices. Dates later than 1700 are not included. The year 1350 is indicated by a dashed line

and Norway. On the other hand, the territory of today's Finland was part of the Swedish realm in the Middle Ages.

However, the political boundaries are of a secondary importance for this investigation. Moreover, the geopolitical situation of the Nordic countries was a very complicated one in the time of the crisis. For example, the political dominion of the province of Scania in the south alternated between Sweden and Denmark during parts of the fourteenth century. From the 1390s up to the beginning of the sixteenth century the three countries Sweden, Denmark and Norway were formally united in a political union with one common regent.

Investigating medieval settlement and its development, a conventional outline of the archaeological record will be followed, using the two primary categories *town* and *countryside* and the subcategories *profane settlement*, *churches and monasteries* and *castles*. A specific category has been denominated *proto-industrial settlement*. Using this outline has been motivated primarily by the fact that most research on the late Middle Ages so far has followed such a structuring of the source material. In addition to archaeology, a new compilation of dendrochronological data will be presented.

Late-medieval Sweden in the shadow of the crisis – an archaeological overview

Urban settlement

The extensive urban expansion of the High Middle Ages in Scandinavia came to an end in the beginning of the fourteenth century and during the remainder of this century very few towns were founded in the Scandinavian countries. Only in Sweden, including Finland, were new urban places founded during the latter part of the fourteenth century and in the beginning of the fifteenth.[11] Several of these had played a role as central places in their regions before they acquired formal status as towns, for example as market places or places of pilgrimage. In Denmark, urban expansion did not start until in the fifteenth century, while in Norway very few towns were founded in the late Middle Ages.

There are significant differences between the newly founded towns of the late Middle Ages and the places of older origin.[12] The former were mainly small units of settlement compared to the latter. They did not possess the developed institutional structure of the older towns, thus lacking buildings like monasteries, hospitals, sanctuaries etc. Usually a single church was the only institution. A famous exception of this pattern was the late-medieval town of Vadstena, the centre of the cult of Saint Bridget, where several institutional buildings were present.

Concerning urban decline at the time of the crisis, there are distinctive traces of desertion of settlement in some towns. In Uppsala a discontinuity of settlement has been observed in two places in the northern outskirts of the medieval town.[13] A rapid expansion in the later part of thirteenth century and in the beginning of the fourteenth century was followed by an abandonment of settlement in this area. At the end of the fifteenth century it was resettled by highly specialised craftsmen, indicating a new expansion of settlement during the recovery phase of the crisis.

In the town of Örebro, desertion of settlement took place in the late Middle Ages but

unlike Uppsala in a central part of the town.[14] Also, in Danish towns there are indications of desertion.[15] In the town of Lund, an area in the northern outskirts, where craft buildings were located in the High Middle Ages, was abandoned after the year 1350 and was not resettled until the sixteenth century.[16]

In the town of Linköping the impact of the crisis was discernable not as desertion but as an almost total stop of construction works during the first decades after 1350.[17] This lacuna is clearly discernible in the new dendrochronological material from the towns of Östergötland where the number of dates decreases significantly after the year 1350 (Fig. 20).

A critical remark concerning the dendrochronological dates from towns is necessary. A lot of them originate from a smaller number of large-scale excavations in medieval and post-medieval towns like Söderköping in Östergötland and Jönköping and Kalmar in Småland. Excavations in the former town have generated a large amount of dates from the thirteenth century and in the latter two towns from the seventeenth century. This means that these periods will be overrepresented in the material when using it for studies of long-term development.

Totally deserted towns seem to have been less common in the late Middle Ages. Probably some urban places in medieval Denmark were wiped out, like Herrested on the island of Funen.[18] In medieval Sweden two places may most likely be considered as examples of urban desertion. One of them is the place Folklandstingstad in Lunda parish of the province of Uppland. The place was obviously an urban structure in the thirteenth and fourteenth centuries but lacking a formal status as a town.[19] According to some written evidence Folklandstingstad was located in the neighbourhood of a local thing stead at the church of Lunda. Finds of cultural layers of the High Middle Ages has given further support to this localisation. Folklandstingstad was counteracted by the Swedish kingship, deciding in 1350 that the inhabitants had to move away to the nearby town of Sigtuna. In 1385 the place seems to have been totally abandoned.

A since long accepted explanation is that solely the acting of the king caused the disappearance of Folklandstingstad. However, the fact that there is a chronological coincidence between this disappearance and the outbreaks of the bubonic plague in the 1350s and 1360s makes it reasonable to suppose that the latter highly contributed to the rapid desertion of this urban society.

Our second example of urban desertion is a place called Gamla Köpstad at the west coast of Sweden, located around 5 km south of the town of Varberg. This place is less well understood than Folklandstingstad and our knowledge of it is solely based on the results of some minor excavations of the last decades.[20] Remains of houses, cultural layers, ceramics and coins indicate some sort of coastal trading place with a principal dating to the twelfth, thirteenth and fourteenth centuries. Probably Gamla Köpstad was finally abandoned in the fifteenth century. However, a thorough discussion on the connections between the abandonment and the societal crisis must be postponed at the moment, waiting for further and hopefully more substantial results concerning the function and chronology of the place.

Urban changes, indicating a reaction to the crisis, can already be seen in some towns in the later part of the fourteenth century. In Uppsala the character of the town settlement west of the river Fyrisån seems to have changed significantly at the middle of the fourteenth century. An older, agglomerated settlement of wooden houses was replaced by a residential settlement of stone houses surrounded by open garden areas.[21] An ecclesiastical district was materialised around the cathedral. Contrasting to this was the profane settlement east

of the river – the area of merchants and craftsmen – their yards filling the blocks with a coherent settlement of wooden houses. Extensive finds of bronze casting in a central part of the east riverside, indicating a specialised, large scale workshop established at the end of the fourteenth century, may be seen as an example of this new social structure of the town.[22] Furthermore, another expression of this process was the establishment of a new square in the 1380s.[23]

A decisive change seems to have happened also in the episcopal town of Linköping in the late Middle Ages. In the 1380s, only a few decades after the outbreak of the plague in 1350, new signs of expansion and restructuring became visible in the settlement. A densification and a regulation of the town plots took place and the first stone houses were built. This new expansion is absent in the dendrochronological material, a fact that may be explained by bad preservation conditions of wood in the cultural layers of the late Middle Ages.

These changes of settlement reflect, according to Tagesson, the establishment of the residential town and the building of clerical estates.[24] Thus, a differentiation of the town settlement similar to the one observed in Uppsala seems to have taken place in Linköping in the late Middle Ages.

In the episcopal town of Turku (Åbo) in the southwest of Finland a period of expansion began already in the 1360s and no signs at all of decline or stagnation are discernable.[25]

> the town grew in every direction with new buildings and the expansion of the street network. At this phase, the population of the town has increased remarkably and new technologies and innovations were also presented.[26]

So, the archaeological experience of Turku surprisingly well supports the earlier picture, obtained in Uppsala and Linköping, of the last decades of the fourteenth century as an expansive and dynamic, urban period.

Explaining this urban dynamics in the initial, severe phase of the crisis may seem rather difficult. However, there was a significant increase of gifts and donations to the clerical institutions in connection to the outbreaks of the plague in the later part of the fourteenth century, meaning a concentration of resources to the dioceses.[27] This phenomenon may probably be looked upon as a possible clue to the dynamics of the mentioned episcopal towns.

However, concerning late-medieval development, one episcopal town differs a lot from the above-mentioned places that is the town of Skara in the west of Sweden. After an expansive period in the thirteenth century and in the beginning of the fourteenth century Skara was struck by decline and desertion after the middle of the fourteenth century.[28] The dynamics, observed in Uppsala, Linköping and Turku in the late Middle Ages, seems to be lacking in Skara. On the contrary, this place together with other towns in the west were characterised by a sort of "de-urbanisation" in the fourteenth century when some administrative functions were moved from the towns to the royal castles in the countryside.[29]

The decrease of thickness in the formation of cultural layers in the later part of the fourteenth century has been a highly debated topic since the 1980s, the phenomenon being observed in urban contexts all over Scandinavia.[30] Several explanations have been presented but a connection between the change of the formation of layers and societal crisis has not been explicitly discussed.

Because of the general decrease in population the towns had to care for their own supply of foodstuff to a much higher degree than before, meaning an extension and a more rational

use of their own surrounding cropland. Thus, the urban refuse was used as manure in the fields outside the towns, enforcing a new management of the garbage inside the towns.[31]

Town churches

In some cases the on-going construction of urban churches in the fourteenth and fifteenth centuries, especially the cathedrals, can be looked upon as a sort of condensed reflection of societal crisis. As mentioned above, all construction works ceased in the settlement of Linköping after the year 1350 and so did the works at the cathedral in the town. Not until in the first decades of the fifteenth century they were resumed.[32]

In the cathedral of Uppsala no stop of the construction works can be observed during the latter part of the fourteenth century. However, the walls of the southern parts of the nave, which were erected during this period, show a more deficient craftsmanship than earlier walls.[33] In the building works of the fifteenth century a higher quality of masonry is visible anew. These qualitative differences have been explained by a lack of qualified masons, caused by the general decrease of the population at the end of the fourteenth century.[34]

The cathedral of Turku shows no signs of decline in the time of the crisis but rather expansion. Extensive construction works were carried out on this building in the second half of the fourteenth century.[35] A new chancel was built together with several chapels. Furthermore the sacristy was enlarged. Thus, these changes of the cathedral harmonise well with the above-described expansion of the town settlement of Turku.

An interesting comparison has been made between the cathedral of Trondheim in Norway and the cathedral of Odense in Denmark.[36] At the former the construction of a new nave started in the thirteenth century, the work staying unfinished when the plague hit Norway in the middle of the fourteenth century. Thereafter the building had to wait for its completion until the nineteenth century.

In Odense the building of a new cathedral began around 1300 but the work was still going on at the time of the Black Death. During the later part of the fourteenth century, there was a stop of building activities, being resumed not until the beginning of the fifteenth century. At the end of the century the cathedral was finally completed.

While the Danish church reminds us a lot of the development of the cathedral of Linköping, its counterpart in Trondheim reflects something much more severe. Not only did lack of economic resources prevent the completion of the cathedral but there was also a total extinction of the knowledge of working in stone caused by a dramatic decrease of population. This was not seen in any other parts of Scandinavia, thus reflecting a much greater impact of the crisis in Norway.[37]

Rural settlement

Large-scale archaeological investigations of agrarian settlement in connection with the late-medieval crisis have been few in number, so far, and are mainly from the southern part of the country. Usually dealing with desertion of single farmsteads or villages, this phenomenon has been studied not as a primary topic but just as a phase among others of the history of the farmstead or the village. However, several deserted medieval farmsteads have been archaeologically investigated in different parts of Sweden. Often the investigations have been carried out in woodland areas where abandoned settlement is well preserved.

The impact of the late-medieval crisis in different regions has been a matter of debate in

recent years. According to an earlier opinion the agrarian central areas of medieval Sweden withstood the effects of the crisis better than the marginal woodland of the north, mostly because of more favourable conditions for agriculture in the former areas.[38] This idea has been criticised by a group of archaeologists working with settlement in the woodland regions.[39] Their opinion is that such areas could cope better with decline than the central regions thanks to a multifaceted economy with several additional activities besides crop cultivation. Thus a natural flexibility should have been inherent in this kind of peasant economy, which made a rapid shift of production possible in times of agricultural decline.

A typical example of a woodland farmstead is a place called Högahylte in the southern part of the province of Småland, which was excavated in 2007.[40] The settlement was established in the thirteenth century and included buildings, crop land and places for ironworking. The economy of the farmstead was a mixed one, characteristic of a woodland area, with ironworking as an important, additional activity besides farming. The farmstead was built in a typical colonisation area but was abandoned in less than 200 years at the end of the fourteenth century. Thereafter its farmland was used for cultivation by neighbouring farmsteads. It has been assumed that the late-medieval crisis was the utmost reason for the abandonment but why this particular farmstead was abandoned is more obscure. An extremely marginal location in relation to other farmsteads in the region has been discussed as a reasonable explanation for abandonment.[41]

Deserted medieval settlement has been investigated at several places in the province of Jämtland in northern Sweden.[42] Because the farmland of deserted medieval farmsteads often were used as hay meadows or for summer pasture by nearby villages the locations of many abandoned medieval farmsteads have long been known.

A place called Eisåsen reminds of the above described in Småland. Here a farmstead was established in the thirteenth century and abandoned before 1450. Thereafter, its farmland was used for summer pasture up to the nineteenth century. However, quite a different narrative, compared to the one of the farmstead in Småland, has been presented for Eisåsen. The abandonment of this farmstead is not comprehended as the end of a phase of colonisation, but as a part of a cyclical course of events where expansion alternated with stagnation.[43] The flexibility of the agrarian society of Jämtland enabled an adaptation to the new economic realities of the late Middle Ages. Desertion was not a sign of a societal catastrophe, rather a part of dynamic change.

In other parts of Sweden where the geographical and cultural conditions were different, for example the fertile plains of Scania, a partial desertion has been observed, meaning an abandonment of only one or a few farmsteads of a village or a hamlet but not the disappearance of the entire settlement. In some places only parts of a single farmstead may have been abandoned. This type of desertion is no doubt difficult to discern in a written source material and most likely also problematic to identify archaeologically without large-scale excavations including a multitude of farmsteads.[44] However, in the province of Scania there are some good examples of partial desertion.

In the village of Kyrkheddinge outside the town of Lund a single farmstead was followed archaeologically from the end of the tenth century up to modern times. Desertion is evident during the second half of the fifteenth century when a major dwelling of three room units and a connecting barn were reduced to a minor building of only two room units.[45]

In the western part of Örja village, investigated in 2010, some kilometres east of the

town of Landskrona the development of settlement could be followed from the phase of establishment in the eleventh century up to modern times.[46] The excavation area included four different farmsteads, known from the oldest maps of the village originating from the seventeenth century. A reduction of the farmsteads took place after 1400 when only two of them were in use.

The examples of medieval settlement, discussed above, represent scattered evidence of desertion from different parts of Sweden. It is of course not possible to draw some conclusions of the relative extent of desertion on the basis of these examples. Investigations showing more obvious trends of desertion usually require interdisciplinary methods.[47]

One of the most noticed of such investigations is the one by Thomas Bartholin, already presented in the introductory chapter, including dendrochronological dating of still standing log houses from the middle and north of Sweden.[48] With a dramatic clarity Bartholin's results expose a rapid impact of the crisis around 1350 and a continuous absence of building activities up to the 1450s when a new expansion seems to have started. During this period of nearly one hundred years no houses were built, which probably means that the need for new buildings then was covered by an abundance of abandoned houses available because of the demographic decline (Fig. 21a).

The new compilations of dendrochronological dates, from the provinces of Småland and Östergötland in southern Sweden, confirm in general Bartholin's results concerning a rapid impact of the crisis on the building of houses around 1350 (Fig. 21b). However, there are no total absences of dates from the later part of the fourteenth century and the first half of the fifteenth century in the southern provinces. Furthermore they do not show any clear expansion in the second half of the fifteenth century. Such an expansion is not discernible until in the seventeenth century and then only in the province of Småland.

So far discussion has centred on late-medieval settlement in terms of desertion. It is also necessary to look upon it from a perspective of long-term change. At some places in southern Sweden a lasting structural stability seems to have characterised the agrarian settlement. Excavations in the hamlet of Stora Ullevi in the province of Östergötland have revealed an adaption of the high medieval settlement to a plot system, similar to the one that is visible on the oldest maps of the eighteenth century.[49] This adaption was discernible around 1200, the settlement thereafter having stayed fixed in the plot system up to modern times, unaffected by the long late-medieval crisis. A similar structural continuity has been observed in the above-mentioned village of Örja in the province of Scania where the structural change of settlement was dated to the twelfth century.

The province of Halland in western Sweden shows quite a different kind of development of medieval agrarian settlement.[50] Unlike the eastern parts it had a distinct mobile character and the locations of settlement units were changed during the Middle Ages. An important change, occurring in the late Middle Ages, meant that settlement was moved to new locations at the border between infields and outlands. Probably this change should be seen in the light of the general restructuring of the agrarian economy during the late-medieval crisis, meaning an orientation of the production towards animal husbandry.[51] Thus, an increase of outland pasture and a more rational use of the infields caused the moving of the settlement.

Whether this development of settlement was a characteristic only of Halland is still obscure. In other parts of Sweden the picture of agrarian settlement is more complex and elusive. In the Mälaren valley, excavated remains of settlement often do not coincide with

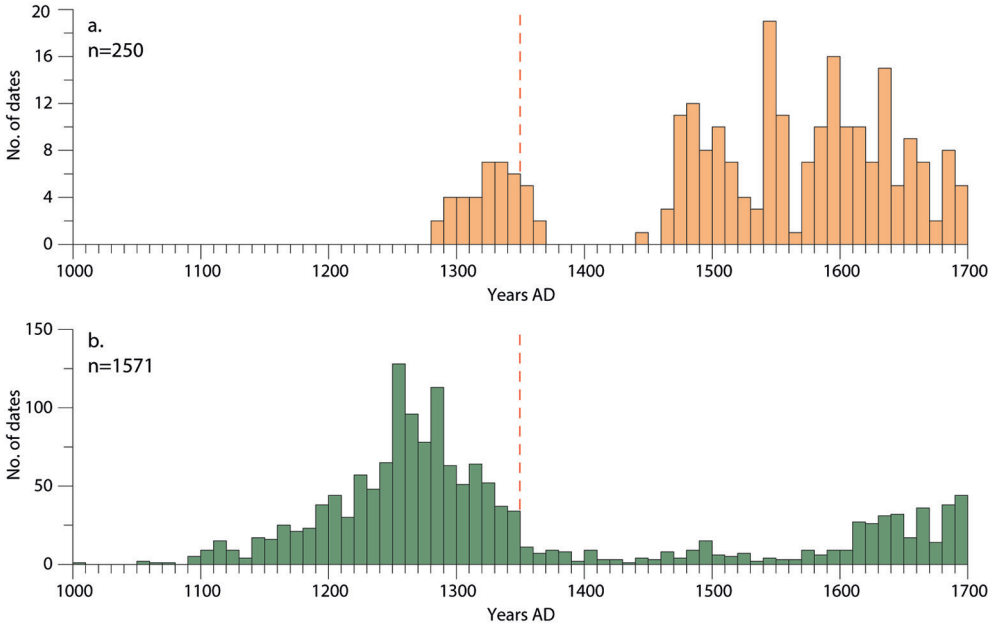


Fig. 21. Dendrochronological dates (felling years) from five Swedish provinces, AD 1000–1700. Bars show the number of dates per 10-year time slices. Dates later than 1700 are not included. The year 1350 is indicated by a dashed line. a. The provinces of Dalarna, Jämtland and Härjedalen (based on Bartholin 1989a); b. The provinces of Småland and Östergötland. Datings by the National Laboratory for Wood Anatomy and Dendrochronology at Lund University

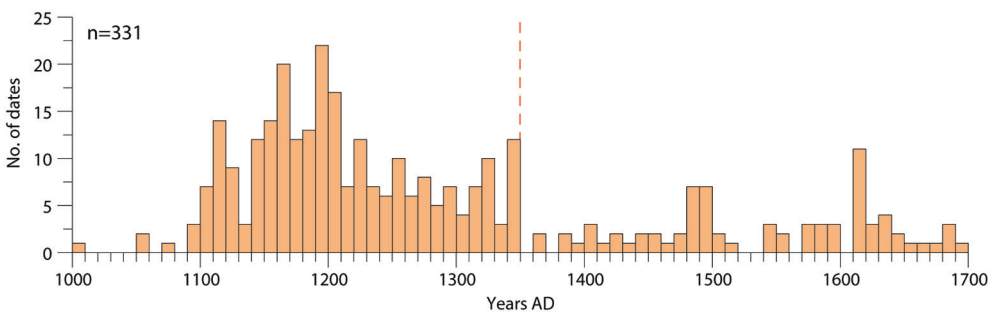


Fig. 22. Dendrochronological dates (felling years) from medieval churches in the provinces of Småland and Östergötland performed by the National Laboratory for Wood Anatomy and Dendrochronology at Lund University. Bars show the number of dates per 10-years time slices. Dates later than 1700 are not included. The year 1350 is indicated by a dashed line

locations of villages and farmsteads on the oldest maps and probably the late-medieval settlement may have had a partially mobile character.[52] However, the investigated remains are usually fragmentary and difficult to interpret, which causes great problems in identifying a late-medieval context.

Rural churches and monasteries

The building of churches in the countryside of medieval Sweden peaked in the twelfth and thirteenth centuries. Many churches, of stone as well as of wood, were erected, especially in the southern part of the country. Successively, building in stone became dominating and stone churches replaced several early wooden churches. This expansive period came to an end in the first half of the fourteenth century and during the remainder of the Middle Ages relatively few churches were built in the countryside. Instead, the late Middle Ages were characterised by extensions and reconstructions of already existing churches.

The decades following the year 1350 meant an almost immediate cessation of building activities in churches, the same pattern that was seen in the towns being repeated in the countryside. This observation is supported by the dendrochronological dates from the provinces of Östergötland and Småland (Fig. 22).[53] In some regions the stop seems to have lasted for about four or five decades. Dendrochronological dates from a number of churches in Scania show that the building activities there were resumed in the beginning of the fifteenth century.[54] However, this pattern is not valid for all regions. In the provinces of Småland and Östergötland dendrochronological dates show an increase of the building activities not until the second part of the fifteenth century.

A critical comment on the chronological distribution of the dates must be added. The purpose of dendrochronological analyses has often been to date the oldest phase of the church. Hence later phases, such as the rebuilding activities of the late Middle Ages, may be underrepresented in the material. Probably, this will be the case for the churches of Östergötland where a lot of reconstruction work, mostly vaulting, is not reflected in the dendrochronological dates from the late Middle Ages.

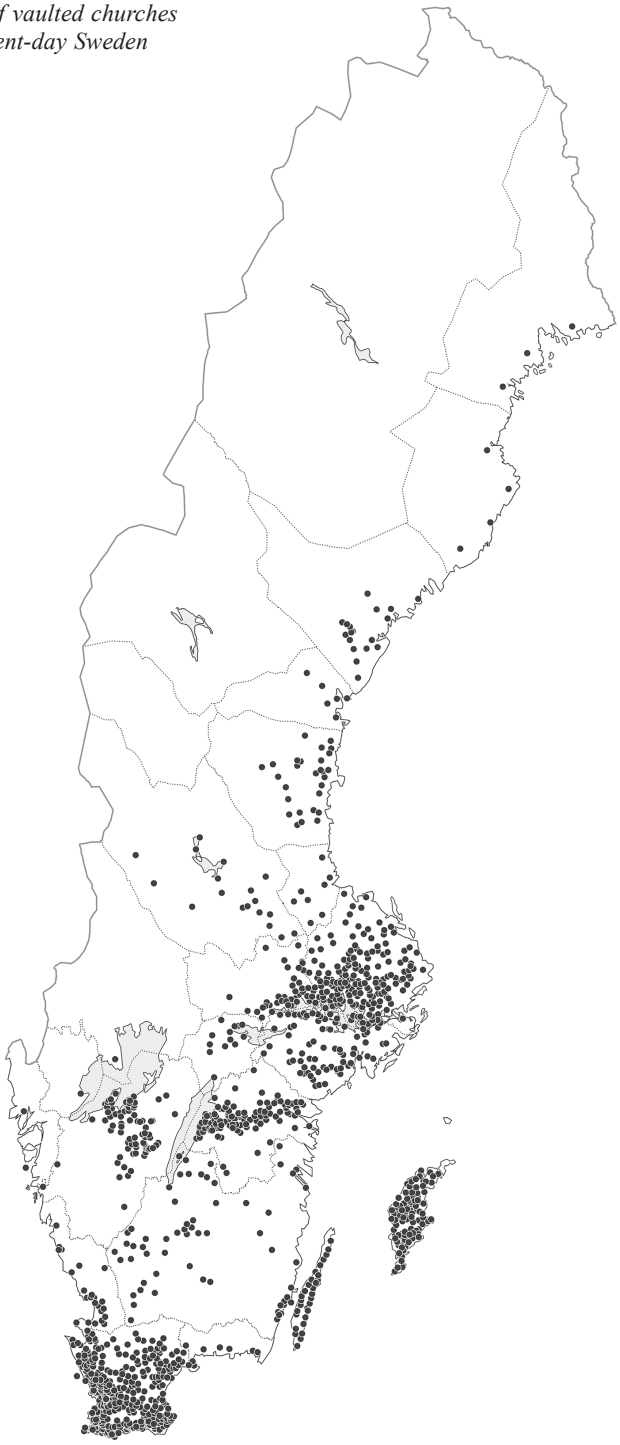
The extensions of the churches in the late Middle Ages included building of towers, chapels, sacristies and porches. A decisive change of the interior of the churches was the construction of brick vaults in the later part of the fifteenth century and in the beginning of the sixteenth, reflecting an agrarian surplus in the time of societal recovery being invested in new constructions. Initially cross vaults were dominating but in the course of the fifteenth century stellar vaults became common.

In searching for the aim of the vaulting, symbolic as well as functional explanations have been presented.[55] The vault may have been looked upon as a symbol of the heaven and the unearthly world and at the same time have served as a protection of fire in the church.

The geographical distribution of late-medieval vaulting shows some interesting variations, being inconceivable from a purely economic perspective. Most remarkable is the difference between the west and the east of Sweden. In the east the majority of stone churches became vaulted in the late Middle Ages, especially in the provinces of Uppland and Östergötland (Fig. 23).

In extensive parts of the western provinces, Västergötland, Bohuslän, Halland and Värmland, very few churches were vaulted in the late Middle Ages. Concerning this remarkable difference between the east and the west of Sweden, administrative as well as economic reasons have been discussed.[56] However, none of them seems convincing. If economic resources had been the decisive factor, the fertile areas of, for example, Västergötland would have had many vaulted churches. Probably an explanation is to be found in cultural differences, which are discussed below.

Fig. 23. Map of the distribution of vaulted churches from the Middle Ages within present-day Sweden (Dahlberg & Franzén 2008, 156)



Using the medieval monasteries in the countryside for a study of the late-medieval crisis raises some problems. Modern investigations of high archaeological quality are few and the existing source materials seldom offer opportunities for a detailed study of the late-medieval development. However, a modern investigation of the Cistercian monastery of Alvastra in the province of Östergötland, based on rich archaeological material, has provided some interesting results.[57]

A thorough analysis of the material culture of the monastery, buildings, small objects and graves, revealed a period of changes in the fourteenth century, reflecting a new approach to the world outside the monastery.[58] This change was interpreted as an expression of a greater openness to the secular world and of increased contacts with an urban culture. Nevertheless a close connection between the changes of the monastery and the late-medieval crisis has been questioned.[59]

However, it is possible to launch a hypothetical connection. A considerable part of the workforce of the monastery being wiped out by the plagues, its agrarian economy would have been severely disturbed. Being more dependent of supply from the world outside, a survival strategy may have been trade with neighbouring towns, probably also promoting an increase of urban cultural contacts. Furthermore, the monastery was not short of economic resources, being richly provided with gifts and donations in the harsh times of the plagues.

Castles

The building of castles in the late Middle Ages has been regarded as one of the most obvious material manifestations of the crisis, particularly of the "*dysfunctional reaction*" of the societal elite in the second half of the fourteenth century.[60] Developing a plunder economy when the crisis threatened to undermine its status, the nobility could use the castle as a highly effective, repressive tool. So, when all constructions of other kind were interrupted after 1350 the building of castles took another direction. A multitude of royal and aristocratic strongholds were constructed, making the second half of the fourteenth century the extreme peak of the building of medieval castles in Sweden (Fig. 24). A great number of castles were built by the royal power in the inland as well along the coasts of Sweden, several of them being located in western Sweden and in the province of Småland.[61] The castles of the nobility seem to have been more evenly distributed over the country.[62]

Many of the castles constructed in the second half of the fourteenth century became short-lived phenomena, being closed down during the first decades of the fifteenth century. Many were destroyed in connection with peasant revolts in the 1430s. Castles surviving the fifteenth century, above all castles belonging to the royal power, were often located at the coast or at strategically important watercourses, many of them in connection with towns like Stockholm, Nyköping and Kalmar.[63]

According to Janken Myrdal's interpretation of the castles built in the later part of the fourteenth century, many of them functioned primarily as centres of military repression. However, some constructions had a more complex function, detectable only by the use of archaeology. Magnus Stibeus has analysed extensive finds material of a royal castle, Piksborg, located in the southwest of the province of Småland and in use in the later part of the fourteenth century and in the beginning of the fifteenth.[64] This material, consisting among other things of a huge amount of coins, had an unmistakably urban character, indicating not only military and administrative functions but also mercantile ones.

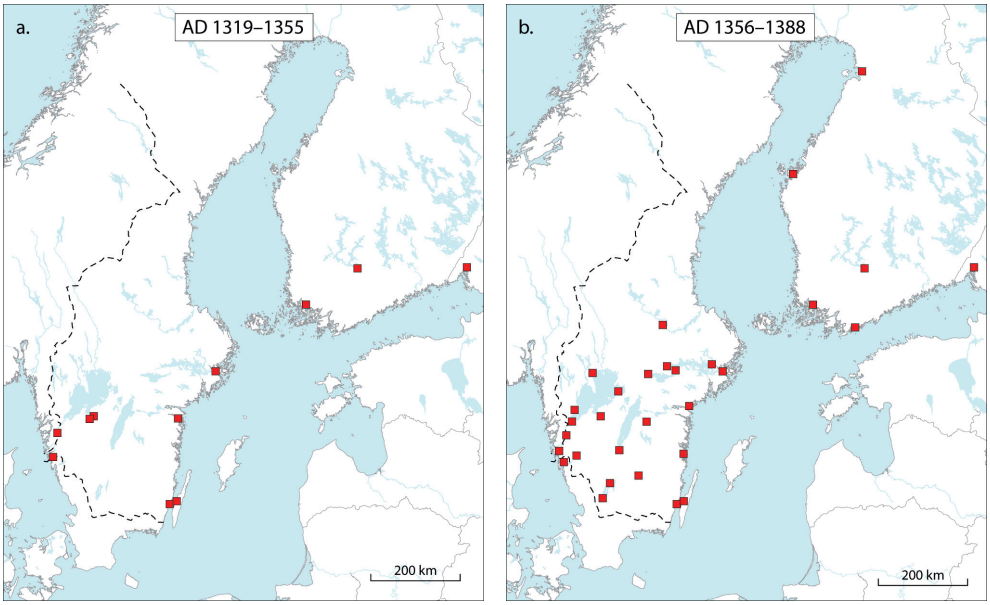


Fig. 24. Map of the distribution of Swedish royal castles of the fourteenth century. The dashed line mark the national border of medieval Sweden (based on Lovén 1996, 194–195). a. Royal castles in use 1319–1355; b. Royal castles in use 1356–1388

Thus, we may look upon Piksborg as an expression of a suppressive strategy of the royal power in an utterly severe period of the crisis, gaining a harder control not only over tax collection but also over other urban functions. For this purpose the *"urban fortress"* was a more efficient solution than the ordinary town. Hence Stibeus' results concerning Piksborg fit well with the experience of late-medieval Skara, losing some of its urban functions in the time of the crisis.

The contemporary castles of northern Sweden have also been discussed from the same perspective.[65]

Proto-industrial settlement

Here a specific kind of place, connected with iron working and fishery, will be discussed, being defined as *proto-industrial* settlement. The term *proto-industry* has been much debated within economic history, often being used to define an initial stage of industry.[66] Here a proto-industrial settlement will mean a place of a large-scale production oriented to consumption outside the actor's own home district. The work was carried out by peasants combining a specialised surplus production with ordinary agricultural supply.[67]

Medieval metalworking in Sweden and its great importance for societal development has long been well known thanks to a large amount of historical research as well as archaeology. At present, research within the latter discipline is mostly work in progress.[68]

In an area of southern Sweden, including parts of Halland, Småland and Scania, medieval iron working has been studied in a long-term perspective.[69] Here, a number of iron working

sites were established in connection with colonisation of the area in the twelfth and thirteenth centuries. The iron production was organised within the context of the single farm, being oriented to a consumption of iron on this particular farm or in its closest hinterland.

In the later part of the fourteenth century the area seems to have been struck hard by the plagues and societal decline and it was not until the end of the Middle Ages that a new landscape of production was taking shape. In the recolonised area iron working was a dominant element. Although an older technique – bloomery production – was still in use, the activities had changed, both quantitatively and structurally. Bo Strömberg has interpreted late-medieval iron working in the area as a sort of *proto-industry*.[70] Its main characteristics were a volume of production much larger than before, a deliberate localisation of the working sites close to the raw material and the energy, that is the waterpower, and finally differentiated settlement at the production sites. Production was oriented to distribution outside the region, being governed by subordinate political actors.

A mining district called Näveberg in the province of Sörmland has been studied by the archaeologist Eva Skyllberg.[71] Here mining activities began in the later part of the fourteenth century, a fact discussed by Skyllberg in connection with the late-medieval crisis. She considers the establishment of mining as a strategy to cope with the consequences of the crisis. Mining provided new revenues for the nobility when the rents of agriculture tended to decrease dramatically.

A characteristic of the activities at Näveberg was an organisation of labour where tenants were the primary actors in the mining process but subordinated to a manor estate. According to Skyllberg such an organisation of metal working was a unique phenomenon in medieval Sweden.[72]

Iron working in the districts north of Lake Mälaren differed considerably from the place described above. A thorough archaeological investigation at the site of Lapphyttan has shed light on the emergence of activities at the end of the twelfth century, as well as on the introduction of the blast furnace technique in medieval Sweden – the great technological innovation of medieval metal working – enabling volumes of production never seen before.[73]

Being subject to great interest by the nobility, these activities must most likely have functioned within a manorial system from the outset, at the end of the twelfth century up to the 1350s, meaning that iron working was organised and governed by a nearby manor. Operating a number of foundries, the manor needed a considerable workforce, consisting of subordinated crofters and tenants dependent of supply from the manor when working at the foundries.

Starting in the second half of the fourteenth century, a major abandonment of blast furnaces, (around 30%) took place.[74] The closed constructions were so-called 'outland furnaces' with no spatial connection to settlement, thus reflecting the old manorial organisation of iron working. The demographic decline of the societal crisis brought this system to an end, enabling a new system of smaller, self-sufficient farms of peasant miners.[75] The latter were freeholders, dealing with iron production beside the agricultural activities. They were living in villages, the single village forming a collective enterprise with an iron foundry in the centre, surrounded by farms.[76]

This system of collaborating farms underwent a continuing streamlining and improvement of iron working during the recovery phase in the late Middle Ages. A co-location of the blast furnaces and hammer mills, beginning at the end of the epoch, was of great importance for

the expansion of the activities in the hey days of the sixteenth and seventeenth centuries.[77]

The peasant miners acting as an influential group in the peasant rebellions of the 1430s; this social transformation of the mining activities must have already occurred in the end of the fourteenth century or in the beginning of the fifteenth century.

So, the late Middle Ages appear as a breaking point in the development of metal working, the crisis being a considerable causal element of this development. It was not a question of introducing new techniques – bloomery and blast furnaces were known long before. Rather it was a question of a new social organisation as well as of a specialisation and streamlining of the activities.

Concerning fishery, no desertion of production sites similar to the above-described situation in the mining districts is to be seen in the late Middle ages. There are some radiocarbon analyses of coastal settlement along the Kalmarsund strait showing a slow-down of fishing activities in the fourteenth century, probably caused by general, societal decline in the second half of this century.[78] At the major fishing sites of the Öresund strait and the southern Baltic, there was no such decline. Rather, restructuring and specialisation characterise these places in the late Middle ages.

In Skanör, one of the most important places at Öresund, the large market area was closed down in the later part of the fourteenth century. At the same time the first settlement of the late-medieval fishing camp was established, located on an island west of the town of Skanör.[79] Not until this time did the fishing camp become spatially defined, which was one of the primary conditions for the development of fishing as a large-scale activity. In Skanör and in the nearby Falsterbo, fishing became highly specialised in the late Middle Ages, the catching as well as the further processing of the fish being restricted many regulations.

Proto-industrial fishing, but of another character, was carried out along the Baltic coast of northern Sweden, starting in the fifteenth century. Burghers from the towns of the Mälaren valley organised this long distance activity as annual, seasonal expeditions to the northern archipelagos. Thus, this fishing was of a primary mercantile character but was not concentrated in big fishing camps as in the southern Baltic.

Apparently, large-scale fishing of a proto-industrial character was confined to the southern and eastern parts of Sweden, such activities entirely lacking in the western parts in the late Middle Ages.

Summing up the overview

Summing up this overview, some preliminary answers to the decisive questions, formulated in the introduction, will be presented.

Firstly, focusing on desertion and decline, it can be noted that there is abundant archaeological evidence all over the country, enhancing the picture of the crisis as a general ‘wave of decline’ raging everywhere. By all accounts towns as well as countryside were engulfed. However, no reliable quantification of the extent of the decline, on the basis of the archaeological material, is possible so far.

According to dendrochronological results the crisis seems to have had a very rapid impact on society in the middle of the fourteenth century, causing an immediate stop to building activities. The recovery of the fifteenth century shows, following the same results, a more prolonged course characterised by certain regional variations.

Considering significant human responses to the crisis, some towns, surprisingly soon

after the first catastrophic decades, experienced a phase of restructuring and expansion. The towns in question were well-established, episcopal centres like Linköping and Turku. In newly founded towns of the late fourteenth century and first half of the fifteenth, except for the pilgrimage centre of Vadstena, there are no such signs of 'positive' development.

Concerning the countryside, the archaeological picture is more obscure, showing both continuity and discontinuity. A structural stability of settlement throughout the Middle Ages, characterising regions like Östergötland and Scania, stands out as rather different from the flexible and mobile pattern of Halland. A particular kind of change in the late-medieval countryside was the transformation of outland occupations like iron working and fishing to large scale, highly specialised activities.

Focusing on regional variations, a fragmented pattern of late-medieval development is appearing. Regional differences are discernable in almost all aspects. Signs of urban dynamics in the later part of the fourteenth century were only seen in towns in the east of Sweden and in Finland. An opposite trend was visible in the western towns, showing decline and "demi-urbanisation".

Also, agrarian settlement was characterised by great regional variation. Showing a high degree of continuity and stability in the east, the opposite was seen in the west, i.e. mobility and instability. A relocation of agrarian settlement in late-medieval Halland is the most obvious expression of this structural mobility.

Concerning churches and castles in the countryside, a great number of the former were reconstructed in the east and south, mostly employing vaulting. In the west, churches showed very little sign of such activities, most of them remaining not vaulted in the late Middle Ages. No distinct, regional differences in the building of castles are discernable except for the royal castles showing a certain concentration to the western part of the country.

Large scale activities of proto industrial character were established in the east of Sweden in the late Middle Ages, for example in the mining districts. Something similar was not to be seen in the west except for the iron working in the south of Halland.

Concluding this summarising picture of the late-medieval development it may be described in general as a complex process including elements both of decline and dynamic change as well as of great regional contrasts. With this in mind we will now continue with the second part of the investigation, studying the late-medieval crisis on a local level.

Three case studies

The previous section was an attempt to outline a late-medieval development from the perspective of the societal crisis, synthesising archaeological results of different kinds and from different contexts. Some crucial problems were discussed, however on a rather general level.

This section will approach the late-medieval crisis from a somewhat different point of view. Earlier research has often focused on the negative aspects of the crisis, for example the degree of mortality and the process of desertion of settlement. Of course the crisis caused severe and pervasive disturbances of late-medieval society but, after all, this society endured. How did people, surviving the ravages of the plague, cope with the harsh realities

Fig. 25. Map of Scandinavia showing the locations of the three farmsteads: A. Vålle; B. Stora Ullevi; C. Örja

of the late fourteenth and fifteenth centuries in their everyday life? What strategies did they develop to withstand decline and collapse?

Hence, this study will focus primarily on survival rather than decline.[80] It will take a point of departure at a social level most essential to a majority of the population, that is the level of the single farmstead. Thus, it will concentrate interest not on deserted settlement but on settlement that survived during the long era of late-medieval decline. How did the crisis affect the people on the single farmstead? In what way were the inhabitants of the farmsteads forced to change their way of living during this severe and transformative period?

Concerning survival strategies in the time of the crisis, abandonment of the farmstead and moving to a more favourable place may of course have been a deliberate choice to avoid complete extinction, i.e. a kind of survival strategy.[81] However, to determine whether a farmstead has been deliberately abandoned or if it has been deserted because of the death of its users will hardly be possible within an archaeological context. Therefore, this section will focus on settlement remaining in use as discernible units in the time of the crisis in the places where it once was established.

The source material of the following case studies will include the archaeological results of three late-medieval farmsteads in the southern part of Sweden, all of them excavated during the last 15 years (Fig. 25). The scientific approach is a comparative one, based on farmsteads from different regional contexts. A main problem discussed in the following will be if unique regional characteristics have been of decisive importance for the choice of survival strategy of the single farmstead.

Sweden includes a large part of the Scandinavian Peninsula where the regional variations concerning topography, vegetation, climate and soils are great. Vast areas of woodland and mountains in the northern part of the country were sparsely settled in the Middle Ages. In

the south the geography is more varying, with fertile plain areas alternating with woodland. Characteristic of the territory of Sweden was further an extremely long coastal zone (2400 km), giving access to maritime resources.

An optimal choice of farmsteads for the following case studies would have included examples from all the different regions of medieval Sweden. However, investigations of agrarian settlement, which almost exclusively originate from rescue excavations, are not evenly distributed over the country. In general, good examples of large-scale excavations are rare and moreover mainly to be found in the south, where modern development has been greatest. Thus, the selection of farmsteads has been restricted to this part of the country.

A point of departure for the comparative study of the farmsteads is the cultural regionalisation of Sweden, described in the introduction of this chapter, starting in the thirteenth century. With a turning point around 1250, regional characteristics were developed of which the western and eastern parts of the country respectively were paid most attention to. In several aspects these two regions differed significantly from each other.

The three places fulfil the following criteria. First, being established in the early Middle Ages, they endured the era of the crisis from the middle of the fourteenth century up to the beginning of the sixteenth century. Secondly, they represent three different regional contexts of medieval Sweden. Thirdly, the chosen farmsteads represent three different environmental contexts.

One of the three farmsteads was located in the west of Sweden, in the northern part of the province of Bohuslän. It can be characterised as a typical woodland farmstead with small lots of crop land surrounded by forests and mountains, its agrarian economy primarily being oriented to animal husbandry. In these respects the farmstead has great similarities with the agrarian settlement of northern Sweden.

The other two farmsteads were located in fertile plain areas, one in the province of Scania in the southernmost part of Sweden, the other in the province of Östergötland in the eastern part. The former was a typical coastal settlement near the strait of Öresund, a highly urbanised region of great mercantile importance in the Middle Ages. The latter was an inland settlement located in the neighbourhood of the bishop's town of Linköping. The agrarian economy of these two farmsteads was oriented primarily towards crop cultivation.

The question must be raised whether these three places may be considered as representative for their regions. Does their development show anything typical in the time of the crisis or were they just exceptions? Of course it is hardly possible to answer such a question properly. The extent and quality of the existing, archaeological source material is still too limited. However, this may not prevent us from using these examples in a discussion of survival strategies in the time of the crisis. Exposing well-discernable, human action in the late Middle Ages, they are good examples.

The farmstead Vålle in the province of Bohuslän

The analysis of each farmstead begins with a brief characterisation of the historical and topographical context followed by an overview of the development of settlement. Finally the development of the farmstead in a wider historical context during the era of the crisis, 1350–1530, will be especially discussed. The Swedish National Heritage Board investigated all the three farmsteads during the last 15 years.

The farmstead called Vålle was located in Lur parish in the northern part of the province

of Bohuslän. A sparsely settled landscape, characterised by minor rift valleys alternating with mountains and woodlands, surrounded the farmstead in the Middle Ages. The settlement of the region consisted primarily of single farmsteads and minor hamlets. No manors seem to have dominated the landscape but in the written source material of the fifteenth century Vålle is mentioned as a tenant farm. On the oldest maps of the nineteenth century Vålle is denominated as a single farm but divided into several households. The investigation of the farmstead that took place in 2007 included the southern part of the settlement (Fig. 26).[82]

According to the archaeological results, the earliest settlement was established in the early Middle Ages (1000–1100), consisting of a major building probably with both residential and economic functions (Fig. 27). In the fourteenth and fifteenth centuries a significant expansion of the farmstead took place. Another large building was erected north of the existing one. The presence of a kitchen in this construction indicates a function of the building as a dwelling house. Between the two larger houses a minor agricultural building was erected.

In the fourteenth century a smithy was built just northwest of the above-mentioned buildings. How long it existed was not possible to determine but according to the radiocarbon datings the activities of the smithy peaked in the period 1350–1450.[83] The results of metallurgical analysis indicate a multifaceted working process including cleaning of iron lumps as well as forging of objects.[84]

The described structure of the farmstead remained intact up to early modern times (sixteenth and seventeenth centuries) except for the oldest building. In the eighteenth centuries all buildings were torn down and replaced with new ones.

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There are no signs of discontinuity or desertion of the farmstead during the era of the late-medieval crisis. However, northern Bohuslän was struck hard by the crisis. Current research has estimated the desertion frequency of farmsteads in this region to be as high as 50% in the late Middle Ages.[85]

Probably the crisis caused extensive desertion in the surroundings of the investigated farmstead. However, this settlement does not reflect decline, rather dynamics through the creation of new constructions. Furthermore, one of these was the place of specialised forging, apparently a new activity in the region. An iron production site of the same date as the smithy at Vålle has been excavated further north in the province.[86]

In the less feudalised and less regulated area of northern Bohuslän the access to the vast, forested and mountainous outlands most likely was less controlled. Probably the outlands had been used, for instance for wood pasture, long before the late-medieval crisis in this area. So, when the exploitation of the outland resources, wood and iron ore, for specialised ironworking started in the fourteenth century a cultural adjustment to these areas was already long-established.

A crucial question is for what purpose were the completed iron objects produced – for sale, as items for taxation or only for use in the household of the farmstead? The activity of the smithy was of an advanced, specialised character, which probably means that forging was not intended exclusively for the household but for a wider distribution. This might have brought other revenues to the farmstead than what was possible through agriculture.

The late-medieval crisis has likely contributed to the development of a multifaceted

peasant economy in the province of Bohuslän. Such an economy with additional activities besides agriculture characterised the region in early modern times and might have had its origins in the changes of the late Middle Ages. One expression for such a diversified economy was a maritime peasant trade going on since the sixteenth century up to the nineteenth century along the coasts of western Sweden.[87] Peasants from Bohuslän and other parts were also sailing tradesmen engaged in long distance trade with cargos like lime and timber to seaports in the northwest of Europe.

The archaeological find material from Vålle included some indications of this mercantile activity. Although most of the finds were of an ordinary character some of the ceramics, fragments of imported vessels from the Netherlands and Flanders, reflected external contacts less typical for an agrarian settlement.[88] Such vessels originate from the seventeenth century, i.e. rather long after the era of the crisis. However, it seems reasonable to assume that these finds reflect a long-distance trade of much earlier origin in the northern part of Bohuslän.

The farmstead at Stora Ullevi in the province of Östergötland

Stora Ullevi is a hamlet in the province of Östergötland located on a low ridge between the town of Linköping and Lake Roxen. Its hinterland is a plain area, during the Middle Ages characterised by large meadows and pastures. On the oldest map from 1764 Stora Ullevi is a geometrically regulated hamlet (Fig. 28). At the end of the Middle Ages there were 11 homesteads in the hamlet of which all but one were used by tenants under the monasteries of Askeby and Vadstena and also the diocese of Linköping. Stora Ullevi belonged to the parish of St Lars, which also included parts of the town of Linköping.

Archaeological excavations in 1998 and 2003 included three building plots of the hamlet.[89] The excavations showed that the earliest settlement here was built during the later Iron Age. The site was then continuously inhabited up to the Middle Ages. New construction elements like sills and fireplaces were introduced in the houses of the eleventh and twelfth centuries.

In the following period, the thirteenth and fourteenth centuries, the most important changes took place (Fig. 29). Of the three investigated building plots only one, plot A, was settled during this period. Here, four minor one-room buildings were erected, one dwelling house, one smithy and two agricultural buildings. It is obvious that this building activity was simultaneous with a regulation of the settlement in the beginning of the thirteenth century. The new houses were then adjusted to a geometrical plot system, which corresponds to a system still detectable on the oldest maps of the eighteenth century.[90]

In the fourteenth century these houses were replaced by one single building consisting of two rooms, a bigger dwelling room with a fireplace and a smaller chamber. A new expansion started in the following period, the sixteenth and the seventeenth centuries, when all the investigated plots were settled. On plot A, showing continuity of the settlement, the house of the late Middle Ages was replaced by a so called double cottage, functioning as a dwelling house.

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There are no immediate signs of desertion or decline in the late-medieval settlement of Stora Ullevi. However, the settlement underwent a great and pervasive change during the fourteenth and fifteenth centuries.

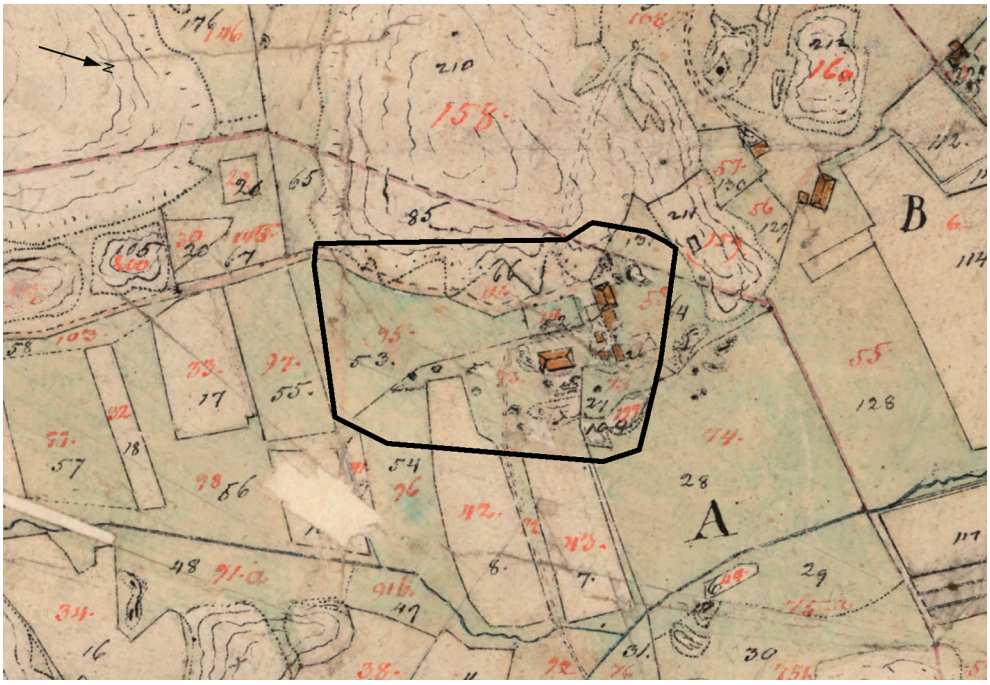

Fig. 26. Cadastral map of Vålle from 1825 showing the settlement (brown squares) and its surroundings. Black line marks the excavation area

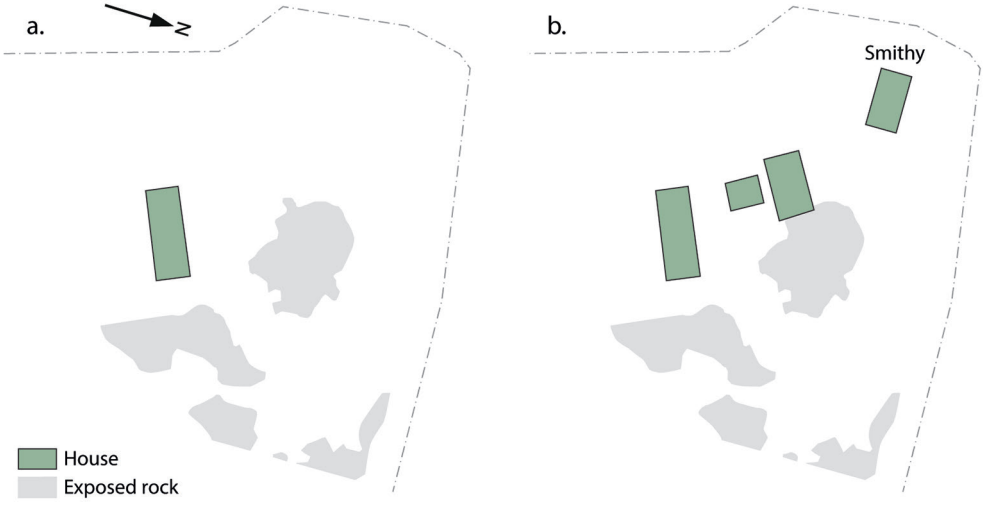

Fig. 27. Change of settlement at Vålle AD 1000–1500. Settlement dated to a. 1000–1300 and b. 1300–1500, respectively

Neither are there any signs of economic specialisation in the late Middle Ages of the kind seen at the site in Bohuslän. The smithy that was present in the thirteenth century disappeared after 1350 together with the other buildings of the early Middle Ages. Only one large building, a dwelling house, replaced them in the late Middle Ages.

However, some finds of an unmistakable exclusive character from this building give a clue to the understanding of the late-medieval Stora Ullevi. The finds consist of some book clasps, a polished rock crystal and some mountings, one with a picture of a heraldic lion (Fig. 30). Such finds are not typical of an ordinary agrarian settlement, rather of urban and ecclesiastical contexts. Similar objects have been found in residences in the town of Linköping and in the nearby monastery of Vreta.[91] These finds raise questions on the social structure in Stora Ullevi in the fourteenth and fifteenth centuries. Do they reflect the presence of some high status people and thus a major social change in the village during these centuries?

The nearby town of Linköping was an important religious centre already in the early Middle Ages, long before it got its legal status as an episcopal town at the end of the thirteenth century.[92] Most likely there must have been a close cultural connection between the town and the neighbouring villages and hamlets because of the special role Linköping played in this part of Östergötland. The fact that the hamlet of Stora Ullevi was included in one of the urban parishes might have been an expression of such a connection. Thus it seems rather logical that the formation of a survival strategy of the hamlet in the time of the crisis was highly influenced by the development of the neighbouring town.

The late-medieval crisis seems to have caused an immediate interruption of the building activities in the town of Linköping already around 1350, which lasted some decades.[93] After 1380 these activities started anew. In the last decades of the fourteenth century Linköping underwent a dynamic development characterised by expansion and densification of the urban settlement.[94] The growth of the diocese town combined with an extensive building of stone houses was no doubt of importance in this development.

Probably the town's hinterland was affected by the urban dynamics and the finds from Stora Ullevi could be a material expression of this connection. Such an assumption is further supported by the analysis of animal bones from Stora Ullevi, which indicates an economic integration between the hamlet and the neighbouring town of Linköping in the late Middle Ages.[95] A decreased consumption of beef in the hamlet can be explained by an increased distribution of cattle to the town. This trend is corresponded by an increasing consumption of mutton in the hamlet during the same period.

Thus the development of Stora Ullevi in the late Middle Ages can be comprehended as reflecting an increased integration – social, economic and cultural – between town and hinterland. The animal husbandry became more oriented to satisfy the needs of foodstuff in the nearby town. The material culture reflects a new social context in the hamlet with a non-agrarian connection.

Hence, the hamlet was in a way 'urbanised'. The ecclesiastical character of the finds indicates a link to the expanding diocese in the town, and possibly people belonging to this institution inhabited the farmstead in the late Middle Ages.

The development of the hamlet of Stora Ullevi after the Middle Ages is somewhat more obscure. The era of Reformation meant a setback for the episcopal town of Linköping, the properties of the catholic church being withdrawn to the Swedish state, possibly affecting not only the town but also the surrounding countryside.[96] However, nothing of this is

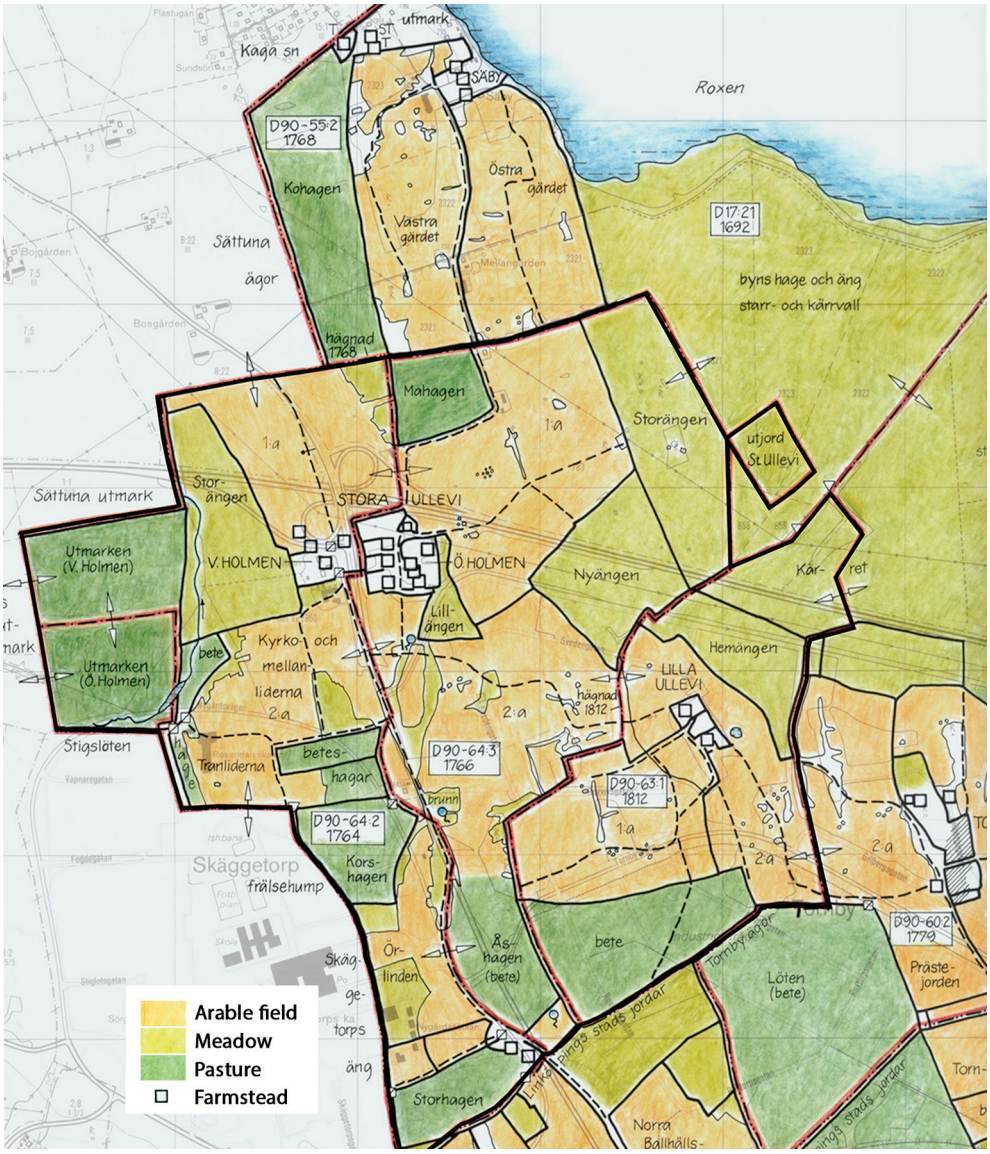

Fig. 28. Cadastral map of Stora Ullevi from the 1760s

archaeologically discernible at Stora Ullevi where the sixteenth and seventeenth centuries were characterised by expansion.

The farmstead at Örja in the province of Scania

The village of Örja is located in the western part of Scania some kilometres east of the town of Landskrona. The surroundings of the village are a fertile plain area where crop farming

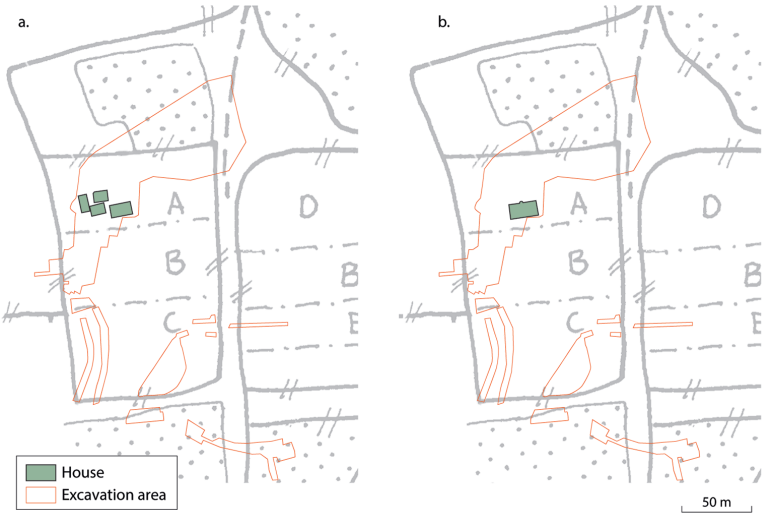

Fig. 29. Change of settlement at Stora Ullevi AD 1200-1500. Settlement dated to a. 1200–1350 and b. 1350–1500, respectively. Grey lines show the building plots from the cadastral map

Fig. 30. Finds from the late medieval house at Stora Ullevi: a. book clasp with rock crystal and strap-end mounting; b. bronze mountings (photo: G. Billeson)

has been dominant. Örja was the church village of Örja parish, which also included the hamlet of Tullstorp. The oldest map of 1761 depicts 18 homesteads in Örja, which means a relatively large village (Fig. 31). A very scarce written source material gives no support to the assumption that this was the medieval extent of the village. All the homesteads of the village seem to have been tenant farms.

Originally the farmsteads were located around a large open area where the medieval parish church was erected at the turn of the century 1200. Possibly, there was an older church and also an early-medieval manor in the eastern part of the village.[97]

In the year 2010 the western part of Örja was excavated. Settlement remains of prehistoric as well as of historic origin were investigated. In the eleventh century a settlement, divided in four clusters of houses, was established, which coincided with the locations of the eighteenth century farmsteads. Two of the settlement units, denominated farmsteads 1 and 12 on the maps, had continuity all through the Middle Ages. One of the other two units, denominated 20 on the maps, was abandoned around 1400. The last unit, denominated 16 on the maps, existed only during the early Middle Ages and was resettled not until in the sixteenth century. Of these four units, I will focus on farmstead 12.

The four units of the eleventh century have been interpreted as a contemporary, large-scale establishment.[98] Whether they were four independent farmsteads or parts of a big manor estate is still obscure. Farmstead 12 included during this early-medieval period a big multifunctional house with three naves, probably serving both residential and economic purposes. Furthermore a long barn and three minor agricultural buildings belonged to this settlement. Outside the multifunctional building a smoke oven was found and so a cultural layer with indications of fish processing.

In the twelfth century the settlement seems to have been incorporated into to a regulated structure. A system of ditches enclosed the settlement and this system remained unchanged up to the time of the oldest maps of the eighteenth century. The farmstead now included a dwelling house in the north, a barn in the west and another two agricultural buildings in the south and in the east. Also in this phase there were strong indications of fish processing.

Small changes of the settlement happened in the thirteenth century. The agricultural buildings were the same as in the previous phase. The dwelling house in the north burned down in the beginning of the century and was replaced by a new construction. Gradually this building was used for smoking fish. A significant development of this activity seems to have happened during this period.

In the fourteenth and fifteenth centuries some important changes of the farmstead took place. There was an obvious reduction of the settled area and the farmstead now included only three buildings. The house in the north was still present but considerably changed and adjusted to the fish processing, which developed to a specialised, large-scale activity (Fig. 32).

Apparently the residential functions disappeared in this period and from now on the farmstead seems to have been used exclusively for fish processing.[99] The big barn in the west also disappeared indicating that even the animal husbandry was phased out in the late Middle Ages. In addition to the building in the north only two smaller buildings were present. Probably they served as drying houses where firewood needed for the fish smoking was dried.

The highly specialised fish processing came to an end in the later part of the fifteenth century. The smaller buildings may still have existed in the beginning of the sixteenth century but in the remainder of the century there was no settlement in the place of farmstead 12.

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No more than a reduced building area indicates decline on farmstead 12 in the late Middle Ages. Of course, this decrease of settlement was directly linked with the changes of functions

in the farmstead. However, within the excavation area as a whole there are very obvious signs of partial desertion in the fifteenth century. Only farmsteads 1 and 12 survived during this period. What happened to the farmsteads of the village outside the excavation area is of course quite obscure and the very scarce written source material gives no clues.

The change of farmstead 12 in the fourteenth and fifteenth centuries, when the economic structure of the farmstead was turned upside down, appears as a rather unexpected phenomenon in its historical context. An originally secondary occupation – fish processing – expanded and became the only activity of the farmstead. However, the large-scale expansion of this activity in the fourteenth century indicates that its aim was not only to cover the needs of the village.

The fish processing was not a new additional activity in the fourteenth century but can be traced back to the early Middle Ages. From the very beginning it is visible only on one farmstead, no. 12, which indicates some sort of allocation of specialised functions on the farmsteads of the village. On the adjacent farmstead no. 1 there were no traces of fish processing, but on the other hand there were indications of another additional activity, namely beer brewing.[100] Hypothetically, such a functional variation of the farmsteads of Örja reflects the structure of a large, early-medieval demesne farm comprising a multitude of activities. Each farmstead might have represented a specialised part of these activities, which were governed from a manorial farm in the village.[101]

It has been generally accepted that fishery was a well-integrated part of the economy of the peasants along the coasts of the strait of Öresund in the Middle Ages. Fishery was part of a common *seamanship*, which included all sorts of maritime work.[102] *The sailing peasant* will be an appropriate expression to characterise this connection between land and sea in the cultural world of the coastal population. Thus the inhabitants of Örja developed their survival strategy during the harsh years of the crisis within a cultural context that was clearly defined for centuries. Probably they could expand the processing of fish without difficulty within an economy where the agricultural and maritime activities were closely intertwined.

A connection between the fish processing in the village of Örja and the great medieval herring fishery at the strait of Öresund lies close at hand. Moreover, it seems reasonable to look upon the change towards a specialised, large scale fish processing in Örja in the fourteenth century in the light of the development of the Scanian markets, being transformed to a highly specialised fish market in the late Middle Ages. Thus, the fish processing at Örja seems to have been deliberately adjusted to trade, probably resulting in new revenues to Örja in the era of the crisis when the village was struck by a considerable decline. The absence of residential functions at farmstead 12 gives a reason to look upon the fish processing as a collective business in the late Middle Ages, inhabitants of all the farmsteads of the village taking part in the activities.

The development in Örja implies that the big herring fishery affected also this ordinary agricultural village near the coast and that the economy of the village became closer linked to a mercantile maritime context in the late Middle Ages. This conclusion is furthermore supported by the analysis of the animal bones from Örja showing a dominance of herring but also a significant presence of species like cod and flounder fish.[103]

The fish processing came to an end in the latter part of the fifteenth century and thereafter farmstead 12 stayed deserted until the seventeenth century. In this way the farmstead did not follow the development of the Scanian markets, which were still flourishing in the fifteenth century. Not until hundred years later, their final decline started.

Fig. 31. Cadastral map of Örja from 1759 showing the village with its 18 homesteads (red squares). Black line marks the excavation area

Maybe the closing of the fish processing at Örja can be seen in the light of a general recovery of society and the beginning of a new agrarian expansion at the end of the Middle Ages. When agriculture expanded anew in the village the need for a large scale, additional activity may have diminished.

The expansion also meant decisive structural changes of the agrarian society. In the sixteenth century fishery was organised in a new way in this part of southern Scandinavia, from now on being performed by professional fishermen living in the towns or in permanently inhabited fishing villages by the coasts.[104] The old medieval diversity of the villages was replaced by a new specialised structure where fishermen and peasants were different social and cultural categories. The old village now became a more streamlined, agrarian unit.

The farmsteads in a comparative perspective – a brief summing-up

Despite regional characteristics, it is possible to discern some very significant resemblances in the development of the three farmsteads. It seems quite obvious that something decisive happened at all the places in the fourteenth century. The settlement of the farmsteads was fundamentally changed, either as an expansion of buildings, like in Vålle, or a reduction,

Fig. 32. Change of settlement at Örja AD 1200–1500. Settlement dated to a. 1100–1350 and b. 1350–1500, respectively

like in Stora Ullevi and Örja. This occurred in connection with major functional changes of the farmsteads. Concerning the character of the change there are some differences between the three places. A new activity, forging, was added to the agrarian settlement of Vålle. At Örja an earlier, secondary occupation was transformed to a large-scale, proto industrial activity, being the primary function of the farmstead. Stora Ullevi was characterised by a general orientation towards the nearby town of Linköping, affecting the social as well as the economic structure of the farmstead. At all the places it was a matter of specialised activities, directed to a distribution outside the own village or hamlet.

A chronological emphasis of the mentioned activities was observable at Örja as well at Vålle, to the period 1350–1450, making a connection to the initial, most severe phase of the crisis probable. At Stora Ullevi it was not possible to pinpoint the changes more precisely than to the fourteenth and fifteenth centuries.

The changes of the farmsteads were discussed in their regional contexts respectively. In the following section they will be looked upon in a wider societal connection.

General conclusions

This concluding section will use the results of the two previous investigations in one

synthesising discussion on the impact of the late-medieval crisis, connecting to the initial issues. The first issue concerned desertion and decline. Different archaeological results have indicated a rapid, negative impact on society in the middle of the fourteenth century, causing an immediate stop to activities like building of houses. It supports the idea of dramatic, profound consequences of the plagues, severely disturbing important societal functions.

Regarding desertion of settlement, evidence was found everywhere, indicating a devastating movement that did not spare any remote corner of the country. Apparently, desertion was a prolonged process, as in Örja, where it occurred not until in the fifteenth century.

Of course, it will not be possible to quantify the extent of the desertion or to find out whether some regions were hit harder than others. However, the problems of partial desertion must be highlighted, being evident in Örja and probably typical of fertile areas like the plains of western Scania. As mentioned in the previous section, this kind of desertion may have been considerable in such areas, still being obscured in the source materials, the written as well as the archaeological. Challenging a general conclusion made by earlier research that such areas remained relatively unaffected by the crisis, the question must be raised as to whether that desertion was as extensive here as anywhere else.[105]

The second issue concerned the human response to the crisis. How did people act in the societal situation of the late fourteenth century and further on? We have seen the dysfunctional reaction of the nobility being materialised in an abundance of new castles in the decades following the year 1350, thus confirming Myrdal's model of development.

However, this was not the only reaction. Our investigation of the three farmsteads has shown us responses on a local level in different parts of the country, reflecting significant economic changes. Surrounded by desertion, the farmsteads seem to have responded rapidly to the crisis in the later part of the fourteenth century, developing additional, specialised activities. The changes at Stora Ullevi implied an increased orientation of social as well as economic character towards the nearby town, being a sort of specialisation, too.

What was the meaning of these changes? Apparently, parts of the production of the farmsteads became oriented towards a market to a greater extent than before. We have identified this market as the nearby town, regarding Stora Ullevi in Östergötland, or, regarding Örja, the urban, mercantile network of the Scanian markets. Thus, this meant a greater interaction between town and countryside but probably also a greater degree of collaboration between the farmsteads of the village or hamlet. At Örja, for example, the fish processing being a matter of a single farm in the High Middle Ages, it became a collective business of the entire village in the later part of the fourteenth century. The agrarian production being severely disturbed by a dramatic decrease of population, the development of an already established, additional activity like fish processing might have been a profitable enterprise for the village in a time of increasing demand for preserved foodstuff.

The traces of restructuring and expansion, discernible in some towns in the later part of the fourteenth century, are most likely to be seen in the light of such a an interacting between town and countryside, creating the basis of a new, urban development and a social emancipation of the towns.[106]

Also collaboration of farmsteads, being a consequence of the response to the crisis, is to be found at other places, for example in the mining districts north of the Lake Mälaren. Here, peasants dealt with iron working using the blast furnace technique at least since the end of the

twelfth century. In the later part of the fourteenth century the activity was transformed into a new, specialised structure of collaborating farmsteads, the village of the peasant miners, replacing the old manorial system. Thus, it seems to have been a close connection between the development of specialised activities and the rise of new modes of social interaction.

How shall we look upon these creative responses to the crisis in the later part of the fourteenth century, when society was at its absolute nadir in a time of profound social and economic imbalance? Apparently, the archaeological evidence does not harmonise perfectly with Myrdal's model of the development of the crisis. The results reflect flexibility and creative change in the initial traumatic decades of the crisis rather than decline, stagnation and suppression. Is it possible to interpret this fragmented picture of the crisis in a satisfactory manner?

Probably we are dealing with reactions to the crisis on different levels of society. The "dysfunctional" acting of the nobility reflects a general survival strategy of a social class, which obviously had a paralysing effect on a socio-political level. But this may not have hampered creative solutions on a local level, where the single farm in the context of a village or a hamlet was able to form its own survival strategy.

However, the changes of the farmsteads may also be discussed in relation to the general social process transforming the agrarian society in the thirteenth and fourteenth centuries. The manorial system of the High Middle Ages, characterised by manors surrounded by subordinated crofters providing workforce to the manor, began to dissolve and was replaced by a system of larger manors functioning as fiscal centres for a number of tenant farms.[107] This process started most likely in the thirteenth century but was not completed at the time of the plagues in the middle of the fourteenth century. However, it may be assumed that the societal crisis and the demographic decline hastened the process, contributing to its completion in the later part of the fourteenth century.

The new situation around 1350 – the old manorial system being in dissolution and old social bonds between landowners and peasants breaking up – may have provided the latter a greater freedom to act on the local level. Probably we should look upon the rapid development of survival strategies at the farmsteads in the light of this new freedom. Thus the essential, societal conditions for an independent acting of the peasants were already in place in the middle of the fourteenth century. Developing their strategies, they could respond immediately to the crisis, which further hastened the social process. Of course, this development must not be looked at as being totally separated from a wider social structure, even if the initiatives to the new strategies were taken in the villages and hamlets. The peasants of our farmsteads being tenants, they most likely must have acted in a state of consensus with their landowners when developing their strategies.

So, an overall strategy seems to have been an increased interaction between town and countryside, parts of the production being specialised and orientated to an urban sphere. Still, this was not the case everywhere. In some regions people acted in a somewhat different way. I will discuss this problem here, taking a point of departure in the regional differences between the east and the west of Sweden.

At the farmstead in the west a rapid response to the crisis in the later part of the fourteenth century was observed, its economy being changed as its counterparts in the east and the south. However, signs of urban dynamics and expansion were not to be seen in the west. The towns being founded in the late Middle Ages all remained small and rather unimportant. In

the western counterpart to Uppsala and Linköping, the episcopal town of Skara, there was only decline and "de-urbanisation" in this period.

Hence, not much of interaction between town and countryside was to be seen in the west. Presumably, the towns meant little for the surrounding countryside, remaining only as small, fiscal strongholds for the authorities.[108] As Christina Rosén has pointed out, an ordinary town in the west was more of a big village than of an urban centre.[109]

Then, how shall we characterise the action of people in the west in the time of the crisis? We have seen countryside, less regulated and less controlled than in the east, showing a high degree of flexibility. The latter enabled the moving of settlement in the province of Halland, adjusting it to the change of the agrarian economy in the late Middle Ages, as well as an increased exploitation of the outland in the northern part of Bohuslän. However, the specialised forging of the late fourteenth century, forming a new strategy of the farmstead at Vålle, was of a different kind compared to the corresponding activity at Örja in the south. It seems to have been a small-scale enterprise, being performed within the context of the single farm.

Thus, we may here discern an important characteristic of the west in the time of the crisis. Acting as independent units, the farmsteads of the west did not develop any large scale, collaborative projects characterising for example the villages of Scania or the villages of the peasant miners north of Lake Mälaren. Nevertheless, the peasants of northern Bohuslän were able to develop a multifaceted economy, starting in the later part of the fourteenth century. Using the natural resources of the region, such as timber, lime and iron, they developed a trade covering a far-reaching network, acting independent of regional urban intermediators. This trade of which there are abundant evidence from Early Modern times, written as well as archaeological, became an essential part of the cultural identity of the coastal regions of western Sweden.

Having identified some of the differences between the east and the west of Sweden in the time of the crisis, the relation between town and countryside stands out as a decisive element. An example from the recovery phase of the crisis in the late fifteenth century will furthermore highlight a cultural aspect of these regional differences. An absence of vaulting of the churches in extensive parts of western Sweden in the end of the Middle Ages has been commented on. Probably, the cultural incentives of late-medieval vaulting originated from an urban context, a fact that may explain the multitude of vaulted churches of the highly urbanised regions in the east and the south. The towns in the west did not interact with the countryside in the same way as in the east, thus never being able to function as transmitters of cultural influences.

The western and eastern parts of Sweden appear as two different and well discernible cultural entities in the late Middle Ages. This cultural regionalisation was not a result only of the crisis, but started long before 1350. However, in the late-medieval society of the crisis, the cultural differences became further explicit, appearing in a more clear light than before. Hence, the crisis had a deep impact on the cultural process, contributing strongly to a strengthening of the regional cultural differences.

Thus the late-medieval crisis has to be considered in the light of the two movements discussed above, the one of cultural regionalisation, the other of social emancipation. Emphasising the complex relation between these two movements will be a primary contribution of archaeology to the study of the crisis.

Notes

1 Cf. Gissel *et al.* 1981; Österberg 1981b
2 Berglund 1991
3 Andersson & Anglert 1989
4 Andrén 1985, 102ff
5 Myrdal 2012a
6 Lindkvist 2010, 34
7 Ericsson 2012, 338f
8 Andersson 1982
9 Winberg 2000, 113
10 Myrdal 2012a, 209
11 Broberg 1992, 56f
12 Broberg 1992, 62f
13 Ersgård 1986, 91
14 Ljung 1991, 120
15 Andrén 1985, 102
16 Christophersen 1978
17 Tagesson 2002, 157f
18 Tagesson 2002, 1
19 Beronius Jörpeland & Bäck 2003, 185f
20 Connelid & Zedig 2007
21 Ersgård 1986, 94
22 Anund *et al.* 1992, 227
23 Uppsala. Medeltidsstaden 3. 1976, 15
24 Tagesson 2002, 159ff
25 Seppänen in press, 6f
26 Seppänen in press, 6f
27 Myrdal 1999, 116f
28 Vretemark 1997, 13
29 Carlsson 2007, 163
30 Andrén 1986; Beronius Jörpeland 1992
31 Andrén 1985, 101; 1986, 265
32 Tagesson 2002, 157f, 281f
33 Malm 1984, 58
34 Malm 1984, 60f
35 Pihlman & Kostet 1986, 123
36 Nyborg 2009, 188–193
37 A similar loss of knowledge concerning the art of healing, caused by the decrease of population in the late Middle Ages, has recently been discussed by Johanna Bergqvist (Bergqvist 2013, 333–337)
38 Cf. Österberg 1981b
39 Berglund *et al.* 2009; Svensson *et al.* 2013
40 Åstrand 2007
41 Åstrand 2007, 77
42 Hansson *et al.* 2005; Olausson 1989; Gauffin 1989
43 Hansson *et al.* 2005, 162
44 C.f. Karsvall 2011
45 Schmidt Sabo 2001, 74f
46 Schmidt Sabo (ed.) 2013

47 See Chap. 4
48 Bartholin 1989a
49 Lindeblad & Tagesson 2005. In this article the terms *village* and *hamlet* are used to classify the local contexts of the medieval, agrarian settlement (cf. Jones 2010, 13–16). 'Village' is used for a cluster of cooperating farmsteads that have had some central functions in the parish, usually through the presence of the parish church. Thus 'hamlet' will be used for clustered settlements with no such functions. The term 'single farm' concerns a farmstead that does not cooperate agriculturally with other farms
50 Connelid & Rosén 1997; Connelid & Mascher 2003
51 Connelid & Mascher 2003, 105
52 Beronius Jörpeland 2010
53 See also Chap. 4 for a discussion on the Småland datings
54 Bartholin 1989b
55 Wienberg 1993, 44ff
56 Bonnier 2008, 164
57 Regner 2005
58 Regner 2005, 229
59 Regner 2005, 238
60 Myrdal 2012a, 230f
61 Lovén 1996, 195
62 Lovén 1996, 348
63 Lovén 1996, 197
64 Stibeus 1986
65 Grundberg 2001
66 Cf. Magnusson & Isacson 1988
67 These characteristics are in accordance with Bo Strömberg's definition of proto industry (Strömberg 2008, 28–31, 53–54)
68 Cf. papers in *Med hammare och fackla* 51 (2010)
69 Strömberg 2008
70 Strömberg 2008, 28ff
71 Skyllberg 2003
72 Skyllberg 2003, 65
73 Magnusson 1985
74 Pettersson Jensen 2012, 251
75 Pettersson Jensen 2012
76 Pettersson Jensen 2012, 56ff, 213ff
77 Magnusson 2010, 114ff
78 Norman 1993, 61, 181
79 Ersgård 1988, 95
80 Such an approach on the late-medieval crisis has already been paid attention to within recent archaeological research in Sweden. Cf. Svensson *et al.* 2012
81 Myrdal 2012a, 225
82 Rosén 2009; Rosén 2013
83 Rosén 2009, 54f
84 Grandin *et al.* 2008
85 Framme 1985, 174–175
86 Lindman *et al.* 2004, 119
87 Sandklef 1973
88 Rosén 2009, 44–46

89 Carlsson *et al.* 2001; Lindeblad & Tagesson 2004; Lindeblad & Tagesson 2005
90 Lindeblad & Tagesson 2005, 250
91 Feldt & Tagesson 1997, 114
92 Tagesson 2002, 234ff
93 Tagesson 2002, 157ff
94 Tagesson 2002, 159ff
95 Lindeblad & Tagesson 2004, annex 1
96 Tagesson 2002, 260f; Lindeblad & Tagesson 2005, 278
97 Schmidt Sabo (ed.) 2013, 30
98 Schmidt Sabo (ed.) 2013, 230
99 Bolander 2014, 192
100 Bolander 2014, 193
101 Cf. Myrdal 2012a, 208
102 Stoklund 2000, 199
103 Stoklund 2000, 197
104 Ersgård 2001, 103
105 Cf. Österberg 1981b; Skansjö 1983
106 Cf. Andrén 1985, 100ff
107 Myrdal 2012a, 209; Ericsson 2012, 43–54
108 Andersson 1985
109 Rosén in press