

Interpreting a Bronze Age motif

- Revisiting the hand signs of southern Scandinavia

Skepticism is, in many ways, a reasonable attitude towards the act of interpreting prehistoric rock art. Can we even begin to hope to uncover the original intent behind the creation of the various petroglyphs and, in continuation hereof, each motif's associated meaning(s)? Could it be that the mind of modern man simply is not wired to comprehend the flow of thoughts and reasoning of our distant ancestors? The validity of such questions is hard to dispute. I would argue, however, that if we were to declare the mystery of the prehistoric motifs unsolvable and turn our attention towards other, more measurable, research fields, we would be neglecting our responsibility as archaeologists. Unless we wish to return to old customs where a petroglyph is merely identified, registered and then left to itself (Tilley 1991, 11 f.), it is our duty as archaeologists to try and discover any traceable logic stored in the prehistoric iconography – however inconceivable the task may seem at first. Because if we do not, no one will. We cannot hope to reach a point where we can claim to have solved the puzzles of the petroglyphs in their entirety, but with every plausible interpretation committed to the study of their symbolism we move closer to a better understanding of their *raison d'être*.

The approach

But how then do we approach this self-imposed duty? From my perspective, a plausible interpretation of a prehistoric motif takes more than a sudden associative notion materializing in the mind of the beholder (Hansen 2019, 94). Otherwise I fail to see why our impressions as archae-

ologists should hold more value than that of any other observer.

In this regard, Flemming Kaul has shown (1998; 2004) a convincing path to an evidence-based interpretation of the Bronze Age iconography of southern Scandinavia. In short, he has discovered how circle motifs on bronze razors in more than 50 instances appear in combination with ships sailing in a specific direction, towards the right, while they are never seen together with ships sailing towards the left – except in one case where both a ship sailing right and one sailing left are present (Kaul 2004, 242; Kaul 2020). Through this observation, and by including the Trundholm chariot, whose golden side is similarly visible when it is moving

*Fig. 1: The hand sign from Udby Vig.
Photo by Mikkel C. D. Hansen*



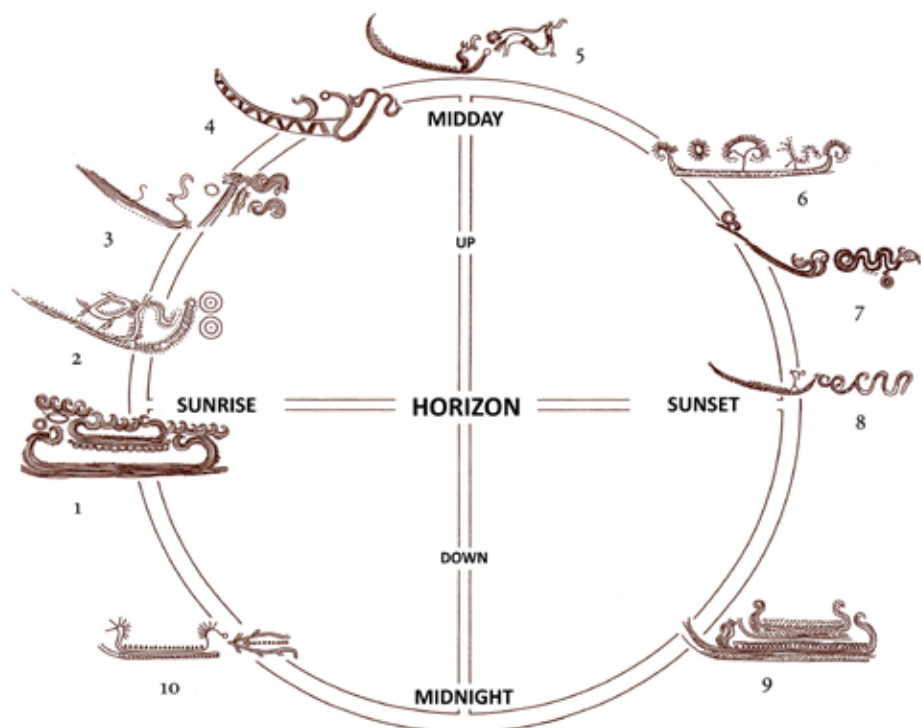


Fig. 2: The daily journey of the sun, as shown on the bronze razors, combined with the wheel cross. Illustration after (Kaul 2004)

towards the right, he puts forward a direction-based thesis that offers to explain the Bronze Age people's conception of the sun's daily movement across the sky (ibid.) (fig. 2). The strength of this interpretation is that it goes beyond mental connections and gut-feelings, as the statistical testimony of the motifs on the razors, and the corresponding logic of the Trundholm chariot, serve as a foundation for Kaul's reasoning. This approach served as inspiration when I first began my work with the hand signs of southern Scandinavia (fig. 1 & fig. 3).

But before we get to the matter of the hand signs, there is another relevant phenomenon we must address: the multifaceted nature of a symbol.

Unlike the variety of signs that transparently signify what they represent, a symbol can be defined by its ability to

move through and beyond its primary meaning to opaque, latent secondary meanings (Ricoeur 1967, 115 f.; 2005,

Fig. 3: The hand sign from Rudebo. Photo by Sven-Gunnar Broström (source SHFA.se)



12; 2016, 110 ff.; Hansen 2019, 94). The symbol is, in other words, polysemic in nature, or multivocal, and thus may take on different meanings depending on the context in which it appears (Turner 1967, 50 f.; Hansen 2019, 94). Ethnographic studies even show how several meanings connected to a symbol may be active at once (Turner 1967, 51; Morphy 1991, 118 ff.). During the Ndembu people of northwestern Zambia's circumcision rituals, the bleeding boys are placed on a log from the mukula tree, which secretes a distinctive red gum that quickly coagulates (Turner 1967, 51). Here the mukula log symbolizes the masculinity of an adult male, who as a hunter and warrior must shed blood, but at the same time also the wish that the boys' wounds will heal quickly (ibid.).

It is essential that we keep this polysemy in mind when trying to decipher prehistoric iconography, as it is too simplistic to uncover one potential meaning connected to a specific motif and expect it to fit all contexts in which that image is found (Hansen 2019, 94 f.). Rock art too is of a multivocal nature (Goldhahn 2004, 127 f.; Wold 2005, 525 f.; Schaafsma 2013, 1, 21; Hansen 2019, 94). A Bronze Age motif of southern Scandinavia that exemplifies this rather well is the wheel cross. It is suspected to symbolize a number of different things including the sun, wheel, year, day and night, orbit (Kaul 2010, 35 ff.), as well as the moon and synodic month (Lindström 2009, 398 f., 403; Hansen 2019, 97 f.).

Considering the above, the task of interpreting prehistoric iconography can easily be perceived as an arbitrary or even chaotic process at first glance, where any proposed meaning connected to a motif can be justified by stating that "it might also symbolize *this and that*" (Hansen 2019, 98). Luckily, this is only partially true. As we saw in the previous example with the wheel cross, and also know from ethnographic studies (Turner 1967, 28 f.; Munn 1973, 172; Tilley 1991, 125; Morphy 1999, 14 f.), the different meanings associated with a symbol are often

related; thus the multivocal motif is not completely robbed of logic (Hansen 2019, 98). Furthermore, while a symbol's secondary meanings tend to be of an abstract nature, its primary meaning is bound to phenomena of the physical world (Tilley 1991, 125; Hansen 2019, 98 f.). This is why an approach where one initially seeks to uncover the denotative meaning of a prehistoric motif might prove advantageous (Wold 2005, 526), as it subsequently allows for a comparative search for closely related connotations amongst the existing interpretations of the image in question (Hansen 2019, 99). If fruitful, such a fusion of interpretations could help us uncloak a, for lack of a better term, "basic logical framework" of the examined prehistoric symbol, in the current case the hand sign of southern Scandinavia, which yet again may bring us closer to a better understanding of it (ibid.).

The hand signs of southern Scandinavia

One of the incentives behind my initial work with the hand signs (Hansen 2019) was to gather and exhibit all known hand signs in one publication. At the time, there had not been a confirmed discovery of a new hand sign in roughly 30 years, but just as the article hit the press, a new one was found in Ejby, Hornsherred, Zealand. Unfortunately, the untimely discovery meant that my catalogue was incomplete and outdated before it was even pub-

Fig. 4: The hand sign from Ejby. Photo by Bettina Balslev Bruun





Fig. 5: The hand sign from Ejby. Photo and frottage by Gerhard Milstreu.

lished, which is why I am pleased to be able to include the Ejby stone here (fig. 4 & fig. 5).

The stone was found back in 1983 during plowing, is covered with approximately 50 cupmarks and, as was confirmed during the late fall of 2019, bears a hand sign only barely visible to the naked eye (Bruun & Hansen 2020, 14). The stone itself is of the following dimensions: 110 x 120 cm (www.kulturarv.dk, Toftegård) – roughly – which makes it both longer and wider than any other stone bearing a hand sign found to this date (for comparison, see Hansen 2019, 123 ff.).

With the 25 other confirmed hand signs (Hansen 2019, 89) the Ejby stone brings us to a total of 26 known stones bearing this motif. Stones with hand sign petroglyphs are known from Sweden, Norway and Denmark, but it is especially in the northern part of Zealand that they are found (Hansen 2019, 90). As of now, 18 discoveries have been made in this area, whereas only three such stones are known throughout the rest of Denmark, as well as three stones from Bohuslän, Sweden, and two near Fredrikstad in Norway (Johansen 1971, 173; Hansen 2019, 90) (fig. 6).

Eight of the 26 stones were found in situ on five different

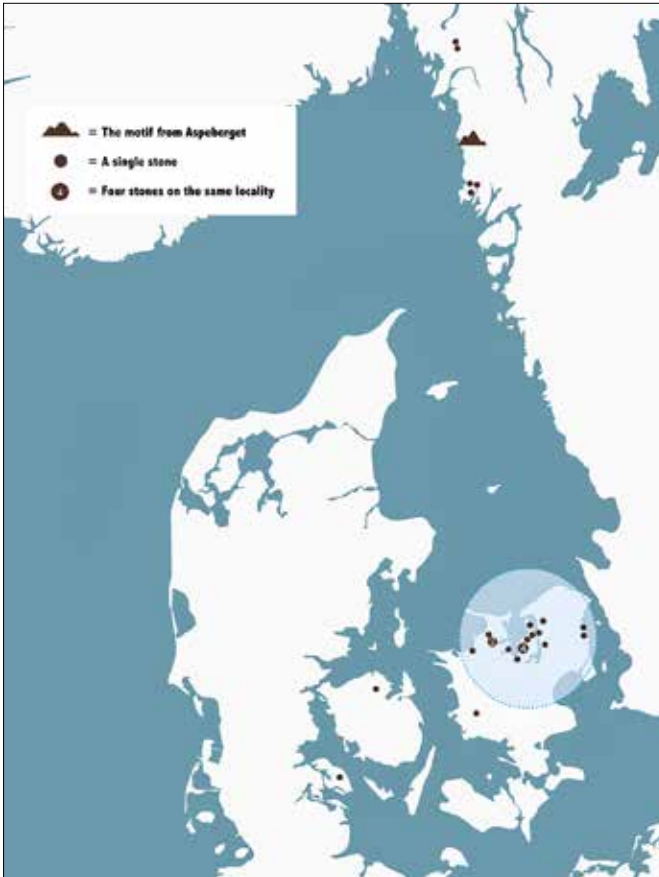


Fig. 6: The 26 known hand signs and the motif from Aspeberget. Illustration by Jesper Andersen

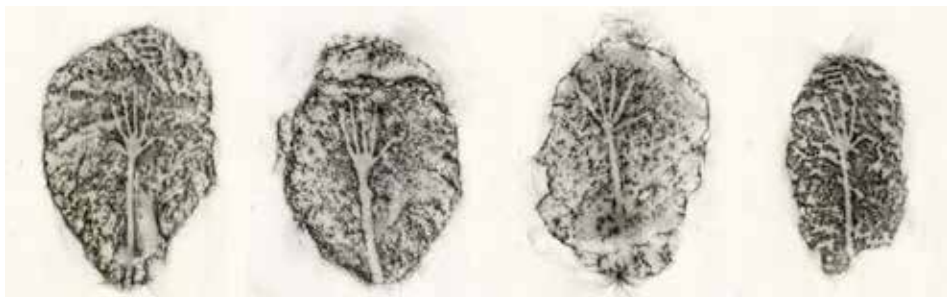


Fig. 7: The four hand signs from Sandagergård. Frottages by Gerhard Milstreu.

localities and all have one thing in common: They are associated with graves. In four of the cases, the stone slabs bearing the hand signs were used in relation to secondary burials in mounds/cairns, where they served as parts for stone cists (Norling-Christensen 1941, 49, 52; Glob 1969, 88, 210 ff.; Thrane 1975, 178; Hansen 2019, 90 f.). Interestingly, in at least two of these instances the hand signs were turned inwards, directed towards the human remains of the deceased (*ibid.*). The four hand signs discovered outside the Sandagergård cult house (fig. 7), in which three urn graves were found, were lying flat on the ground with the hand motifs pointing towards the cult structure (Kaul 1987, 36 f.; 2004, 105 f.; Hansen 2019, 91).

All of the seven stones that it has been possible to date belong to period IV of the Bronze Age, although one of them, the hand sign from Rævebakke, alternatively could be from late period III (Glob 1969, 85, 207, 212, 220; Kaul 1987, 41 f.; Hansen 2019, 92, 123).

The hand signs as motifs are rather consistent in their design: A hand with stretched fingers appears under four horizontal lines. These lines do, however, come in two main variants: one where all are of the same length and one where the two middle lines are longer than the top and bottom one (Hansen 2019, 88, 92). The former variant is known from 14 stones, the latter from eight (*ibid.*). Often the palm of the hand motif is carved deeper than the fingers, which has made several archaeologists suggest that it represents the inside of the hand, leading to the

conclusion that the hand signs depict right hands (Johansen 1971, 177, 181 f.; Goldhahn 2007, 46; 2010, 95; Melheim 2008, 546; Knudsen 2014, 113; Hansen 2019, 88, 92 f.). Lastly, although the majority of the hand signs only consist of the hand, arm and four horizontal lines, ten of the known stones do include some atypical elements (Hansen 2019, 92). The details of these divergent hand signs will be discussed at a later point.

Previous interpretations of the hand sign

The previous interpretations of the hand sign play a central role in this work, but except for the three that will prove of particular importance for the approach undertaken by this author it will only be possible to present them briefly below.

The first discovery of a hand sign was made by none other than Frederik VII of Denmark and his men back in 1858, who reasoned that the horizontal lines above the hand motif were a reference to the four graves they found in the mound where the symbol was located (Glob 1969, 210 f.). The first known attempt to interpret a hand sign was thus made.

In 1922 a rather alternative point of view was presented by curator Hans Kjær of the National Museum of Denmark, who believed the hand signs to portray trees (Hallström 1922, 16; Brøndsted 1941, 119 f.). He interpreted the motifs as signs created to protect against lightning with reference to the old superstition where a tree that is hit by lightning becomes holy

and acquires protective abilities (Norling-Christensen 1941, 59).

The tree-thesis withered, however, as a series of new interpretations were presented during the Second World War, where the hand signs were proposed to be depictions of a force originating from a large-handed god (Brøndsted 1939, 139 f.; 1941, 124 f.), a tattooist's logo (Winther 1940, 136 ff., 146 f.), and, more vaguely, a motif related to religious thoughts and ideas from the eastern parts of the Mediterranean (Norling-Christensen 1941, 58 f.).

In 1955 the archaeologist Knud A. Larsen suggested that the hand sign was a sun-related symbol. He believed the hand motifs represented the hand of the sun god and the horizontal lines depicted the reflection of the morning light upon the waves of the sea (Larsen 1955, 52 f.).

The archaeologist Sverre Marstrander stressed that the meaning of hand motifs in general depended on their context, and considered the hand signs found at gravesites to be safeguards against desecration (Marstrander 1963, 222 f.). The four horizontal lines were to be understood as details meant to enhance the potency of the symbol's magical powers (ibid.).

P.V. Glob offered (1969, 90) a straightforward explanation of the hand sign's symbolism in his comprehensive work from 1969 on the subject of the Danish petroglyphs. He deduced that the five fingers of the hand and the four horizontal lines represented a combined symbolic numeric value, nine, and saw it as a possible reference to the nine synodic months of the human pregnancy (Glob 1969, 90; Hansen 2019, 99 f.). This led to the interpretation that the hand signs should be understood as symbols of rebirth (ibid.).

In 1971 the archaeologist Erling Johansen presented his view on the symbol, and suggested that the four horizontal lines depicted the front of a fist, and that the hand signs were perhaps meant to bind the dead to their graves (Johansen 1971, 184 f.).

When Flemming Kaul first considered the symbolism of the hand signs, in connection with the excavation of the cult house from Sandagergård, he suggested evolving Glob's rebirth metaphor, as the four horizontal lines of the hand signs could also represent the four seasons of the year and thus the death and rebirth of nature (Kaul 1987, 31, 37 f., 41 ff.; Hansen 2019, 100). At a later point he added that the four lines should perhaps be understood as the four spokes of the wheel cross that some force, represented by the hand, had torn loose (Kaul 2004, 108 ff.; 2006, 109; Hansen 2019, 100). The hand signs would then depict a divine power with the ability to stop the cyclic nature of time (ibid.).

Several interpretations have been presented during the last 30 years or so, including suggestions that the hand signs refer to 2 x 2 holy twins (Nancke-Krogh 1989a, 4 f.), beings from another world related to death (Karlssohn 2005, 468 ff.), competence, creativity and resurrection (Melheim 2008, 547 ff.) and a hand gesture used to measure the time to the next full or new moon (Lindström 2009, 400 ff.).

Lastly, a relatively new and refreshing approach to interpreting the hand signs should not be overlooked. The archaeologist Thomas R. Knudsen's contribution to the study of the hand signs was rooted in his belief that the visual expression of the prehistoric iconography was created intentionally, and is thus charged with meaning and closely connected to the creators of the motifs (Knudsen 2014, 111 f., 114 ff.; Hansen 2019, 100). By focusing on the artistic choices and details of the images it should be possible to deduce meaning from them, Knudsen reasoned, which is why he applied an analytical framework originally designed to extract meaningful details from modern art (ibid.). In order to do this, he presented two relevant concepts: *suspicious coincidence* and *metonymy* (ibid.). *Suspicious coincidence* can be exemplified by the depiction of a jumping horse, as it represents an unsustainable situation due to the law of gravity that will

swiftly force it back down to the ground (ibid.). The fact that this very moment is portrayed implies an intentional artistic choice and therefore hints that the specific detail bears meaning – not unlike the stretched fingers of the hand sign, which do not constitute a relaxed natural pose (ibid.). Metonymy, originally conceived as a linguistic term but nowadays also considered to be a cognitive phenomenon, refers to an isolated component of a whole representing that entire something, which is why Knudsen suspects that the hand motif might symbolize a whole person (ibid.).

One of the benefits of Knudsen's approach is that it raises a series of new questions (Knudsen 2014, 117; Hansen 2019, 100). By questioning the reason behind certain suspicious details we can test an interpretation on a new parameter and, arguably, reach a less arbitrary end product (Hansen 2019, 100).

The hand stones' own statement

It seems reasonable that a search for meaning related to prehistoric petroglyphs should begin with the motifs themselves (Malmer 1989, 93; Kaul 2004, 27 f.). Unfortunately, the hand sign does not do us many favors in the pursuit of its symbolism (Hansen 2019, 101). The four horizontal lines represent so modest a sum that they might refer to a wide range of different things, while the (right) hand below the lines likewise has the potency to serve as a symbol of almost anything due to the hands' function as our primary means of interacting with the world (Knudsen 2014, 116; Hansen 2019, 101). So although any credible interpretation must naturally account for the hand sign's horizontal lines and hand motif, the road to a better understanding of the symbol does not necessarily begin with these two core elements (Hansen 2019, 101).

Instead the ten stones with atypical details might hold some clues. Four of these ten stones are difficult to extract meaning from as the extra details merely consist of additional hands and/or horizontal lines and in one case a frame enclosing the

very same lines (Hansen 2019, 101, 103, 124, 127, 130, 138). Five other stones with added details (a footprint, a cross, a circle, and in two instances a semicircle) have something in common, however, as these extra details might refer to time and the celestial bodies according to existing interpretations of their symbolism (Kaul 1998; 2004; Bradley 2009, 195 ff.; Jensen 2011, 4, 7 f.; Skoglund, Nimura & Bradley 2017, 292 f., 301; Hansen 2019, 101 ff., 125, 131, 133, 137, 147).

Lastly, the Ejby stone also holds an atypical hand sign, as the four horizontal lines seem to have been replaced by roughly 50 cupmarks. In a way, the combination of hand sign and cupmarks makes sense, as cupmarks too are known from stones used for burials, and at times, similar to the hand sign, are even directed inwards towards the remains of the dead (Glob 1969, 123, 125; Matthes 2016, 169 f.). The interpretations of cupmarks are numerous, and it seems fair to assume that these particular petroglyphs must have held several different meanings, but amongst them, it has been argued, the cupmark could serve as a symbol of the sun, moon, stars and time (Albrechtsen 1966, 174; Horn 2015, 32 ff.; Matthes 2016, 167; Foss & Johansen 2018, 31, 38; Dodd & Milstreu 2018, 5 ff.).

In summary, six of the ten hand signs with atypical details have one thing in common: it is possible to link the added details to time and the celestial bodies, while the remaining four stones are more secretive when it comes to their symbolism (Hansen 2019, 103). This observation might hint at the hand sign's general symbolism, although we, admittedly, are dealing with indications of a relatively weak nature (ibid.).

The motif from Aspeberget

A motif with a relatively explicit testimony can be found on a rock surface from Aspeberget in Tanum, Bohuslän, where an anthropomorphic figure holds up a forearm, palm and fingers towards 29 cupmarks arranged in four rows of seven with a single cupmark isolated above the rest (Hansen



Fig. 8: The motif from Aspeberget. Photo by Gerhard Milstreu.

2019, 103) (fig. 8). The sum, 29, is interesting, as it is likely to be a reference to the synodic month, which is 29.5 days long on average (Lindström 2009, 399) – the time between each new moon (Hansen 2019, 103). Moreover, this motif has many similarities with the hand sign (ibid.).

The depicted individual's feet suggest that the person has his or her front facing towards the viewer, which would make the raised hand a right hand (ibid.). The four rows of cupmarks are placed directly over the hand just like the hand sign's four horizontal lines (ibid.). Furthermore, keeping the length of the rows of cupmarks even seems to have been a priority for the creator of this motif, as the second row from the top was already of equal length with the other rows after the placement of the sixth cupmark, but instead of placing the seventh in continuation of the other cupmarks (making that row longer than its counterparts), the artist appears to have squeezed it in a bit awkwardly between two of that row's other cupmarks, thereby maintaining the overall structure

of the sequence (Hansen 2019, 103 f.). Considering that more than half of the known hand signs were correspondingly made with four horizontal lines of even length, it does seem fair to suggest a possible connection between the motif from Aspeberget and the hand signs (ibid.).

There are, however, also differences. Firstly, the motif from Aspeberget depicts a whole individual with only four fingers on his or her hand, not five, and the individual moreover appears to be part of a larger composition (ibid.). Unlike the 26 known stones bearing hand signs, the motif from Aspeberget is carved on a rock surface, as opposed to a portable stone, and does not seem to be related to any grave (ibid.). Naturally, these inconsistencies must be addressed before we can render a connection between the two phenomena probable (ibid.).

It has previously been suggested that Bohuslän (where the motif from Aspeberget and all the known Swedish hand signs are from) served as a religious center in the Bronze Age, which people travelled to from as far away as northern Zealand and Jutland (Nancke-Krogh 1989a, 7, 11 f.; Kaul 2004, 101 ff., 221, 281; Hansen 2019, 104). If this was the case, it does not seem unreasonable that some of the petroglyphs could have been made by people from these areas, which could explain why a motif that seems to be especially popular on the northern part of Zealand made its way to a rock surface in Bohuslän (ibid.).

The Algonkian tribes near Ottawa River, Georgian Bay and Lake Superior in Canada lived in small groups from autumn to spring, but then gathered over the summer in larger political and social units (Vastokas & Vastokas 1973, 29 ff., 50 ff.; Hansen 2019, 104). As this was the only time the entire band was assembled, it was during the summer gatherings that religious activities and initiation rituals took place, and thus the petroglyph sites most likely served as a ceremonial center of the world (ibid.). Due to everyone being dependent on the canoe for transport, these meeting places were always close to

water (ibid.), which was likewise characteristic of Aspeberget during the Bronze Age (Ling 2008, 109, 117, 119 ff.).

But how do we explain the atypical context and choice in medium of the Aspeberget motif (Hansen 2019, 105)? A recurring tendency during the creation of symbolic motifs across cultures and continents is that the most holy and esoteric meanings are tied to abstract forms, while the exoteric meanings are bound to more naturalistic outlines (Vastokas & Vastokas 1973, 45, 134; Layton 1992, 54, Morphy 1999, 18; Goldhahn 2007, 107; Hansen 2019, 105). Moreover, knowledge of a motif's symbolism is subject to a strict hierarchy, which is why only a few ritual specialists master the full spectrum of associated meanings (Vastokas & Vastokas 1973, 37, 45; Keen 1994, 226 f., 242 f.; Morphy 1999, 13 ff.; Goldhahn 2007, 106; Hansen 2019, 95). Interestingly, when a novice is taught a new meaning connected to a motif, he or she will at times be presented with an explanatory image that makes the particular connection explicit (Taylor 1996, 255; Hansen 2019, 105).

This could perhaps explain the motif from Aspeberget's placement on the rock surface (Hansen 2019, 106). If the area was a religious center in the Bronze Age where people gathered from near and far and ritual activities were carried out, it would be an obvious place to present those novices who were found worthy with petroglyphs that could give them an increased understanding of the symbolism of the iconography (ibid.).

In other words, the abnormal context in which the motif from Aspeberget appears in comparison to the hand signs does not necessarily rule out a connection between the two phenomena (ibid.). The fact that the anthropomorphic figure seems to be part of a larger composition could just mean that the meaning 'synodic month' was rooted in a myth (ibid.).

Unfortunately, it is still problematic to declare that the lunar month is connected to the symbolism of the hand signs (Hansen 2019, 106). Although the six previously mentioned hand signs with atypi-

cal details seem to support the explicit testimony of the motif from Aspeberget, we are, at this point, mainly basing our interpretation on a single petroglyph – which is far from ideal (ibid.). Furthermore, we are yet to fulfil the ambition of deducing the denotative meaning of the hand sign, which is why our attention should now be turned southwards (ibid.).

The numerical system of the Urnfield culture

In the southern part of the German state of Saxony-Anhalt, the river Saale makes its way through the landscape (Hansen 2019, 107). In the area surrounding Saale more than 600 bronze sickles have been found, of which almost all date to the second half of period III or the first half of period IV of the Bronze Age (Sommerfeld 1994, 208 ff.; 2004, 118; Hansen 2019, 107). The bronze sickles of this area are rarely bare, but are instead covered with different systems of signs; one system, placed at the bottom of the blade, appears to constitute a numerical system (Sommerfeld 1994, 236 f. 251; 2004, 118, 120; Hansen 2019, 107). In its simplicity, it is made up of two different marks, slash and backslash in modern terms, that represent ones and fives respectively (ibid.). It has been suggested that the numerical system in question ranges from 0 to 29 and hereby refers to the synodic month, which again could explain the choice in media, as the bronze sickles bear a great resemblance to the crescent moon (ibid.). Interestingly, 99.17% of the sums appearing on the sickles fall within the range of 0 to 30, despite the fact that the system's logic would allow for higher sums, as one could merely place more marks (ibid.). The fact that the sums of this numerical system seem to align with the number of days of the lunar month favors the proposed connection between the two phenomena (ibid.).

In this regard it is important to mention that although it makes sense to symbolize the synodic month using the number 29, as all lunar months are at least 29 days long, it is still meaningful to include the

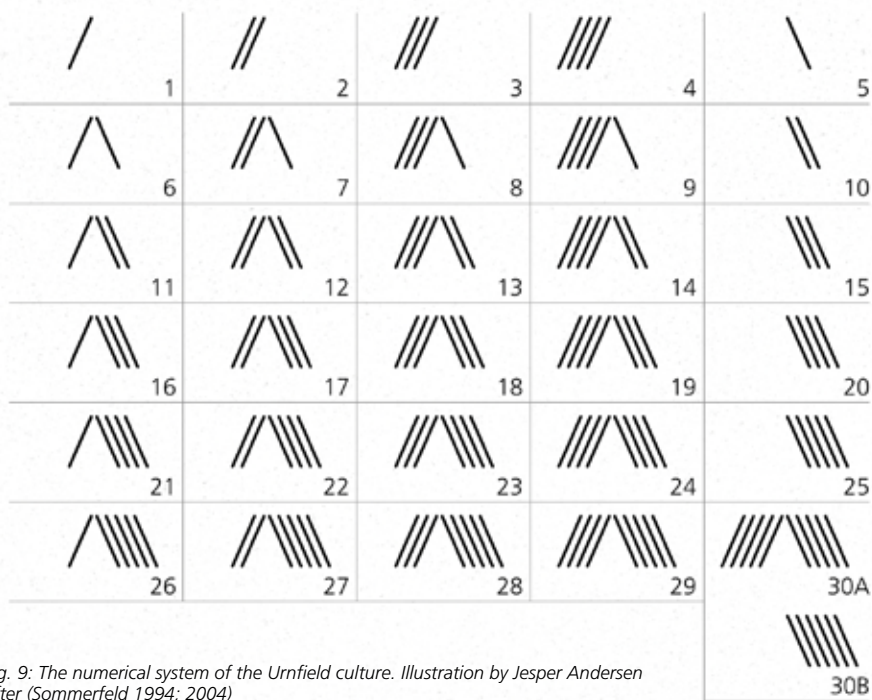


Fig. 9: The numerical system of the Urnfield culture. Illustration by Jesper Andersen after (Sommerfeld 1994; 2004)

number 30 in a numerical system that follows the phases of the moon (Hansen 2019, 108). This is due to the fact that the length of the synodic month is not constant, but varies within a range of 29.27 to 29.84 days, which is why the number 30 would have been useful during the lengthy lunar months (eclipse.gsfc.nasa.gov, Synodic month; Hansen 2019, 108).

The reason the archaeologist Christoph Sommerfeld proposes a numerical system that only ranges from 0 to 29 is that he suspects that elements of the other systems of signs on the bronze sickles might have been included to represent the 30th day of the lengthy synodic months (Sommerfeld 1994, 252; 2004, 120; Hansen 2019, 108). Considering that Sommerfeld also includes the number zero in his proposed numerical system, one could alternatively argue that this sum could have been used as a placeholder of sorts during the long lunar months (Hansen 2019,

108). But due to the number zero being a rather abstract phenomenon that only a few numerical systems of the world have included throughout human history (Ifrah 1998, 340 ff.), both of the above suggestions seem somewhat far-fetched (Hansen 2019, 108). Since the numeral 30 actually appears on several of the sickles (Sommerfeld 1994, 237 f.), and seems to fit well into both the numerical system and the proposed moon symbolism, I argue that it should be regarded as part of the numerical system of the Urnfield culture (Hansen 2019, 108) (fig. 9).

Now, one might ask why the numerical system of the Urnfield culture is divided into units of 'ones' and 'fives' (Hansen 2019, 109). The answer may be quite straightforward. Almost all of the world's numerical systems relate to the fingers (Ifrah 1987, 26, 32, 37 f.; Hansen 2019, 109, 112). In multiple languages the name for 'hand' and 'five' is even one and the same

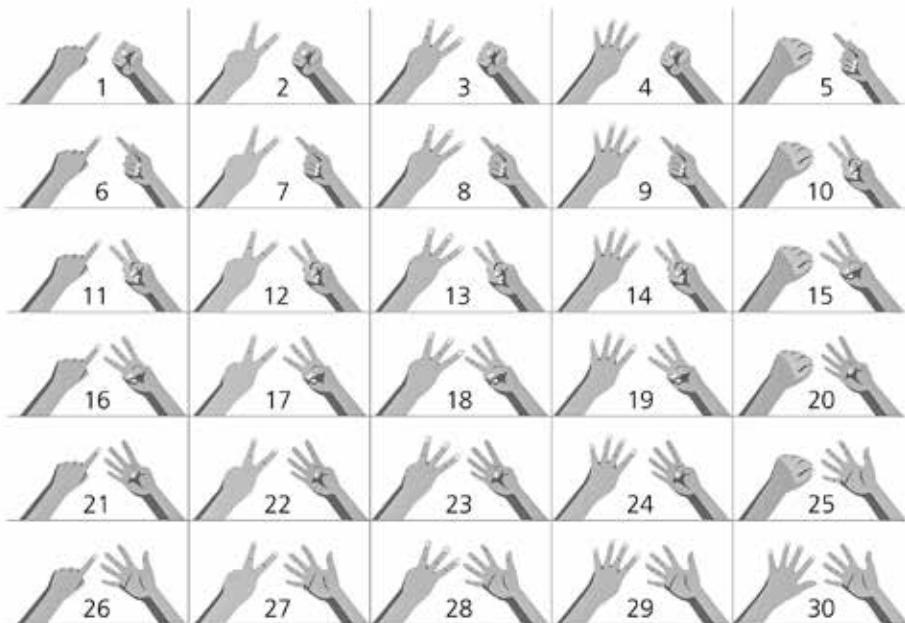


Fig. 10: The numerals of the Urnfield culture counted on the hands. Illustration by Jesper Andersen

(ibid.). This may be due to the fingers' ability to show both sequence and total at the same time, thereby making counting intuitive (ibid.). Keeping this observation in mind while looking at the numerical system of the Urnfield culture, the two different marks, "/" and "\", leaning in opposite directions do make a convincing metaphor for the left and right hands' fingers respectively (Hansen 2019, 109, 112). Employing the two distinct types of units the system would allow you to count 'ones' on one hand, and 'fives' on the other, thereby extending the highest sum you may represent, using your fingers, beyond 10 (ibid.).

Now, if we look to our own hands and attempt to imitate the numerical system of the Urnfield culture most accurately, this is done by stretching out those fingers that total the desired sum while having the fingers of the left hand lean towards the ones on the right and vice versa (ibid.)

(fig. 10). Counting is done by holding out one finger on the left hand at a time until you reach '4' and then folding the left hand fingers back into a clenched fist, replacing them with one finger on the right hand, representing the sum '5' (ibid.). You then count up to '9' using the fingers on the left hand again one at a time, only to clench them into a fist once more when you reach '10', replacing them with another extended finger on the right hand (ibid.). By counting in this fashion, you will not run out of fingers to represent sums before you reach either '29' or '30', depending on whether or not the system's logic allows you to hold out a fifth finger on the left hand, since no more than a maximum of four left hand fingers are in use at any other given time during the counting sequence (ibid.).

When counting the Urnfield culture's numerals on the fingers they prove especially interesting if we compare them with



Fig. 11: The hand gesture representing the number 29 compared with the hand sign. Illustration by Jesper Andersen

the hand signs of southern Scandinavia (Hansen 2019, 109). Because if we once again put our hands to use and stretch out the fingers needed in order to represent the sum '29' (////\\\\) while leaning the left hand fingers towards the ones on the right and vice versa, we are all of a sudden mirroring the composition of the hand sign: a right hand with five stretched fingers beneath four transverse lines (ibid.) (fig. 11).

As the two fingers in the middle, the ring- and middle finger, are longer than the index- and little finger on most people (Manning 2002, 19 ff.), this specific hand gesture would also explain why the hand signs' four horizontal lines at times are depicted as two long lines flanked by a shorter one on either side (Hansen 2019, 19).

The number 29 appears to have been of particular importance, as it is also known from other contemporary findings within Germany (Hansen 2019, 110). A beaker from a burial site in Coswig near Dresden, dated to 1200-1000 BC, bears the mark of 29 next to concentric circles, and in Ruthen, south of Rostock in northern Germany, a stamp forming the number 29 has been found as well (Sommerfeld 2004, 120, 122 f.; Hansen 2019, 110). That a tool was made with which to stamp the mark of 29 onto items seems to indicate that that particular sum was of great significance (Hansen 2019, 110).

Returning to the hand sign, there is little evidence that the symbol spread to southern Scandinavia from Germany

(ibid). Although hand motifs do appear on stones there as well, they are not seen in compositions similar to the Scandinavian hand signs (see Schwantes 1939, 256, 266; Capelle 1972, 233 f.). But while the hand signs as a phenomenon do appear to originate from southern Scandinavia, their design suggests that the numerical system of the Urnfield culture, specifically the hand gesture representing the sum 29, served as inspiration during their initial creation (Hansen 2019, 110, 112).

The denotative meaning of the hand signs

Considering that we have now been presented with two phenomena, the motif from Aspeberget and the proposed hand gesture of the Urnfield culture, independently representing the same sum, 29, and both bearing great resemblance to the physical appearance of the hand sign, it seems fair to suggest a connection between the hand sign and the meaning 'synodic month' (Hansen 2019, 112 f.) (fig. 12). The six previously mentioned hand signs with atypical details seem to agree with such an interpretation (ibid.). Taking the suggested hand gesture representing the sum of 29 into account, as well as the earlier mentioned observation that a symbol's denotative meaning is bound to a phenomenon of the physical world, it even seems reasonable to propose the meaning 'synodic month' as the primary meaning of the hand sign (ibid.). If the hand gesture portraying the number 29

was the main inspiration during the symbol's birth, it is unlikely that we in the deduced meaning are dealing with a peripheral connotation (ibid.).

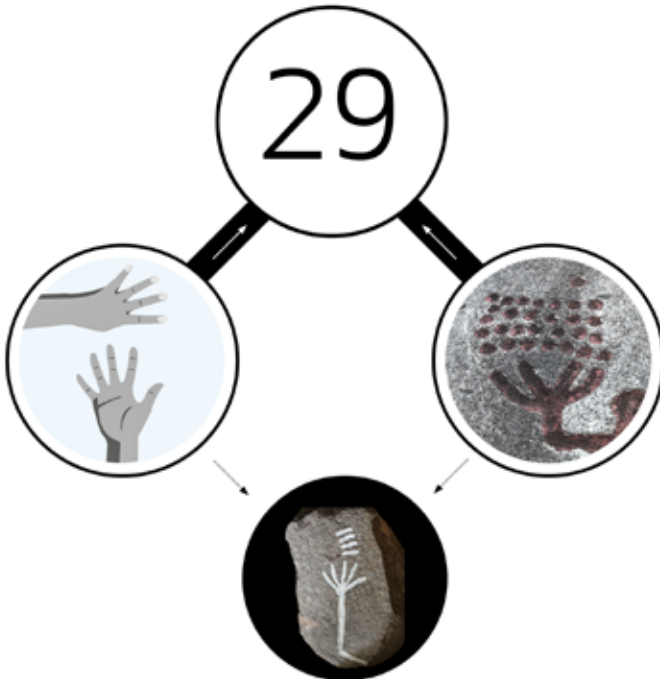
Drawing on Thomas R. Knudsen's approach (Knudsen 2014), the proposed denotative meaning also provides answers to the questions that the artistic details of the hand sign raise (Hansen 2019, 113 f.). The hand gesture representing the number 29 explains the choice of a hand as a motif (ibid.). It also accounts for the hand sign's case of suspicious coincidence as the stretched fingers emphasize that the numerical value, 29, is active, and even clarifies why the symbol's depicted hand is a right hand, as we have learned that it was the right hand that the units of fives were counted on (ibid.). Lastly, the hand signs include a case of metonymy, as only part of the left hand is included – the four fingers in use (ibid.).

The rebirth metaphor

In order to examine the multivocal nature of the hand sign, the time has come to compare the deduced denotative meaning to potential related secondary meanings by including previous interpretations of the symbol (Hansen 2019, 114).

Glob's rebirth metaphor with the nine months merges well with the proposed denotative meaning, as nine synodic months equal the average human pregnancy duration (ibid.). But in this regard it is important to remember that this potential rebirth metaphor does not begin with the hand signs, but with the sum 29 in the numerical system of the Urnfield culture, as that specific number is *also* made up of nine marks (//////) (Hansen 2019, 115). And considering that this numerical system appears to have been designed to follow the synodic month (due to the near complete lack of sums higher than 30 on

Fig. 12: Both the proposed hand gesture and the Aspeberget motif represent the number 29 and bear great resemblance to the hand sign. Illustration by Jesper Andersen



the sickles), it does not seem unreasonable that a rebirth symbolism could have been incorporated during its creation (*ibid.*). Not only would this explain the popularity of the number 29 represented by the Ruthen-stamp, but also that sum's presence on the Coswig-beaker from the contemporary burial site (*ibid.*).

Returning to southern Scandinavia the hand sign also seems to host more than the primary meaning (*ibid.*). Considering how well the visual expression of the wheel cross corresponds with the contrasting phases of the moon (fig. 13), I would argue that a wheel cross could have been carved in the hand sign's place if the latter did not hold a higher symbolic complexity than the suggested denotative meaning (Hansen 2019, 97 f., 115). Here the fusion of the synodic month and the number nine (the rebirth of the moon combined with pregnancy and childbirth) could represent an adopted intent in the design of the hand sign, enhancing the metaphor and constituting a closely related secondary meaning (*ibid.*).

Due to their round shapes the mounds of southern Scandinavia have been associated with the female gender and thereby interpreted as symbols of rebirth, while the buried dead have been compared to planted seeds (Gräslund 1994, 24 f.; Goldhahn 1999, 189 f., 192, 297; Hansen 2019, 115). And if we look at the oak-coffin graves of the early Bronze Age of southern Scandinavia the symbolism seems even more distinct: a round form with an inner watery core in which an individual is present (Holst & Breuning-Madsen 1995; Holst, Breuning-Madsen & Rasmussen 1996; 2001; 2004; Randsborg 2006; 3 ff., 23; Hansen 2019, 115). This phenomenon fits the proposed rebirth metaphor of the hand signs rather well, and might explain why three of the five places where stones with such petroglyphs have been found *in situ* are secondary burials in older mounds (Hansen 2019, 116). The same morphological symbolism could be argued for the cairns as well, thus it is only the presence of the hand signs at the Sandagergård cult house that truly contrasts this tendency

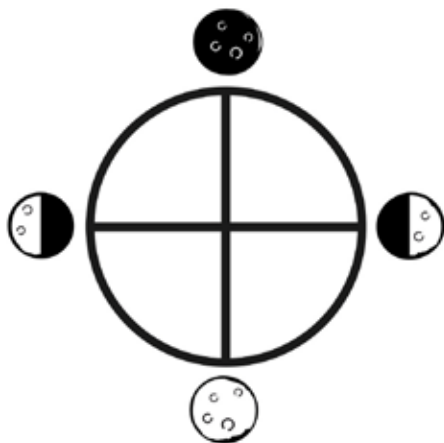


Fig. 13: The contrasting phases of the moon integrated in the logic of the wheel cross. Illustration by Jesper Andersen

(*ibid.*). In this regard it should be added that the notion of transformation by returning to the womb is rooted in many so-called primitive cultures (Eliade 1965, 36 f., 51, 57 ff.; Hansen 2019, 116).

The four spokes of the wheel cross

The proposed denotative meaning 'synodic month' also seems to fit Flemming Kaul's interpretation of the four horizontal lines as representations of the spokes of the wheel cross (Hansen 2019, 116). Because if the wheel cross, as suggested, can likewise hold the meaning 'synodic month' it makes sense to incorporate it into the design of the hand sign (*ibid.*). That message also seems to be conveyed by the motif from Aspeberget through its four rows of seven cupmarks with even length, which furthermore would explain why the 29th cupmark is isolated above the rest (as opposed to a placement at the end of one of the rows), as the spokes of the wheel cross are naturally of even length (*ibid.*).

As mentioned, more than half of the hand signs have horizontal lines of even length, and it would seem that these specific motifs included the four spokes of the wheel cross in their symbolism at the cost of the naturalistic appearance of the four left hand fingers of uneven length (*ibid.*).

Thus the four horizontal lines represented both the left hand fingers and the spokes of the wheel cross at the same time (ibid.).

Conclusion

An approach that seeks to uncover a cluster of closely related meanings connected to a Bronze Age motif through the fusion of personal observations and previous interpretations might be unorthodox. But I would argue that it meets the multifaceted motifs on their own terms, at least to a higher degree than a practice where a single isolated interpretation is presented and assumed to explain all aspects of a symbol.

A basic logical framework that unites the denotative meaning 'synodic month' with both a rebirth metaphor and the wheel cross has been put forward. It offers a way to explain why the hand sign is constituted by a right hand, why its fingers are extended and why the four horizontal lines at times are made up of two long ones flanked by a shorter line on either side and at other times of four lines of even length. Moreover the rebirth symbolism would explain the hand signs' close connection to graves.

It would seem that the merging of ideas is not without its merits when interpreting Bronze Age motifs.

Acknowledgments

I would like to thank the following persons for their assistance in the making of this article: Gerhard Milstreu, Henrik Zedig, Jesper Andersen, Ellen Meijer, Orla Hansen, Thomas Bruun, Bettina Bruun, Lars Strid, Markus Boxe and Ole Kastholm.

Mikkel Christian Dam Hansen
Cand.mag.
+45 53709733
kranmand@gmail.com

References

Albrechtsen, E., 1966, Nye fund af skålstén. *Fynske minder*, bd. 5., pp. 173-183, Odense.

Bradley, R., 2009, *Image and Audience: Re-thinking Prehistoric Art*. Oxford.

Bruun, T. & Hansen, O., 2020, Håndtegn fra yngre bronzealder – et gådefuldt symbol, *Fund & Fortid* 2020, nr. 2, pp. 14-19, Højby.

Brøndsted, J., 1939, *Danmarks Oldtid II, Bronzealderen*. København.

Brøndsted, J., 1941, Danish arm-and-hand carvings, *Acta Archaeologica* vol. 12, pp. 119-125, København.

Capelle, T., 1972, Felsbilder in Nordwestdeutschland eine übersicht. *Acta Archaeologica* vol. 43, pp. 229-238, Copenhagen.

Dodd, J. & Milstreu, G., 2018, The cup-mark: the smallest, most frequent, cosmopolitan and most complicated symbol, *Adoranten* vol. 2018, pp. 5-29, Tanumshede.

Eliade, M., 1965, *Rites and Symbols of Initiation: The Mystery of Birth and Rebirth*. New York.

Foss, P. & Johansen, J., 2018, Cup marks on stones in Danish Bronze Age settlements, *Adoranten* vol. 2018, pp. 31-41, Tanumshede.

Glob, P.V., 1969, *Helleristninger i Danmark*. Odense.

Goldhahn, J., 1999, *Sagaholm – hällristningar och gravritual*. Umeå.

Goldhahn, J., 2004, Mångtydighetens tydlighet – til frågan om hållbilders mening och innebörd. In: *Prehistoric Pictures as archaeological source / Förhistoriska Bilder som Arkeologisk Källa*, edited by G. Milstreu and H. Pröhl, Gotarc Series C no. 50, pp. 121-136, Gothenburg.

Goldhahn, J., 2007, *Rituelle specialister i bronze- og jernalderen. Del 1. Dødens hand – en essä om brons- och hållsmed*. Gotarc Series C no. 65, Gothenburg.

Goldhahn, J., 2010, Rock art for the dead and un-dead. Reflections on the significance of hand stones in Late Bronze Age Scandinavia, *Adoranten* vol. 2009, pp. 95-103, Tanumshede.

Gräslund, B., 1994, Prehistoric Souls Beliefs in Northern Europe. *Proceedings of the Prehistoric Society* vol. 60, pp. 15-26.

Hallström, G., 1923, *Nordiska Arkeologmötet i Stockholm 1922. Berättelse över mötet och dess förhandlingar*. Stockholm.

- Hansen, M. C. D.**, 2019, Håndtegnets udstrakte fingre. En anderledes tilgang til tydningen af bronzealdermotiverne. *Gefjon* 4, pp. 86-151, Aarhus.
- Holst M. & Breuning-Madsen, H.**, 1995, Genesis of Iron Pans in Bronze Age Mounds in Denmark. *Journal of Danish Archaeology* vol. 11, 1992-1993, pp. 80-86.
- Holst, M., Breuning-Madsen, H. & Rasmussen, M.**, 1996, Jernkapper i bronzealderens gravhøje – forsøg ved en minimodel af Egtvedpigens gravhøj. In: *Arkæologiske Eksperimenter i Lejre*, edited by Meldgaard, M. and Rasmussen, M., pp. 113-120, Lejre.
- Holst, M., Breuning-Madsen, H. & Rasmussen, M.**, 2001, The South Scandinavian barrows with well-preserved oak-log coffins. *Antiquity* vol. 75, nr. 287, pp. 126-136.
- Holst, M., Breuning-Madsen, H. & Rasmussen, M.**, 2004, Skelhøj. Et bygningsværk fra ældre bronzealder. *Nationalmuseets Arbejdsmark*, 2004, pp. 11-25.
- Horn, C.**, 2015, Cupmarks, *Adoranten* vol. 2015, pp. 29-43, Tanumshede.
- Ifrah, G.**, 1987, *From One to Zero: A Universal History of Numbers*. New York.
- Ifrah, G.**, 1998, *Universal History of Numbers: From Prehistory to the Invention of the Computer*. London.
- Jensen, M. F.**, 2011, Bronzealderens solkalender på Bornholm, *Fund & Fortid* 2011, nr. 1, pp. 4-8.
- Johansen, E.**, 1971, Med hevet hand, *KUML* vol. 1970, pp. 171-188. Aarhus.
- Karlsson, S.**, 2005, Kroppens gestaltning och symbolik på Sydskandinaviens hållristningar. In: *Mellan sten och järn*, edited by J. Goldhahn, Gotarc Series C no. 59, Gothenburg, pp. 461-572.
- Kaul, F.**, 1987, Sandagergård. A late Bronze Age Cultic Building with Rock Engravings and Menhirs from Northern Zealand, Denmark. *Acta Archaeologica* vol. 56, 1985, pp. 31-54, Copenhagen.
- Kaul, F.**, 1998, *Ships on bronzes: a study in Bronze Age religion and iconography*. Text. National Museum of Denmark. Copenhagen.
- Kaul, F.**, 2004, *Bronzealderens religion. Studier af den nordiske bronzealders ikonografi*. Det Kongelige Nordiske Oldskriftselskab. Copenhagen.
- Kaul, F.**, 2006, Kulthuset ved Sandagergård og andre kulthuse – betydning og tolkning. In: *Kulthus & döds hus – det ritualiserede rummets teori og praktik*, edited by M. Anglert, M. Artursson and F. Svanberg, pp. 99-111, Stockholm.
- Kaul, F.**, 2010, Hjulkorset – et enkelt, men mangetydigt symbol. *Fund & Fortid* 2010, nr. 2, pp. 34-39.
- Kaul, F.**, 2020, The Possibilities for an Afterlife. Souls and Cosmology in the Nordic Bronze Age. *Ergänzungsbande zum Reallexikon der Germanischen Altertumskunde* 118, pp. 185-202. Berlin/Boston.
- Keen, I.**, 1994, *Knowledge and Secrecy in Aboriginal Religion*. Clarendon Press, Oxford.
- Knudsen, T.R.**, 2014, The meaning of hands: A semiotic approach to the interpretation of hand stones. In: *Rooted in Movement: Aspects of Mobility in Bronze Age Europe*, edited by S. Reiter, H.W. Nørgaard, Z. Kölcze and C. Rassmann, pp. 111-118, Højbjerg.
- Larsen, K. A.**, 1955, Solvogn og solkult, *KUML* vol. 1955, pp. 46-64.
- Layton, R.**, 1992, *Australian Rock Art: A New Synthesis*. Cambridge.
- Ling, J.**, 2008, *Elevated Rock Art – Towards a Maritime Understanding of Bronze Age Rock Art in Northern Bohuslän, Sweden*. Gotarch series B, Archaeological Thesis 49, Gothenburg.
- Lindström, J.**, 2009, *Bronsåldersmordet – om arkeologi och ond bråd död*. Stockholm.
- Malmer, M.P.**, 1989, Principles of a non-mythological explanation of North-European Bronze Age rock art. In: *Bronze Age Studies*, edited by H. Nordström & A. Knape, pp. 91-99, Stockholm.
- Manning, J. T.**, 2002, *Digit Ratio: A Pointer to Fertility, Behavior, and Health*. New Brunswick, NJ.
- Marstrander, S.**, 1963, *Østfolds jordbruk-sristninger*. Oslo.
- Matthes, L.**, 2016, Sønderjyske helleristninger og skåltegnsten – et update, *Sønderjysk månedsskrift* 2016, nr. 5, pp. 167-173, Aabenraa.

- Melheim, L.**, 2008, Right and left. Directions in Bronze Age cosmology seen through a pair of spectacle-fibulas. In: *Facets of Archaeology. Essays in Honour of Lotte Hedeager on Her 60th Birthday*, edited by K. Chilidis, J. Lund and C. Prescott, Issue 10 of Oslo Archaeological Series, pp. 539-554.
- Morphy, H.**, 1991, *Ancestral Connections. Art and an Aboriginal System of Knowledge*. Chicago.
- Morphy, H.**, 1999, Encoding the dreaming – A theoretical framework for the analysis of representational processes in Australian Aboriginal art. *Australian Archaeology*, nr. 49, pp. 13-22.
- Munn, N. D.**, 1973, *Walbiri Iconography: Graphic Representation and Cultural Symbolism in a Central Australian Society*. New York & London.
- Nancke-Kroggh, S.**, 1989a, Tvillinger, masker og Viken, *Adoranten* vol. 1989, pp. 4-12. Tanumshede.
- Nancke-Kroggh, S.**, 1989b, Flere tvillingehænder, *Adoranten* vol. 1989, pp. 13-14. Tanumshede.
- Norling-Christensen, H.**, 1941, Et bronzælders helligtegn, Fra *Nationalmuseets arbejdsmark* vol. 1941, pp. 49-59, Copenhagen.
- Randsborg, K.**, 2006, Opening the oak-coffins: new dates – new perspectives. In: *Bronze Age Oak-coffin Graves. Archaeology and Dendro-dating*, edited by K. Randsborg, *Acta Archaeologica*, vol. 77, 2006, *Acta Archaeologica Supplementa* 7, pp. 1-162.
- Ricoeur, P.**, 1967, *The Symbolism of Evil*. Boston.
- Ricoeur, P.**, 2005, *The Conflict of Interpretations: Essays in Hermeneutics (Continuum Impacts)*. London.
- Ricoeur, P.**, 2016, *Philosophical Anthropology*. Cambridge.
- Schaafsma, P.**, 2013, *Images and Power: Rock Art and Ethics*. New York.
- Schwantes, G.**, 1939, *Die Vorgeschiede Schleswig-Holsteins (Stein- und Bronzezeit)*. Bd. 1. Neumünster.
- Skoglund, P., Nimura, C. & Bradley, R.**, 2017, Interpretations of footprints in the Bronze Age rock art of South Scandinavia. *Proceedings of the Prehistoric Society* 83, 2017, pp. 289-303.
- Sommerfeld, C.**, 1994, *Gerättegeld Sichel*. Studien zur monetären Struktur Bronzezeitlicher Horte im Nördlichen Mittel-europa. Berlin.
- Sommerfeld, C.**, 2004, Mondsymboll »Sichel« - Sicheln mit Marken. In: *Der geschmiedete Himmel. Die weite Welt im Herzen Europas vor 3600 Jahren*, edited by H. Meller, pp. 118-123, Stuttgart.
- Taylor, L.**, 1996, *Seeing the Inside: Bark Painting in Western Arnhem Land*. Oxford.
- Thrane, H.**, 1975, Stenhøje fra bronzælderen. Grave fra en bronzælderbog i Jyderup Skov, Odsherred. *Nationalmuseets Arbejdsmark* vol. 1975, pp. 172-182.
- Tilley, C.**, 1991, *Material Culture and Text. The Art of Ambiguity*. Routledge. London.
- Turner, V.**, 1967, *The Forest of Symbols: Aspects of Ndembu Ritual*. Cornell University Press. New York.
- Vastokas, J.M. & Vastokas, R.K.**, 1973, *Sacred Art of the Algonkians – A Study of the Peterborough Petroglyphs*. Peterborough.
- Winther, C.**, 1940, Tydning af nogle Helligeristningsfigurer II-III, *Danske Studier*, pp. 127-149, København.
- Wold, M.**, 2005, Å skrive om bronzældreligionen. In: *Mellan sten och järn*, edited by J. Goldhahn, *Gotarc Series C* no. 59, Gothenburg, pp. 521-535.

Internet references

www.kulturarv.dk, Toftegård. URL: <http://www.kulturarv.dk/fundogfortidsminder/Lokalitet/98258/>
 www.eclipse.gsfc.nasa.gov, Synodic month. URL: <https://eclipse.gsfc.nasa.gov/SEhelp/moonorbit.html>