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(De)constructing the Mesolithic. A History of Hut Reconstructions in the Netherlands

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The amount of reconstructions of huts from the Mesolithic period all over Northern Europe has boomed over the last 5 years, signaling a significant increase in scholarly interest. However, the scientific basis of these experimental reconstructions is often unclear. At the same time, the excavation and preliminary publication of two recently discovered Mesolithic huts in the Netherlands indicate structures of a completely different build than the proposed

reconstructions. This prompted a study into the history of reconstructions in the Netherlands, as well as their archaeological basis and ethnographic inspiration.

> The construction methods of Dutch reconstructions of Mesolithic huts have several characteristics, such as their oval shape, their relatively large size, the wickerwork that is wrapped around vertical oaken poles, and the flexible hazel or willow branches used to create a central axis.

Introduction

Creating reconstructions of the past has occupied a central position within the archaeological discipline from its early days (Clark, 2010, p.64). Reconstructions are often considered essential for visualizing the past and for translating abstract archaeological remains into more comprehensible narratives for the larger audience. Such visualisations, in the broad range of the word, can be more easily and readily understood than a complicated textual description. However, visualisations have the potential to be overly realistic, and thereby to convey a sense of truth that might not be fully justified – 'seeing is believing' (Clark, 2010, p.69; Miller and Richards, 1995). Their authoritative potential makes them "seductive" (Kensek *et al.*, 2004, p.175), and even trained archaeologists may be fooled into believing that what they see is true (Kensek *et al.*, 2004, p.176; Sylaiou and Patias, 2004, p.7).

This is true for drawings, sketches, computer visualisations, 3D and scale models, but perhaps even more so for architectural life-size models at open-air museums and other types of archaeological parks. There, audiences can space themselves within and around reconstructions, as well as touch and smell them; visitors are offered a full sensory experience. However, life-size models lack a way of making clear the certainty with which (parts of a) model are imagined to have been like (Kensek *et al.*, 2004; Kensek, 2005). Because reconstructions can have "lives of their own" (Kensek *et al.*, 2004, p.175), it can be reasonably assumed they contribute to and have an influence on our perception of prehistory.

To explore the issue of perception, I will use as a case study the life-size reconstructions of Mesolithic huts built in the Netherlands, whose scientific basis is debatable. Reconstructions of Mesolithic huts have been built repeatedly over the last 30 years in archaeological open-air museums across the country, and I argue that our perception of Mesolithic dwellings has, for a large extent, been rooted in fantasy and on misinterpreted excavations. I will trace the origins of this archetypal concept, show how it was further refined, and how it has persisted all these years.

My goal, however, is not to provide mere criticism, especially since I have no solid or convincing alternative model to offer. Rather, I would like to use the Dutch Mesolithic hut reconstructions as a case study to (i) show how perceptions of prehistory can take form

(Raemaekers and Van Oorsouw, 2012; Raemaekers, 2015), and (ii) to demonstrate the value of tracing back the origins and sources of such a perception. The hypothesis can be summarised that, as soon as they are built, reconstructions steer our thinking about prehistory, and once this image exists, it can be difficult to alter.

Types of reconstructions

To understand the nature of the reconstructions in question as well as the purpose with which they were produced, it is important to note the – here admittedly simplistic – difference between scientific reconstructions and public reconstructions.[1] The first category consists of (re)creations that use experimental archaeological methods and techniques in their aim to produce scientific knowledge about, for example, the materials and construction techniques used and the life-span of a building. Examples include the experimental tradition as developed by Reynolds at Butser Ancient Farm in England (Reynolds, 1976; 1999; 2006) and by Hansen at Lejre Land of Legends in Denmark (Schöbel, 2004, p.155). The second category consists of buildings that have been built with an educational motivation, that contain both museological and entertainment elements (cf. Stone and Planel, 1999, pp.4-5). Such reconstructions are often found at archaeological open-air museums and form a décor against which both adults and children can be taught about (pre)history. The Dutch 'mesohuts', as these reconstructions are known colloquially, all belong to this second category – they were never meant to test hypotheses and thus have little scientific value. As such they cannot aid us in understanding human prehistory.

The archetypal concept

The construction methods of Dutch reconstructions of Mesolithic huts have several characteristics, such as their oval shape, their relatively large size (the smallest is ca. 4 m in length), the wickerwork that is wrapped around vertical oaken poles, and the flexible hazel or willow branches used to create a central axis (See Figure 1). The construction is given strength in one of two ways: either sturdy branches are planted in between the wickerwork and guided diagonally towards the central axis, or these branches are led to the central axis perpendicularly, after which half circles are created by leading more flexible branches from one oak pole to another (See Figure 1 for the second approach). Common to either approach are the diagonal crossings of branches that can be tied together with thin willow twigs or rope, which ensure the strength and sturdiness of the construction. Also characteristic is the use of reeds, although various thatching methods have been applied to the structures. Innate to the Dutch huts are also the overhanging smoke hole at the top, the 'fold' caused by the central axis and the usual (rather large) entrance in the long side (See Figure 2; de Raaff, 2018, 3-8). The floor is nearly always bare earth, which is sometimes strengthened with cement to prevent mud from forming, and decorations are occasionally added inside.

Source 1: archaeological site Bergumermeer S-64B

The archaeological basis of the reconstructions is derived from the remains of alleged huts that were excavated at the archaeological site Bergumermeer S-64B, in the northern Netherlands (IJzereef, 1999, p.173). This site was excavated in the early seventies (1971-1974) by the BAI (nowadays the Groningen Institute of Archaeology), and led by Dr. Raymond Newell (Newell, 1973; 1980). The excavated complex was interpreted as a semi-permanent residential hunter-gather camp from the Late Mesolithic, where various groups of people would meet up periodically (Leien-Wartena Complex, ca. 5200-5000 BC; Newell, 1980, p.276). It was one of the largest, most systematic excavations of a Stone Age site at the time (Niekus *et al.*, 2018, p.946).

It was found next to the so-called Bergumermeer lake, and yielded numerous finds. Most curiously, the excavators also discovered several horse-shoe shaped orange discolourations. These were interpreted as the remains of five or six more or less contemporaneous dwelling structures, or huts (See Figure 3). Hardly any postholes were found but the excavators did find a number of large 'structural' stones that were supposedly used for reinforcing the huts. The orange patterns are on average 7.7 m long and 4.6 m wide.

The excavated encampment attracted the attention of scholars from all over Europe, and it gained international renown. The huts especially played a significant role in shaping our definition of Mesolithic settlements, as well as the chronology of the Late Mesolithic. The camp was used to hypothesize about demography (the size of the settlement provided proof of a large growth in population numbers in the Late Mesolithic) and about sedentism (the camp showed how people grew more sedentary, right before the introduction of agriculture) (Newell, 1973, p.409; Niekus, *et al.*, 2018, pp.948-949). The site's location next to a water body reverberated in the construction of the camp at Archeon as well as later at Prehistorische Nederzetting Swifterkamp (See Figure 4; IJzereef, 1999, pp.173- 174).

The interpretation of the site has long been criticised. For many decades, archaeologists were not able to evaluate, verify and/or disprove the proposed conclusions because the data was not fully published, yet it remained one of the textbook Mesolithic excavations in the Netherlands (Niekus *et al.*, 2018, p.946). The site's considerable influence was reinforced in the public perception, where by necessity the vagaries and ambiguities of excavations are removed in favour of presenting a solid narrative. This is especially visible in archaeological open-air museums: the huts excavated at Bergumermeer have served as the basis for reconstructions of Mesolithic huts numerous times over the last 30 years. The first reconstructed 'Bergumermeer hut' was built in the early 1990s at archaeological theme park Archeon (See Figure 5; De Mol, n.d.; Geerlink, 1990; IJzereef, 1999, p.173). It was never meant as a careful reading of the archaeological remains; the builders looked mainly at the size and shape of the various plans of the supposed huts at Bergumermeer (pers. comm. H. Horreüs Haas, A. de Haas, and L. Wolterbeek).

Over the following decades another four huts were built at Archeon, of which two remain standing. The design was quickly replicated in other archaeological parks across the country; reconstructions were built at Prehistorische Nederzetting Swifterkamp (four), School in Bos Buitencentrum Wilhelminaoord (two), Hunebedcentrum Borger (one), Erve Eme (one) and during the Living Experiment at Horsterwold (two) (Olthof and Pomstra, 2006a; 2006b). The design also crossed the national borders – an almost identical structure was built on the premises of the Nicolaus Copernicus University in Poland (See Figure 6-7). The dimensions are slightly different (4m by 5 m), in correspondence to characteristic flint scatters from Poland that are regularly excavated and interpreted as the shadows of Mesolithic dwelling structures. Despite some further deviations in use of material (guilder rose and black locust), the creation of a foundation trench and the lack of oaken poles, the resemblance is striking (Osipowicz *et al.*, 2015).

Meanwhile, the call for a thorough restudy of the material excavated at Bergumermeer became louder, so that the scientific value of the site could be firmly established. Re-examination by Niekus *et al.* (2018) established that Bergumermeer was an extensive palimpsest, with overlapping archaeological remains from the Late Paleolithic, the Mesolithic and the Neolithic/Bronze Age. The Mesolithic finds, mainly retouched tools, can be dated to the Late Mesolithic (between ca. 8000-6000 BP). This could not be narrowed down any further. At the same time, there was insufficient evidence to firmly establish whether these specific remains were contemporaneous. Most importantly, the interpretation of the horse-shoe shaped patterns was rejected – there was no obvious relation between the features and the flint distribution, treefalls obscure accurate interpretation, only 12% of the finds was suitable for spatial analysis, and there was a qualitative difference between the excavated squares. In other words, Mesolithic people certainly inhabited this area, but Bergumermeer was at no point the aggregation camp that it was imagined it to be. The orange discolourations were not the remains of huts (Niekus *et al.*, 2018, pp.957-959). The archaeological evidence is thus insufficient to support the built reconstructions.

Source 2: the Living Experiment in Flevoland in 1976

Inspiration for the reconstructions was also found in other places, most notably the Living Experiment that took place in 1976 on a parcel of newly reclaimed land in the Flevopolder (Province of Flevoland). During this 'creative game', as the organizers call it themselves, a group of people attempted to live under Neolithic (Swifterbant) circumstances (Horreüs de Haas, 1978, p.2). Their objective was to find out whether it is possible for a modern-day, Western person to live under the same conditions as their early human predecessors, by living "at a hunting-gathering-gardening subsistence level" (Horreüs de Haas, 1978, p.2). The participants assumed that the dwellings they built must have resembled the temporary dwellings of fishermen and hunters in a swampy landscape (Horreüs de Haas and Horreüs de Haas, 1982, p.70). The participants were well aware that Neolithic farmers lived in larger

farmsteads, but they accepted this apparent historical inaccuracy because they assumed that it was likely that temporary dwellings were still occasionally built in the Neolithic (Horreüs de Haas and Horreüs de Haas, 1982, p.70). Archaeology did not play a role in the design of the huts:

> *"Because the archaeological science could not tell us what the dwelling structures of this time looked like, the participants were free to design a hut after their own taste, insights and skills. This way various very different constructions were built, although all using the same material. The skeleton of the huts consisted of willow; the roof- and wall covering of reeds"* (Horreüs de Haas and Horreüs de Haas, 1982, p.70, author's translation).[2]

The single condition that the builders had to abide by was that their huts were to be built with replicated Stone Age tools and with materials found in the immediate vicinity of the camp (Horreüs de Haas, 1978, p.3). The experiment was assigned a small plot of land in the south of Flevoland, which was reclaimed from the sea only 8 years prior, in 1968 (Horreüs de Haas, 1978, p.57). This environment was entirely anthopogenic. The initiator of the experiment, R. Horreüs de Haas, a biologist and a teacher by profession, carefully documented the development of the vegetation. He observed, for example, how reeds became predominant because seeds were scattered from planes as soon as the soil was dry. When the experiment took place reeds were plentiful, while also willow and elder had started to settle the new land (Horreüs de Haas, 1978, pp.57-60). The choice of materials was thus dictated by their availability in an artificial, completely man-made stretch of land. To what extent this was in accordance with the Mesolithic vegetation in the Netherlands is therefore questionable.

During the experiment, huts of various shapes and sizes were built, though the participants quickly observed that it were the light, round and oval huts with 'braided' domes that could defy bad weather and wind best (Horreüs de Haas and Horreüs de Haas, 1982, p.144). The design of Hut F in particular seem to have survived the test of time, and likely served as inspiration for the Archeon huts in the early 1990s (See Figures 8-11; paragraph Source 4). It is relatively small, with a diameter of ca. 3 meters and a height of 1.50 meters. Just like the later huts at Archeon, it was built with a low wall of wickerwork, after which long sturdy willow branches were led diagonally towards a central axis.

The Living Experiment of 1976 certainly was not an archaeological experiment – the participants explicitly said so themselves (Horreüs de Haas, 1978, p.2; Pomstra, 2012) – and therefore should not be regarded as such.[3] Nonetheless, its influence on the perception of prehistory within the Netherlands is notable. Through their conviction that the experiment should also have an educative component and the background of several participants as teachers, they managed to reach a large audience. They wrote two books (Horreüs de Haas, 1978; Horreüs de Haas and Horreüs de Haas, 1982) and created a television show for school children on Dutch national television (broadcasted by Nederlandse Onderwijs Televisie (NOT)

School TV). For the purpose of filming this show, a new camp was built that contained huts of the same types. In addition, a teaching programme (with videos) was designed for primary schools, accompanied by booklets that abounded with drawings and best practices for weaving, basketry and building huts (Horreüs de Haas and Horreüs de Haas, 1979; Pomstra, 2012). It is interesting to note how the huts, despite never having been labelled as Mesolithic by the participants, were soon identified as being representative of the Mesolithic because of their temporary nature. The huts stood for a number of years before becoming completely overgrown and collapsing (Horreüs de Haas and Horreüs de Haas, 1982, p.132), yet their afterlife is considerable – little did the participants know their personal interpretations of ancient dwellings would have such a heritage.

These huts had been inspired by shelters built some 30 years earlier. For some time during the Second World War (1944-1945) Roeland and Hans Horreüs de Haas had gone into hiding in a farm in the province of Friesland. The area was largely flooded and difficult to reach. Once spring arrived, they went out to observe the birth of birds. To avoid scaring off the birds they took shelter in a domed hut that they made with branches of willow covered with reeds (See Figure 12; Horreüs de Haas, 2004, p.84). Clearly, they had gained experience with the construction of lightweight, dome-shaped huts made of flexible branches and reed here, not surprisingly the same kind of materials used many years later during the Living Experiment (Pomstra, 2012).

Source 3: *Verleden Land* (1981)

The excavation of Bergumermeer was first introduced to a large audience through the book *Verleden Land: Archaeologische Opgravingen in Nederland* (Bloemers *et al.*, 1981). This popular-scientific book described the 40 most influential excavations in the country to inform a general audience about life in the past and the work of archaeologists. And since the intended audience was the lay person, not educated in archaeology, it was full of reconstruction drawings, which were meant to visualize the abstract archaeological data. As such, it also contained a drawing of Bergumermeer (See Figure 13). Somewhat hidden in the background, three round, reed-covered huts can be observed. They are described as “likely made of braided reed mats, over a skeleton of bent twigs that were placed in a circle and bound together at the top” (Bloemers *et al.*, 1981, p.34; author’s translation). The accompanying text refers to ethnographically comparable huts of indigenous North Americans (Bloemers *et al.*, 1981, p.34), but they are surprisingly analogous to the huts of the Living Experiment.

Equally interesting are the similarities with the arrangements at Archeon a decade later, i.e. the illustration depicts several contemporaneous huts grouped together and next to a body of water. This is in accordance to the interpretation of the excavation as an aggregation camp. The large offprint of this book and its popularity bequeathed to the illustrations a ring of truth, and they became, together with the Living Experiment huts, perhaps unwillingly and/or

unconsciously, the source of inspiration for the Archeon huts of the early 90s, and by extension all the huts thereafter. Perhaps key in this process was the inclusion of Hans Horreüs de Haas, one of the participants in the experiment, in the construction of the first huts at Archeon. His presence seems to have ensured the transmission of the ideas and the hands-on experience gained during the experiment about how to build temporary huts with material like willow and reeds, which were then projected onto the size and shape of the Bergumermeer plans.

Source 4: Oerlinghausen and BAI

Besides the huts of the Living Experiment, the builders of the first huts at Archeon had gathered information about two more models: two reconstructions from Archäologisches Freilichtmuseum Oerlinghausen (DE) and one built by students from the BAI. Both are discussed in an archival document from Archeon, in which they feature as sources of inspiration on how to build the huts at the new theme-park to be (Geerlink, 1990). The basis of the Oerlinghausen reconstructions is a controversial excavation from the early 1930s at Retlager Quellen (Banghard, 2007). These reconstructions are far smaller than the huts at Archeon (2.30 x 1.50 x 1.70 m), yet the branches that would form the arches were in a similar way pushed into the soil. Over time, various materials have been used to cover the skeleton, such as hides, birch bark and common couch (*Agropyrum repens*).

The hut that was reconstructed by students from the BAI was based on the orange traces observed at Bergumermeer, and constructed simultaneous with the excavation. It consisted of a skeleton made with flexible branches, where first the arches across the length were created, and then the arches across the width were put into place. The arches were not made from one branch, but two branches bent towards each other and tied up with rope where they met. Despite a sketch in the documentation that shows a possible interpretation of House West of Bergumermeer, it seems that the first huts at Archeon do not make use of this BAI-method of tying two branches together to create an arch. Instead, it seems a method more similar to that applied at the Living Experiments was used. It is reasonable to assume that the inclusion of Hans Horreüs de Haas was once more influential.

The skeleton of the BAI-hut was covered with green reeds, similar to both the huts of the Living Experiment and several of the later archetypal huts. After the students experimented with making reed mats, they switched to tying the reeds straight onto the skeleton because this was faster. The structural stones found at the excavation were incorporated too, and used to weigh down the cover.

It is significant that these reconstructions at Oerlinghausen and Bergumermeer make use of horizontal branches that create intersections of 90 degrees, whereas the archetypal reconstructions – especially the later ones – make use of diagonal crossings to create triangles. This essential difference shows that these examples, despite being labelled as

sources of inspiration, had only limited influence on the model eventually developed at Archeon. Their most lasting impact seems to have been the choice for a dome: both the Oerlinghausen and the BAI reconstructions are elliptical and domed, and built with flexible branches.

Source 5: ethnography, logic and experience

Over the years, as similar huts were built at other parks, the design was slowly 'improved' upon – through ethnography, logic and experience, the builders created sturdier, more durable huts. As an example, some inspiration was taken from modern-day huts from Senegal, where one of the builders (A. de Haas) worked for several years. There he observed how reed was not attached to the skeleton of a hut directly in bundles but rather tied into mats, and then used to cover huts. The same technique was then applied to several reconstructed Mesolithic huts in the Netherlands (See Figure 14). The method certainly has its merits; the mats can be easily and quickly attached to the hut, and removed once the reed is no longer of sufficient quality as a result of of wear. It does mean, however, that the huts are to a certain extent Africanised, a trait already observed by IJzereef for the first huts at Archeon (IJzereef, 1999, p.173). Besides, the technique was a chance discovery, and not the result of meticulous research.

In a similar example, builders of a reconstruction at Swifterkamp took inspiration from a plan drawn up by Alfred Rust of his excavation at Pinneberg, northern Germany. The excavated remains pointed to a hut with a distinct pear-like shape. Rather than having an entrance in line with the direction of the walls – basically a discontinuation of the wall – this hut had an entrance that stood perpendicular to it, created by the purposeful misalignment of two walls (See Figure 15; Jelinek, 1974, pp.226-227). It was hypothesized by the constructors that this design would better protect anyone inside the hut from raging winds outside (R. Meier, pers. comm.). It must be noted however, that the hut was no 1:1 reconstruction based on an archaeological plan (See Figure 16). Instead, the concept of misaligning the walls to create a perpendicular entrance was applied to the standard concept as first built at Archeon – it merely had a different entrance. The above examples show how the builders of Mesolithic hut reconstructions have cautiously been playing with new ideas, techniques and materials, without wavering from the general concept.

An image created – problematic?

The sources on which the archetypal Dutch Mesolithic hut reconstructions are based, are thus divergent. On the one hand, the orange discolorations attested at Bergumermeer (1971-1974) served as the basic plan, though these later turned out to be wrongly interpreted as huts (Niekus, Jelsma & Luinge 2018). On the other hand, the reconstructions are heavily influenced, in construction technique and use of material, on the creative abilities of the participants of the Living Experiments from 1976 and the bird-watching hut built in 1945. Both were

corroborated by illustrations from the book *Verleden Land* (Bloemers et.al.,1981). Meanwhile, the builders 'improved' on the design through accumulated logic and experience so as to improve the strength and durability of the huts – building reconstructions is costly so in theme parks and open-air museums they are built to last (1990-2017). A chance ethnographic parallel from Senegal and the archaeological plan from Pinneberg were used to create some variety amongst the arsenal of constructions, yet all fit within the same conceptual framework. At the same time, the long legacy of this concept is largely due to the fact that there was little new archaeological information available from within the national borders that was both suitable and clear enough to be confidently translated into a superstructure that could alter the image that had long since taken root.

I am not arguing that huts like these did not exist at all in the Mesolithic – the evidence that archaeologists find is so marginal that brave decisions need to be made in visualizing the superstructure at open-air museums. After all, the reconstructions have shown that with thin, perishable material, unlikely to leave any significant traces, huts can be built that last some 20 years (like the oldest one currently still standing at Archeon). More importantly, the above account shows how a perception of prehistory is created, improved upon, experimented with, and how it can persist over such a long period of time.

The main strength of reconstructions is that they are far more effective than textual descriptions in conveying an interpretation of the past (Schmidt, 1995, p.20). One of the drawbacks of reconstructions built solely for the public, as décors, is that they are rather unreceptive to new scientific insights. Reynolds has previously touched upon this point. He noted that, especially reconstructions built for the public are the "explanation of an excavation, the interpretations frozen at a moment of time allowing for little or no development" (Reynolds, 2006, p.58). The Dutch Mesolithic huts are exemplary of this statement – once the image was created, it persisted.

Particularly interesting is how IJzereef noted that "building at Archeon will never be finished, because the story of the past will never be finished" (IJzereef, 1999, p.179). Yet our image of the Mesolithic period, as presented at archaeological theme parks and open-air museums saw only limited evolution, as evidenced by the reconstructions of the huts, which were built time and again after the same prototype.[4] The reconstructed huts of the Bergumermeer type had become decorated facades, still images that could and did not reflect any change in perception (cf Pétrequin, 1999, p.225). They have been 'Disneyfied' (Stone and Planel, 1999, p. 8).

Some final notes: deconstructing reconstructions?

I am equally part of the history and perpetuation of a paradigm that I am describing. Along with fellow students and volunteers I have built a hut of this exact type, without diving into the archaeological data but simply by copy-pasting a previous construction. The

reconstruction recently featured in a popular-scientific article in the annual journal of the Groningen Institute of Archaeology called *Paleo-Aktueel* (De Raaff, 2018), and it received attention by a local newspaper called *Flevopost* (Bakker, 2017). In both cases the reconstruction featured prominently on the front page. It even starred in a short video made for the University of Groningen (Buijvoets, 2018). The relative ease with which the image was spread testifies to the necessity of both minutely analysing and confronting previous perceptions that one might have before attempting to build any kind of reconstruction.

What would be the solution then, after the above deconstruction of our perception? Should we tear down and literally deconstruct the old reconstructions at the open-air museums? Not necessarily. Rather, at Swifterkamp we have chosen to show the development of thinking over the years. The extant Bergumermeer-hut is deliberately kept intact next to a newer model based on structure 68 of the Norwegian site Aukra (Åstveit, 2009) to showcase the development in our thinking of Mesolithic architecture. This way the huts serve not merely as possible interpretations of the past but also aid in teaching and thinking about the way our conception of the Mesolithic is formed, and how it changes as new discoveries are made and academic research progresses. It offers a way of making the public aware of the challenges involved in understanding and visualising the past, and it can aid in fostering a critical mind-set (Schmidt, 1999, p.154). This more active engagement is often much appreciated (Schmidt, 1999, p.154). Perhaps presenting the evolution of our interpretation of the past is the only way to banish old, out-dated clichés of the past (Stone and Planel, 1999, p.8). With the recent excavation of the remains of several Mesolithic huts from Kampen-Reevediep (Geerts *et al.*, 2019) and Soest-Staringlaan the opportunity presents itself to update the perception of the Mesolithic for the Netherlands – not merely to replace it with a new constructed past but to show the evolution in our thinking, this time based on more confidently interpreted and published archaeological remains.

There are advantages to reflective studies into the perception and creation of particular images and ideas about prehistory. Now that the perception of the Bergumermeer reconstructions has been deconstructed, we have a baseline from where we can continue building the story of the past. Like open-air museums, our stories are never finished.

1 The word reconstruction has been much debated. While I nod my head in agreement with the arguments presented in favour of alternatives such as 'reconstructed site, 'constructed site' and 'model', I here use 'reconstructions' for reasons of simplicity and recognisability, and because the constructions in question were meant as such, as representations of the past (IJzereef, 1999, p.173).

2 At the time of the Living Experiment, the excavation at Bergumermeer had been completed

3 The knowledge of materials and practices gained fits best with Reynolds' category of 'experiential', rather than 'experimental' (Reynolds, 1999, p.156-157).

4 Only in Lelystad (Nobelhorst) has a hut of a different type been built, in 2011, as inspired by the reconstruction at Howick (Waddington, 2007).

Keywords construction of building
(re)construction
hut

Country the Netherlands

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Gallery Image

FIG 1. THE CONSTRUCTION OF HOUSE STORK. THE BASKET-LIKE STRUCTURE WITH THE DIAGONAL CROSSINGS ENSURES STRENGTH AND STURDINESS. PHOTO BY YANNICK DE RAAFF

FIG 2. HOUSE STORK IN ITS FINISHED STATE. THE REED TURNED BROWN IN A MATTER OF WEEKS. PHOTO BY YANNICK DE RAAFF

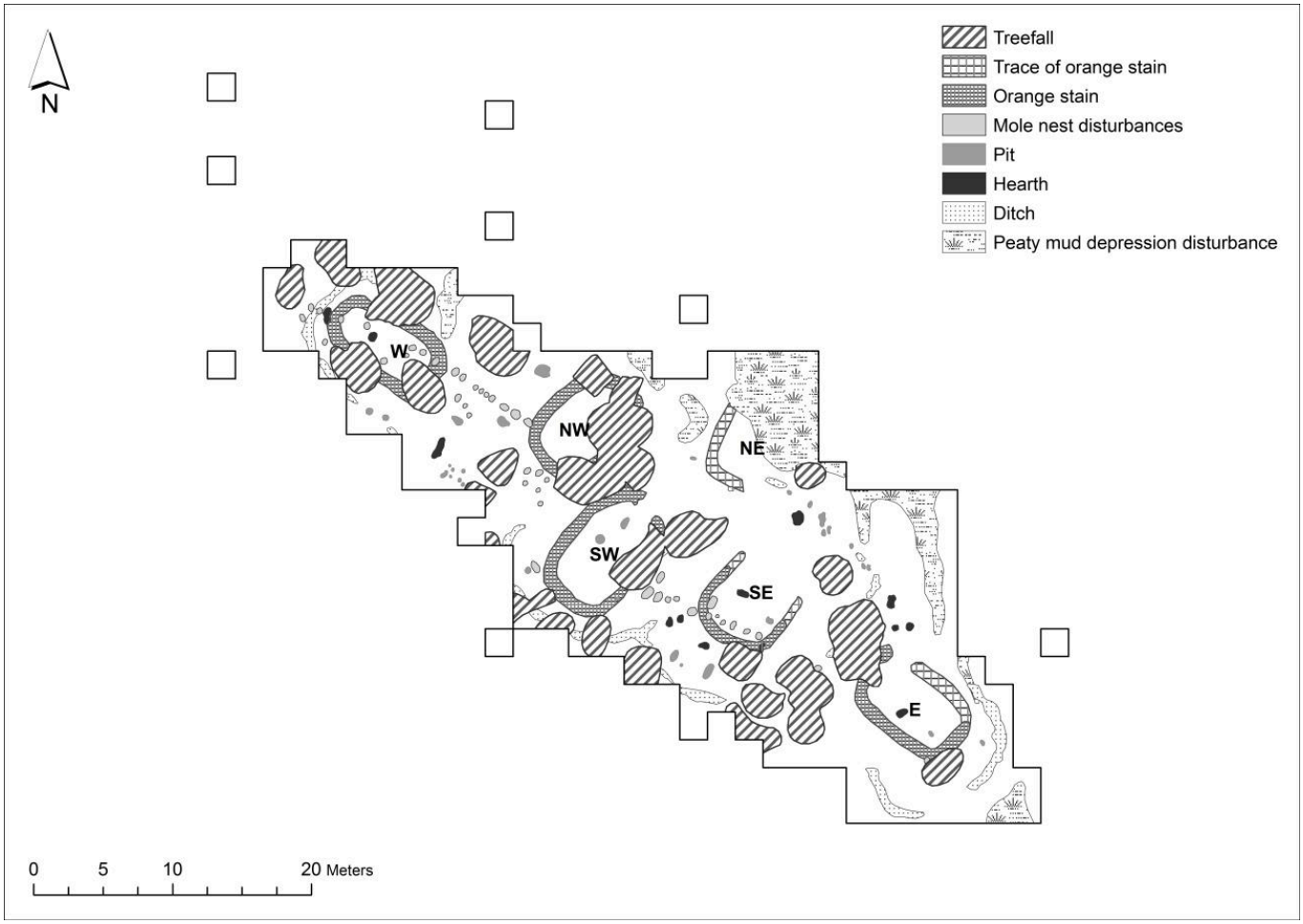

FIG 3. DIGITIZED PLAN OF THE EXCAVATION AT BERGUMERMEER S-64B. THE SUPPOSED HUTS ARE MARKED BY W, NW, SW, NE, SE AND E. FIGURE: FROM NIEKUS ET AL. 2018, P.950 MODIFIED AFTER NEWELL (1980: FIG. 3) AND CASPARIE AND BOSCH (1995: FIG. 1).

FIG 5. SOME OF THE EARLIEST HUTS RECONSTRUCTED AT ARCHEON IN THE EARLY 1990S. PHOTO BY A. DE HAAS AND L. WOLTERBEEK.

FIG 6. THE HUT IN POLAND UNDER CONSTRUCTION. PHOTO FROM OSIPOWICZ ET AL. 2015.

FIG 7. THE HUT IN POLAND IN ITS FINISHED STATE. PHOTO FROM OSIPOWICZ ET AL. 2015.

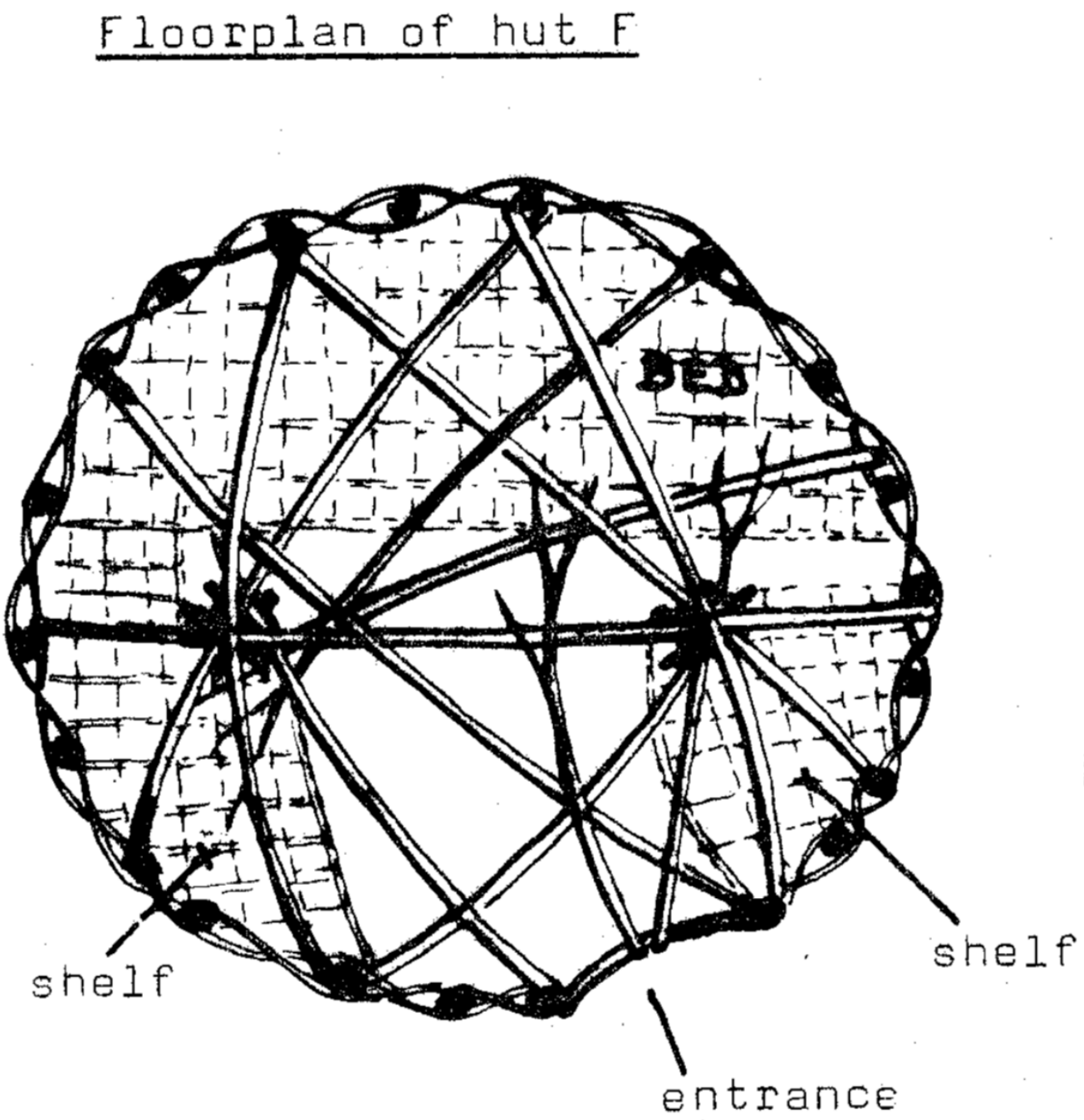

FIG 8. FLOOR PLAN OF HUT F. DRAWING FROM HORREÜS DE HAAS 1978, P.73.

FIG 9. PHOTO OF HUT F UNDER CONSTRUCTION. PHOTO FROM HORREÜS DE HAAS AND HORREÜS DE HAAS 1982, P.77.

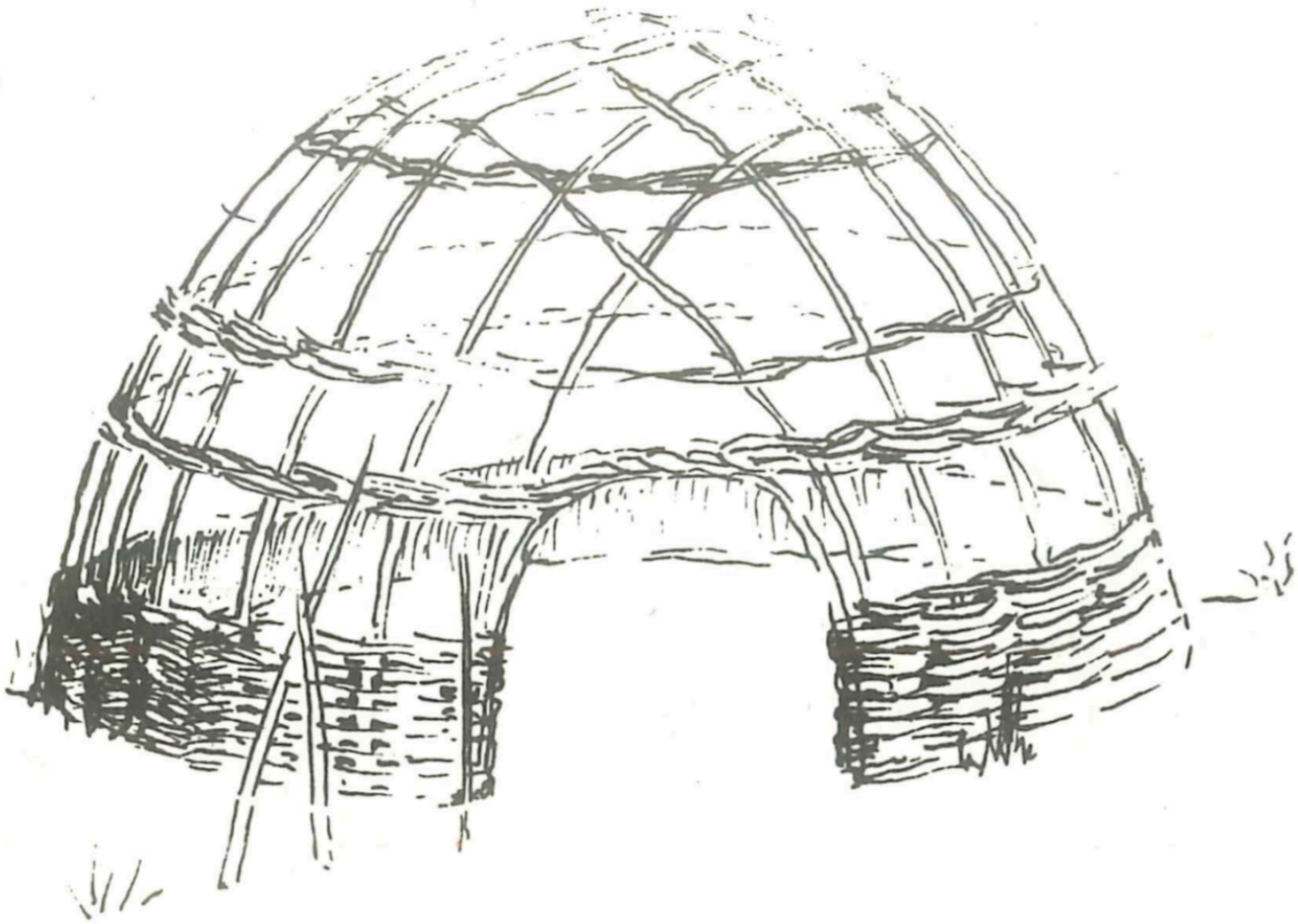

FIG 10. SKETCH OF THE STRUCTURE OF HUT F. DRAWING FROM HORREÜS DE HAAS AND HORREÜS DE HAAS 1978, P.72.

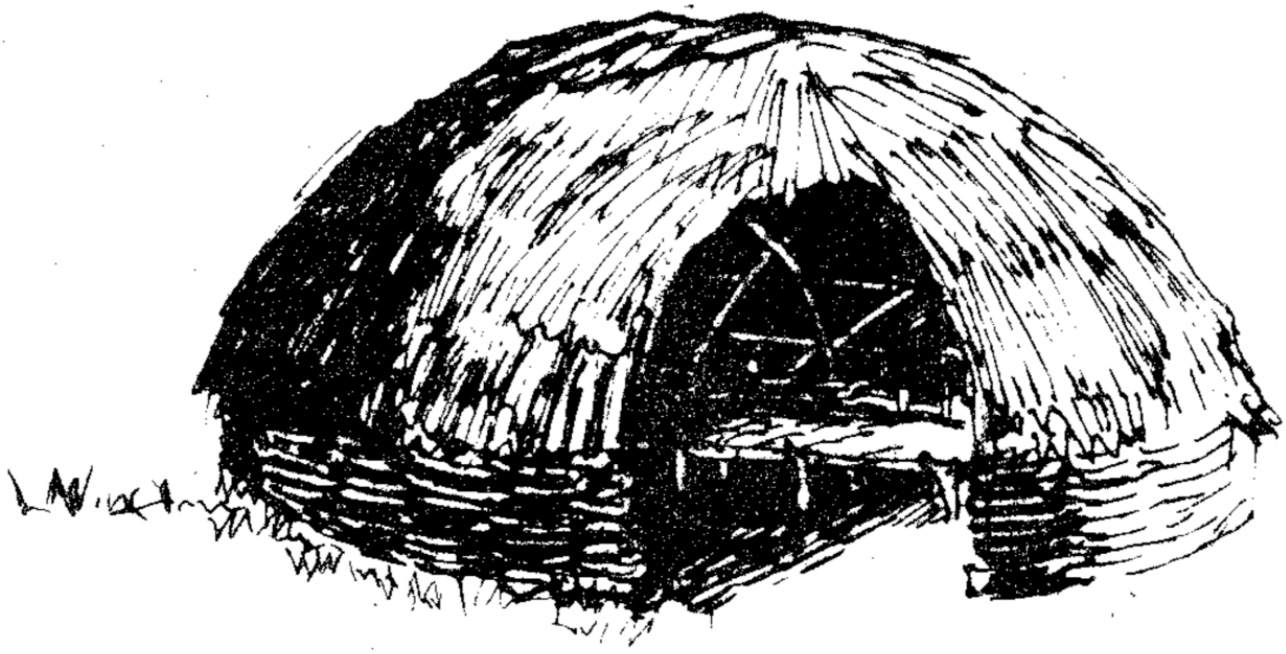

FIG 11. SKETCH OF HUT F WITH REED COVER. DRAWING BY HORREÜS DE HAAS 1978, P.73.

FIG 12. THE SHELTER FOR WATCHING BIRDS BUILT IN 1945. PHOTO FROM HORREÜS DE HAAS 2004, P.84.

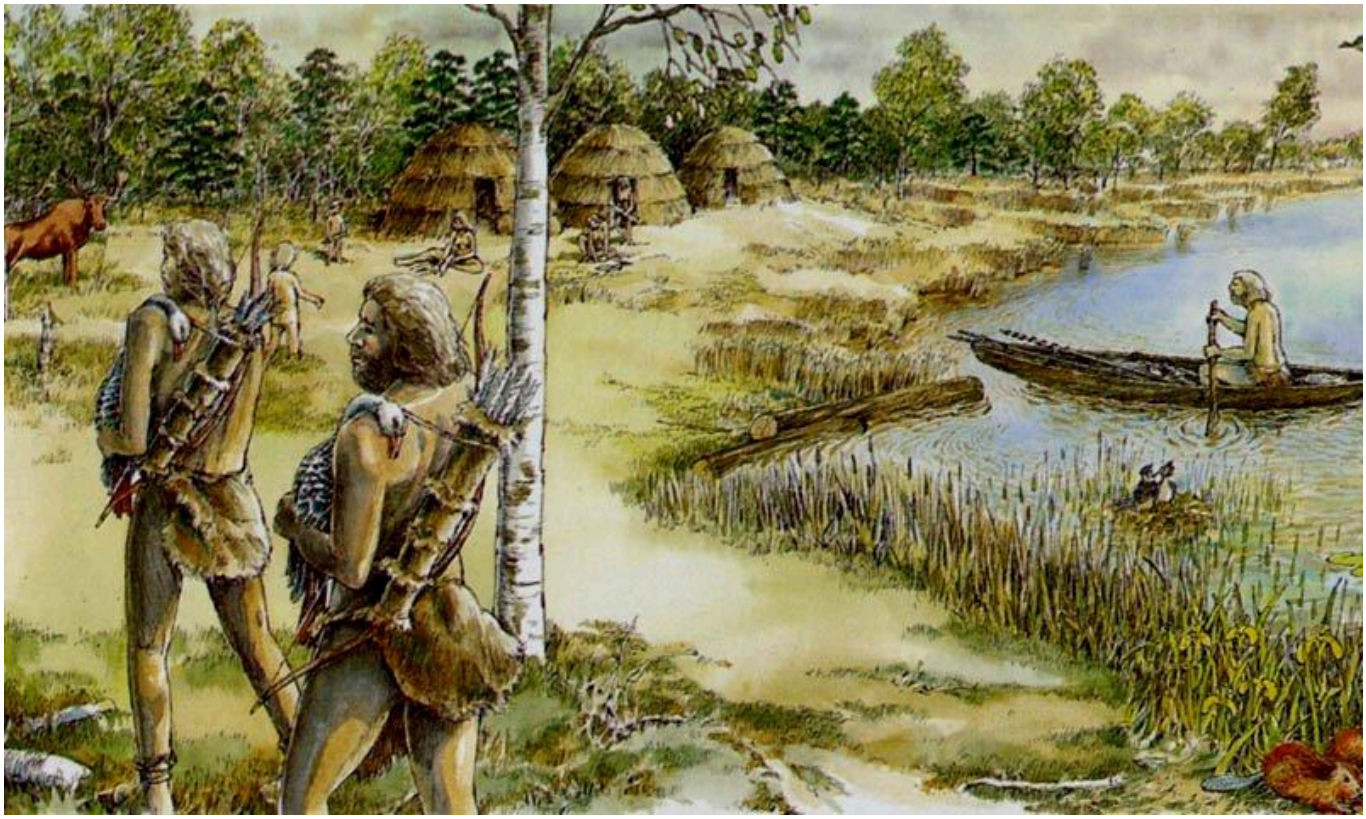

FIG 13. RECONSTRUCTION DRAWING OF THE CAMP AT BERGUMERMEER. DRAWING BY B. BROBBERS, FROM BLOEMERS ET AL. 1981, P.34.

FIG 14. THE USE OF MATS OF REEDS, AS OBSERVED IN SENEGAL, WAS APPLIED FOR EXAMPLE TO THIS RECONSTRUCTION AT PREHISTORISCHE NEDERZETTING SWIFTERKAMP. PHOTO BY YANNICK DE RAAFF

FIG 15. THE PLAN OF THE REMAINS OF A MESOLITHIC HUT EXCAVATED BY ALFRED RUST AT PINNEBERG WAS USED TO CREATE A VARIATION OF THE GENERAL CONCEPT AT PREHISTORISCHE NEDERZETTING SWIFTERKAMP. DRAWING FROM JELINEK 1974, P.226.

FIG 16. THE RECONSTRUCTED HUT AT SWIFTERKAMP, WITH ELEMENTS OF THE PLAN OF PINNEBERG MERGED INTO THE GENERAL BERGUMERMEER-TYPE RECONSTRUCTION. PHOTO BY YANNICK DE RAAFF

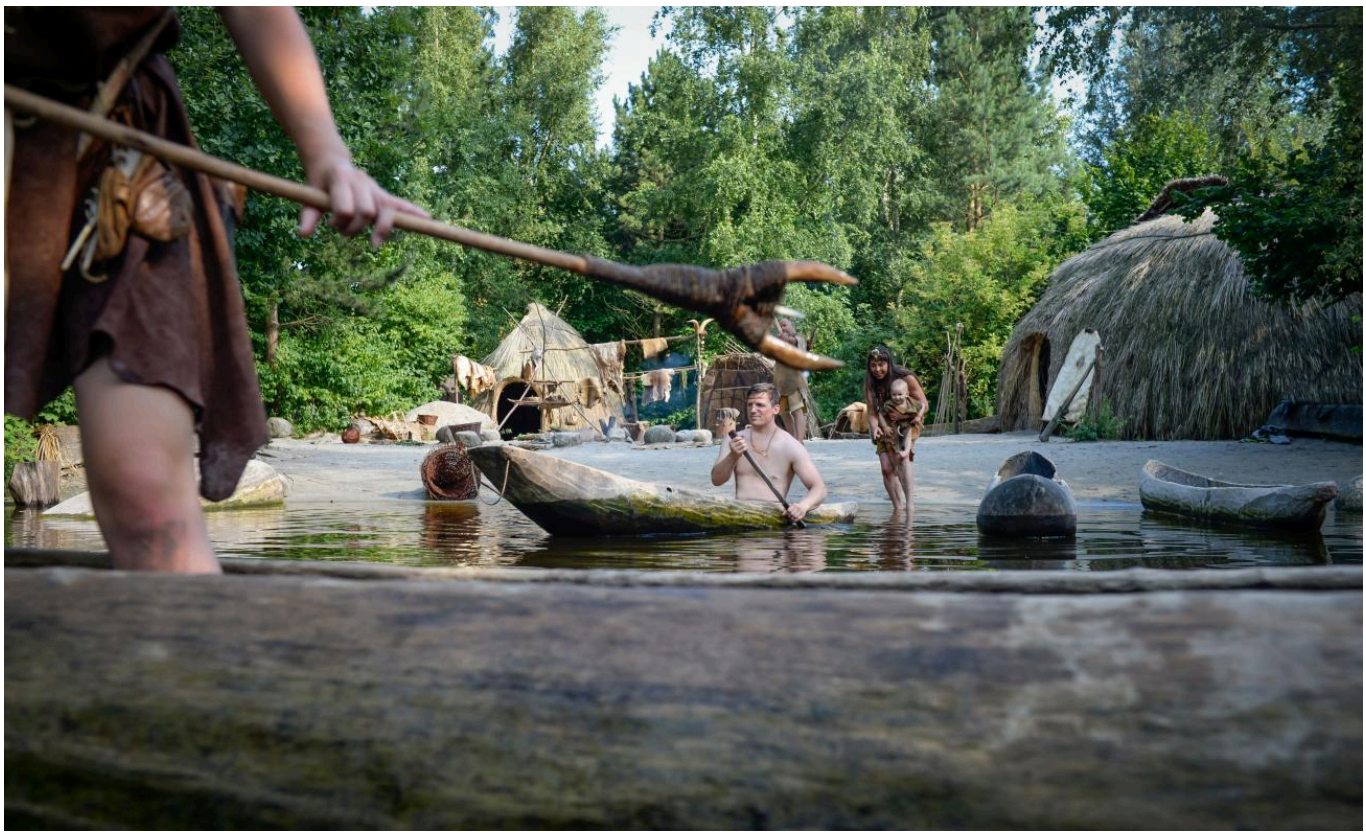

FIG 4. THE RECONSTRUCTED CAMP AT ARCHEON AS SEEN FROM THE WATER. PHOTO BY HANS DODERER.