

With people in focus

Gunilla Gardelin & Ivan Balic

Depending on the approach words like stability and alteration can receive different meanings. The physical evidence that archaeologists examine often represents alterations. Within archaeology the focus therefore often has been on the changes rather than on the usage of a space. To be able to write a history as close to people as possible we want to focus on their everyday life, meaning the continuance between the changes. According to our approach the household is defined by the continuance and the discontinuation of continuance marks a change of household.

One approach to get closer to peoples everyday life in a city is to define and analyze space. Environments consist of spaces on different levels. The landscape can be defined as one space, the city or village and lots as others. The environments have been created by human beings and are therefore socially and culturally influenced.

The knowledge of the conditions of the household can be deepened through different analyses. The exchange of knowledge between archaeologists, archaeobotanists and osteologists has enabled a joint interpretation and communication towards a richer cultural history.

Introduction

The household has been a central element in both historical and archaeological studies of early modern social and cultural history. Some research has focused on trying to identify household as a well defined group, while other has turned their attention to the functional and structural aspects. In the last couple of years' large archaeological excavations in urban settings have produced extensive and detailed results regarding households in early modern time. In combination with historical records,

these have shown that the concept of a household can be very complex and have raised whole new sets of questions. The need to discuss the concept of household led to a session at the 2015 Nordic TAG conference being dedicated to the topic. The papers presented at the session dealt with a wide range of aspects, from houses and households on the isle of Lewis during the 19th and 20th centuries, to households in change in the wake of the Black Death (Mackie 2015; Ersgård 2015). Archaeologists at the Kulturen museum in Lund have during the last couple of years worked

with the concept of household, both as a stratigraphic element and an analytical method to study everyday life of people. Even though the concept of household is used in two very different ways, the analytical method is based on the stratigraphic analysis, and the usage of household as a contextual element. In an effort to explain the way Kulturen work with households, this paper will first deal with some aspects of the stratigraphic documentations and analysis. Those are fundamental to the understanding of the second part, where the household will be discussed as an analytical method to study everyday life of people. The paper is based on a presentation given at the Nordic TAG 2015 in Copenhagen (Balic & Gardelin 2015).

Creating history

Conducting excavations and interpreting the remains is in fact the base for the way we create history. Therefore our interpretations must be presented in a transparent way, easily examined and reinterpreted by others. But it is also important to regularly reevaluate our methods and procedures and try to change the perspective, to see things from other points of view.

In this process it is sometimes necessary to leave the safety of old tools and procedures used to examine archaeological remains, as well as the way data is gathered, ordered and analysed. A better, or perhaps different, understanding of people's lives

in past times can require a change of perspective. The situation in Lund means that quite a few smaller excavations are made every year, while larger ones are rare. To make the most of these circumstances a new approach is to stretch the interpretations that can be made from the available material. This means that more information will be available to interpret, but also that the results will be less well based. On the other hand, making safe strongly based interpretations has so far not brought us as close to understanding people's lives as we strive to. To put this in a concrete example; a safe interpretation is to use a very general or abstract term like feature to describe what has been examined. This tells you very little about what it once was or how it was used. In such an instance it is far better to make an interpretation, even a less well based one. If your documentation is well made with a clear statement of how the interpretation was reached, it will be possible for others to evaluate and reinterpret your results. One such term that has been frequently used when excavating in Lund is levelling layer, which does not really say much. If we strive to make a history that is important to people outside our own profession, we need to make interpretations and to use an accessible language.

Background

The archaeological unit at the Kulturen museum have conducted

excavations using the single context methodology since 1991. These have usually been quite small, often carried out as a result of existing buildings being expanded. To make small investigations contribute to the overall picture of the medieval town, suitable tools and workflows have been tailored to suit our needs. Two basic concepts form the base. The first one is that archaeological remains should be documented and interpreted by the archaeologist in the field during the excavation (Gardelin 2014, p. 31). This puts a large responsibility on the staff and requires experienced field archaeologists. The second is that results and field documentation should be processed parallel to the field work, and be more or less in sync with the excavation (Gardelin 2009, s. 37). For this to be possible there needs to be an effective organisation and routines to handle registration, quality control, stratigraphic processing and to update the field archaeologists of the results. If the household is to be used as a stratigraphic unit, it needs to be considered during the excavation and the concept must be well known to everyone involved. These prerequisites are fundamental when households as stratigraphic units are used, even though it is possible to work with the concept under different circumstances, see chapter “Applying the concept of household to a post excavation material”.

To understand the inhabitants of the town

Our approach to how we want to write history has also influenced the methods we use and the questions we put to our material, and in the end how we present our results.

The basis for this approach is a quotation from an article written by Axel Christophersen, professor in Historic archaeology in Trondheim that deals with making analysis of why people lived as they did rather than how they lived.

”Men har vi alvorlig forsøkt å finne ut av hva som egentlig foregikk mellom de individer vi har befolket den urbane scenen med? Å stille spørsmålet slik er ikke det samme som å etterlyse analyser av hvordan de levde, men hvorfor de levde som de gjorde” (Christophersen 1997).

It is not the state of objects/ things in material and contextual meaning that should be examined. It is no longer the changes that are of interest for understanding the state, it is rather the durability that needs to be defined and studied. It is not the changes that we examine during the excavations but the remains of actions and durability. It is in the time between the deposits of different cultural layers that the action takes place – where people’s lives have been lived.

To put this in practise on the ground is not without problems. Archaeological field work in an urban setting, where centuries of human life are condensed into limited

spaces, is a complex operation in many ways. There is usually a variety of practical matters like logistics, administration and safety issues that needs to be addressed. In the same time a large amount of data and documentation are generated, and just managing the basic material is a huge task. Usually this means that a lot of effort goes into creating a well oiled organisation with suitable methods and routines. In all this the human element behind the archaeological material tends to become more abstract, especially when expressions like agents, actions and actors are used to describe people and human behaviour. The matter is further complicated by the fact that it is hard to detect individual human life and actions in an archaeological material.

Method – techniques-priorities

It is necessary to separate method, techniques and priorities. The method is a process to reach a goal and a way to approach the remains. Technique is a tool, like a pen and paper or a total station etc. When working with rescue archaeology having to make decisions concerning priorities is reality. Different areas on an excavation might have to be examined in different ways and with different priorities, a fact that often has to be dealt with. When different tools are applied to objects during an excavation, it is a matter of priorities and not methods. So an exca-

vator is a tool, and since it does not have the same level of precision as a trowel, it will, when used to excavate archaeological remains, devalue the information that can be attained from them. The decision to use an excavator means that a lower priority has been given to the remains.

Principles

Since our ambition is to write a history from a bottom to top perspective with a focus on people, and to understand why they lived their life as they did, we have chosen to focus on the household. Because the use of household, as an element of social organisation, is closely linked to the way it is used as a stratigraphic unit, a short presentation will be made of the methods and principle that are used by *Kulturen* (Gardelin 2014, p. 32).

Group

The base for the story of the place excavated is the stratigraphy. The ordering of contexts in time and space, in a matrix, starts during the fieldwork and is the frame for the further work. Each context corresponds to an activity or a state. Since an excavation can consist of hundreds of contexts a higher level of interpretation is needed to make sense of the results. The activities and the time of stability have to be gathered and ordered in some way. The definition of groups varies depending on the object examined, the condition of the cultural layers

and the theoretical positions by the questions we ask. The groups are segments forming a household (Gardelin 2014, p. 33).

An activity could be the digging of a well, the construction of a frame for the well, and the levelling of the ground around the well. These contexts can form a group. By using the principle group, different types of cultural layers and constructions can have a more equal part in a discussion leading to the interpretation.

The group is not the same thing as feature or construction. Using the principle feature for example the building of a house, the usage of a house and the destruction of a house are joined together. This way of interpreting causes serious problems, when writing history concerning the place excavated. The construction, use and destruction needs to be separated to be able to write history about people's lives. You cannot be born, live your life and die at the same time, it is simply impossible.

The same logic applies to buildings. It makes no sense to deal with the construction and the destruction at the same time, since it leaves out the important part, the time when the building was used and when people actually lived in it. Especially since that is the history we are trying to reach.

In the matrix it is possible to show the relative time between different events. You can graphically make time visible in your matrix

by making it show how long time a building has been in use compared with for example a well.

The goal must be to be able to describe what happened at the same time and in the same space. To be able to identify a house, a yard and a garden that were used during the same time, is necessary if you want to reach people of the past

Household

During the last 10 years, Kulturen have tried to define households instead of phases. A phase only takes in consideration the excavated remains and no other sources. It is a very technical way of dealing with the information obtained through excavation. Using the phase as a principle makes it virtually impossible to reach the everyday life of people in the archaeological material. This is the reason why Kulturen has changed the way stratigraphic documentation and analyses are made.

For example, sometimes two plots situated next to each other are interpreted as being part of the same phase, meaning that they have the same duration. This can of course be true in theory, but usually people do not live parallel lives in two different places.

By taking steps towards trying to understand what could have happened in a place, our understanding of the people who lived there will gradually become better. All households do not leave remains or traces behind, which means that somehow an understanding of what

is not there has to be achieved. For example, different types of activities might not leave obvious traces or later activities might have destroyed them, but they are still a part of what shaped people and history.

The objects that we investigate are usually profane environments. Therefore, the definition of a household that we have chosen is a judicially and economically defined group of people living on a plot. The household must be defined and limited in relation to other households that precedes, coexists or succeeds the one examined. A household must therefore be defined both in space and time, but also by its use of space and its durability (Gardelin & Johansson Hervén 2003, s. 43).

After a household has been defined in space and time, it must also be filled with content so that connections to material culture can be established. To do this the following needs to be answered:

- When did they move to the plot and for how long did they stay there?
- What was their livelihood?
- What social position did they have in society?

To be able to define the households you need to use the remains, written sources, maps and pictures. In fact, you need to use all sources available. Since different sources have been created for different reasons, it is interesting to compare them and see if they support each other or not.

Environment - to understand the town life

In 1997, Conny Johansson Hervén at the Kulturen museum was the project leader of an archaeological excavation at Mårtenstorget in Lund. The spot was the backyard of the former plot belonging to the Danish noble family Krognos. When working with the analysis of the results from the excavation Conny formed a concept that he called environment- milieu (miljö). This was a way of making the small excavation contribute to the understanding of the town as a whole in a clearer way (Johansson Hervén 2001).

A town undergo both changes and times of stability which is reflected in the archaeological remains. The ownership of plots changes, and the plots might be divided or merged together into larger units. Constructions like buildings, yards, backyards, gardens and passages also change over time. For periods of time there might be little that changes in the physical structures.

Period

In the process of analysing the social environment Johansson Hervén introduced the concept of "period" that corresponds with the level social environment in fig. 1.

The definition of a period is that there has been a stable social environment on a plot during more than one household, and that no major structural change has taken place. The base for the definition is

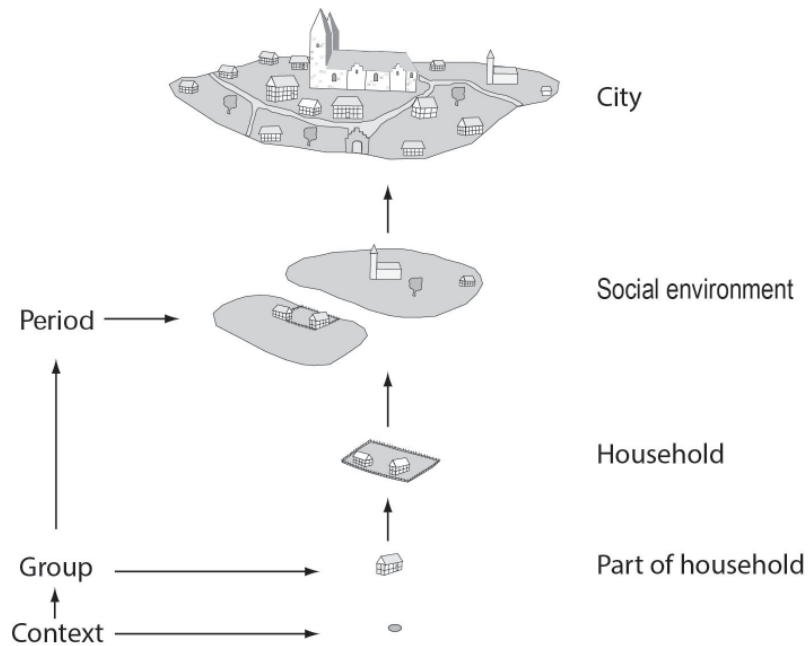


Figure 1. A model that illustrates the concept Environment and show different levels, from the smallest part – the single context — to a group of contexts which represent a part of a household, the household and the social environment which it is a part of and in the end the town as a whole. In a longer run the town also can be understood in a larger context.

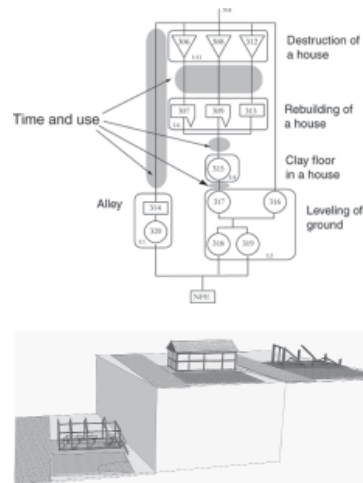


Figure 2. Stable or slow moving processes are hard to detect in the archaeological material, while fast changes like buildings being constructed or torn down are much more visible. This becomes clear when analysing the material using a Harris matrix. The everyday long term activities leave fragmented imprints or no traces at all in the archaeological material, and are therefore represented by the space between the contexts in the matrix. Graphically this can be illustrated by giving time a physical dimension.

that each household has been well defined, to make it possible to compare different households with each other. This level of interpretation makes it possible for write history on a wider level (Gardelin 2014, p. 34).

The town with its plots and people

To work with the concept of households as instruments in the archaeological analysis, and as a way of understanding everyday life of people, starts at the excavation. The concept affects not only the way excavation and documentation are done, but also how archaeological material is perceived and how resources are prioritized.

Slow processes and stable situations

Earlier in this text the theoretical definition of a household has been addressed, but applying the concept as an analytical instrument in practice means that we have to adjust how we perceive and interpret the remains we excavate. Since we strive to have a bottom to top perspective we need to look at the factors that influence people's lives the most. The things that we do repeatedly might seem unimportant, but they play a large part in shaping us into the person we are. These everyday structures are most often connected to stable conditions rather than change and development (Larsson 2000, p. 122pp). Stable or slow moving processes are

hard to detect in the archaeological material, while fast changes like buildings being constructed or torn down are much more visible and attract more attention. This means that a large part of our excavation resources usually are spent examining and documenting changes, rather than the time span between them, where people's lives to a greater part are spent. This leads to a process driven view on history based on changes. We need to shift our focus from changes to stable situations, and start viewing time as stability broken up by intervals of change. By quantifying stable long lasting situations or slow moving processes, a comparison can be made with the next state of stability.

Activities taking place during the time in-between changes often leave a fragmented imprint or no traces at all in the archaeological material (fig. 2). This leaves us with little data to work with, so to make the most of the remains that potentially could contain information it is a good strategy to try to anticipate them. By trying to predict where such remains potentially could exist and what information could be gained from them targeted efforts can be made to excavate, document and analyse these instances. This process in practise means that there has to be a good understanding of the overall context that is being excavated and what effect later processes may have had on the remains. For an instance when a clay floor is uncovered questions regarding its usage should be consi-

dered. In other words, what was the space used for? What traces would it leave? And where? Did the usage change? How would that be visible? What sort of later activities could have affected the remains? What would be left? And what information could there potentially be? By addressing this prior to the excavation, a tailored plan of action can be formulated regarding how to excavate and document, collect samples and what resources are to be used. Actively focusing on activities happening between changes makes it possible to quantify stable long lasting situations or slow moving processes, and thereby make them comparable to other states of stability.

The last couple of years excavations in Lund have proven that archaeobotany combined with geology is a valuable resource, which has resulted in new understandings of stable situations and slow moving processes in the archaeological material. This has been especially useful when applied directly in a field context trying to anticipate and excavate fragmented traces of everyday life (Heimdahl 2014, p. 326ff). Adding a new point of view prior to excavation and applying a new set of tools examining and analysing them, has contributed to a broader and more detailed understanding of the everyday structures in the space between changes.

Movement and human behaviour

The basic analysis should also, if possible, be made during excava-

tion, making it possible to start deeper analysis, for example spatial analysis, as soon as possible thereafter. But why analyse organization of space? If we want to try to understand why people lived like they did we need to understand their mentality. Human behaviour is to a large part governed by the interplay of physical and immaterial preconditions. Physical ones like buildings, roads, plots and other constructions are visible in the archaeological material, while the immateriality needs to be interpreted and reconstructed. This can be done by studying possible movements and restrictions between different constructed spaces and the elements within them. Buildings and other constructions can create boundaries and thereby become a part of how an area is organised and regulated (Kent 1990, 1f). How a space is organised is not only affected by functional factors, but also by cultural traditions and standards, which vary between different times and places (Christoffersen 2001, p. 53ff). By looking at accessibility to and from the plot and between different constructions, we can analyse how the plot was used. By looking at the movements on a plot you can also start to ask questions about what happened outside the excavated area. It also makes it easier to identify slow moving processes and gradual changes over a long time span.

The method is simply about making assumptions and assessing probability. It starts by identifying

possible access points to the plot and then analysing possible movement patterns within it. By taking built up environments that can regulate movements into account, potential movement patterns can be reconstructed. The possibility that the built environment could have been constructed respecting already established patterns of movement on a plot, should also be considered. Since the environment on a plot is made by people and therefore part

of a social and cultural construction, the plan and placement of buildings is not random. It could also be regulated by existing surrounding conditions and it is therefore important not to treat it as an isolated object, but to see it as a part of the whole context (Gardelin 2014, p. 11). How a study of movement patterns on a block level can be used to make an overall interpretation regarding the whole town, can be illustrated by an example from the

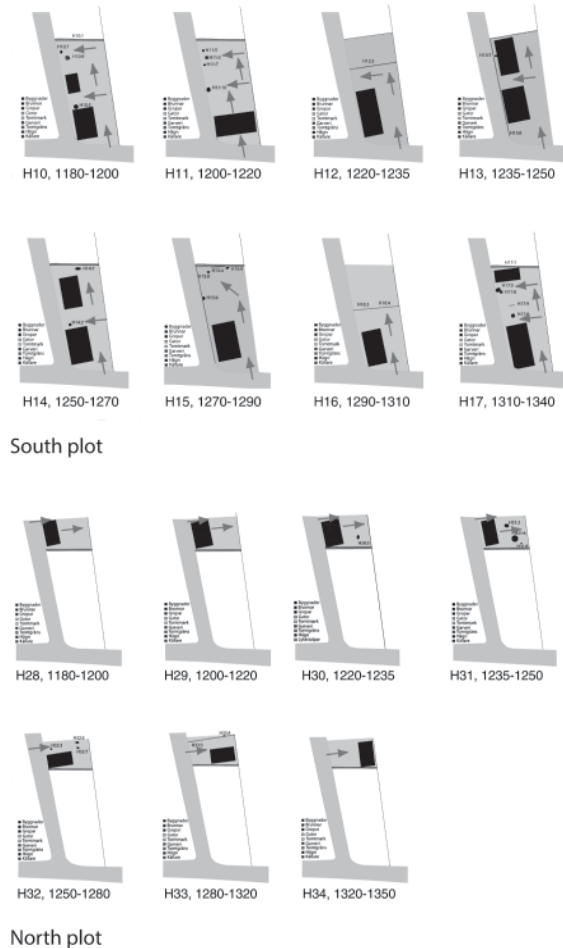


Figure 3. The picture shows the splitting of a plot into two new plots and the possible movements on the plots.

excavation made in the town block Blekhagen in Lund. It was excavated in 2003-2004 and consisted of one complete plot and parts of others. They were initially studied to examine if a repetition of patterns or changes in patterns could say anything about the use of space. In this case the plots were used for tanning during a long period of time. At one point, around 1180, the plot was divided into two parts on which tanning activities continued. How should this change be interpreted? Does the new organization of the plots say anything about the tanners as a group? Were there more tanners establishing in the eastern part of Lund? Tanners are mentioned around the year 1200 in the town rights of Slesvig and in 1294 in the Copenhagen ones. So it is possible that the archaeological remains excavated in kv Blekhagen are the first indications of a reorganisation of the tanner's craft into guilds in Lund (Ericsson, Gardelin, Karlsson & Magnell in prep.).

This way of working can help us understand what is norm and convention and what can be private initiatives. It can tell us something about the accessibility of a plot, how it was organized and used. It can also help us understand more about large scale changes in a town. If this type of analysis is done on several places in a town, over an extended period, it can help us in interpreting the town life.

Formulate a household suggestion

When working with the concept of household the aim is to be able to present an interpretation of the household, in other words how they made their living and what social position they had, even if it still to a large extent will be a template. This will be the base for further discussions and attempts to evolve the interpreted household in an effort to try to get closer to the humans behind the template.

Many different parts need to come together when formulating a household. The backbone is formed by a detailed understanding of how time and space are connected on an overall level. This is the result of stratigraphic analysis of the documentation and if this is done parallel to the excavation, there will already be a basic understanding of some of the households that has been excavated. This in combination with the results from different deeper analysis, such as spatial analysis, artefact and soil sample studies, will form the basis for formulating households. The method is in many ways similar to a spatial analysis, making assumptions and assessing probability. By formulating different suggestions of households they can be compared to each other and the most probable put into the overall picture. When formulating a possible household, it is important to have a good grasp of the stable situations in between. But changes also need to be assessed to understand their relation to

a household. With the following real life example, I will try to make the argument clearer. My sister and her family lives in a large house and a couple of years ago they built a swimming pool. It was a welcome contribution to the wellbeing of their family and the pool itself will probably in the future leave some nice remains indicating rapid changes. But did the building of the pool have a fundamental impact on the household? Not really. It is still the same household living the same life as before, even though the plot underwent some major changes.

In most cases a household will be a representation rather than a real group of people. There will be a risk that the household becomes another convenient abstract classification. To avoid this, it is necessary to try to populate it, even if there is very little material. This will force you to think in terms of individuals or at least what kind of categories of people would have been present, and thus taking the interpretation of the household past a convenient classification.

In many cases working with households from an archaeological material will be a struggle. Since our ambition is to make people visible we need to expand our perspectives and be able to use a broader spectrum of information. The last couple of years of interdisciplinary cooperation in Lund have been very fruitful. Especially archaeobotany in conjunction with geological resources during fieldwork has not only re-

sulted in very good results from the analysis, but also introduced new tools and knowledge during excavation. This has brought a whole new understanding of horticulture in the medieval town (Balic in print.). To make the most of the archaeological material we need to continually try new approaches and new points of view in order to find as much information as possible regarding the people we try to study.

Filling the household with people

The households are still made up of templates of a group of people, a model that we try to make as plausible as possible by putting in as much information as we can. Our ambition is to start carving out the contours of the individuals that make up the household. To be able to do this it will be necessary to use every piece of information or comparable material available. These can be written sources from other places with better material or results from other disciplines. From the gathered material a suggestion of a household and its members, that is as plausible as possible, can be formulated and tested against future results.

Applying the concept of household on a postexcavation material

Since the household concept can be a way of perceiving both archaeological remains and time, it can also be applied to new adaptations

of an existing material, as long as the fieldwork and documentation allows it to be reinterpreted. In 2011 an excavation was conducted in Halmstad, on the west coast of Sweden, as preparation for a new district cooling system. The excavation areas consisted of narrow trenches through the central parts of the medieval town. One trench cut through the entire length of a plot. The narrow trench resulted in constructional remains playing a significant part in the post-excitation process and in how time was divided. Since the plot was extensively used it contained numerous buildings that were continuously rebuilt or replaced. This made it very hard to determine which buildings were used during the same time and thereby also how the plot was used (Öbrink 2013).

In an effort to rework the material into a form that would be more useable, the concept of household was applied. The excavation was done using a contextual method that allowed the material to be reworked. Since the material was originally organised around constructional features, a new approach was needed, one that did not involve a complete reworking of stratigraphy. The approach used was to identify times that had the same sort of stable situation, and from there look for signs that could identify a likely household candidate. This was found in the archaeobotanical material and consisted of waste material from brewing, that indicated an

activity present during a long time. From this a framework of a household was formulated and data from spatial analysis, archaeobotanical studies and analysis of artefacts was applied to see how it held together and how far it could be stretched in time. From this starting point the rest of the material was reworked using the same principles. For each new household that was formulated a complete reassessment of the earlier ones was made, until a complete stratigraphy of households was attained. Reworking the material made it clear that an effort to identify and document stable situations and slow moving processes was needed and that having an archaeobotanist available during the fieldwork resulted in a much better understanding of the remains that were being excavated (Balic in print.).

Conclusion

In an effort to bring back people into the focal point, and really try to understand why they lived the lives they did, archaeologists at Kulturen have since 1997 worked with the concept of household, both as an instrument in archaeological analysis and as a base for trying to study everyday life of people during medieval and early modern times. During this time some valuable insights have been made that can be summed up in three points.

- A change of perspective makes it possible to formulate better interpretations of people's lives

and therefore it makes sense to approach the material from as many points of view as possible. Each new approach may lead us closer to understanding the people that once lived there and to look for new perspectives should be an ongoing process.

- New methods to analyse the archaeological material needs to be tried out in order to evaluate their potential to produce new results.
- It is possible to rework materials where the principle phase has been used, in favour for the principle household, assuming that the fieldwork and documenta-

tion is done in a way that allows it to be reinterpreted.

In his doctoral thesis Stefan Larsson predicted that by combining action theory, spatial analysis and stratigraphic understanding it would in theory be possible to achieve a better understanding of the household (Larsson 2000, p. 134). We would like to believe that we have made a good start towards realising that prediction and we will keep on striving in that direction.

Archaeologist Ivan Balic, Kulturen
E-post: ivan.balic@kulturen.com
Curator Gunilla Gardelin, Kulturen
E-post: gunilla.gardelin@kulturen.com,

References

- Balic, I, Gardelin, G. (2015). The concept of households not only an instrument in archaeological analysis of urban life. in, XV Nordic TAG 2015. Copenhagen, Denmark, 16-18 april 2015.
- Balic, I. in print. Hushåll- ett sätt att närma sig den medeltida människan. Halmstads äldsta historia. Vår by Broketorp.
- Christophersen, A. (1997). Byer? Hvilke Byer? Tanker om byutvikling i Norge i middelalderen. META 1997:4. pp. 51-62.
- Christophersen, A. (2001). Bóndi, bjærmaðr, burghere. Om folk, hus, og fremveksten av urban identiteti norske byer ca 1000-1700. Från stad till land. En medeltidsarkeologisk resa tillägnad Hans Andersson. Andrén, A., Ersgård, L., Wienberg, J. (red.). Lund Studies in Medieval Archaeology 29. Stockholm. pp. 51-62.
- Ericsson, G, Gardelin, G, Karlsson, M., Magnell, O. in prep. Kv Blekhagen, Lund Fornlämning 73 i Lunds stad, Lunds kommun, Skåne.
- Ersgård, L. (2015). Household in change. in, XV Nordic TAG 2015. Copenhagen, Denmark, 16-18 april 2015.
- Gardelin, G, Johansson Hervén, C. (2003). Stratigrafi och hushåll – teori och resultat från några arkeologiska miljöer i Lund. I Ann Bodilsen, Jesper Hjerminde, Mette Iversen (red). Stratigrafins mangfoldigheter. 4. Nordiske Stratigrafimøde. Viborg. Middelalderseminar 2. Viborg. pp. 41-53.
- Gardelin, G. (2009). På Kungens bakgård. Kv Altona 10, Lund. Arkeologisk undersökning 2000. (Kulturens rapporter nr 3.). Lund.
- Gardelin, G. (2014). Saluhallen 1. Fornlämning nr 73, Lunds stad, Lunds kommun, Skåne. Arkeologisk slutundersökning 2010. (Kulturens rapporter nr 6). Lund.
- Heimdahl, J. (2014). Det borgerliga livets kryddor. In Nordman, A.-M., Nordström, M. & Pettersson, C. (red.), Stormaktsstaden Jönköping, 1614 och framåt. Jönköpings länsmuseum. pp. 326-347
- Johansson Hervén, C. (2001). Mårtensstorget i Lund. Arkeologisk undersökning 1997. En kulturhistorisk redogörelse. (Arkeologiska rapporter från Lund, nr 21). Lund.
- Kent, S. (1990). Activity areas and architecture: an interdisciplinary view of relationship between use of space and domestic built environments. Domestic architecture and use of space. An interdisciplinary cross-cultural study. Kent, S. (ed.). London. pp. 1-8.
- Larsson, S. (2000). Stadens dolda kulturskikt. Lundaarkeologins förutsättningar och förståelsehorisonter uttryckt genom praxis för källmaterialsproduktion 1890-1990. Archaeologica lundensia. Investigationes de antiquitatibus urbis Lundae IX. Lund
- Mackie, C. (2015). Houses and households of Isle of Lewis in the 19th and early 20th centuries. in, XV Nordic TAG 2015. Copenhagen, Denmark, 16-18 april 2015.
- Öbrink, M. (red.). (2013). Livet vid Storgatan under fyra sekler. Lämningar från tiden

META 2016

innan Halmstad till tiden efter stadsbranden. Särskild undersökning/basdokumentation. Halland, Halmstad stad, Brogatan, Klammerdammsgatan och Storgatan, RAÄ 44. (Arkeologiska rapporter från Hallands länmuseer 2013:1. Kulturmiljö Halland). Halmstad.