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Anders Söderberg Charlotte Hedenstierna-Jonson Anna Kjellström Magnus Källström Cecilia Ljung Johan Runer



Words of the Vikings.

A look at the expansion of literacy in Viking Age and Early Medieval Scandinavia:

Sigtuna and Birka as case studies

Themistoklis D. Zacharopoulos

To trace the concept of literacy through a civilization's material culture presents a relatively new approach and a rather challenging process. For this study, two comparative case-studies were chosen: the Late Viking/ early medieval settlement of Sigtuna, and the Early Viking-Age settlement of Birka, both located in east central Sweden. The aim was to illustrate – in space and in time – the scale and expansion of literacy as it first appeared and then progressed during the 8th to 12th centuries CE in this area. In order to bring this study to fruition, several types of material evidence relating to the skill of writing in particular and the concept of literacy in general have been examined. The chosen material consists of styli and wax tablets (fig. 1) as well as runic inscriptions on rune stones, rune bones and runic plates. The runic inscriptions on stone, metal or bone comprise some of the most unique and important archaeological evidence at our disposal allowing us to unravel and understand early Scandinavian civilization. The present study will examine the evolution and spread of writing habits among Viking-Age Scandinavians. The different types of material evidence listed above are all connected, in one way or another, with the concept of reading and writing and for this reason, they have been chosen as the main subjectmatter of this study.

Runes and literacy - an indeterminate bond

In past research, the introduction of literacy has most often been considered to be linked to Christianization, with Birka and Sigtuna seen as representing the two stages in the transition from an oral and pagan society (Birka) to a literate and Christian one (Sigtuna). This notion however, has been reluctantly revised in recent decades. The reason for this revision is the accumulated extensive research on one important linguistic element that is unique to the civilization under study, namely, the use of



Figure 1. A wax tablet from the Professorn 1 site, Sigtuna. c. 1020–1030 AD.

runes as a form of writing system. In the context of Viking-Age Scandinavian society, runic inscriptions are sometimes considered to have been used as autonomous symbols bearing specific meaning and purpose and simultaneously as letters that were part of a linguistic alphabetical system, to be combined to create a word and by extension communicate a meaning (Looijenga 2003:186, 359-360). The notion that runes were used in the ancient world solely as magical symbols or for religious purposes, has begun to be modified during the last half century as a result of increased interdisciplinary research within the fields of archaeology and historical linguistics. In fact, contrary to some previous schools of thought of the 20th century, we today – with the help of linguistic research – understand that runes were used as letters of an integral and structured alphabetical system. As with most languages, they transcended from a pictogrammic/ ideogrammic writing system, into one that was syntactically complete (Coulmas 1999:561–563).

Runes and their importance for historical/archaeological research

Understandably, the archaeological runic evidence that we have at our disposal is of utmost value for our understanding of the Viking Age, since runic inscriptions and texts constitute more or less the only original sources for literacy during that period. Through runic inscriptions and texts, we are able to extract valuable information about everyday matters such as legal and trading practices, naming patterns, and a multitude of cultural attributes such as social norms, historical facts, religious ideas and superstitions as well as burial customs, inheritance laws and, last but not least,

literary tastes (Williams 2008:281–282). Over the years, considerable contributions have been made by a host of runologists and archaeologists towards transcribing and interpreting runic script, the Futhark, named after the initial six characters of its alphabet: **f u P a r k** (Williams 2008:282–283; Düwel & Kuzmenko 2013:328). It is rather important to note here that the dating of runic script is a rather complicated procedure, since so much depends on the correct reading of the form of each rune; reinterpretation of one single character not only can change the entire meaning of a text, but potentially alter its dating by several hundred years (Williams 2008:281). Therefore, runic texts that are illegible often are very difficult to date.

Over the years, many questions revolving around runic inscriptions, their role in Viking-Age society and their involvement with the concept of literacy have been debated by numerous scholars. On several occasions doubt has been cast on the idea of literate individuals (runographers) as also the idea of runography being intertwined with the concept of literacy (Brink 2005:85–86; Spurkland 2005:148; 2004:343–344), while on other occasions runic inscriptions have been seen as a symbiotic coexisting phenomenon of the merging of orality and literacy (Zilmer 2010:160–161), as observed by Kitzler Åhfeldt (2012:64–65). Regardless of the methodology used in dating runic inscriptions, runology – progressively establishing itself as a scholarly science (Barnes 2013:7) – has made great advances in recent years in researching and understanding the literary past of Scandinavian society, and has on many occasions offered valuable aid to archaeological research.

Writing tools of the past: styli and wax tablets

One of the most challenging aspects of investigating unpublished original sources and material artifacts that have not been previously studied in depth, is trying to find ways of creating a new methodology for understanding and explaining the functionality of objects from the past. Styli belong to a type of artifact that has not been studied at length, nor properly classified. Accordingly, overviews and critical identifications in publications and find catalogues are lacking for most Viking-Age excavations in our study area. Presumably, the reason for this is that, until not so long ago, Viking culture, and consequently the Old Norse language, was generally understood in terms of illiteracy, oral communication and a lack of the written word. One of the most persistent and challenging issues throughout this research project was the fact that many of the items found in the excavations of both Birka and Sigtuna were variously recorded as styli, needles, or in some cases pins, and that all of these items look more or less similar (fig. 2).

On a collective look at these artefacts, it is difficult to distinguish with certainty the functionality of each item. In light of this, the best methodology to follow initially seemed to be to identify the most common styles occurring within each artifact type in order to separate and understand the technical specifications of both style and functionality for each. However, one issue that arises from this process is that styli, hair/dress pins, and needles – regardless of the type of needle – share many specifications in common: length, material, decoration and style. Two further issues are the existence of small eyelets/holes on the upper end of some of the items and the



Figure 2. An illustration of various needles, styli and pins from the Urmakaren site. Sigtuna Museum's collection. Photo from the Sigtuna Museum web archive, http://emuseum.sigtuna.se.

material of which these items were made. An additional classing problem surrounds the presence of a spatula-shaped head, normally considered a diagnostic criterion for a stylus, as a wax scraper. The problem which arises if one focuses on the necessity for this erasing function, centers around the possibility that other items could and did function as wax-tablet erasers instead of the stylus head. We know that scribes in medieval times had penknives as part of their writing toolkit (Rosenfeld 2002:157). Therefore, it is not entirely impossible that styli that are not spatula-shaped but rather simply ornamented with rectangular or double-pointed ends could have been used for writing purposes, in combination with penknives or belt knives for flattening the wax on the writing tablet.

Bearing all this in mind, it seems important to first discuss the manufacturing material used and functionality. In our case studies, the majority of the styli are made of bone and deer or elk antler. Analysis of the objects classified as styli from Birka and Sigtuna produced interesting results after measurements were taken of all items. It is now possible to distinguish two types of styli according to their total length: short styli (7-11cm long) and long styli (12-16cm long). In addition to classifying by length, an attempt was made to classify by shape. The most important categories of shape for styli were found to be as follows: Spatula-shaped/T-shaped type (a stylus with one pointed end and one spatula-shaped end serving as an eraser. This is the most common type of stylus. Usually made of metal, but in our case studies there are examples made of bone or antler). Blade-edge shaped type (a stylus with one pointed end and one blade-/knife-shaped end used to scrape the text off a wax tablet. This could be a case of an early type of the medieval scriber's penknife, used as an erasing tool). Rectangular shaped type (a stylus with one pointed end and one rectangular end. Most of the rectangular styli at our disposal are partially broken and many of them should possibly instead be classed as needles). Other than by shape, two other types of styli can be identified, based on stylistic criteria: Ornamented type



Figure 3. Three writing pens, or styli, made of bone from the block Trädgårdsmästaren 9 and 10 (Sigtuna). From the left find no. 10790 from plot III, early 1000s; no. 13171, also from plot III, approx. 1020-50 CE and no.15054 from plot IV, approx. 1020-50 no. The item 10790 has a knife-like wax smoother at the top, as well as several contemporary finds from Lund (Mårtensson 1962). The lengths of the pins are 150, 126 and 92 mm. (Gustavson and Söderberg 2014:40).

(a stylus with one pointed end and one end ornamented with a decorative shape. Some of these items have been found among my material and this ornamentation does not seem to carry any practical function, but rather had a stylistic purpose. These items can be argued to have been used as hair-pins instead). Eyelet-shaped type (a stylus with one pointed end and one variously shaped end which bears an eyelet/hole. Any of the types mentioned above may have a hole on the upper end. These items can be argued to have been used as needles or hair-pins and

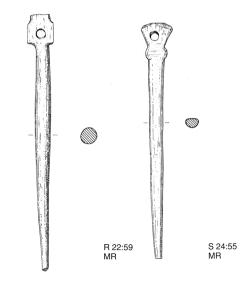
are generally not considered to have been used as styli, though there are exceptions to this general argument). The types of styli that bear eyelets and those that lack any sharp or spatula-shaped end, are those that have been the most confusing to deal with and classify with certainty, for the very reason that they could have been used as needles or pins respectively (Zacharopoulos 2021:18–19). Here, once again, the question arises of how can we ensure that an item was a stylus? The following figure illustrates three different known types of styli (*fig. 3*).

A groundbreaking attempt at answering the question of a proper classification of styli has been suggested by the archaeologist Kaj Borg in his publication Eketorp III: Den medeltida befästningen på Öland. Artefakterna (1998), where he studied and presented an analysis of the excavation material from Eketorp ringfort, an Iron Age and medieval fortress on Öland. In his book, the author studies the needles and styli found in his case-study excavation and places them in perspective, comparing them with other finds from similar contexts. Following microscopic analysis of these items, Borg advances new data with regard to these items, showing that some of them were found to have metal pins on their tips, some bearing residual quartz. The author further explains that some of the other items marked as "needles" had a missing tip, arguing that the tips were possibly broken because they had been fitted with metal pins, and thus were used as styli (Borg 1998:164) (fig. 4). Through his thorough analysis of his material, Borg offers a new methodology for distinguishing styli from needles, arguing that needle-shaped items could be used as styli, in the scenario that they were fitted with metal pins on their writing tip.

According to the criteria presented above, a summarized list of specifications is presented here, based on the feasibility to define the stylistic and functional attrib-

Figure 4. Item S 24:55 MR and R 22:59 MR, from the Eketorp Borg collection. (Borg 1999:165).

utes of the styli in circulation around Scandinavia during the Viking and early Middle Ages. Firstly, it seems reasonable to argue that a stylus must have one pointed end that could function as a writing tip. Indications of metal tips fitted to the writing-end identified through microscopic analysis can be argued to be an attestable way of classifying a stylus. Also, a broken tip may in itself be a minor secondary or functional indication of the item having been used as a stylus, but can rarely serve as a stand-alone indicator. Styli should be crafted in a durable



material such as bone, horn, antler or metal. Wood is not considered to be a suitable material, though there can be exceptions to this general rule (Gustavson & Söderberg 2014:39). Moreover, though there is no need for an eyelet/hole to exist on a stylus, some styli could (and several do) have an eyelet on their upper end, for the insertion of a chain or string. Lastly, the spatula/eraser shape of the head is not a clear indicator of whether the specimen should be classified as a stylus and not a needle or pin, since penknives could have been used for erasing instead. The spatula-headed stylus is however, the standard and most common type of stylus used in most cultures of the Late Iron Age and medieval Europe, and though this cannot be a standalone indicator, it could be regarded as an additional important criteria (Zacharopoulos 2021:21). These are the specifications that have been taken into consideration when selecting the material to be collected for the Birka and Sigtuna case studies concerning styli.

At this point, it is imperative to argue for a simple observation which admittedly complicates the very nature of this research - the idea being that, all things considered, tools have always had multiple purposes and uses in the hands of humans. A knife, a hatchet and a spear can be used for multiple purposes: hunting, gathering, waging war, skinning, fishing, crafting and even incising letters or runes. The existence of wax tablets and styli is an important and strong indicator of a society expanding its literary limits and transitioning from the spoken to the written word. This however does not mean that letters were not written before or beyond the use of wax tablets and styli. On the contrary, in Viking-Age Scandinavia, runic inscriptions were mostly cut into bone and stone, and the tools used for this were most certainly not styli, but knives and both sharp and blunt-edged tools such as chisels (Looijenga 2003:110–111). Indeed, observing the rune carvings that are at our disposal, one realizes that rune-carving techniques were seemingly adjusted after the shift of the millennium, at which time runes seem to have been carved deeper and the stones ornamented in a more elaborate way, indicating a change of tools by the carvers, especially

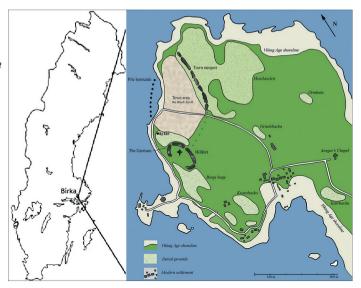
noticeable from the second half of the 11th century (Kitzler Åhfeldt 2012:69, 77). This argument leads to the understanding that the profession of rune-carving as well as the overall process of runic inscriptions, was, as most professions in ancient times, a living, ever-evolving process, being advanced and optimized in the hands of the people who practised it. Additionally, it goes without saying that there was more than one way to utilize a tool in order to communicate one's meaning and write or carve a certain symbol or word during the Viking Age in a Scandinavian context. Accordingly, we may therefore safely assume that the existence of wax tablets and styli in Viking-Age settlements is not an indicator of an existing literary environment in itself, but rather an indication of a transitioning period – a phenomenon caused by the advancement of the level and scale of literacy in these areas at this period in time. Finally, it is sensible to assume that items such as wax tablets and styli were not used by the majority of those residing and living in these environments but only by a select few who owned both the means and the knowledge to use such literary items. Therefore and realistically, when we are considering styli and wax tablets, we cannot argue about an overall literary society but rather pockets of literacy within an overall oral society; a minor number of individuals who would be literate enough and wealthy enough to own items such as styli and wax tablets.

The two case studies: Birka and Sigtuna

The amount of items related to literacy that have been found in the Viking settlement of Birka (fig. 5) is relatively small by comparison to Sigtuna. This however is understandable if we consider the time frame and the context under which Birka town was established and functioned.

Through extensive study of both the settlement structure as well as the context of the graves, the archaeological community today has an impressive amount of information about the settlement of Birka and how it functioned in the Viking Age. Among the wealth of finds unearthed in various excavation projects that have taken place at Birka, there is a small collection of items that are related to literacy and which indicate a culture at a primal stage of introduction to the concept of reading and writing. Among these finds, two items are recognized as wax tablets and six items could be argued as having possibly functioned as styli. Additionally, there is a multitude of items (rune bones, rune stones and runic plates) that carry runic inscriptions from the 8th and 9th centuries (Källström 2013: 108-11; Källström 2014: 110–112). The late Viking – early medieval settlement of Sigtuna, on the other hand, (fig. 6) holds a large amount of archaeological finds in general and a much larger amount of artifacts related to literacy in comparison with the Birka settlement. Among these finds, one item is recognized as a wax tablet, while another is considered to have possibly had this function. Additionally, eleven items can be argued to have functioned as styli. Lastly, there are seven items among the c. 120 portable objects with runes from Sigtuna (rune bones, rune stones and runic plates) that bear runic inscriptions of special interest, the most important of them being item no. 68844 [Professorn 1: 12810], a unique runic item of great cultural and historical value: the Sigtuna rune-syllabary (Gustavson 2003:19-21; Källström 2012:42; Gustavson

Figure 5. An illustration of Björkö (Birka) island and the major excavation areas. (Price et al 2019:183. Figure by Charlotte Hedenstierna-Jonson)



2007:69; Gustavson & Söderberg 2014:35–38). Two further items of unique interest found in Sigtuna are item no. 62976 [Professorn 1: 6932], a rune bone bearing an inscription with both Latin and runic text (FR PAXTEC) (Gustavson 2000:30; Gustavson & Söderberg 2014:35–38), and item no. 4059 [Trädgårdsmästaren 9–10: 2841], a rune bone containing an inscription of a Christian prayer/blessing written in runic text (Gustavson 1990:24; Gustavson & Söderberg 2014: 34; Gustavson, Snaedal, Stocklund & Åhlén 1990:37)

Study of the items that have been presented above has brought many interesting results to light. From the perspective of a general overview, an apparent conclusion is that there are fewer items found in Birka that seem to be literacy-related compared

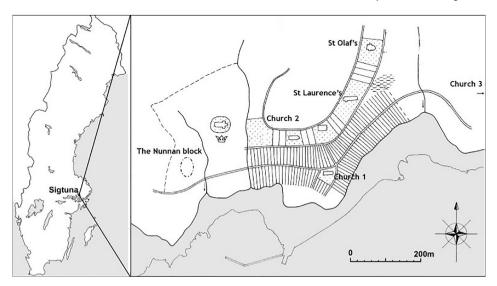


Figure 6. An illustration of the Sigtuna town and the major excavation areas. (Kjellström 2012:263).

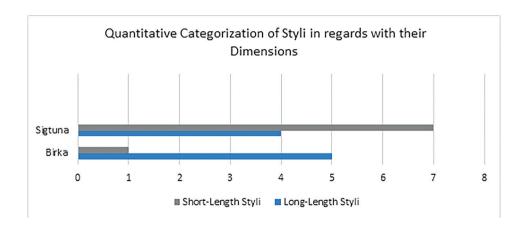


Figure 7. A quantitative categorization of the styli studied in this paper, in regards with their dimensions.

to the case of Sigtuna, especially with regard to runic inscriptions. This might be obvious, considering the historical background to the foundation of both settlements, but it is nonetheless an important observation for the items examined in this study, as it is connected to the following conclusion that there is an interesting change in the variety of source material and quality of manufacture over time. Indeed, the vast majority of items found in the Birka collection are made out of bone/antler, as are the items that date earliest in the Sigtuna collection. However, the only clear cases of metallic styli – like the ones showcased from Roman or Anglo-Saxon contexts – are found in the Sigtuna excavations and of a later date, during the early medieval period. Additionally, it is apparent that most of the cases of styli in Sigtuna appear to be crafted in a more artistically sophisticated manner, bearing more decoration and showing a higher quality of craftsmanship. In this regard a further interesting observation specifically concerning the styli in these two case studies is that the majority of the styli found in Birka seem to belong to the long-length category, while in Sigtuna, though it presents greater variety in regard to the dimensions of all possible styli items, these fall mainly into the short-length category (fig. 7).

It is unclear if this indicates a shift in the stylus-craft over time. Without proper material analysis and further research we cannot establish with complete certainty whether these items were even used as writing tools or not. It is however an important addition to the list of observations stemming from this study. A similar shift can be observed with regard to the runic inscriptions. There is apparently a much larger amount as well as a larger variety of runic inscriptions from the Sigtuna collection, in comparison to those found in Birka. However, it is crucial to note several additional important observations. The majority of the Birka inscriptions seem to be rather simplistic, both stylistically and grammatically. Seven of the inscriptions unearthed from Birka are found in the form of rune stones, with only one find of runic plates and the two rune bones. Since only some of these inscriptions have been fully translated, it would be unwise to base any argument on their content. On the other hand, the runic inscriptions from the Sigtuna settlement appear to be more complex in regard

to their content. For the first time, one can recognize Latin script cut into rune bones and witness clear evidence of the Christian church's effect on this type of writing practice, as well as changes in the craft. This is interesting and can be interpreted in many ways, and may have had significance for the advancement of literacy in Viking Age Scandinavia.

In assessing these two case studies, it seems reasonable to come to the conclusion that, considering the material used and the amount of items as well as their stylistic characteristics, it seems rather extravagant to argue that Birka was a Viking-Age social hub for literacy. There are very few items that can be definitively identified as styli, only a possible handful of wax tablets and a few examples of runic inscriptions, in comparison with what the Sigtuna settlement has to offer. However, the mere existence of items such as these can lead us to the deduction that the items unearthed from the settlement of Birka indicate a certain predisposition for literacy to take hold there and to blossom over time. This having been said, it would seem that the actual transformation of the writing system and apparent transition from an oral to a writing culture, in regard to the Scandinavian societies in Sweden, began at the time when Sigtuna was establishing itself, at the end of the 10th century and beginning of the millennium.

Tracing and mapping the scale and expansion of Viking Age literacy

In order to place this expansion of literacy in a linear time perspective, it is imperative that we first attempt to understand when the changes in both language structure as well as language function begin to occur. As mentioned above, changes in both the format as well as the use of the younger Futhark begin to appear around the beginning of the Viking Age, advancing in a steady manner up until the shift of the millennium indicates a more firmly constructed written language. Already in the beginning of the 10th century a change in rune-carving technique seems to appear, and inscriptions with words separated by word dividers in the form of (double) points, (double) crosses or other punctuation marks, and at the end of the century dotted runes slowly begin to make their appearance (Williams 2008:283, Barnes 2011, Meijer 2007a; 1992; 1997). These punctuation marks may have had different functions in a runic text, whether linguistic (opening and occluding punctuation) or decorative, or in some cases, just be a matter of wrongly placed punctuation marks (Meijer 2007b:84-91; Jörgensen 1973:118-119). This is a rather important fact, as it indicates that those people who were literate in Viking Age Scandinavia, could have actually advanced their understanding of the functions of the oral and written language in their professional as well as possibly their everyday lives. An important case for the use of written language in a Viking-Age Scandinavian setting has been presented by runologist Helmer Gustavson. In accordance with his findings, and using the Sigtuna runic syllabary as well as several rune bones bearing incomplete Futharks as examples, he has argued for the existence of teaching and a dissemination process of the skill of writing in late Viking Age and early medieval Scandinavia (Gustavson 2007:69–75; Hedenstierna-Jonson 2010; Gustavson & Söderberg 2014). Based on these arguments, if the incomplete/unfinished Futhark inscriptions

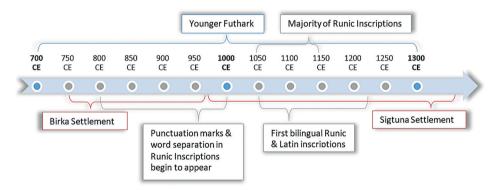


Figure 8. A timeline illustrating the main events in regards with the advancement of literacy in Viking Age Scandinavia.

indeed constitute writing attempts and thereby are evidence for attempts to disseminate the knowledge of runic writing from one person to another, then as consequence, this opens up more artefacts to be researched and studied from a literary perspective.

Judging from the amount of inscriptions that have turned up in Sigtuna specifically, it would be safe to assume that there was a large-scale blossoming of literacy after the millennium shift and during the first half of the 11th century, as most of the runic inscriptions that we have at our disposal come from that period in time. As part of the process of bringing everything into perspective, an attempt to create an illustration of a timeline is provided here in regard to the expansion of literacy and the evolution of language through time, marking some of the material and basic changes that occurred in Viking-Age and early medieval Scandinavia, (*fig. 8*). This timeline depicts some general information about the Scandinavian world from the 8th to the 13th century CE, and offers an overview of some of the events and facts mentioned so far in this article. In this timeline one may notice the foundation periods and prosperity periods for both settlements studied in this paper, as well as the most important events in regard to literacy over the course of seven centuries, from the beginning of the Viking Age until the Middle Ages.

A more in-depth and scaled-down timeline is also provided (fig.9), illustrating the changes in the runic linguistic construct from 950 CE until 1200 CE. Some of the most important items studied in the research presented here are marked on the timeline.

Conclusion

In this paper, the concept of literacy and its traces have been studied through material artifacts from two case studies in Sweden: the early Viking settlement of Birka and the late Viking – early medieval town of Sigtuna.

Taking into consideration all of the arguments present here, it is possible to summarize the basic principles which indicate a strong case for literary expansion in Viking-Age Scandinavia. The existence of styli and wax tablets in Birka that can be roughly dated to around the end of the 10th century, the separation of words and use of punctuation in runic inscriptions, the existence of runic syllabaries and alpha-

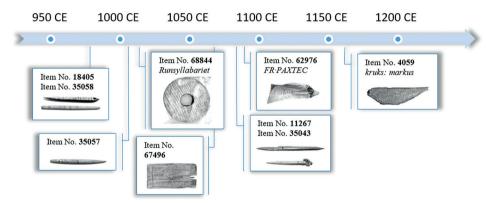


Figure 9. A timeline illustrating the main materials related to literacy from the settlement of Sigtuna from 950 to 1200 CE.

betical systems which themselves indicate an attempt at teaching and disseminating knowledge of the written language, along with the incomplete Futharks which could indicate learning attempts, and last but not least, inscriptions in both Latin and runic text. All of these elements appearing around the shift of the millennium could lead us to the conclusion that by that time, the people of Scandinavia had begun the transition from a generally pre-literate society to a more literate one (Zacharopoulos 2021:40). This argument is based on the idea that a "literate" society, can be defined as a society in which an increasing number of individuals slowly and gradually begin to get accustomed to writing and evolve their oral tradition into a concrete and structured written linguistic system.

Defining literacy as a contemporary concept is rather different to comparing it within past societies, a fact that leaves us with no choice but to argue that when it comes to the literacy of ancient/historic cultures, each case must be studied on its own merits, and a definition for each and every one of those cultures must be given individually. When it comes to Viking-Age Scandinavian civilization, it is important that we keep in mind the way the language evolved, the means through which writing made its appearance, the relevance that runic inscriptions held throughout the land's cultural history, and the role that Latin text and – later on – Christianization played in the formation of that culture's written language. Based on the excavation finds in the case-studies presented here from both Birka and Sigtuna, it is evident that the two writing systems - runic script and Latin - arguably complemented rather than competed with one another (Hedenstierna-Jonson 2010:164). This idea has evolved through an understanding of how runes were used and their significance during that time, by means of the notion that the runes constituted a medium for the oral Nordic tradition on the one hand, while on the other hand, Latin script was conceived more as a well-defined tool in a later established writing culture.

In regard to the spread of literacy over time, it appears that there was an internal shift and some form of transformation within Scandinavian culture in the transition period between the late Viking and early Middle Ages; an internal change from a culture dependent mostly on an oral tradition to one of the written word. It would seem that during the Viking Age in Scandinavia, there were several literate individuals within the respective societies, who had the skill to incise and carve runes upon

bone, metal or stone – a minor portion of the society's population, which gradually increased as time progressed while the contacts of Scandinavians with other cultures became more and more frequent and meaningful. Recent archaeological excavations in Sweden have turned up artefacts indicating an interest in the written word at this time specifically in Sigtuna, which seems to have been a hub for teaching and developing language skills from as early as the turn of the millennium and into the late Middle Ages.

One can only hope that future research on this topic may bring forward new information on the subject of Viking-Age Scandinavian literacy. Such an endeavour, especially through an interdisciplinary approach, has the potential to initiate a dialogue within the archaeological community, not just on what we can learn about Viking-Age Scandinavian societies, but also on how we perceive them overall.

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Sammanfattning

Under de senaste åren har forskningen inom historia och arkeologi producerat ett överflöd av ny information rörande skriftlighet – skriv- och läskunnighet – i det senvikingatida och tidigmedeltida Skandinavien. Denna artikel har som mål att, genom ett studium av utvalda arkeologiska material, lägga samman spridd information om och rikta ljus över vad vi vet om nivån hos och utbredningen av skriftligheten i de Skandinaviska samhällena under dessa perioder.