[Experimental and experiential research in archeology](https://www.archeologia.uw.edu.pl/en/conference-the-past-has-a-future-2021/)

**Organizers:** Katarzyna Pyżewicz (Faculty of Archaeology University of Warsaw), Maciej Talaga (Faculty of Archaeology University of Warsaw), Roksana Chowaniec (Faculty of Archaeology University of Warsaw)

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Archaeological discoveries in the late 19th century influenced development of various research methods, including formation of the scientific basis of archaeological experiments. Over the following decades, original statements of experimental archeology underwent significant transformations. It was also the time when the idea of presenting outcomes of such experimentation to the broader public was born. Since then, issues related to experimental archeology have sparked serious interest in the literature, but usually remained limited to popularisation and interactive learning solutions. Whereas it has to be admitted that a proper scientific archaeological experiment – employing a number of methods, techniques, analyses, and theoretical approaches, and simultaneously firmly grounded in archaeological, iconographical, numismatic, and epigraphic source material – needs time to be performed, along with attention to details and scientific process to be implemented, which is impossible during shows for popular audiences. In effect, some archaeological practices commonly referred to as ‘experimental’ may be more precisely termed ‘experiential’, as they put lived experiences of the spectators rather than rigorous methodical experimentation to the forefront.

The aim of this session is to present best practices and investigate the importance of experiments in modern archaeology understood as a scientific discipline, and to bring together researchers from various thematic backgrounds – from the Palaeolithic to historic periods; from field archaeologists to museum experts – to improve quality of studies making use of archaeological experimentation as well as to better trace the methodological boundary between experimental and experiential approaches.

**Speakers and papers with abstracts:**

**22.03.2021 (Monday)**
**1st part (9:50-11.10)**

* 1. **Roksana Chowaniec** (Faculty of Archaeology, University of Warsaw)
	*Introduction*
	2. **Aidan O’Sullivan, Brendan O’Neill**(UCD School of Archaeology and UCD Centre for Experimental Archaeology and Material Culture (CEAMC), Dublin, (IE))

*Experimental Archaeology: Making, Understanding, Storytelling?*

Experimental archaeology can be defined as the (re)construction of past buildings, technologies, environmental contexts, and things, based on archaeological evidence, and their use, testing and recording as analogies, to create a better understanding of people’s lives in the past, and their relationships with buildings, things and material culture. Experimental archaeology has been a part of the archaeological discipline since its origins, the earliest antiquarians often carrying out practical experiments with ancient tools to discern their use. It boomed again in the 1960s and 1970s, as part of the interest in archaeology in seeking scientific, replicable results to understand past technologies. In recent years, some have wondered if it is possible to have an experimental archaeology that is both ‘knowledge-focused’ and ‘experience-oriented’, and if we can give more weight to experience, or the sensory and emotional aspects of how people engage with material culture? Can we think about the “phenomenology of objects, the ‘feel of things’, the experience of buildings? This lecture will explore the research projects, undergraduate and graduate teaching, and public engagement activities of a university facility for experimental archaeology at University College Dublin, Ireland. Through case studies of our own reconstruction of early medieval buildings, objects and technologies, we will investigate the many different ways that “making” helps with “understanding”, and how “storytelling” about the past can engage with both archaeological and historical evidence, but also with our own experiences. Attendees might be interested in exploring the work of CEAMC through the social media links below.

* 1. **Albin Sokół** (Archaeological Museum in Biskupin)

*Mapping the borderlands between science and popularisation. Changing the perception of experimental archaeology, on the example of the activity of the Archaeological Museum in Biskupin*

Experimental archaeology is a constantly developing field, and facilities engaged in it are constantly striving to improve its methods. The methods of popularising knowledge about the past that have grown out of it (e.g. Living Archaeology) often represent the main function of institutions at the intersection of science and tourism. This is also true of the Archaeological Museum in Biskupin. Soon after the discovery of the archaeological site in Biskupin (1933), its atypical nature forced researchers to use innovative methods to explore, and to document and analyse data. It was also the site of one of Poland’s first attempts at experimental archaeological research – one that has long remained part of the site’s research tradition. Over time, this innovative approach to verifying certain findings relating to how certain types of objects were created and used has proven itself to be of benefit to the education of students participating in archaeological excavations in Biskupin as part of Archaeological Training Camps. The further development of the Archaeological Museum in Biskupin, which became a successful tourist enterprise, brought experimental research results and, above all, more liberal experimentation with techniques for reconstructing historical objects and their use – and a reconstructed vision of life in the past – to a wider audience during events held there to popularise the subject matter.

From a modern perspective, now that experimental archaeology has for several decades been a well-established, widely accepted research tool with specific theoretical principles and recognised rigour, it is possible to trace the development of experimental archaeology in Biskupin and to consider whether the boundary between typical scientific conduct and popularisation was sufficiently clear, with an understanding of the fairly subtle differences in the meanings of related terms.

**Discussion**

**22.03.2021 (Monday)**
**2nd part (11:30-13.10)**

* 1. **Michał Pawleta** (Adam Mickiewicz University in Poznań)

*Open-air archaeological museums through the prism of heritage intepretation principles*

Over the last few years, the process of the revitalisation of existing archaeological reserves and open-air museums, and the construction of archaeological parks, copies or replicas of strongholds or settlements (the majority of which refer to the Middle Ages or to prehistoric times) has become more pronounced not only in Poland, but also across Europe and worldwide. Reconstruction sites are created, amongst other, to interpret and/or study the past. They involve not only reconstructed houses but also performance of past daily life providing a unique opportunity to interpret prehistory.

I propose to approach archaeological reconstructions as an interpretative presentation of heritage. According to The Ename Charter of 2008, drafted under the auspices of ICOMOS that seeks to establish scientific, ethical and public guidelines for the public interpretation of cultural heritage, interpretation denotes full range of activities intended to heighten public awareness and enhance understanding of heritage sites. In my presentation I will concentrate on strategies applied in interpretation of the past in archaeological open-air museums in present day Poland. I will argue that interpretation at heritage sites should not only enhance public understanding of the past, but also prove its relevance to present day society by addressing contemporary issues.

* 1. **Andrzej Ćwiek** (Adam Mickiewicz University in Poznań & Archaeological Museum in Poznań)

*Dragging pyramid stones or let us come back to a primary school*

How the pyramids were built is a recurring question in the Egyptian archaeology, engaging likewise scholars and amateurs. Among a number of issues, the most discussed is certainly the way of transporting large stones. There is no doubt that the method employed by the ancient Egyptians was dragging of heavy loads placed on sledges. However, the details of the procedure are somewhat unclear. Experiments made in Biskupin in 2001 and 2019, when an average 2-tonne block of stone was hauled on a sledge, revealed a bit in this respect. Being as much experiential as experimental, they resulted in important observations, including the necessary track preparation and ratio of the number of workers to the load weight. Most surprising results concerned, however, the way of levering the load to start moving or to turn. The effective method is surprisingly counter-intuitive proving that our contemporary theoretical reconstructions of an ancient technology are sometimes too sophisticated. Even graduated engineers are sometimes wrong, because we do not practice using simple machines. The observations on levering made in Biskupin not only enable understanding horizontal and vertical transport of stones at the pyramid building, but they also allow to explain some features noticed at the Cheops’ pyramid casing.

* 1. **Andrzej Wiśniewski, Magdalena Ciombor, Adam Kobyłka** (University of Wrocław)

*Learning through the experimentation*

This paper aims to show some advantages resulting from using an experiment during the study of archaeology. The experiment was a part of a course concerning the formation of flint artefact clusters at the archaeological sites. This course was a part of the Technology of archaic human: Theory and practice, which for more than a decade has been performed in the Institute of Archaeology of the University of Wrocław.

The experiment and education modify the classical academic teaching mode. On the one hand, students embody prehistoric humans (1), and on the other hand, they become researchers who obligate to organize the experiment, report, and interpret its results (2). In the first part of the experiment, they learn what conditions stay behind the diversity of lithic concentrations and how fast the spatial structures can appear. They became aware of what the flintknapping process looks like. During the second part of task, the students are involved in making the documentation and explaining the given spatial situation.

With this doubled role, the students also realize how important role plays in the filtration of data due to specific activity of prehistoric artisans and data collecting methods. The controlled manufacture of lithic blanks and the type of position of flintknapper were the basis of our observations. The collecting of the proper raw material and making the photographs and set of measurements of tools preceded the experiment.

At the same time, students acquired the basic knowledge of camps’ spatial organisation by studying the classical papers and preparing the presentations. Each flintknapping activity was recorded with a photo camera. The arrangement of objects was documented with the total station. The GIS data were used for creating the spatial maps. To capture the spatial situation the kernel density estimation was used. As a result, the dispersion of lithics and shape was recorded precisely. The experiment revealed that clusters’ size and shape depend upon the posture of flintknapper and handedness, range of motion, and orientation of the hand. The position of raw material was also of great importance. At the end of the experiment, the students examine the difference between the clusters and recorded activity.

* 1. **Katarzyna Pyżewicz** (University of Warsaw), **Witold Grużdź** (State Archaeological Museum in Warsaw)

*Experimental research, education and popularization of knowledge of the Stone Age*

This paper aims to present the issue of experimental archaeology and its possible application in the popularization of the Stone Age in Poland. In compare to the later periods, such as iron age and medieval times, it is still not so common in the space of public archaeology. Although it has to be aforementioned that the use of scientific experiment in the research of the Stone Age archaeology is applied quite often. The lack of “visibility” of it in the public space might be linked with a couple of factors that we would like to analyse in our paper. First of all, there is a huge role of historical re-enactment on the archaeological events and its publicity, in comparison to the popularization of knowledge of the Stone Age. Additionally, the school education system attributes some of the aspects such as palaeoanthropology and early tools production to the biology, and there is only the brief introduction of “beginning of man” to the history lessons. These aspects influence the perception and interest in the Stone Age by mature society. In our presentation, we would like to analyse these aspects and possible ways of changing the public perception on the subject of Stone Age.

**Discussion**

**22.03.2021 (Monday)**
**3rd part (14:30-16.10)**

* 1. **Bernadeta Kufel-Diakowska, Justyna Baron** (University of Wrocław)

*Erratic pebbles as tools – experimental tests and implication*s

Ball-shaped erratic pebbles without any preparatory processing are one of the most common finds at the Central European archaeological sites. Presence of abraded or flattened surface is often a main criterion for distinguishing between artefacts and geofacts and for classifying objects as handstones. The earliest handstones originate from the Neolithic contexts thus, they are associated with cereal processing. However, unworked erratic pebbles might be used for various purposes. While most of the functional studies on stone artefacts are focused on the objects made from siliceous rocks, use-wear analysis of non-flint materials is still in its initial stage. Due to the variety of rocks offered by deposits in Europe, every research project requires an individual scientific protocol and experimentally obtained reference materials.

We conducted a series of experiments with field-collected pebbles from SW Poland, selected according to the previous petrographic identification of archaeological finds. The experiments aimed at obtaining models of use-wear formed during the activities potentially performed with handstones, such as cereal grinding, pigment and grog processing, as well as extracting edible parts of grasses (reed). The results of the experimental tests were used to determine function of the handstones utilized by the community of early Iron Age settlement (7th century BC, so-called Lusatian culture) at Milejowice in SW Poland. The site yielded an impressive assemblage of stone artefacts: 63 objects of crystalline rock of which 74% were handstones.

* 1. **Alexander Otcherednoy** (Russian Academy of Sciences)

*Plano-convex “technics” in the Middle Paleolithic bifacial technologies of Eastern Europe*

* 1. **Witold Migal** (State Archaeological Museum in Warsaw)

*Flintknapping  and experimentum crucis*

Scientific discovery is one of the greatest pleasures of the scientist. For many archaeologists it is associated with finding interesting artifacts, stratigraphic relation or interesting units. Sometimes tedious, fair analysis of the data leads to sort out facts and considerations other than those already adopted. Experimental flint processing is one of the accepted scientific methods leading to the verification of old and building new hypotheses about societies using silica materials for the production of tools. At present, we can divide this research approach into experience and experiment. In the first case, it is rather about duplicating the flint methods and techniques already described in the literature. Gaining experience (and knowledge) about the morphology of the manufactured tools and  wastes,  facilitates the analysis and constructing of classification of materials obtained through excavations. It allows to organize impressions and build hierarchies. Flintknapping as a controlled experiment, we understand it to do with the repeatability of the results. Unfortunately, unlike, for example, physical experiments, it is impossible to construct identical apparatuses for carrying them out. Therefore, the human factor has a much greater influence on the results of such research. Researchers who use the experimental method in their practice primarily pay attention to the reproducibility of some aspects as research results. These are: determining the technology and method of processing the raw material, determining traces (sometimes microtraces) left on the products and determining the waste related to the method of processing. Finally, it is also the identification of the characteristic waste generated in the processing systems of different communities.  The presentation will discuss whether and what flint-making experiments can be crucial experiments (experimentum crucis) in the classical concept of a scientific experiment. Various examples of the use of such an experiment will be presented.

* 1. **Marcin Diakowski, Bernadeta Kufel-Diakowska, Tomasz Płonka** (University of Wrocław)

*Burins, blades and others – ornaments on bone and antler artefacts from the experimental perspective*

As a part of the NCN-funded project “The Mesolithic art in Poland: the social and ritual meaning of artefacts in the light of their biographies” (UMO-2018/29/B/HS3/01162), we conducted a series of experiments related to ornaments observed on bone and antler artifacts from the Mesolithic. Analyzed implements come from the sites Niezabyszewo, Szczecin-Podjuchy, Police, Pułtusk, Stolec, Trudna and Woźniki. They represent a variety of artifact types and ornamentation. In order to determine the technique of making particular type of ornament, including type of tools, type of gesture, we create a comparative database of technological traces. Moreover, we analyzed variations in morphology and abrasion of ornaments. In many cases we were able to recognize the moment of damage to the tool, its replacement, interruption of work and change of the  an author of ornamentation.

**Discussion**

**22.03.2021 (Monday)**
**4th part (16:30-17.50)**

* 1. **Małgorzata Winiarska-Kabacińska** (Archaeological Museum in Poznań)

*Atypical traces of plant processing on selected neolithic sites from Poland*

In the course of traceological research on lithic inventories from several Neolithic sites from Poland atypical traces were identified on edges of truncation and burins. These traces were interpreted as a result of specific plant processing. During presentation that enigmatic traces will be shown and discussed. The problem whether and to what extent identified activities and settlement context contribute to better understanding the economy of different Neolithic groups.

* 1. **Michał Paczkowski** (State Archaeological Museum in Warsaw)

*Knapping and breaking – reconstruction of stone processing techniques at the Magdalenian site Ćmielów 95 “Mały Gawroniec*”

Stone (non-lithic artefacts) are a characteristic element of Magdalenian inventories. 1028 artefacts of this type comes from site Ćmielów 95 “Mały Gawroniec”. Slabs are the second most numerous techno-typological group in the collection. They are characterized by the presence of two parallel surfaces and strictly defined proportions, that is, at least two-fold smaller thickness than the greatest width. Sandstone specimens amount to 70%. It also seems that chalcedonite arrived at the site in form of slabs and its present chunk forms were shaped by use or post-depositional processes. Stone slabs belong to one of the most common categories of artefacts at Magdalenian sites, and their presence is mainly connected with relics of different types of structures. An interesting part of this group are slabs with negatives of corrective removals visible on their edges.

Among techno-typological group of wastes there are also a two category of wastes. One of them are 31 flakes showed parallel distinctive features to those noted in flint material. The second consists of 14 fractures, which are fragments of slabs, mostly of long crescent-shaped or triangular forms. Eight of these items are natural edges of slabs, which show polished or worn primary erosion surface. Distinctive features of these refuse pieces include a slightly arched shape of at least one edge and a specific fracture characterized mainly by the absence of the bulb and butt, features characteristic of flakes. A lateral section of the fracture surface indicated that the angle between this surface and the flat portion of the specimen is close to the right angle, ranging from 75° to 85°.

Refit of plate and fracture was the starting point to reproduce this process experimentally. A fine-grained sandstone with distinct lamination was used for the experiment. Slabs were obtained from it, which were used for a series of experiments. One of main question was, is this it is possible to obtain such waste using a knapping technique. A series of experiments has shown that it is necessary to use a different processing technique. The intention of fracturing technique was to break the slabs in a controlled manner in order to correct or shape or divide it.

* 1. **Grzegorz Osipowicz, Justyna Orłowska, Justyna Kuriga** (University of Toruń)

*The importance of the experimental archaeology in the traceological studies conducted in the Institute of Archaeology NCU in Toruń*

Experimental archaeology has a long tradition in the Institute of Archaeology, Nicolaus Copernicus University in Toruń dating back to the early 1950s. Over the years, employees and students of our unit have made hundreds of archaeological experiments related to various aspects of human life in different periods including prehistory. Among them, we can mention works related to the processing of various organic and inorganic materials such as leather, bone, antlers, meat, wood, ceramics, shells, amber, stone, silica plants, etc. with tools made of materials such as flint, stone, bone or antler. The tools used in the course of the experimental works and all the related documentation are part of the reference collection kept at the Laboratory of Traceology of the IA NCU. In our presentation, we will demonstrate the most interesting and important recent examples of our experimental works connected with traceological studies of different kinds of prehistoric materials. As an example will serve our works associated with varied technological aspects of manufacture different kinds of prehistoric osseous artefacts from Late Palaeolithic and Mesolithic from Poland; and functional studies, like those connected with Bronze Age bone “knives” from Bruszczewo (Poland), seal bone scrapers and animal tooth pendants from the Subneolithic sites in Šventoji (Lithuania).

**Discussion**

**23.03.2021 (Tuesday)**
**1st part (9:50-11.10)**

* 1. **Barbara Wielgus** (Adam Mickiewicz University in Poznań)

*Textiles tools – between production and using. The potential of experiments with spindle whorls and loom weights from the Neolithic*

The potential of experimental research is based on the interpretation of the stages of “a tool’s life” – from its production, through use, repair, function changes, abandonment, and post-deposition processes. Archaeological experiments are a way to trace and describe them. What if the stages of the “biography of things” are not cause-effect, but are linked together in various configurations? Is it possible that “unfinished” tools were used? Is the production and usage stage determined by contemporary definition and causes interpretational difficulties? Are they finished products, semi-finished products, or something else?

According to many researchers, weaving tools made from clay were first fired and then used. In my speech, I would like to present a different position, arose from my experimental studies carried out in early 2021. I used replicas of Neolithic weaving tools in them. The transition to spinning and weaving with the use of “unfinished tools” shows that the prehistoric manufacturer might have thought about the function that the tool is to perform and consciously decide about the course of production and tools.

* 1. **Alexander Vashanau** (National Academy of Sciences of Belarus), **Anna Malyutina**  (Russian Academy of Sciences), **Maryia** **Tkachova** (National Academy of Sciences of Belarus)

*Experimental-traceological study of the Mesolithic-Neolithic antler cutting tools from Smarhon quarries (North-Western Belarus)*

Our report will present the results of the experimental and traceological analysis of the chisels, axes and T-shaped axes made of antler (Alces alces L., Cervus Elaphus) from the Smarhon quarries (North-Western Belarus). The findspot of bone and antler artefacts was detected in the late 1960s during sand and gravel quarrying. It is located in the floodplain of the right bank of the Vilija River, near the Michnievičy village (Smarhoń Region, Belarus). Recently, bone artefacts in a new quarry located downstream of the Vilija River near the village of Kliedzianiaty have been discovered.

The available data allow us to link the complex of cutting antler tools on the territory of North-Western Belarus with the Mesolithic – Early Neolithic period.

At the first stage of the work, the most expressive and numerous groups of artefacts made of antler were selected for a techno-morphological analysis. Analysis of the technological traces recorded on the items allowed us to highlight the differences in the manufacturing processes of the tools. According to the technological and morphological features, the whole analyzed material was divided into conditional categories of instruments. In addition, on the basis of the macro signs of utilitarian wear observations on the functional using of objects were obtained. A series of experiments were conducted to reliably verify the traces of use recorded on artefacts. It was found that the choice of raw materials, a specific part of the elk antler, was deliberate for the manufacture of tools of a different type. Established standards for the manufacture of some types of tools with a set of certain characteristics indicate differences in their functional specialization.

* 1. **Barbara Wielgus, Monika Stelmasiak** (Adam Mickiewicz University in Poznań)

*One tool – multiple functions? Could bone awls be used to decorate pottery?*

The following topic was inspired by some insufficiency left after the already conducted series of experiments on bone and antler tools, vastly known in literature as ‘awls’ and needles. Those experiments enabled to create a data base for traces left on the tools surface by working on hides, linen and wool. The most important however, was to check what type of traces are left on the surface of stiluses used for writing on wax tablets, because these are often mistaken for needles. The idea to conduct an experiment to check traces left on such tools by ornamenting pottery came to life after series of questions on various conferences, whether the results received on stiluses might be the same on tools used to decorate pottery. We would like to present the general frames of our experiment and the results of the use-wear analysis.

**Discussion**

**23.03.2021 (Tuesday)**
**2nd part (11:30-13.10)**

* 1. **Paul Bardunias** (Department of Biological Sciences Charles E. Schmidt College of Science, Florida Atlantic University)

*Leveraging reenactors and historical martial arts practitioners to investigate massed hoplite combat*

Experimental archaeology cannot prove the ways in which historical combatants fought in mass combat, but it can show what was possible and provide context for the interpretation of texts and images. Testing weapons or armor can be complex or limited by the cost of making accurate recreations, and testing how groups of warriors interact on the battlefield multiplies this cost by the number of combatants. In addition, any sufficiently violent recreation of combat requires extensive protective gear. One way to make testing large groups feasible is to leverage the reenactment community and practitioners of Historical European Martial Arts, members of which bring their own more or less accurate recreations of weapons and armor and/or protective gear. I ran a series of tests with a large group of hoplite reenactors at the 2015 Archeon Dromena reenactment event at the Marathon battlefield in Greece and tests with groups of combatants in full Historical European Martial Arts protective gear at the 2019 The Western Martial Arts Workshop (WMAW) in Racine, Wisconsin. We tested how men formed into groups, used weapons, and gathered data on the crowd forces involved in othismos. Experiments must be carefully designed to allow useful interpretation of the data.

* 1. **Miente Pietersma** (Rijksuniversiteit Groningen, Faculty of Arts)

*Experiencing European Martial Arts of the 16th century. Experimentation and Reading as Two Sides of the Same Coin*

This paper will discuss how experimental analyses are necessary to understand the manuals for physical exercises which first emerged in Italy and Germany between 1400 and 1550. Generally lacking a straightforward body of text, these sources instead contain series of brief instructions for executing bodily techniques, sometimes accompanied by illustrations. The historian is then presented with a challenge, as a traditional textual analysis is insufficient to comprehend their form and function. The paper considers these brief instructions as guidelines for experimentation, however, which readers were supposed to enact as part of the reading process. The use of experimental analyses on these sources is then inextricably bound to their historical background, rather than a necessary evil caused by our ignorance of practices ‘as they really were’. Such a use of experimental methods in textual analysis directly touches upon a crucial epistemological debate in the Humanities. New scholarship has in recent years begun to criticise the Linguistic Turn’s sharp divide between texts and the material world, instead analysing the interaction between experiences and linguistic representations. The emerging discipline of Experimental History has applied this perspective to the study of ‘learning by making’ in the 15th and 16th centuries, focusing on subjects such as painting and metallurgy. Its potential for studying the history of ‘learning by doing’ has also been noted however, the difference being experimentation with the body rather than the material world outside it. Departing from a project at the University of Bern that studied the 16th century fencing culture of the Swiss town of Solothurn, this paper will consider the possibilities, challenges and requirements of such an experimental approach.

* 1. **Daniel Jaquet** (University of Bern)

*Experiencing European Martial Arts of the 16th c.: Capturing and Displaying the Experience in a Museum Context*

The fight books, a corpus of technical literature appearing in Europe in the 14th c., contain records of martial arts systems. Following the embodied turn in historical studies, new research developments arose in the field (see the paper by M. Pietersma). By focusing on the interpretation of obscure technical terms and notation of movements in the original sources, theoretical hypotheses are tested physically. The results of these experiments shed new light on the interpretation of primary sources. The documentation process of these interpretations, which are reconstructions of embodied knowledge by expert martial artists based on the study of fight books, requires invention of new methods. Motion capture of the experiments produces datasets which can be used for research purposes, but also for public outreach initiatives. This paper is presenting the exploration of a new method for documenting reconstructions of embodied knowledge, namely the active motion capture in 4D (videogrammetry), as opposed to previous existing technologies with passive markers. The output presented comes from a case study regarding martial arts documented in an urban context in 1546 Switzerland, correlated with the corpus of the fight books. This research will be disseminated to the public through an exhibition project in a museum located in Solothurn (Museum Altes Zeughaus) in 2022, in connection to a research project in Medieval History at the University of Bern. Major issues regarding the documentation methods will be discussed in the light of previous similar initiatives in museums. These new datasets indeed pose, on the one hand, new challenges for both their use for research and their curation. On the other hand, they open up new potential for communicating research about embodied knowledge.

* 1. **Maciej Talaga** (University of Warsaw)

*Getting Medieval on the Body. Preliminary Results of an Autoethnographic Study on Late-Medieval Fitness Regimes*

Auto-ethnography defined as using researcher’s own body and participation to investigate studied practices has already been implemented and validated in anthropology and ethnography. New strands in the theory of history and archaeology, such as the so-called ‘Experimental History’ or ‘Embodied Historical Research’, open up avenues for developing auto-ethnographic research frameworks for studies of the past. However, so far they have remained mostly theoretical possibilities with few committed case studies to back them up. Therefore, the aim of the present paper is to outline one such study which is already underway and to offer its design and preliminary results for critique.

The said study is focused on late-medieval views on physical exercise as a part of both general personal healthcare (regimina sanitatis) as well as maintenance of the public persona of a fit „upright” man inherent to that period’s ideas on masculinity and courtliness. By narrowing down the scope to late-medieval Germany, it was possible to approximate the domains of physicality historically connected to social standing and identify a range of specific workouts or fitness regimes aimed at developing the ideal body. This then served as a basis for designing a prolonged study in which a single researcher adheres to a historically-informed fitness regime for the period of 12 months and periodically tracks the changes in select physical traits against a control group. In the present paper, results of the first 5 months of the project will be critically evaluated.

**Discussion**

**23.03.2021 (Tuesday)**
**3rd part (14:30-16.30)**

* 1. **Bartłomiej Walczak** (Association for Renaissance Martial Arts ARMA-PL, independent scholar)

*Medieval and Renaissance Fightbooks as Notes From Experiments in Martial Arts – How to Replicate Them and Why?*

Fight-books contain written and pictorial material that purports to describe observations of period combat as well as advice on how to improve one’s personal fighting skills. Regardless of the actual source of recorded teachings – including a possibility that they are pure fiction – one can look at the content as notes, that attempt to distill author’s generalised thoughts on performed or observed repeated experiments in the matter. Considering this point of view, modern researchers can try to replicate described experiments to find out if their results will parallel the original ones. Such replication requires embodied research, and if a properly rigorous self-correcting methodology is applied, the results can serve as an important proof positive, despite the fact, that conditions and contexts cannot be faithfully replicated. Both competitive and cooperative approach is required to discover limitations and possibilities of offered advice and converge towards the most likely interpretation of the material. Regardless of the outcome, the process of replication itself informs our understanding of the content, often revealing insights, which at the first sight were not apparent. Seen from this light, embodied research can serve as one of the important tools that supplements paleography and critical textology apparatus in discovering the meaning and deepening our understanding of pragmatic literature and assessing their value, possibly opening new avenues of research in numerous additional scientific disciplines.

* 1. **Jerzy Miklaszewski** (independent scholar)

*Influence of the grip development on handle construction in early modern Polish and German sabres and broadswords based on the contemporary fencing sources*

Broadswords and sabres are a well-known weapons of the early modernity. Specifically, in the region of eastern Europe, these weapons’ designs are strongly connected to their special asymmetrical handles. How important these would be seen by the wielders themselves can be seen in the fact that many blades of foreign origin were re-hilted into a more recognizable, native handles and guards.

Handle construction, its length, curvature, and level of asymmetry has been dealt both by the contemporary users in examples of G. Marey-Monge or G. Le Marchant and M. Ivanowski. Nowadays, the issue arises of diminishing handling capacity among modern practitioners, especially due to the use of a developed protection gloves. This has a major impact on the ability to reconstruct a period-proper fencing technique in the tournament environment.

This study aims to present the problem of the handle development in the light of the contemporary sources and later analysis of users in regards to modern interpretations. To test and present different aspects of grip and its influence on the fencing techniques a variety of both period originals and proper reconstructions of weapons were analysed. This analysis was compared to the explanations given by contemporary users and later interpreters. Results have shown that not only many aspects, like the placement of thumb, depth of thenar position on the backpiece, finger alignment and many others are often neglected, causing many misinterpretations in the modern HEMA and often producing many untypical techniques.

Result suggest that the study of fencing with sabres and broadswords should be interpreted with much more focus on the subject of grip. This would influence much better possible interpretation of less known schools of sabre fencing, like German, Austrian, Hungarian and Polish styles of the early modern period.

* 1. **Paolo de Vingo, Laura Vaschetti** (Università degli Studi di Torino)

*The Project for the Application of the analytical Method to Garnets in early medieval Jewelry in Italy*

The aim of this speech is to propose an analytical research on garnet samples from alpine deposits, to be compared with analysis performed on garnets used for the goldsmith technique of cloisonné in the early Middle Ages in Italy (Lombard area), to verify the provenance of the gems.

* 1. **Ruadhán MacFadden** (independent scholar)

*Crooks, Hooks, Tips, and Taps: Reconstructing the Techniques of an Extinct Irish Folk Wrestling Tradition*

During its heyday in the 1800s, the national wrestling style of Ireland – Collar and Elbow – was practiced on three continents by some of the most famous athletes of the age. Due to a combination of social and political factors, it rapidly declined in the early years of the 20th century, to the extent that it is now entirely extinct both in its homeland and abroad. When researching Collar and Elbow, a significant hurdle one encounters is that the style was never recorded visually in any meaningful way. No technique manuals were ever compiled, and Collar and Elbow had faded into sporting obscurity before video technology could have realistically captured the technical intricacies of a bout. The small handful of images that do exist – less than a dozen in total – are very basic posed illustrations and photos, depicting little more than static stances and grips. The actual bodily movements and techniques of Collar and Elbow are thus “invisible”, surviving only in the realm of words. I will demonstrate how, using a combination of first-hand descriptions of 19th-century Collar and Elbow bouts, an old Irish-language dictionary of wrestling terminology, and personal experimentation with the relevant movements, I am attempting to reconstruct the core techniques of Collar and Elbow and commit them to the visual record. In order to illustrate this method and its associated challenges, I will show how I applied it to one particular technique.

* 1. **Monika Stelmasiak** (Adam Mickiewicz University in Poznań)

*Needle? Awl? Stilus? An experimental approach to reinterpreting tools made from bone and antler from the early Middle Ages*

Stiluses are a part of the writing set which also contains wax tablets. They usually have a typical shape: spiky part used for carving in the wax and the counter end formed in the shape of letter ‘T’ or ‘Y’, used for erasing. Although they have circa 4 thousand years of tradition, they appeared in Poland together with highly educated representatives of the Church in the late 10th century. There is a great number of these writing tools made from different kinds of metal but also from bone and antler. Regrettably, there are no findings of the wax tablets together with styluses from Poland, their connection is however undoubted. Although the metal exemplars are rather unquestionable, for years there were a serious of interpretational issues with those made from bone and antler. That was resulting from their morphological similarity to the tools connected with sewing and tanning such as perforators, awls, and needles. I had conducted a series of experiments to provide a way of distinguishing them through the use-wear analysis. Results obtained through this method enabled to apply it on genuine artifacts.

**Discussion**

<https://www.archeologia.uw.edu.pl/en/conference-the-past-has-a-future-2021/>