

EXPERIMENTELLE ARCHÄOLOGIE

in Europa

Bilanz 2011



EXPERIMENTELLE ARCHÄOLOGIE IN EUROPA
BILANZ 2011
Heft 10

Herausgegeben von der Europäischen
Vereinigung zur Förderung der
Experimentellen Archäologie / European
Association for the advancement of
archaeology by experiment e. V.

in Zusammenarbeit mit dem
Pfahlbaumuseum Unteruhldingen,
Strandpromenade 6,
D – 88690 Unteruhldingen-Mühlhofen



EXPERIMENTELLE ARCHÄOLOGIE IN EUROPA BILANZ 2011



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OLDENBURG

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Bibliografische Information der Deutschen Bibliothek

Die Deutsche Bibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet abrufbar unter:
<http://dnd.dbb.de>

ISBN 978-3-89995-794-5

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Gedruckt bei: Beltz Bad Langensalza GmbH, D-99941 Bad Langensalza

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Archaeology by experiment and education – the case of Archaeological Museum in Biskupin, Poland

Anna Grossman, Wojciech Piotrowski

One can say that first archaeological popular education in Biskupin realized Walenty Szwajcer, discovering in 1933 on Lake Biskupin peninsula timber relics – as he thought of ancient lacustrine village – during school trip with his pupils. Thank to Mr. Szwajcer and his effort, prof. Józef

Kostrzewski, eminent archaeologist and scholar from Poznań University, turned his attention to Biskupin. Kostrzewski initiated and directed the research there until the break of the war, and taught young archaeologists not only field techniques and documentation methods in wetland environment. From the first excavation season in 1934, showing round the excavations and introducing into construction problems of the settlement from early Iron Age was one of main tasks for young members of the expedition. Parallel was carried out intensive propaganda of Biskupin excavations and it resulted in great social interest as well as growing number of visitors at Biskupin site (Fig. 1). In 1937 the Department of Education of Polish government ordered



Fig. 1: Biskupin 1935. Youth from Żnin grammar school on a bicycle trip. The card from a private album.



Fig. 2: Biskupin 1937. The expedition carpenters building a fragment of the breakwater reconstruction. Photo Biskupin Museum Archives.

to organize lectures on Biskupin in every school, so it was motivation for teachers to organize trips to Biskupin (RAJEWSKI 1938, 10). According to this order Polish Radio broadcasting in Poznań gave regular information on excavations results. Due to such activity of expedition members and Dr. Zdzisław Rajewski, prof. Kostrzewski's assistant, Biskupin got fame on a vast scale, and name of small village Biskupin found a place on whole Poland maps.

Archaeology by experiment and education activity were introduced before Word War II. Important fact was erecting in full scale replicas of a fragment of discovered constructions – two huts, part of transverse street and ring road, rampart and breakwater. Reconstructions works were carried out using tools similar to the ancient ones (Fig. 2). Within experimental project and for exposition use there were performed some replicas of tools and goods from a differ-

ent raw materials. Another experiments were carried out under curation of Dr. Rajewski and his colleagues – mostly joined with wood elaboration and there was also a kind of happening, simulated attack on the fortress, and enemies were treated by clay balls thrown by defenders (PIOTROWSKI 1998, 99-100).

After the war, due to political transformation, archaeological objectives radically changed. New form of education in Biskupin were Archaeological Training Camps for students of all Polish archaeology, university chairs, organized with breaks in Biskupin between 1951 and 1964. On the Camps were introduced daily round field techniques, methodology and even lectures on Marxist philosophy. New didactic theme were experiments under curation of chosen specialists – smoking food, bone and horn elaboration (also using softening techniques with natural ac-

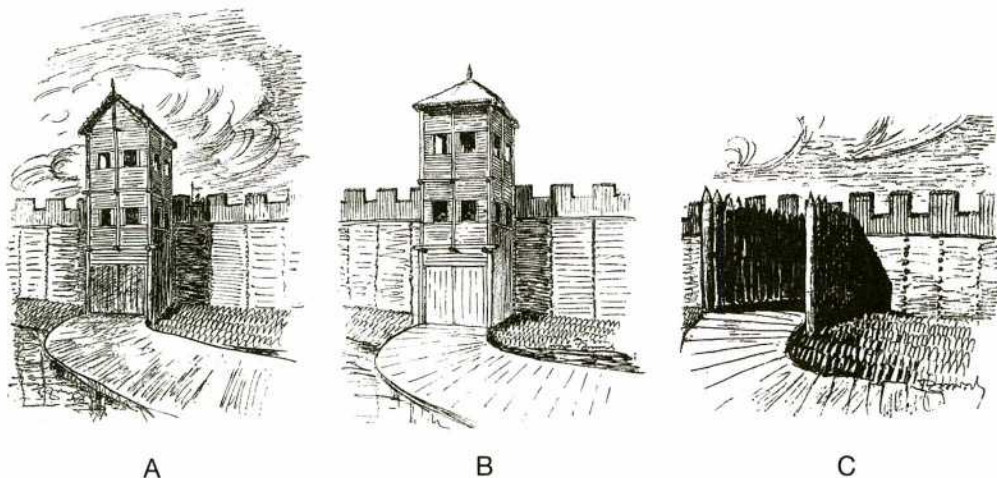


Fig. 3: Three reconstruction proposals of an upper part of the settlement entrance tower (drawings by T. Żurowski 1950): A – saddle roof (realized in 40tieth-60tieth of XX c.), B – hip roof (realized from the end of 60tieth of XX c. until nowadays), C – entrance without upper platform (never realized).

ids), pottery, distilling wood tar and pitch, weaving and spindling, casting bronze objects on lost wax method. In 1956 there was an experiment – the first one in European archaeology by experiment - with burning a replica of a small hut with a full equipment. Well marked and preserved remains wait for archaeologists sedimentation studies. The Camps became a practice range for the generation of Polish archaeologists (GROSSMAN 2005, 269-273; RAJEWSKI 1957, 8).

First among others we would like to point a little bit longer on one aspect of Biskupin experimental archaeology, but very important to the Museum policy – building activity, and on one aspect of education – museum lessons. As we have already mentioned, during the first seasons were erected replicas of the fragment of original constructions which are clear example of a gift of former carpenters. Reconstruction research (conducted by Dr. Z. Rajewski and T. Żurowski) was accomplished by a vast publication by the architect Tadeusz Żurowski in 1950 (ŻUROWSKI 1950). So it

was possible to reconstruct not only the layout of the settlement but also interior and building techniques of houses and rampart. Detail study enabled to describe methods of protecting structures against sinking in wet ground and preservation against humidity. There were proposed different versions of to be reconstructed settlement building complex – from walls, roofs until the entrance tower (Fig. 3). For reconstruction studies university students directed by Dr. Włodzimierz Szafrąński tried to calculate an amount of timber used for the settlement building purposes. According to approximate calculation – we have to remember it was done more then 50 years ago – for 105 huts in 13 rows Biskupinians needed 3300 cubic metres, for streets and bridge – 350 cubic metres, for defence wall and the entrance tower – circa 1870 cubic metres. Altogether circa 6000 cubic metres had to be used for erecting the settlement – and Szafrąński suggested that 16 hectares of forest had to be cut out. These calculations are under discussion until now.

After all this busy research and many projects proposals, on the beginning of 70ies a new reconstructions complex set place on Lake Biskupin peninsula – two rows of huts with transverse street and a fragment of ring road, rampart, entrance with its tower and breakwater. Numerous visitors, among them school youth, were satisfied with „new” Biskupin. Growing number of school trips was also a result of a text on Biskupin put in every hand-book of history for grammar school. A kind of defect was the situation when organized groups were not longer guided by the expedition members but guides from the Polish Tourism Organization.

In 80ies of the last century there was come back in Biskupin to a selected actions on education based on experimental archaeology. In 1985 in Museumsdorf Düppel in Berlin Zehlendorf was presented the exhibition „Biskupin ein polnisches Pompeji”, which has initiated a long lasting cooperation between Biskupin and this institution. Also partly in cooperation with Museumsdorf Düppel there were initiated in Biskupin experimental fields of prehistoric plants and continuing stock breeding as well presentations of old crafts techniques (PIOTROWSKI, ZAJĄCZKOWSKI 1991, 137). Now within Biskupin reservation are bred Polish Ponies, so called Tarpans, longhorn goats, flock of heath sheep and Red Polish cattle – species close to these from prehistoric Biskupin. Most of plant species – especially wheat and oleaginous – grow on fields of unspoiled soil. Our colleagues from Düppel built in the end of 80ies two pottery kilns and baking oven, which still serve during festival events. There have been continuing experiments with weaving and spindling, dyeing textiles, pottery, and wood tar and pitch distilling. In former years such experimental archaeology was incorporated into educational programme, but –as we realize now – not on satisfactory level. Experimental archaeology quarter was also equipped in 80ies and 90ies

with new replicas of household buildings erected by our specialized carpenters – barns, stables, sheep shed and hayrick.

At last in 1994 were initiated new and regular education activity – it means museum lessons. First lessons were devoted to minting coins, making clay pots, weaving on mini loom and making ornaments based on Lusatian culture motives. Growing number of visitors as well as interest in educational projects made a problems for Polish Tourist Organization and its guides, spending time at Biskupin only in spring-summer season and not properly prepared for a new educational challenge. We have decided to create our own group of education and popularization specialists – most of them Biskupin archaeologists and qualified historians.

Biskupin Museum as culture institution of differentiated substantial character joins visual elements with spiritual emotions – and this is possible by immediate contact with relics of the past. Museum creates exceptional conditions for a contact with originals made by ancient craftsmen. Great value lies in rich and varied set of Museum artefacts, and also that most of them are elaborated on a didactic way, and this makes the perception easier for guests. But artefacts quite often do not have unambiguous meaning for all, especially for school children, so it is necessary to help them in a proper reception. Such exercise needs directed observation and commentary, like at school, by a well prepared curator. Paying attention on a good cooperation between schools and the Museum – what is, as we all realize, one of basic elements of youth humanistic education – we employed and trained persons capable to conduct such activity.

During Museum lessons (GROSSMAN, PIOTROWSKI 2011, 210) generally are followed principles of school lessons – accessibility and grading difficult. By grading difficult curator goes to commentaries and explanations with intension to make knowledge



Fig. 4: Biskupin 2010. Interior of the reconstructed hut. Photo P. Hildebrant.

more accessible and then let pupils be more independent. Thus pupils have to be more involved in spiritual and intellectual effort than during ordinary school lesson. Time of active and effective pupils participation depends on their psychophysical level – for example for children 11-12 years old it is up to 30 minutes, for adults up to 75 minutes. It is important to remember that museum lessons should consolidate school knowledge and enlarge it as it is only possible.

Subjects of Biskupin museum lessons follow didactic-pedagogic criteria and – as we look on the last years frequency – receive growing interest. Important substantial set of the lessons occupies building and architecture of the prehistoric settlement. Another lesson – “Everyday life in Biskupin settlement” – points on food collecting, grinding corn on stone querns, making flat

loaves on hot stones of a hearth and making objects necessary for former daily existence. Every lesson is equipped by a proper set of replicas of prehistoric tools, ready to use by kids. From Spring to Autumn lessons take place within reconstructions of VIIIth Century BC. huts on Lake Biskupin peninsula and it creates good atmosphere, commitment and temper (Fig. 4).

Lesson „How Biskupin was built” appeared when we realized on great interest to this subject. Location in a full reconstruction of a hut is advantage of this lesson. So participants can touch and observe all construction elements, except roof of course. Multimedia presentation (prepared in collaboration with the Institute of Archaeology University of Warsaw) showing among others archive photos from interwar excavations (Figs. 5 and 6) and then a movie sequence of the settlement reconstruction



Fig. 5: Biskupin 1937. View on the basements of three huts. Photo Biskupin Museum Archives.



Fig. 6: Biskupin 1937. View on the rampart remains. Photo Biskupin Museum Archives.

process is an introduction to the lesson, explaining techniques and sequence of erecting the settlement – from breakwater, box rampart, streets, rows of houses and so on. The mentioned presentation also shows how the full scale reconstructions of the Iron Age settlement features were erected on Lake Biskupin peninsula (Figs. 7 and 8). It has been stated that multimedia element keeps lessons more attractive. Then curator shows carpentry and building tools (or their replicas done by experimental archaeologists) as well construction elements in the hut, informs on quantity and quality of wood used for building purposes. After 10-15 minutes of an introduction participants may start with Biskupin building process. For the first phase of the lesson are used two timber models of huts (four models are in plan) (Fig. 9) and one model of the rampart with breakwater (Fig. 10) – all made in scale 1:40. Founda-

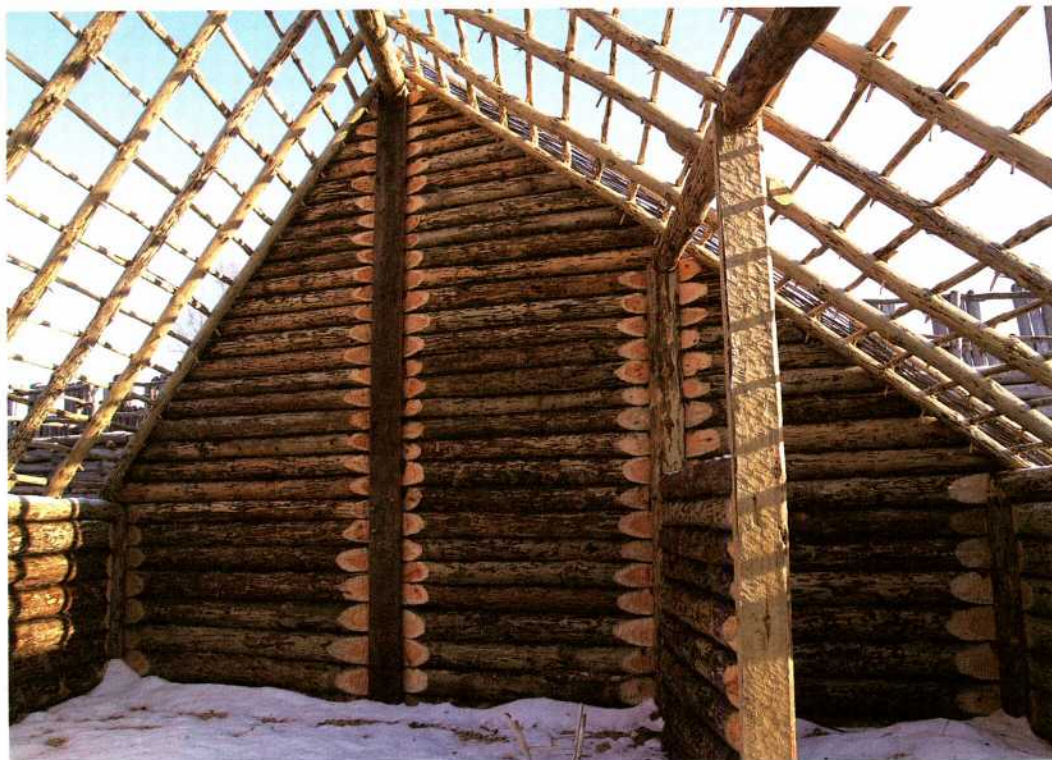


Fig. 7: Biskupin 2005. Erecting a hut reconstruction in scale 1:1. Photo M. Kazik.



Fig. 8: Biskupin 2002. Erecting a rampart reconstruction in scale 1:1. Photo M. Kazik.



Fig. 9: Biskupin 2010. Museum lesson "How Biskupin was built". Erecting by children a hut model in scale 1:40. Photo P. Hildebrant.

tion elements (some vertical of them, too) are fixed to the plate, the rest is movable and ready to be caught by children hands. Speaking frankly also adults are involved in this activity (it happens that accompanying parents try to improve their kids work), and it is very educative in case of archaeology students, for whom it might be a first step to a future activity on popular-scientific field. Observation of kids and adults notes a fervour and desire in such activity. Curators ought only to control the situation. Thank to such lessons participants know better the nuisances of different building techniques used in unpleasant, wetland conditions. Amount of building material of the prehistoric Biskupin settlement awakes among participants an admiration for a deep past generations skill and economic impetus as well.

Strict register of Museum lessons being recorded from the year 2000 shows a growing attendance. It ought to be mentioned that museum lessons are carried out mainly in the newest complex of reconstructions on the Biskupin peninsula. These reconstructions were erected between 2004-2006 by old building techniques as well as ancient techniques of protecting timber in wet conditions. It has been planned as well that part of interiors will be devoted for education and archaeology by experiment workshops and meetings. In 2006 the attendance was distinctly bigger and is growing on – because of a better offer – new themes based on archaeological experiments – prehistoric hunting, herbs, textiles, flint knapping, every day life, making ornaments from a copper wire, beads replicas, pottery, leather elaboration and mint-



Fig. 10: Biskupin 2010. Museum lesson "How Biskupin was built". Erecting by children a rampart model in scale 1:40. Photo P. Hildebrant.

ing process (the last activity corresponds to Middle Ages). Biskupin is located far from big towns, so such popularity is worth to mention on in these hard times. According to school programme Museum lessons are directed also on didactics joined with archaeologists workshop and methodology and a history of archaeology – in Polish case it means explaining an influence of nationalism and chauvinism on humanistic sciences – especially in the first half of XXth century. Anyway, in the 2009 year 17 thousand persons took part in Biskupin museum lessons, and this is a clear reason to keep on varied and improved activity. At last we would like to mention about organized every year, in strict cooperation with the Institute of Archaeology Warsaw University (and up to 2000 with the State Archaeological Museum in Warsaw), Biskupin Archaeological Festivals – the first one launched in 1995 – and we want

to draw in brief an attention on educational value of this event (PIOTROWSKI 1996). Tens of students not only from Warsaw but also from Poznań and Toruń universities take active part as participants of different duties – from cleaning the reservation area, through guiding visitors groups and helping in shows, presentations and being involved in archaeological experiments. This is a good training for future archaeologists – some of them may become scientists, but many will follow this experience in popularization, didactics and just having wide horizons in a contact with other people. The 2010 year Festival, XVIth in a sequence, got motto „Ruthenia known and unknown” with an intention to bring closer material and spiritual culture of Ruthenia – future Russia – between Xth and XIVth century. During every Festival are presented plenty of old crafts and reconstructions of spiritual activity of different civilizations. From

the beginning a main idea was taking visitor far from museum show cases, enabling contact with artefacts and ancient cultures, so it has been said „take an artefact to your hand, look at carefully and make a copy“. Organizers intention is to create a reasonable balance between education and amusement. We do hope that we consequently reach a main goal – but we do realize that it becomes not without difficulties. First problem is how to properly divide archaeology by experiment from a festival archaeology – in a way clear for a visitor what is scientific trial and what is only more or less interpretation. And this is explained by presenters – but not every visitor is inclined to inquire about it. Second problem is delivering an information of what culture and chronology a presentation is – and it happens that this requirement fails. Third problem is commercialization – from which we can not go away, because of necessity gathering funds for the Museum whole activity. We try to struggle with such problems, remembering on keeping an education value in confrontation with a mass and so called popular culture. It touches not only Biskupin Festivals but the Museum whole operation and varied activity as well.

Zusammenfassung

Experimentelle Archäologie und Bildungswesen – der Fall Archäologisches Museum Biskupin in Polen

Archäologische und interdisziplinäre Forschungen in Biskupin spielten in der polnischen Forschungsgeschichte des 20. Jahrhunderts eine wichtige Rolle. Prof. Józef Kostrzewski, Leiter der Forschungskampagne, und sein Assistent Dr. Zdzisław Rajewski erkannten bereits bei der ersten Grabung im Jahr 1934 die Möglichkeiten, mit Hilfe von Experimenteller Archäologie Bildungsprogramme für

breite Bevölkerungsgruppen zu entwickeln. Prof. Kostrzewski entwickelte die Theorie von frühslawischen Wurzeln seit der Bronzezeit und so war Biskupin für ihn ein Beispiel für eine frühslawische Kultur auf hohem Niveau. Das war der Grund für eine weitgestreute Propaganda mit großem Einfluss auf das Bildungsprogramm. Im Jahr 1937 schickte das Unterrichtsministerium eine Order an die Schulen, Biskupin in das laufende Erziehungs- und Bildungsprogramm einzubeziehen, somit eine Anregung für Lehrer Schulausflüge zu den Ausgrabungen in Biskupin zu organisieren. Bereits vor dem 2. Weltkrieg wurden mit Experimenteller Archäologie und Erziehung verbundene Aktivitäten durch Rekonstruktionen im Maßstab 1:1 auf der Halbinsel am See von Biskupin unterstützt, zwei Hütten, Teile der Quer- und Ringstraße und ein Wallabschnitt mit einer Uferbefestigung. Nach dem Krieg, während politischer Veränderungen, gab es neue Trends in der polnischen Archäologie. Zwischen 1951 und 1964 wurden in Biskupin archäologische Trainingscamps für Studenten aller polnischen Universitäten organisiert. Neben archäologischen Lehrgrabungen wurden auch verschiedene Experimente unter der Leitung von ausgewählten Spezialisten durchgeführt.

Eine genaue Auswertung der vorzeitlichen Gebäude und ihrer Probleme durch Z. Rajewski und T. Żurowski im Jahr 1950 führte in den 60er und 70er-Jahren zum Aufbau eines neuen Rekonstruktionskomplexes mit zwei Häuserreihen, Querstraße, einem Teil der Ringstraße, einem Wallabschnitt mit Uferbefestigung und dem Eingangsturm. Zur Zeit können die Besucher in Biskupin die vierte Generation von archäologischen Rekonstruktionen betrachten.

In den 80er-Jahren gab es eine neue Wendung der archäologischen Experimente und der Bildungsprogramme. Bis heute legen wir großen Wert auf den Bereich der Experimentellen Archäologie – mit Keramik, Weben, Holzkohleerzeugung, Viehzucht

und Landwirtschaft. Seit unsere Wanderausstellung „Biskupin das polnische Pompej“ im Jahr 1985 im Museumsdorf Düppel präsentiert wurde, pflegen wir engen und fruchtbaren Kontakt zu dieser Einrichtung. Seit 1994 entwickelten wir eine neue Form der Bildungsaktivität, den Museumsunterricht. Zunächst waren 30 Unterrichtseinheiten der Erzeugung von Tontöpfen, der Verzierung mit Motiven der Lausitzer Kultur und dem Weben gewidmet. Mit unseren aktuellen Lektionen „Wie man Biskupin erbaute“ gehen wir auf das wachsende Interesse für die Architektur des alten Biskupin ein. Der Museumsunterricht in Biskupin, der zumeist im neu rekonstruierten Museumskomplex durchgeführt wird, erfreut sich großer Popularität in der Jugendausbildung.

Archäologische Festivals (das erste wurde 1995 durchgeführt) sind speziell auf diese Bildungsziele ausgerichtet und zeigen die Unterschiede zwischen Experimenteller Archäologie und der sog. Festivalarchäologie. Dieser Herausforderung stellen wir uns im Zuge unserer Öffentlichkeitsarbeit ständig und wir versuchen, dem Besucher alle Abstufungen des Themas zu erklären, indem wir unser Vorführpersonal gut ausbilden und sauber zwischen wissenschaftlicher Unterhaltung und ihrer populären Version unterscheiden. Wir stellen uns auch dem Problem der Kommerzialisierung und noch immer suchen wir eine gute Balance zwischen Vermarktung und öffentlichen Bildungsprogrammen. Es erscheint erwähnenswert, dass die Museumsfeste in Biskupin in enger Zusammenarbeit mit dem Institut für Archäologie der Universität Warschau organisiert wurden (bis zum Jahr 2000 war auch das Staatliche Museum in Warschau beteiligt), welches uns mit einem Dutzend Wissenschaftlern und mit etwa 50 Studenten voller Energie und Hingabe unterstützt. Auch Studenten anderer Universitäten – zum Beispiel von Poznań und Toruń – sind herzlich willkommen. Vom Beginn an standen die Museums-

feste unter dem Motto von bildungstechnischen Werten – „Nimm ein Werkzeug in deine Hand, betrachte es genau und fertige eine Kopie“.

Experimentelle Archäologie und Bildungswesen können nur durch gemeinschaftliche Anstrengungen und mit einem kritischen Blick auf die gesamte Idee erfolgreich vereint werden.

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ISBN 978-3-89995-794-5