

From metal to mystery: Approaches to the study of gold and goldsmiths in 1st millennium Europe

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Introduction

Archaeological artefacts, the objects, have constantly been a question of vital importance for the discipline. Characteristic features regarding for instance raw material, form or ornamentation, have been basic for studies of classification, chronology and function since archaeology's initial stages. This has probably been a necessity, and a considerable quantity of knowledge has been reached in this respect. Today, when many disciplines experience a "material turn", archaeological studies of material phenomena are more important than ever. One reason is that archaeological research now has the opportunity to integrate more high resolution scientific analyses of, for example, the origin of primary products, technical processes, material wear and tear, and the history of conservation and restauration. Another reason is that the archaeological field methods have been refined, often resulting in a broader knowledge of the artefacts' contextual relations and connections with various field structures. A third reason is that archaeology's ontological and epistemological perspectives have multiplied, leading to research pursued from aspects of, for example, relational ontologies or agential realism besides the more traditional perspectives like evolutionist, materialist or functionalist points of view. All this leads to a diversification of archaeological methodologies, and a many times eclectic and pragmatic creativity regarding the choice of analytical concepts and methods for studying the archaeological record. From all of these viewpoints the archaeological material is something basic, which deserves to be vitalised and discussed by different generations of researchers.

Hence, a book like *Goldsmith Mysteries*, edited by Alexandra Pesch and Ruth Blankenfeldt¹, whose aim it is to highlight a specific kind of source material, namely gold, is most welcome to the archaeological discussion. The book is a publication of a two-day's workshop organised by the Centre for Baltic and Scandinavian Archaeology (ZBSA) in Schleswig 2011 on the topic of North European goldsmith work and its main actors and technologies in the first millennium AD. Twenty-one articles, of which almost two thirds are written in English and the remaining in German, all complemented by an English summary, are written by twenty-two authors. The contributions are organised in four sections: "The elusive smithies", "Workshop in theory and cultural anthropology", "Archaeological sources: Roman periods to Viking Age" and "Smiths in religion, literary sources and pictures". The book's title and its yellow cover – though the colour is in line with the convention of this series – may allude to gold's air of mystic fascination. Maybe such references are a way to make the book visible in today's stream of news, or a concession to the contemporary fantasy-trend of gold and mysterious treasures.

It shall not be denied, though, that also within the discipline of archaeology the process of transforming a piece of raw metal into an exquisite glittering object has been attributed with a

¹ ALEXANDRA PESCH / RUTH BLANKENFELDT (eds), *Goldsmith Mysteries. Archaeological, Pictorial and Documentary Evidence from the 1st Millennium AD in Northern Europe*. Papers presented at a workshop organized by the Centre for Baltic and

Scandinavian Archaeology (ZBSA), Schleswig, October 20th and 21st, 2011. *Schriften des Archäologischen Landesmuseums, Ergänzungsreihe, Band 8*. Wachholtz Verlag, Neumünster 2012. € 54.00. ISBN 978-3-5290-1878-7. 365 pages.

particular lustre. Moreover, a special nimbus may also have been attributed to the person who had the knowledge and skill to perform the process – the smith (CHILDE 1930, KUIJPERS 2013, 140). But anyone who fears excessive extravagances has no reason to worry: The articles in the volume by Pesch and Blankenfeldt are written by a number of serious scholars, working within different parts of the field of non-ferrous metallurgy and adjacent areas. This big research area is of current interest (for a Scandinavian example, see TROTZIG 2014). In this volume, the theme is confined to goldsmithing and fine metalwork, even if blacksmithing is touched upon as well.

Course and questions

The editors' introduction, "A Golden October", and the authors of the three chapters in the introductory section "The elusive smithies", Torsten Capelle, Nancy Wicker and Alexandra Pesch, set the tone both for the workshop and the volume. A number of questions are presented, demonstrating the width of the discussion: How were the forging workshops shaped? Why do they leave so few traces in the archaeological contexts? Maybe the valuable material made people take care of the remains? Or was it a result of the social arrangements of the craft? If the smiths were itinerant craftsmen, their workshops might have been small, leaving few traces. On the other hand, wouldn't the elaborate gold artefacts themselves, witnessing the craftsmen's immense skill, indicate established workshops? In such a case, the goldsmith's work could have been combined with other specialists' knowledge, such as the processing of precious stones or other kinds of non-ferrous metalwork that demanded similar conditions regarding the preparatory stages like tool production, mastering of ovens and fire, knowledge of clay behaviour for making crucibles and moulds. Furthermore, these specialists could have easily exchanged their knowledge in such a fixed workshop. How was the access to the precious metal organised? Was the smith him- or herself in control, or was a purchaser, a customer or a ruler in charge of this process? Was there a difference between commissions or serial productions? Was there one solitary master smith (anonymous to us), or were more craftspeople involved? In this regard, Torsten Capelle highlights the unusual case of the signature Ulfberht marking some Carolingian sword blades. Here, the anonymity of a specific smith seems to have vanished, although it is also possible that the signature was intended to be a mark of quality for the workshop taken as a whole.

The workshop as a place for more than one person, represented by a fictive master and his apprentice(s), is discussed in a personal and refreshing format by Alexandra Pesch. Her example is taken from the Migration Period, the epoch within the first millennium AD when the circulation of gold in Europe was at its top. Her discussion illuminates the important general theme of a craft and its traditions, secrets, innovations and the transmission of knowledge between generations.

Nancy Wicker's case study about the Nordic gold bracteates belongs to the Migration Period as well, and can be applied on a general level. Wicker proposes that the illusiveness of the gold smith and his work may be a fiction; more elaborated research strategies and analyses could be helpful in relation to this assumption – which is confirmed by the following chapters of the volume in review. One question asked by Wicker concerns the gender of the smith. Was the smith's craft always confined to males? It is highly plausible that the forging process included stages involving women. Moreover, written sources indicate that women could assign a goldsmith for a special item. Such assignments may in particular be plausible for the many gold objects that have a feminine gender attribution. However, Wicker's gender sensitive approach and her attempt to challenge the specific and stereotyped masculine image of the goldsmith is not developed further in the volume.

Historical and anthropological considerations

In the following articles, many more questions are discussed from a broad and varied empirical ground. A suitable point of departure are the articles by Charlotte Behr, Barbara Armbruster and Iris Aufderhaar, which are grouped under the headline “Workshops in theory and cultural anthropology”. Behr’s focus is on the gold itself, representing a meaningful material phenomenon. Studies of historical sources and social contexts of gold artefacts demonstrate the material’s extraordinary position as a medium of symbolic values, combining connotations of worldly and mythical power. Behr suggests that such notions have a strong effect mythologising also the image of the smith. The best known character that has survived within the north European tradition via its source material is the legendary smith Weland / Weyland / Völund. According to Behr however, he had few similarities with the smiths of the real world. Both the Weland figure and the actual smiths recur in several discussions within the volume, among them the contributions by Kristoffersen, Maier, Marold, Hardt, and Oehrl. In this context, Behr’s position provides a clear guiding line, which offers the reader a complementary comparison to the named articles.

Both Armbruster and Aufderhaar discuss the technology of fine metalwork. Armbruster applies a long-term perspective, from the earliest metalwork to the Roman Empire. Aufderhaar focuses on the Iron Age with the aid of, among other things, written sources from Europe’s Medieval times. Both authors highlight the importance of historic, ethnologic, and ethnographic comparisons. Furthermore, they state that once a technique has become well suited, the form and function of the tools needed are surprisingly stable over time, something that is also emphasised by TROTZIG (2014). The various technical innovations indicated by the different artefacts, for example through changes and variation in ornamentation, can be linked to the presence of a number of special implements and tools – many of them made out of bronze, and thus produced within the non-ferrous smithies. Aufderhaar employs the approach of the *chaîne opératoire* to elucidate the production process of a particular product and the many technological steps involved. Her example demonstrates the usefulness of the method on a general level as well as its potential to contribute to the knowledge of a culture-specific context.

To sum up, the three articles on theory and cultural-anthropological comparisons offer both a general overview of the development of fine metalwork and a basis for the discussion in the following sections.

Increasing empirical evidence

With its eight articles the section “Archaeological sources: Roman period to Viking Age” constitutes the volume’s largest part, presenting recent knowledge of the growing empirical material. The texts by Hans-Ulrich Voß and Günther Moosbauer focus on the continental Roman period. Voß raises the question whether metal craftsmanship was performed by persons with either widespread or highly specialised knowledge. Based on an analysis of a combination of objects, material, and techniques from selected Roman period graves, he can identify the existence of smithies working on a more general level as well as fine non-ferrous workshops. According to Voß the level of the craftsman’s specialisation would be related to his degree of mobility and his connection to society’s elite groups. These points are central to several authors of the volume (for example Kristoffersen and Hardt).

Moosbauer points to an increasing specialisation of fine metalwork as early as the Roman Iron Age. In addition to the analyses of archaeological specimens and ornament styles Moosbauer also uses antique written sources. Here, various designations for different craftspeople appear, including

those for working with gilding, polishing and producing gold foil, to mention just a few (compare Carstens in this volume, who names different categories of smiths in the rune texts and Old Norse saga material). Moosbauer is also able to show influences from Hellenistic and Roman style in the gold working of barbarian groups who were in contact with the Roman Empire. What was the smiths' role in this flow of ideas and things? Studies such as those of Voß and Moosbauer are a good basis for continuative discussions on these matters.

From a Danish and Swedish horizon, Morten Axboe, Kristina Lamm and Eva Hjærtner Holdar show how elaborated field working techniques and new analytical methods provide us with new knowledge of the variations and particularities of the non-ferrous smith-work. Here is, as Axboe emphasises, the metal detector of importance. Non-ferrous metal craft has long been known from central places like Gudme, Uppåkra and Helgö. However, variations and detailed steps in the working process demonstrated in recently excavated sites like Torstorp, Vesterby, Kværndrup and Skeke give new details to our understanding of the topic. A site like Skeke shows the astonishing remains of various production stages from a small fine-metal workshop, almost as a materialisation of various steps in a *chaîne opératoire*. Here Hjærtner Holdar has identified a melting hearth, a casting box and a stone feature which indicates the use of a pair of bellows. The bellows prove the cooperation of at least two persons. In common for sites like Torstorp, Vesterby, Kværndrup and Skeke is the small and simple character of the findings in question: uncomplicated dark features that indicate pit houses, plain concentrations of charcoal, accumulations of small bronze, silver or gold drops, and the like. Taken one by one, these features might be a bit precarious for the interpretation as a workshop, but seen as parts in a larger context, they are clear evidence of Iron Age smithies.

As Lamm demonstrates in an analysis of the 30–40 years old find material from Helgö, the contemporary fine meshed methods render it possible to discover techniques like brazing and cupellation, a method of refining gold and silver through heat. Finds like these lead the author into the discussion of the itinerant smith versus the settled workshop. Maybe both variants occurred, where an established workshop could be the craftsmanship's hub related to small temporary workshops within a region.

For southwest Norway in Merovingian time, Siv Kristoffersen suggests the presence of small, local workshops when she puts focus on some pieces of a soapstone mould, a matching gold object and a gold hoard. The most obvious indication of the craft is the existence of smith graves, the rich grave from Vestly being the most prominent example. The stone cist from Vestly contained many high-status objects, including a set of weapons along with a selection of tools for forging, like an anvil, a pair of tongs, and a chisel. This finding is of significance for our view of the social position of the smith; do we see of a warrior, maybe a local chieftain, fused with a smith, possibly even a goldsmith? This ambiguous social blend, proved by more archaeological evidence by, for example, HED JAKOBSSON (2003) and HEDEAGER (2011), adds to the complexity of the goldsmith's craft.

A few centuries later, in the continental Medieval times and the Scandinavian Viking Age, non-ferrous smithies seem to have been just as significant, which is particularly obvious regarding silver, bronze and other copper alloys. However, also the gold smiths' craft was further refined. Finds from Scandinavia, northern Germany and Poland provide interesting information about the craft. Heidemarie Eilbracht discusses the technique of filigree and granulation decoration based on studies of Viking Age press dies and press models. This leads to the question if exquisite gold products might have been part of a serial production, in that case having implications regarding trade, commissions and other economic aspects. The contribution of Michael Baranski adds interesting evidence on workshops, copied objects and multiplied items. Eilbracht also suggests a kind of technologic "cross-over" as the press die technique also was used for making coins. In addition, Eilbracht presents finds of cupels, small clay bowls showing traces of cupellation from the work-

shops (compare Lamm in this volume). Similar cupels appear in contemporary minting workshops, and Eilbracht suggests that the goldsmith and the mint master sometimes could be one and the same person (compare Hardt in this volume). For a craftsman producing a silver coin, it must have been of the utmost importance to possess the knowledge of making a product with the correct content of silver, in order to earn or keep the confidence of the superiors, themselves having to guarantee the coin's value. Eilbracht's proposal is an interesting example of how a certain technological knowledge is a necessary resource, a technical capital to speak in terms of Bourdieu, for the development of the early medieval market economy.

The production of Viking Age jewellery is looked upon by Barbara Armbruster. She compares the filigree and granulated press die brooches from the Hiddensee gold treasure, found on Hiddensee island in the Baltic Sea, with tools from Hedeby / Haithabu, mainly dies for similar brooches. The form, the technique for producing the gold thread and soldering the grains and the presence of the necessary tools strongly indicate that there were workshops in Hedeby for the serial production of exclusive objects like gold and silver brooches. As in Armbruster's earlier chapter in this volume, historical and ethnographical analogies are important, but here, up to date technical analyses of, for example, the filigree soldering is added.

The chapters foregrounding the archaeological source material amplify the overarching questions of the symposium about the non-ferrous smithy technology, the actual fine metalwork workshops and the craft's development towards specialisation and variation. They also contribute to the knowledge of the craft's products like jewellery and other gold objects and finally they elucidate some of the complex social and political dynamics of which the smith and the smithy were a part.

Stories and images

In many societies, the smith, being able to control fire and transform metal into exquisite objects, was seen as a special figure, appearing in religious, mythical and epic narratives as well as in its iconography. In the volume's last section, "Smiths in religion, literary sources and pictures", six authors discuss the smith and smithy from such perspectives. These topics are highly relevant for a book on non-ferrous forging and the gold smith and his social context in northern Europe during the first millennium AD.

Bernhard Maier introduces the theme by presenting an overview of smith figures and their craft in the ancient religions of the Near East, the Mediterranean and the Celtic world. The written sources tell us that the smith as a religious character appears in all of these areas, and even more often as a subject with important social functions. Sumerian and Akkadian texts indicate a distinction between iron, bronze and copper craftsmen in daily life, while the smiths as a group were united in the celebration of a common divine protector. Also, Hittite and other Minor Asian sources mention certain gods who were patrons of the smiths and their craft. Most likely some deities were practicing smiths themselves. According to Classic sources on mythology, the smiths and their craft were specialised and differentiated. For example, the Roman god Vulcan was associated both to the control of fire and the craft of the smithy. Roman and later Irish and Welsh sources indicate that the deities of the smithy could take over other gods' characteristics, as well as combining tasks, such as those of the smithy and the trade of war. An interesting case is that of an Irish bishop who mentions three goddesses, protecting the craft of the forge. However, Maier recommends using the textual sources with a sound scepticism, not least regarding chronological discussions trying to sketch a common line of development. The chapter provides much interesting information on the religious and social contexts of the smithy, and in particular the importance of ritual and ceremonial invocations and celebrations of a spectrum of deities.

Using Early Medieval German epics, Old Norse narratives, rune texts and images, Edith Marold, Lydia Carstens, Matthias Hardt and Sigmund Oehrl proceed to the Early Medieval and Scandinavian Late Iron Age including the Viking Age and the Nordic Middle Ages. Bringing onomastic evidence, textual comparisons and iconographic representations into the discussion, the chapters provide a broad overview. This provides important perspectives on ancient notions of the smith and his craft, some of them possible to connect to the archaeological evidence.

Marold's main research area is German folk tales, Germanic epic work, and the Edda texts. Carstens studies these sources as well, including rune inscriptions where smiths are mentioned in one way or another. In contrast to the Asian contexts described by Maier, in which the gods themselves could be smiths and protectors of earthly smiths, it seems that the Old Norse literary smiths mostly were mythical figures, sometimes elusive collectives like the dwarfs, the elves and the enigmatic group of Regin, which Carstens sheds light upon. These groups' skills in magic and sorcery were often transferred to the crafted object, which consequently would hold supernatural powers. It is possible, that the god Thor acted as a smith, but as both Marold and Carstens say, the main occasion when the Old Norse gods were presented as smiths was when they settled in their divine home *Idavallen*. Their first step was to build sacred sites, and close by "They set up their forges, Smithed precious things, Shaped tongs And made tools" (p. 245). This planning and organisation of the divine world can be understood as an origin myth. It can be compared with archaeological observations, showing traces of forging in close vicinity to ritual or ceremonial high status areas (HED JAKOBSSON 2003, HEDEAGER 2011). If this story of the Edda was part of the common belief at the time when rituals and smithy were taking place near each other, we may infer that Viking Age people were referring to their pantheon's origin myths through these practices.

In the ancient narratives of northern Europe, two knowledgeable smith figures stand out. One is the above-mentioned Weland, the captured and mutilated smith who escaped his master in the shape of a bird. The myth probably represents more narrative elements than that of the skilled but unfree smith (see for example Oehrl in this volume). The other well-known smith is Regin, the foster father of the hero Sigurd the Dragonslayer of the Volsunga epos. Regin shares his name with an enigmatic and little known mythical collective. While educating Sigurd, Regin taught him not only the craft of metalworking but also languages and the art of reading runes. Based on the various themes and sequences of the epic story, which guide Sigurd's and Regin's interactions, Marold proposes in an interesting argumentation that the epos, besides telling the dramatic events of the story, also expresses a process of initiation undergone by Sigurd. Marold's interpretation forms a starting point for further reflections: The fact that Regin first and foremost was seen as a smith in spite of his skills in many other tasks may be of significance. Could it be possible that the smith's knowledge of transforming metal into a finished and useful object might have been understood as a metaphor for the transformation of the adolescent boy to a grown-up man? Beyond that, could such transformative powers change over to the smith's products, thus adding an agential potential to the material object itself? Such thoughts may seem a bit speculative; however, Marold's observations allow us to relate the archaeological material to other notions of the smith's social influence than those connected to the production.

As Marold and Carstens observe, the settlers of *Idavallen* were not only smiths but also carpenters – and as they note, it is significant that the Old Norse word for smithy also could mean craft in general. Carstens mentions a number of examples of how smiths and forging – and maybe other craftsmen called smiths – are present in the Icelandic Sagas and runic inscriptions. Her study pays attention to many situations, events and practices, giving the art of metalworking a varied image between the extremes. The forging farmer's craft could be integrated into daily life, while the smith crafting on a royal commission could compare his prestigious manifestations with an honourable

poem or a good reputation. The possibility for a smith to acquire status and wealth can be inferred from Carstens' example of a grave inscription from the 14th century in the Klinte church on the Baltic island of Gotland. Here a smith and his family were buried, in runic characters beseeching prayers for their souls. The inscription and the grave place inside the church are a clear indication that the smith had been a generous donor to the parish.

The corpus of written sources taken into account in this volume expresses both variations and contradictions in the perception of smiths and their craft. The dwarfs' social seclusion, secrecy and magic oppose to the Aesir's display of forgery at ceremonial places. Weland's unfree and handicapped condition – before his flight – is in stark contrast to Sigurd's able bodied status as a hero. Regin is a representative of the versatile high ranked craftsman.

Marold's and Carsten's articles provide a useful breadth regarding the mythical, social, cultural and economic contexts of the smith and smithy. This varied and broad picture is also demonstrated by the archaeological contributions in this volume.

Matthias Hardt's chapter is based on historical sources. He demonstrates how persons associated with fine metalworking could have been linked to Early Medieval Europe's power politics. For example, a text by Eugippius, biographer of St Severinus of Norcium, refers to an event which has taken place at the Rugian court about 480 AD. Here, queen Giso imprisoned "captured barbarian smiths". In a violent negotiation of power between a smith and the queen, a drama took place, which according to Hardt could have served as an inspiration for the mythical tales of Volund and his revenge.

Other written sources mention that Eligius, known as the saint and patron of the goldsmiths, worked for several Merovingian kings. The Merovingian workshops included both free and unfree smiths, and the records mention smiths of Saxon and Suebian origin. The texts emphasise the importance of the objects' beauty, its creation from valuable metal and decoration with precious stones and how the royal treasurer watched over the consumption of the raw material. This indicates a detailed control of the objects' value, both when meant to be a gift in the political and diplomatic power game or a part of religious and ecclesiastical embellishment. Furthermore, Hardt calls attention to the significance of Eligius' teacher, the well reputed goldsmith Abbo being the head of the royal coining workshop, as Eilbracht has done in her contribution to this volume from an archaeological and technological point of view.

Hardt's article is highly interesting and informative; among others leading to the conclusion that at least some of the Early Medieval goldsmith's work must have been strictly regulated and controlled. The flow of metal was being allotted to the specific workshops depending on kings' and war lords' lust for power. An internal administration guarding the consumption of metal and guaranteeing its purity and hierarchies within the various workshops with their most likely free and unfree craftsmen regulated the outcome of the craft. Moreover, the sometimes various ethnic backgrounds and traditions of the smiths could result in an exchange of knowledge and style. However, the most crucial influence on the production and the product was most likely the desire and demands of the patron.

Several of the volume's authors, including Behr, Marold, Carstens, and Hardt discuss the legendary smith Weland. Weland exemplifies a topic of various meanings: He is a central figure of the topos of the skilled craftsman; his highly valued products lead another person to capture him; he becomes an actor in a chain of events bringing revenge; and he is an example of the fluid border between man and animal, in this case a bird. This multifaceted character is also a topic for Sigmund Oehrl, using iconographic sources. Departing from the well-known images of the Anglo-Saxon relic shrine known as The Franks Casket, for which Oehrl focuses on the scene where Weland is believed to take revenge on King Nidud, he goes on to some picture stones from Gotland, where Weland's

revenge might be depicted as well. Here, also the flight in the shape of a bird may be present. These comparisons are frequent among scholars, but Oehrl includes a category of objects less often discussed in this respect, namely some of the Early Medieval British stone crosses. Presenting these partly weathered representations in photos and drawings made by the author himself, Oehrl suggests that Weland's appearance in a bird's shape was relevant not only for the flight, but that the bird metamorphosis was significant for the revenge theme as well. The reconstructive illustrations look plausible, but a critical reader might wish for more information on the methodological background of the documentation of the images. On the one hand, new 3-D scanning and frottage documentation on some stone surfaces have revealed new pictures, which Oehrl interprets as a smith arriving at Valhall. He suggests a so far unknown connection to Weland. On the other hand, his interpretation may have gone a little too far. One objection is that the images themselves are interpretations of the stones' surface, and as such open for discussion. Another problem occurs in his connection of a horse rider on the stone's upper panel to a scene from Valhall and his link of a possible depiction of a smith to Weland without further discussion. As we have seen, other smith-figures appear in Norse mythology; nevertheless, future finds may strengthen Oehrl's interpretation.

Both the written and iconographic sources allow for a spectrum of interpretations. It seems that one of their common denominators is 'the transformative theme' (compare GOLDHAHN / ØSTIGÅRD 2007). A craftsperson who was able to convert a raw material to something new, may it be of metal or other substantial material like stone and timber, must have evoked social connotations of transformative powers. Such notions could also be attributed to immaterial processes, like the transformation of an adolescent person to a grown up member of society as shown by Marold, or the Christian appropriation of non-Christian figures like Sigurd and Weland as demonstrated in the examples by Oehrl. Many more chapters in the volume demonstrate examples of the smith's transformative ability.

Well-grounded knowledge, new paths

A scholarly work like this volume has many advantages. It pays attention to a number of questions within the current discussion of northern European non-ferrous forgery's technological, anthropological, economic and social character, during a millennium when gold seems to have been a highly important part of life, surrounded by rules and rites. Likewise, it presents a broad overview of the material evidence of northern Europe. However, a theme which has escaped this fine meshed net are Celtic contexts encompassing gold. Maier mentions briefly that smiths and gods related to smiths appear in Celtic mythology, and this arouses the curious reader's appetite for more information. Celtic societies in particular show an interesting display of gold, not least regarding jewellery and coins. It might be argued that the Celtic sphere is outside the spatial and chronological delimitation of this volume, but it is not necessarily so. For example, the gold hoard from Vittene, Sweden, is usually attributed to Celtic workshops dated to the centuries around the turn of eras BCE / CE.

One of the merits of this informative and thematically concentrated volume is that it, in a cross-fertilising way, can serve as a springboard for further discussions. One such research field, touched upon by Pesch and Armbruster, is the exploration of the connection of practical experiences and skills to craft production and transmission of knowledge, a theme often referred to as 'tacit knowledge' or 'embodied knowledge' (STIG SØRENSEN / REBAY-SALISBURY 2013, BENDER JØRGENSEN 2013). As a repeated sensory impression and its connection to practice will be incorporated into the experiencing body, an embodied knowledge of proficiency and skill will develop. HAMILAKIS (2013) demonstrates the potential for such studies in archaeology, while exploring relations between various practices and sensory perceptions, and KUIJPERS (2013) accomplishes a

study regarding tacit knowledge and Bronze Age non-ferrous forgery. Referring to these works will suffice to demonstrate the future prospects of the perspective, which most likely can include studies of gold smiths and their craft. Research on an embodied craft production will probably also generate discussions including gender perspectives, something Wicker called for in the introductory section of the study at hand.

To conclude, this volume on Goldsmith Mysteries highlights themes of immediate importance. The book has much to offer for those specialising in prehistoric non-ferrous forgery, historic and ethnographic craft technology and smiths in myth and folklore. Also, researchers with a general interest in material culture will benefit from this read. The clear and educational way in which the subject matter is organised, the intriguing research questions, and the empirical breadth and depth, form an opus deserving many readers.

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