

# What Makes a Slingstone in the Swedish Archaeological Material?

A Discourse Analysis Focusing on Objects from Uppåkra

BY CHRISTOFFER HAGBERG

## Abstract

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This article analyses the discourse that makes the discussion of slings and slingstones in Sweden, to define what is discussed on the matter of what defines a slingstone and to debate the proposed functions for this material group. Through this example, with a focus on Uppåkra, a discussion is formed of how knowledge is shaped through the inclination of specific associations.

Through an analysis of the slingstones found at Uppåkra, comparisons are made with materials with the same classifications from other parts of Sweden. This is followed by an examination of slingstones in the written material, with the aim of clarifying possible functions. The article concludes that there is no previous clear definition of what makes a slingstone in the Swedish material and that the function of a slingstone is not necessarily military. It concludes furthermore that it is in no way certain that the objects from Uppåkra are to be considered as slingstones, even if it is a possibility.

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## Introduction

The Uppåkra settlement covers almost a thousand-year span of habitation by people who have left a vast variety of artefacts behind. Unique luxuries are combined with the more mundane, which in combination have formed the basis of numerous publications over the years. Part of this material are the weapons found at the site and perhaps the most extraordinary find in this category is the large deposition of weapons in a depression just north of the house commonly described as “the cultic house” (Hårdh 2010). The deposit consists mainly of spearheads and javelin heads, but includes other types of weaponry as well, including a category termed *slingstones* (Helgesson 2010, pp. 107 f.). These slingstones

have been presented, in the excavation reports as well as in the one article so far describing them in detail, as representing an obvious part of the military equipment during the time to which the deposition of weapons is dated; c. 200–500 AD (Lenntorp & Piltz Williams 2002, p. 34; Helgesson 2002, pp. 104 ff.). Looking at these descriptions, we find no explanations of what makes these objects sling-bullets, and no references to similar artefacts. This sparked my interest and a quest began to study what makes a slingstone in the Swedish discourse.

The purpose of this article is to investigate existing definitions of slingstones in the Swedish archaeological discourse, with a focus on

the Iron Age and the material from Uppåkra, using objects interpreted as slingstones from Falkenberg, Gotland and Öland as reference material. The main aim, however, is not to give an empirical account of slingstones in general, but rather to investigate the outlines of the discussions on the subject. The study is performed using a qualitative group of material rather than a quantitative one, with a focus on the discourse rather than the material it describes. Although the purpose is not to conduct an empirical artefact study, the Uppåkra material as well as slingstones as an artefact class will be subjected to a somewhat closer examination that will prove useful in the analysis. This is done to answer what defines a slingstone as an object, i.e. where are they usually found, what are they made of, what shape do they have, and so on? The analysis is performed with the inspiration of a discourse analysis, although there may be tendencies to deconstruction at times. This is an attempt to bring the existing research on the subject of slingstones together by identifying the components that constitute its discourse and in doing this a certain tone of deconstruction will prove useful.

## Slingstones – the material

The archaeological material used for this survey covers six geographically diverse locations where objects have been found and interpreted as *slingstones*. The Swedish slingstones discussed here have been unearthed at Uppåkra in Scania, Falkenberg in Halland, Eketorp on Öland and Gammelgarn, Visby and Fole on Gotland. The objects were located and studied at the storage facilities of the Lund University Historical Museum (LUHM) and the Swedish History Museum in Stockholm (SHM).

Initial research showed early on that slingstones have been found at hill-forts in

England, which led me to look at some of the Swedish equivalents. This is why the slingstones from the medieval phase of Eketorp were included, despite the fact that they are lost to the collections. The description and interpretations of their use in the Eketorp III publication (Sandstedt 1998, pp. 198–199) add weight to the discussion, since not much has been written on the matter of the stones that were found at SHM.

## The Uppåkra slingstones

There are 36 objects registered as slingstones in the material from Uppåkra (Fig. 1). Seventeen of these were obtained from what was interpreted as a weapon deposit, dated to the Late Roman Iron Age/Early Migration Period (Lenntorp & Piltz-Williams 2002, p. 34; Helgesson 2010, p. 108; Söderberg & Piltz Williams 2011, p. 16). The deposit was named this due to the fact that similar weapon collections, like the one found at Illerup Ådal, had been interpreted as ritual deposits after a battle (Lenntorp & Lindell 2001, p. 10). Bertil Helgesson has described the stones excavated from the weapon deposit as being round in shape and in most cases made out of rock (Helgesson 2010, p. 104). He finds it interesting that out of a total of seventeen stones, eight have a diameter of 31 or 32 mm, which, according to Helgesson, suggests a standardization of the size of the stones (Helgesson 2010, p. 104). The rest of the stones are in most cases not presented in detail, except for four stones which were found in a layer interpreted as a kitchen area/storage room, dated through a comb and a fibula to the Early Vendel Period. These stones are described as being unusual and the interpretation is that they probably are slingstones: since they look like the stones from the weapon deposit and since those were classified as slingstones, it is likely that these objects are the same (Söderberg &

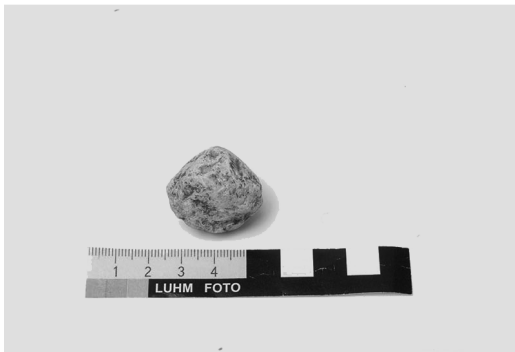


Fig. 1. Examples of slingstones from Uppåkra. Photo by C. Hagberg, with permission.

Piltz Williams 2011, pp. 16–17).

The stones measure on average approximately 2.5 cm in diameter, with an average weight of 26.4 g (Table I). The state of preservation varies; some are quite intact with a very chalky white surface whereas others are more weathered and grey in colour.

#### *Raw material*

The geologists Vivi Vajda and Per Ahlberg have examined the stones from Uppåkra. Their conclusion is that the objects are fossils made out of writing chalk, formed during the Maastrichtian age (Vajda 2013). This chalk, mostly formed by an organism called *Coccolithophores*, is located too deep in Scania to have been accessible during the Iron Age, but there are places just across the sound in Denmark where it can be found in the open (Anderskov *et al.* 2007; Vajda 2013). It is plausible that the objects found in Uppåkra have their origin at one of the seaside cliffs in Denmark, e.g. Stevns Klint or Møns Klint, but this type of chalk can be found in Poland as well.

The objects are probably fossils of a type of sponge called *Porosphaera globularis* which can be found in Maastricht chalk (Vajda 2013). There is an alternative possibility that it could be another type of fossil called *Plinthosella* (Hurcewicz 1966; Ahlberg 2013).

## Looking outside Uppåkra

Initial investigations with the web-based search engines *historiska.se* and *kringla.nu* gave a result of seven registered slingstones (Sw. *slungsten*) in the Swedish material stored at the Swedish History Museum (SHM). When taking a closer look at those at the storage facilities, I identified more objects defined as slingstones, making a total of 26, of which 22 have their origin in Fole, Gammelgarn and Visby on Gotland, with the remaining four brought to Stockholm from Falkenberg, Hal-

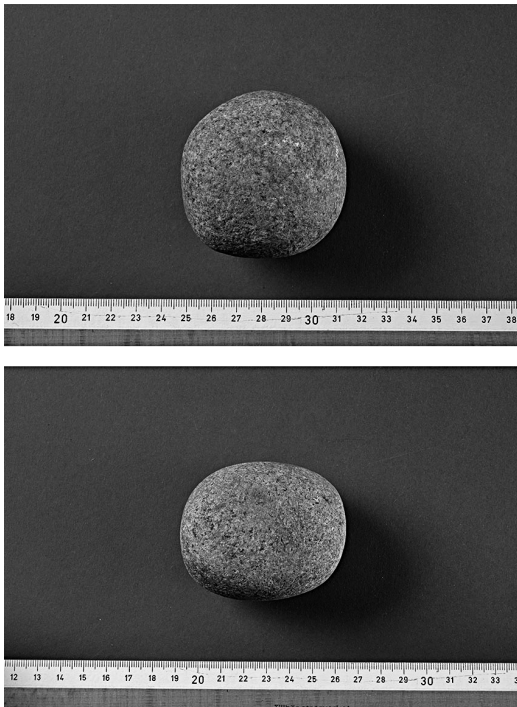


Fig. 2. Slingstone from Fole (upper) and Gammlegarn (lower), Gotland. Photo by G. Hildebrand, Swedish History Museum.

land (Fig. 2). The objects are described only in short notes, mainly by C. R. af Ugglas and Erik Bohrn in the 1930s (Bohrn 1938; af Ugglas 1938a, b & c). The notes describe the slingstones as being made out of granite, sandstone and limestone. They are considerably larger than the stones from Uppåkra, with an average diameter of c. 6.5 cm and an average weight of 410 grams. The notes give an indication of a probable dating, placing the stones from Falkenberg at the destruction of the fortress of Falkenberg House in 1434, the one stone from Gammelgarn to the 13th–14th century AD and the two stones from Fole not younger than 1350 AD. This makes it clear that the overall dating of the stones at SHM should be regarded as medieval.

Belonging to the medieval phase of the fortress Eketorp on Öland are two piles of nineteen “fist-sized” rocks interpreted as sling-

stones (Sandstedt 1998, p. 198). None of them remain in any official storage facilities today. They were found on the inside of the castle wall and the interpretation in the publication of the material is that they were part of the castle defence. The idea is that they could have been thrown with either a simple version of a trebuchet, where the force of arm strength and bodyweight replaces the counterweight, or simply hurled by hand (Sandstedt 1998, pp. 198 f.).

## Analysis and discussion

The analysis consists of a comparison of the studied material, moving on to an analysis of descriptions of the use of slings and slingstones in historical texts and a concluding analysis of what defines a slingstone in the archaeological material. The material might not cover all existing slingstones defined as such. This is, however, as mentioned above, not the main focus here, but rather to sum up the existing discourse and find a place for the discussion of the stones from Uppåkra in connection with their intended function. It is however clear that none of the discussions mentioned here make any sort of reference to any kind of general discussion on the subject of slingstones in the Swedish archaeological material. This is why it is important to investigate how the classification of the slingstones from Uppåkra came to be. If there is no discourse, that alone must be a reason to form one, on the basis of what is known so far. This is why the analysis of the discourse will not be formed by the existing discussion on the subject, since that would make this the conclusion. Instead, the focus will be on what makes the objects from Uppåkra slingstones when there is no reference material and no existing discussion of this type of artefact dated to the Iron Age in Sweden.

## Comparing the materials

Looking at the stones introduced above, it quickly becomes clear that the ones not from Uppåkra are all of sizes that can be described as “fist-sized” and they are all dated to medieval times. The slingstones from Eketorp are the only ones that have been discussed with a proposal of their function, other than the obvious hint in the classification of a stone with the purpose of being slung. In his article, Helgesson makes a simple presentation of the stones from Uppåkra, with no mention of a probable function other than that they are weapons (Helgesson 2010).

The stones from Uppåkra are significantly smaller than the rest of the objects defined as slingstones, which are of more or less the same size. All of the stones have in some way been connected with assemblages indicating military activity, but it does not seem to be with reference to these medieval stones that the Uppåkra slingstones were interpreted, since no reference is made in either direction (e.g. Lenntorp & Piltz Williams 2002; Helgesson 2010; Söderberg & Piltz Williams 2011).

A possible conclusion when looking at the material as a whole, as far as functionality goes, could be that the larger stones, which excludes the ones from Uppåkra, were made to be hurled with some sort of larger construction like a trebuchet, as was suggested with the stones from Eketorp. This conclusion can be drawn due to the fact that the stones from Eketorp have previously been concluded to have precisely that function when defending the medieval fortress of Eketorp (Sandstedt 1998, pp. 198 f.). Another variable used in that equation is that all the medieval stones are quite similar in size and material, which at least gives them the possibility to have the same function. The stones from Uppåkra, on the other hand, are completely different from the medieval ones in every respect, except that they were unearthed at a settlement and that

they are spherical in shape. Helgesson points out how unusual it is that the weapons from Uppåkra were found in a settlement, a context with which weapons are not normally connected (Helgesson 2010).

Reading the published Uppåkra material, including the reports, we find no indication as to how the slingstones were classified as such; it seems to have been considered the one obvious choice (Lenntorp & Piltz-Williams 2002, p. 34; Helgesson 2010, p. 108; Söderberg & Piltz Williams 2011, p. 16). How can this be, when there are no slingstones similar to the ones from Uppåkra?

When I talked to some of the central figures in the excavations of Uppåkra (not named here in order to preserve their anonymity) it became clear that the stones were initially interpreted as potential gaming pieces. As more people came to see the objects it was soon stated that they were more likely to be slingstones, making reference to a passage in *Gesta Danorum (History of The Danes)* by Saxo Grammaticus which says that Absalon went past Stevns Klint to collect slingstones. The interpretation of this text had initially been that the stones used to sling were the flint pebbles that make up the beach of Stevns Klint. The objects from Uppåkra are made from a material that was agreed to be similar to the chalk that constitutes the cliffs at Stevns Klint and thus they were named and registered as slingstones.

## The use of slingstones – evidence from historical texts

My generation of newly graduated masters in archaeology have been schooled to be sceptical and not to take what we read and hear as positivistic truths; this is especially the case when looking at historical texts, not as answers to our questions, but as just part of all the variables that can be put into an analysis. Howe-

ver, the data recognised as viable data should be treated as such. Where historical texts are available, they should not be neglected, nor should they be treated as truthful positivistic facts; they should be included and discussed in participation with all present data. It is also probable that stated facts in the archaeological discourses might be influenced by the historical texts even when that is not the intention. Anders Andrén is one of many who point out the problematic feature that the presence of texts might limit the possible arguments in an archaeological discussion, as well as opening up for new ones (Andrén 1997, pp. 13 f.). The theoretical process within the field of historical archaeology today, as stated by John Moreland (2010, p. 2), has changed the view of historical texts to a point where the importance of understanding historical texts as documents of their time, formed in specific social and historical contexts, stands as a central feature. He states, furthermore, that these contexts should be analysed by any historian or archaeologist etc. studying the texts (Moreland 2010, p. 3).

It is therefore necessary, for the transparency of the matter of the formation of slingstones in the Swedish archaeological discourse, to give an account of the possible historical sources that might form the discourse backdrop.

Slingers were commonly included in the Roman army, at least if we trust historical texts like *On Roman Military Matters*, written by Flavius Vegetius Renatus in the 5th century AD. The text states that any recruit of the Roman army was taught how to throw stones, using slings as well as bare hands (Vegetius 2008, p. 17). The text goes on to mention things like how effective slings are for annoying the enemy and how effective they are when defending a mountain or a castle or city, and so on (Vegetius 2008, p. 18).

As noted above, the translation of Saxo Grammaticus' *History of the Danes* was the

source that inspired the classification of the Uppåkra slingstones. What is it exactly that Saxo writes and what other texts exist on the matter?

In book XIV of the total XVI Saxo describes how Absalon anchors at Stevns Klint to load his ship with slingstones. These stones were to be added to the defence of the newly erected castle at the harbour called Køpmændenes Havn (The Harbour of the Merchants), modern-day Copenhagen (Saxo 2005, p. 429). Absalon was the predecessor of Anders Sunesen, archbishop of Lund, and Saxo Grammaticus his employee, writing his texts sometime during the early 13th century, when Valdemar II was regent of Denmark (Saxo 2008, p. 1). The description of Absalon is in essence contemporary, but *The History of The Danes* is claimed by Saxo to cover the *entire* history of Denmark and, as stated by him, was written "to glorify the fatherland" (Saxo 2008, p. 1). In this glorification of Denmark through history, Saxo mentions many battles and, a few times, the use of slings.

In Book VII of *The History of the Danes* Saxo Grammaticus describes how the Danish king Harald Hildetand got his war strategies from the god Odin (Enoksen 2004, pp. 286 ff.). In this strategy, the slingers had their place on the flanks, well protected behind the rest of the armed force (Enoksen 2004, p. 286; Saxo 2008, p. 227). It is mentioned again in book VIII that the slingers, this time in a description of the Swedish army, are placed in the rear (Enoksen 2004, p. 303). In the description of a battle the slingers' participation is mentioned separately, where it is stated that the slingers sling their stones before they engage in hand-to-hand combat with the enemy (Enoksen 2004, pp. 308 f., 313).

Saxo Grammaticus is not the only one who describes warfare in early medieval times; in his historical description of Viking Age warfare Lars Magnar Enoksen lists some of these sources, which he reckons to be possible to



Fig. 3. Part of *The Prisoner, scene 2* on the Bayeux Tapestry. Slinger chasing off birds as the fields are being sowed. Copyright Reading Museum (Reading Borough Council). All rights reserved.

connect with Viking Age traditions. Some of these make mention of the use of slings, and are described below.

*The Royal Mirror* (original title *Konungs Skuggsjá*) is an early 13th-century work from Norway (Enoksen 2004, pp. 117 f.). The main plot is that a son poses questions to his wise father (Enoksen 2004, p. 117). According to Enoksen, the writer was a part of the Norwegian hird and as such he had a unique insight into the military structure of weapon practice (Enoksen 2004, p. 117). Enoksen acknowledges that it is a description of the 13th century, but believes that the Viking ideal lived on (Enoksen 2004, p. 117). In this description the writer makes the statement that the king's men should practice the use of all weapons, including the *pole-sling*, *hand-thrown sling*

and the art of throwing stones with your bare hands, using what is referred to as a *weapon-stone* (Swedish: *vapensten*) (Enoksen 2004, p. 118). Throwing rocks in battle is mentioned in *Konunga och Hövdinga styrelsen* ("The Rule of Kings and Chiefs") as well, a Swedish text from the mid 14th century (Enoksen 2004, p. 159).

Woven into the Bayeux Tapestry, probably made sometime between 1066 and 1096, is a person who seems to be hunting birds with a sling, or maybe he is simply chasing them off (Fig. 3)? Depicted in almost the same way is Abraham, chasing off birds, in an 11th-century version of *The Old English Illustrated Hexateuch* (Fig. 4).

This is just an initial peek into the texts and images depicting and describing slings



Fig. 4. Page from *The Old English Illustrated Hexateuch* showing how Abraham is chasing off birds with a sling. Reprinted from Dodwell & Clemoes 1974, p. 71, with permission.

and slingstones; enough, however, to form a possible backdrop for the definition of slings and slingstones based on historical sources.

## Defining a slingstone

So, what is it that defines the archaeological artefact *slingstone*? What is the outline in the discourse of this subject in Sweden? It is clear that there is a somewhat clearer definition in the historical texts than in the existing archaeological material and the discussion of the same. There is no coherence between the stones from Uppåkra dated to Iron Age and

the ones from other parts of Sweden dated to the High and Late Middle Ages. They each form their own material group, based mainly on size, shape, dating and possibly function. Using the description of the slingstones from Eketorp as an example, it is likely that the medieval stones might have been ammunition for siege engines such as the trebuchet, but it is just as likely that they might have been used in some other manner, for example, being slung by hand. The medieval stones have all been found and connected with warfare and most of them are associated with defensive strategies in sieges of castles or towns and so on.

The stones from Uppåkra are much smaller than the other examples, and it would seem strange if they were to have been used in connection with siege equipment in the same way. They are, as stated by the geologists Vivi Vajda and Per Ahlberg, likely to be fossils and it is definitely not clear that they were used with the intention to harm other human beings. However, the size of the stones makes it possible to sling them with a hand-held sling just like the ones in the Bayeux Tapestry and drawn in *The Old English Illustrated Hexateuch*. In these pictures the possibility is suggested that the slings might have had a function in the everyday life of a farmer, at least in medieval times. The picture of Abraham chasing off birds shows a slingstone that is not spherical in shape, but rather more elliptical. These types of elliptical slingstones can be found all over the world in living cultures today, e.g. in Peru, as well as in the ancient world around the Mediterranean (e.g. Brown Vega & Craig 2009; Vegetius 2008, p. 17; Hagberg 2011).

When found in a context commonly known to be associated with military activity, the slingstone is an object used in warfare, with the intention of causing harm to human beings (Helgesson 2010). In other scenarios the sling can be a valuable tool for the everyday life of the farmer/herder, who can use the sling to prevent birds from eating their crop



as in the Bayeux Tapestry, or to chase wildlife away from their herds.

Slingstones are objects that are described as intended to be hurled at other living creatures, with the intention to kill or disturb enough to chase them off, whether in battle by the warrior defending the herd or in the field by the farmer sowing his field or the herder guarding his herd. Slingstones can have all sorts of shapes and may or may not have been manufactured. If the Uppåkra stones are slingstones, they were most likely thrown using a handheld sling, unlike the rest of the Swedish material, which was possibly used with siege equipment, and thus have a more specific function connected to warfare.

## The formation and creation of knowledge

Looking at the slingstones from Uppåkra and the comparison with the medieval material it is clear, as stated earlier, that they do not represent the same group of artefacts. However, the functionality of the two groups could still be similar, acknowledging that they actually are to be regarded as slingstones in that they have the potential function to be slung or hurled in some way. But this makes it interesting to discuss what makes a slingstone. Because if the criterion of a slingstone is that it is an object which has the potential of being slung, in any fashion possible, almost all conceivable objects could be slingstones (or sling-any-other-material-coming-to-mind). What makes the medieval slingstones plausible weapons (or rather ammunition, possibly to be used with siege equipment) is not in the first place the fact that they are possible to throw or sling, but rather that they are shaped into a spherical form that seems to follow some sort of standard (Table I), in combination with the fact that in most cases they have been found in connection with defensive structures.

The stones from Uppåkra have two things in common with the medieval slingstones: they are spherical and some of them were found in connection with weapons, in a settlement area. This does not exclude the possibility that the Uppåkra stones might have been used as slingstones, but the comparison shows that it is not the obvious conclusion, when one looks at the existing material in this category.

The materials that we as archaeologists study are representatives for the peoples who formed the cultures that we want to understand. Some objects might have been produced with a very specific purpose of use, but the usage might very well change during the life span of that object. This might be due to the transformation of an object's meaning in one context into another in a second context. An appropriate term to use for this argument is "the biography of things", as discussed by e.g. Igor Kopytoff (1986) and Chris Gosden (1999). The biography of things is a process of change, within the "life" of an object, between possible functions. The slingstones might have been used as slingstones in the everyday life of a herder and then used in battle; the change of function might have come from a change of ownership or from a change of need etc. (Kopytoff 1986; Gosden & Marshall 1999).

The Uppåkra stones might be fossils, not made by man to be slung at other humans or animals, but man might very well have seen the potential in these objects to have this specific function in specific circumstances.

There is always the possibility of fallacies in any science, in archaeology often due to preconceived notions about past societies, based on the epistemology forming the conditions of what associations are possible to make. As Sandra Wallace states: "many of the problems of archaeological theory can be traced back to common meta-theoretical errors" (2011, p. 155). Wallace makes this conclusion in connection with theoretical ar-

chaeology specifically, but it can very well be applied to the Swedish slingstone discourse, in the simple sense that it does not actually exist but is still implied as existing in previous publications.

When conducting an archaeological excavation of any area, archaeologists mainly use their experience to make initial explanations and interpretations of what they find. The archaeologists make associations in their own minds as well as in discussions with colleagues. By including other people's experiences the magnitude of the associations grows and eventually a decision is made and the object gets registered as something specific. In the scenario of a field school, the excavation leader, who knows for sure that an object is one thing, may overrule the inexperienced student's suggestion of an object being another, because the number of associations is connected to the experience held on an individual basis. The discussion within the more experienced group of archaeologists may then very well change the object back to being what the less experienced student suggested; perhaps because the most senior and most respected scholar in that group had his say?

Who has the final word regarding the interpretation depends on the importance/rarity of the object. If it is something never seen before, say for instance that it is a relatively small, spherical object made of chalk, the associations within the excavating group might have reached their interpretative limits. A more experienced archaeologist has to be consulted.

This is a possible scenario for the "slingstones" at Uppåkra. The more experienced on-site staff had read about several occasions in Saxo Grammaticus' *The History of the Danes* where the use of slingstones is mentioned. Saxo Grammaticus writes about how people go to Stevns Klint to collect slingstones (Saxo 2005, p. 429). The on-site staff's initial idea had been that people went to Stevns Klint to

collect flint, but when confronted with and observing the chalk objects found at Uppåkra the line of associations changed. The chalk objects were found in a deposit of weaponry and immediately the connection of old and new information clashed and it became obvious that the objects actually are slingstones, made out of chalk of the same kind as the cliffs at Stevns Klint.

The excavation team in Uppåkra absorbed this information, but the line of associations that made the classification of a completely new artefact type in the Scandinavian Iron Age material is not mentioned in any of the published material. In excavation reports as well as the series *Uppåkrastudier* the one thing that is mentioned about the stones is that they exist and that they are slingstones, with an obvious connection to warfare (Lenntorp & Piltz-Williams 2002, p. 34; Helgesson 2010, p. 108; Söderberg & Piltz Williams 2011, p. 16). Why is it not considered important to mention in the published material that a new artefact category is created? Why is the line of associations which led to the invention of this category not accounted for in the published material? It becomes clear to me, when looking at the documentation, that it is everything but certain that the stones were used as slingstones.

## Conclusion and final reflections

The objects from Uppåkra might have been used as slingstones, or they might have had a function as something else. If they were slingstones it is not certain that they were used in battle, even if it is a possibility; they might just as well have been used for more practical purposes in the everyday work of a farmer or herder. And as far as function goes, it would be interesting to further explore the stones from Uppåkra by looking further into their biography, where the function as slingstones

is just one in a long row of possible functions.

The possibility that the stones might be fossils is important for the discussion, since that rules out that the stones could have been manufactured to a standard, as suggested by Helgesson (2010, p. 104). Vivi Vajda is a geologist with vast experience of chalk and limestone. There is no reason to doubt her assessment that the stones probably are fossils, even if a more detailed study could not be arranged. These objects might not have been shaped to a standard, but may have been collected because of their size because, as suggested by Helgesson, they fit a certain standard (2010, p. 104). However, since there are no previous finds of similar objects treated in this way, and no present academic discussion, it is a doubtful decision to draw any such conclusions.

Summing up, it can be concluded that the existing discussion on the subject of slings and slingstones in Swedish archaeology is split into two categories, with two very different types of objects. The Iron Age stones from Uppåkra are about half the size of the stones dated to medieval time; the latter were possibly used in connection with the defence of the structures where they have been found. This can be the case for the stones from Uppåkra as well, but that possibility will have to wait to be tested, since no such suggestions have been made in this article or in previous publications.

In writing this article, I set out to investigate, define and discuss an existing discourse on the subject of Iron Age slingstones. In the process I have been surprised by the fact that no such discourse exists to which the stones from Uppåkra can be compared. In fact, the only possible conclusion that can be drawn from previous reports and articles is that the stones from Uppåkra hitherto have been named slingstones, but that they might very well have had a different function. A challenge for the future is to conduct a more thorough empirical investigation of simi-

lar objects in the archaeological material, to define more assertively the possible functions of the “slingstones” from Uppåkra. Another empirical challenge is to look specifically for what might be considered as slingstones in the Iron Age material in Scandinavia, because to date there is no strong evidence for such a group of artefacts, the Uppåkra stones included.

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## References

- Ahlberg, P. 2013. Discussion on the matter of the geological aspects of the slingstones from Uppåkra. (Personal communication, 14 March 2013).
- Anderskov, K., Damholt, T. & Surlyk, F. 2007. Late Maastrichtian chalk mounds, Stevns Klint, Denmark: Combined physical and biogenic structures. *Sedimentary Geology* 200 (1-2).
- Andrén, A. 1997. *Mellan ting och text: en introduktion till de historiska arkeologierna*. Eslöv.
- Bohrn, E. 1938. *Gammelnärens kastal: Redogörelse för konserveringsarbeten 1937*. Accessed at ATA, Stockholm.
- Brown Vega, M. & Craig, N. 2009. New Experimental Data on the Distance of Sling Projectiles. *Journal of Archaeological Science*, [on-

- line] Available from: [http://www.academia.edu/176644/New\\_Experimental\\_Data\\_on\\_the\\_Distance\\_of\\_Sling\\_Projectiles](http://www.academia.edu/176644/New_Experimental_Data_on_the_Distance_of_Sling_Projectiles) [Accessed 23 April 2013].
- Dodwell, C. & Clemons, P. (eds.), 1974. *The Old English Illustrated Hexateuch: British Museum Cotton Claudius B.IV*. Copenhagen.
- Enoksen, L. M. 2004. *Vikingarnas stridskonst*. Lund.
- Gosden, C. & Marshall, Y. 1999. The Cultural Biography of Objects. *World Archaeology* 31 (2).
- Hagberg, C. 2011. A note on lead sling bullets from 2010. *Opuscula: Annual of the Swedish Institutes at Athens and Rome* 4:2011, pp. 89–90. Available from: [http://old.raa.se/cms/showdocument/documents/extern\\_webbplats/arkeologiuv/publikationer\\_uv/rapporter\\_uv/teknik\\_uv/teknik\\_2011/1\\_uv\\_teknik\\_rapport\\_2011\\_hala\\_sultan\\_tekke.pdf](http://old.raa.se/cms/showdocument/documents/extern_webbplats/arkeologiuv/publikationer_uv/rapporter_uv/teknik_uv/teknik_2011/1_uv_teknik_rapport_2011_hala_sultan_tekke.pdf).
- Hårdh, B. 2010. Viking Age Uppåkra. In Hårdh, B. (ed.), *Från romartida skalpeller till senvikingatida urnespännen: Nya materialstudier från Uppåkra*. Lund.
- Helgesson, B. 2010. Krigarna från Uppåkra: 1 000 år i järnålderssamhällets tjänst. In Hårdh, B. (ed.), *Från romartida skalpeller till senvikingatida urnespännen: Nya materialstudier från Uppåkra*. Lund.
- Hurzvicz, H. 1966. *Siliceous Sponges from the Upper Cretaceous of Poland: Part I. Tetraxonia*. Acta Paleontologica Polonica.
- Kopytoff, I. 1986. The cultural biography of things: commoditization as process. In Appadurai, A. (ed.), *The social life of things: Commodities in cultural perspectives*. Cambridge.
- Lenntorp, K.-M. & Lindell, M. 2001. *Rapport: Arkeologisk förundersökning, Stora Uppåkra 8:3, Fornlämning 5, Uppåkra socken, Staffanstorps kommun, Skåne Län*. Lund.
- Lenntorp, K.-M. & Piltz-Williams, B. 2002. *Rapport: Arkeologisk förundersökning, Stora Uppåkra 8:3, Fornlämning 5, Uppåkra socken, Staffanstorps kommun, Skåne Län*. Lund.
- Moreland, J. 2010. *Archaeology, Theory and The Middle Ages: Understanding the Early Medieval Past*. London.
- Nicklasson, P. 1997. *Svärdet ljuger inte*. Stockholm.
- Raddatz, K. 1987. *Der Thorsberger Moorfund Katalog: Teile von Waffen und Pferdegeschirr, sonstige Fundstücke aus Metall und Glas, Ton- und Holzgefäße, Steingeräte*. Neumünster.
- Redfern, R. C. 2009. Does Cranial Trauma Provide Evidence for Projectile Weaponry in late Iron Age Dorset? *Oxford Journal of Archaeology*, [online]. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0092.2009.00335.x/full> [Accessed 8 January 2013].
- Sandstedt, F. 1998. Vapen, Weapons. In Borg, K. (ed.), 1998. *Eketorp – III: Den medeltida befästningen på Öland*. Stockholm.
- Saxo Grammaticus. 2005 [13th century]. *Gesta Danorum: Danmarkshistorien Bind 2*. Latin text published by K. Friis-Jensen, Translated into Danish from Latin by P. Zeeberg, 2005. Copenhagen.
- 2008 [13th century]. *The History of the Danes: Books I–IX*. Translated from Latin by P. Fischer, edited and commented by H. Ellis Davidson, 1979. Cambridge.
- Söderberg, B. & Piltz Williams, B. 2011. *Uppåkra 2011: Forsknings- och seminarieundersökningar Skåne, Staffanstorps kommun, Uppåkra socken, Stora Uppåkra 8:3 och 8:4, RAÄ 5*. Lund.
- Stjernquist, B. 1955. *Simris: On Cultural Connections of Scania in the Roman Iron Age*. Lund.
- af Ugglas, C. R. 1938a. Notes on slingstones from Gammelgarn. [online] Available from: <http://kulturarvsdata.se/shm/media/html/48316>. [Accessed 21 March 2013].
- 1938b. Notes on slingstones from Stora Hellvigs. [online] Available from: <http://kulturarvsdata.se/shm/media/html/48319>. [Accessed 21 March 2013].
- 1938c. Notes on slingstones from Falkenbergs Hus. [online] Available from: <http://kulturarvsdata.se/shm/media/html/48379>. [Accessed 21 March 2013].
- Vajda, V. 2013. Discussion on the matter of the geological aspects of the slingstones from Uppåkra. (Personal communication, 14 March 2013)
- Vegetius, F. 2008 [5th Century]. *On Roman Military Matters: A 5th Century Training Manual in Organization, Weapons and Tactics, as Practiced by the Roman Legions*. Translated from Latin by Lieutenant J. Clarke, 1767. St Petersburg, Florida.
- Wallace, S. 2011. *Contradictions of Archaeological Theory: Engaging Critical Realism and Archaeological Theory*. Abingdon.

| SHM/LUHM #       | Size (mm)           | Weight (g) | Locality                                | Dating                   | Material      | Context                | Source  | Year of excavation |      |
|------------------|---------------------|------------|---|--------------------------|---------------|------------------------|---------|--------------------|------|
| SHM#: 7764:187:A | 73x55x72            | 520        | Falkenbergs hus, Falkenberg, Halland    | 1300-1434 (?) AD         | Sandstone (?) |                        | SHM/ATA | 1885               |      |
| SHM#: 7764:187:B | 63x69x75            | 576        |   |                          | Granite       |                        |         |                    |      |
| SHM#: 7764:187:C | 56x68x50            | 326        |   |                          | Sandstone     |                        |         |                    |      |
| SHM#: 7764:187:D | 60x55x50            | 310        |   |                          | Granite       |                        |         |                    |      |
| SHM#: 21961      | 69x56x51,5          | 410        | Gammalgarns kastal, Gammalgarn, Gotland | 1200-1300 (?) AD         | Granite       |                        |         | 1937               |      |
| SHM#: 21993:2    | 67,5x67x69          | 576        | Stora Hellvigs, Fole, Gotland           | Not younger than 1350 AD | Granite       |                        |         | 1937               |      |
| SHM#: 21993:3    | 67,5x64x63,5        | 572        |   |                          | Granite       |                        |         |                    |      |
| 17880            | 50x55x55            | 224        | Visby                                   | Pre-historic/medieval    | Sandstone (?) | Stortorget, Visby      |         | 1927               |      |
| 17880            | 66x65x45            | 350        |   | Pre-historic/medieval    | Limestone     | Stortorget, Visby      |         | 1927               |      |
| 20951:8 A        | 82x83x79            | 754        |   |                          |               | Limestone              |         |                    | 1935 |
| 20951:8 B        | 29x61x59            | 174        |   |                          |               | Limestone              |         |                    | 1935 |
| 11734: A         | 65x63x61            | 394        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 61x65x35            | 210        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 68x68x48            | 694        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 76x73x78            | 372        |   |                          |               | Granite                |         |                    |      |
| 11734: A         | 49x53x32 & 52x43x50 | 242        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 55x41x70            | 284        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 57x45x70            | 318        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 55x67x74            | 464        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 65x66x61            | 472        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 67x67x60            | 380        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 51x61x62            | 324        |   |                          |               | Limestone              |         |                    |      |
| 11734: A         | 67x71x71            | 406        |   |                          |               | Limestone              |         |                    |      |
| 31827: 5         | 95x105x104          | 1 746      |   | Unknown                  |               | Granite                |         |                    |      |
| 31827: 6         | 84x83x87            | 1 080      |   |                          |               | Granite                |         |                    |      |
| 31827: 7         | 72x71x64            | 492        |   |                          |               | Granite                |         |                    |      |
| 31251: 1080      | Missing             |            |   |                          |               | Chalk                  |         |                    | 2001 |
| 31251: 2033      | Missing             |            |   |                          | Chalk         |                        |         | 2001               |      |
| 31251: 2251      | 23x22x22            | 19         |   |                          | Chalk         |                        |         | 2001               |      |
| 31251: 2341      | 20,5x19x18          | 10         | c. 200-500 AD                           |                          | Chalk         | (Weapon deposit)       |         | 2001               |      |
| 31251: 4276      | 29x26x25            | 19         | c. 200-500 AD                           |                          | Chalk         | 52810 (Weapon deposit) |         | 2001               |      |
| 31251: 4366      | 30x30x29            | 29         | c. 200-500 AD                           |                          | Chalk         | 52811 (Weapon deposit) |         | 2001               |      |
| 31251: 4397      | 29x28x28            | 28         | c. 200-500 AD                           |                          | Chalk         | 52812 (Weapon deposit) |         | 2001               |      |
| 31251: 4424      | 47x44x32            | 59         | c. 200-500 AD                           |                          | Chalk         | 52804 (Weapon deposit) |         | 2001               |      |
| 31251: 5086      | 30x30x28            | 46         | c. 200-500 AD                           |                          | Chalk         | 500 (Weapon deposit)   |         | 2001               |      |
| 31251: 5547      | Missing             |            | c. 200-500 AD                           |                          | Chalk         | 46223 (Weapon deposit) |         | 2001               |      |

|                 |              |    |  |               |       |   |                     |      |
|-----------------|--------------|----|--|---------------|-------|---|---------------------|------|
| 31251: 6351     | 24x22x21     | 17 |  | c. 200-500 AD | Chalk | 60913 (Weapon deposit)                    |                     | 2001 |
| 31251: 6661     | 30x29x27     | 37 |  | c. 200-500 AD | Chalk | 61867 (Weapon deposit)                    |                     | 2001 |
| 31251: 6662     | 32x32x28     | 52 |  | c. 200-500 AD | Chalk | 63721 (Weapon deposit)                    |                     | 2001 |
| 31251: 6949     | 20x19x16,5   | 10 |  | c. 200-500 AD | Chalk | (Weapon deposit)                          |                     | 2001 |
| 31251: 7062     | 29x28,5x23   | 32 |  | c. 200-500 AD | Chalk | 67171 (Weapon deposit)                    |                     | 2001 |
| 31251: 7109     | 29,5x29x28,5 | 34 |  | c. 200-500 AD | Chalk | (Weapon deposit)                          |                     | 2001 |
| 31251: 7280     | 29x29x28     | 37 |  | c. 200-500 AD | Chalk | (Weapon deposit)                          |                     | 2001 |
| 31251: 7779     | 28,5x28x28   | 42 | Uppåkra  | c. 200-500 AD | Chalk | 61002 (Weapon deposit)                    | LUHM                | 2001 |
| 31251: 7846     | 26x25x24     | 28 |  | c. 200-500 AD | Chalk | 64867 (Weapon deposit)                    |                     | 2001 |
| 31251: 8867     | 27x26x21     | 18 |  |               | Chalk |   |                     | 2007 |
| 31251: 8970     | 28x26x23     | 28 |  |               | Chalk |   |                     | 2007 |
| 31251: 9223     | 24,5x24x23   | 18 |  |               | Chalk | 77566                                     |                     | 2007 |
| 31251: 10026    | Missing      |    |  |               | Chalk | 83657                                     |                     |      |
| 31251: 10314    | 22x22x21     | 19 |  |               | Chalk | 86087                                     |                     | 2008 |
| 31251: 10817    | 21x19x19     | 17 |  |               | Chalk | 90344                                     |                     | 2008 |
| 31251: 10832    | 26x25x23     | 26 |  |               | Chalk | 87635                                     |                     | 2008 |
| 31251: 10916    | 21x20x19     | 13 |  |               | Chalk | 88857                                     |                     | 2009 |
| 31251: 12670    | 25x23x23     | 28 |  |               | Chalk | 213192                                    |                     | 2010 |
| 31251: 12897    | 29,5x29x27   | 42 |  |               | Chalk |   |                     | 2010 |
| 32146: 13081    | 19,5x19x17,5 | 13 |  |               | Chalk |   |                     | 2011 |
| 32146: 13234    | 21x20x17     | 14 |  |               | Chalk |   |                     | 2011 |
| 32146: 13294(a) | 23x23x20     | 18 |  | c.550-650 AD  | Chalk | 213741 ('Kitchen')                        |                     | 2011 |
| 32146: 13294(b) | 24x22x21,5   | 18 |  | c.550-650 AD  | Chalk | 213741 ('Kitchen')                        |                     | 2011 |
| 32146: 13295    | 21x20x20     | 13 |  |               | Chalk |   |                     | 2011 |
| 32146: 13296    | 30x27x26     | 38 |  | c.550-650 AD  | Chalk | 213741 ('Kitchen')                        |                     | 2011 |
| 32146: 13297    | 26x24x22     | 22 |  | c.550-650 AD  | Chalk | 213741 ('Kitchen')                        |                     | 2011 |
| -               | -            | -  | Avenstorp,<br>Otteby 44:1,<br>Vällåkra,<br>Helsingborg | -             |       | Found and stored at the Avenstorp's farm. | FMIS/krin<br>gla.nu |      |

Table I. Objects identified as slingstones (Sw. *slungstenar*) in the collections of the Lund University Historical Museum (LUHM) the Swedish History Museum (SHM/ATA), and the Register of Ancient Monuments (FMIS). The stones have been measured from three different angles, to show the diversity in shape.