

Prehistory in school didactics

The article introduces the educational project “Learning history through archaeology” developing deeper knowledge of regional prehistory aimed at classes of primary school pupils.

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During the school year 2004/2005, an educational project aimed at developing knowledge in the historical-archaeological aspects of the Lucanian territory in the very south of Italy, in particular of the Ionian Basilicata, was carried out at the Direzione Didattica 1° Circolo “L. Milani” of Policoro (Matera, Basilicata).

The didactical project, called “*Learning history through archaeology*”, proposed by the Cooperative Co. Archeart within the School Educational Proposals Plan for 2004/2005, was chosen from among numerous didactical proposals by the Teachers’ Board and Parents. It was developed through a 60 hour activity plan, shared equally between 6 classes of pupils in the third year of Primary School. All the pupils took part in the project.

Theoretical stage

Class lessons were carried out with the help of multimedia technologies, already widely used within the didactical field (Cecconi, Olmetti Peja 2004), including handling in copies of archaeological material and handling tools used in archaeology (Fig. 1)

Copies of archaeological finds were actually handled by the pupils. A tactile approach with such material allowed a physical and formal knowledge of the objects together with the awareness of their practical functions. Such learning method allowed the pupils a cognitive acquisition of the various structural components of the tools: handle,

insertion, cutting edges and their proper use.

Moreover a tactile knowledge of the working tools used in archaeological surveys allowed a kindling of pupils’ motivational interest, which could have failed with a merely theoretical lesson (Tornar 2004)

The archaeologist work on the field

The archaeologist working in the field carries out different activities, allowing him to record all the information collected, and to reconstruct events which are not tangible anymore. Within our didactical project, major importance was given to activities such as surface surveying, cell outlining of the surveyed area and archaeological excavation methodologies, with particular reference to the basic principles of stratigraphy and technical recording of the data collected during the archaeological excavation.

These subjects, which are not quite that easy to understand because of their technical complexity, were dealt with in a scientific way, though with the help of didactical methodologies apt to be understood by Primary School pupils.

Prehistory in Basilicata

Images of archaeological excavations, finds and reconstructions of everyday life in Basilicata concerning Prehistoric periods (Palaeolithic, Mesolithic, Neolithic) were shown to the pupils.

As to the most ancient stage of Prehistory, particular attention was given to Pleistocene fauna finds in Basilicata, whose osseous remains were found at the sites of Rotonda (Potenza), Grumento (Potenza), Chiaromonte (Potenza), Venosa (Potenza) (Bianco 1993) and Atella (Potenza) (Borzatti von Löwenstern, Sozzi 1996). The latter two sites, as well as the area around Matera, show evidence of the presence of



■ Fig. 1 Class carried out with multimedia support

Homo Erectus, to whom the lithic tools found in different Palaeolithic contexts are ascribed.

The most common typologies of lithic tools were shown and illustrated: from particular ones, individuating specific cultural areas, to more generic ones, found at numerous sites. Based on comparisons to other Italian Palaeolithic contexts, it was possible to spot among the materials collected in the field known forms, such as the chopper, the biface and the scraper which are often shown in school books without any geographical, chronological or cultural references.

As to the most recent stage of Prehistory, the transition from a nomadic life, with an economy based on hunting and spontaneous plants picking (Palaeolithic, Mesolithic) to a sedentary one by communities organized in villages having an economy based on agriculture and cattle breeding (Neolithic) was underlined. Major importance was given to the organisation of a Neolithic village: from hut structures to the areas devoted to specific activities and the evidence of material culture (vases, lithic production, osseous production et cetera). With reference to the territory of Ionian Basilicata, areas where Neolithic villages were settled were surveyed. Such surveys allowed the relating of local Neolithic cul-



■ Fig. 2 Didactical simulation of an archaeological excavation



■ Fig. 3 National Archaeological Museum of Siritide: didactical visit



■ Fig. 5 Clay preparation



■ Fig. 6 Weaving with vegetable fibre

tural issues to the ones dealt with in school books, sometimes introduced in a generic way and thus distant from a proper cultural and historic setting.

Laboratory didactical-experimental stage

The second stage was carried out with laboratory practical lessons featuring a didactical simulation of an archaeological excavation. Such activity, aimed at going deep into the concepts and issues dealt with during the theoretical stage, elicited particular attention and cultural curiosity with both the pupils and the teachers.

A didactical simulation of an archaeological excavation can be carried out both within enclosed places, with a didactic box or properly set out in the open air. In both cases the archaeological finds (copies) are laid out according to synchronic and diachronic contexts. In the specific case of the project *“Learning history through archaeology”* a didactic box was used, with a reconstruction of a diachronic stratigraphic sequence.

- The first level of the stratigraphic sequence (more recent upper level) contained a tomb dating back to the Neolithic, made at a 1:2 scale. The funerary equipment (copies) was laid down next to the skeleton, placed in a crouching position.
- The second level of the stratigraphic sequence (bottom older level), placed under the Neolithic tomb, was made up of Palaeolithic lithic objects (copies) and the remains of a hearth with charcoal and burnt animal bone fragments

It must be underlined that the didactical simulation of an archaeological excavation generally shows reconstructions of known contexts, such as the areas for cooking food (hearth), with relevant leftovers (animal ones), or human tombs, with funerary equipment indicating a specific cultural phase. Such archaeological contexts, not always easy to be interpreted, both for the fragmentary nature of the preservation state and for their chrono-

stratigraphic complexity, are set out through reconstructions which are easy to understand.

During laboratory activities the pupils learned how to do an archaeological excavation, using typical tools. The excavation was carried out, though on a smaller and easier scale apt to school didactics, following the methodological criteria of archaeological survey (Fig. 2) and the relevant field documentation (graphic survey, photographic survey, drafting of the excavation diary and filling-in of stratigraphic technical forms).

Didactical visits to the National Archaeological Museum of Siritide

Didactical visits to the National Archaeological Museum of Siritide in Policoro (Fig. 3) were carried out by a paleoethnologist (an archaeologist specialised in Prehistory and Protohistory) following an experimental methodology based on filling in an archaeoform; the pupil thus becomes an active actor during the guided tour and acquires the different concepts in a proper scientific way.

The archaeoform has a very easy structure, made of cells for recording archaeological data and spaces for drawings (Fig. 4). Thus used, the archaeoform proved to be a useful instrument for organizing the different information.

The archaeological issues dealt with during the didactical visits concerned both historiographic subjects and themes connected to the methodology of archaeological research, the procedures of production and use of the objects displayed and the images shown on the illustrating panels. The explanation of the words used within archaeological vocabulary proved also to be very interesting, with a particular emphasis on the proper scientific terminology, often neglected or improvised. The pupils' acquisition of an adequate archaeological terminology allows, as already shown in other didactical experiences in museums, a more proper knowledge of the typology and function of different objects and relevant cultural contexts (Asquini 1999).

Materials used	Technique	Making up of elements functional to hut building
Vegetable fibres	Weaving	Ropes
Reeds	Caning	Frames
Clay	Processing and preparation	Hut plaster
Wheat stems	assembling	Upper cover

■ **Tab. 1** Materials used in the reconstruction of part of a hut

The didactical visits carried out in museums, as in the National Archaeological Museum of Siritide, allow a multi-contextualized learning of archaeological events and of the historical datum in its entirety thanks to the use of different explanatory methodologies.

The didactical-experimental laboratory

The experience that most strongly involved the pupils was the laboratory of didactical experimental archaeology (Fig. 5). During this phase of the project, part of a Neolithic hut was reconstructed, based on the knowledge both archaeological finds and ethnographic comparisons.

The materials used for the reconstruction of part of the hut (Tab. 1), all of natural origin (Fig. 6), were set out and put together (Fig. 7, Fig. 8) by the pupils, who showed that they had acquired the scientific and technical elements dealt with during the theoretical lessons.

The reconstruction of the hut was completed by setting out a paleoground, on which post holes were reconstructed as connected to the bearing structure of the hut, having inside little stones working as the “wedges” of wooden poles (Fig. 9).

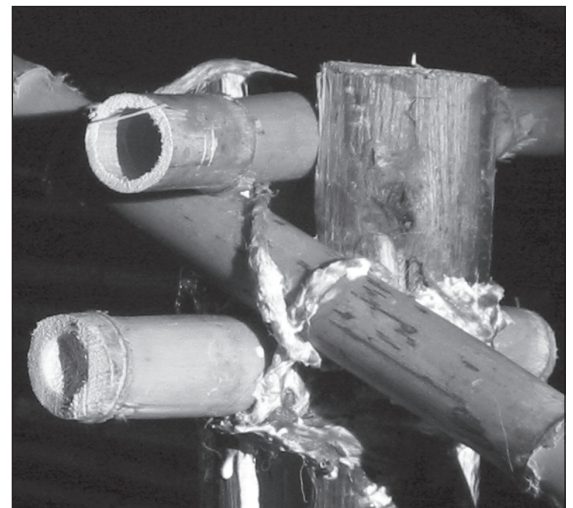
Conclusion

Class lessons, visits to the museum and didactical-experimental laboratory activities aim to give the pupils a deeper knowledge of the cultural and technological aspects of the first Prehistoric human groups; such issues, in fact, often appear in school books as decontextualised, thus deprived of contents and mainly linked to superficial factual knowledge.

Both during the different activities and within the feedback phases, the pupils were shown to have acquired the basic concepts of the cultural processes taking place in Prehistory, in particular in a Lucanian and Ionian coast context. The assignment of tasks and the organisation of study groups created further so-



■ **Fig. 8** Plaster preparation (clay and straw) on caning

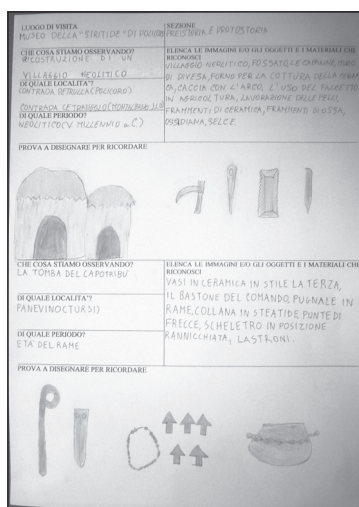


■ **Fig. 9** Weight bearing structure (binding detail)

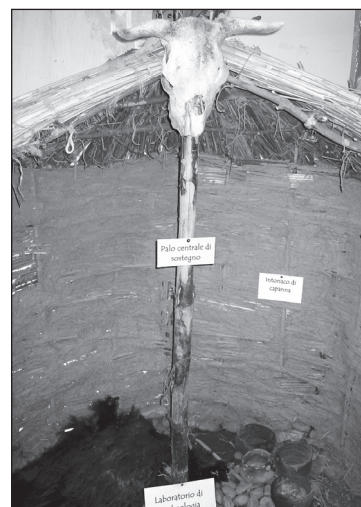
cialisation occasions, with respect to the usual school ones.

The result was a more collaborative cohesion between the pupils, who carried out their tasks with awareness and responsibility, though contributing individually to the work. They also showed to have an inclination to team working and a particular openness, not always evident in other school activities, towards schoolmates with disabilities. Teachers found a wider interest and better involvement by pupils usually less bright in traditional school subjects.

Moreover, assigning specific roles within the different activities gave the chance for some pupils, even including those with disabilities, to acquire more faith in their own capacities.



■ **Fig. 4** Sample of completed archaeoform



■ **Fig. 7** Didactical reconstruction of part of a Prehistoric hut

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Summary

La Préhistoire dans la pédagogie scolaire

Le présent article présente le projet pédagogique intitulé "apprendre l'Histoire à travers l'Archéologie" destiné aux élèves des écoles primaires. Ce programme est divisé en partie théorique, qui repose sur l'utilisation de technologies multimédia, et celle pratique qui consiste dans la visite du musée et la simulation de fouilles archéologiques. Ce projet aide les élèves à comprendre les aspects culturels et technologiques de la Préhistoire, mais également à développer leurs compétences dans le travail en équipe et leur confiance en eux.

Urgeschichte im Schulunterricht

Im Artikel wird das für Grundschulklassen entwickelte Pädagogikprojekt "Geschichte kennen lernen mit Archäologie" vorgestellt. Das Programm besteht aus einem theoretischen Teil, der mit Hilfe von multimedialen Präsentationstechniken durchgeführt wird, sowie einem praktischen Teil, der einen Museumsbesuch und eine simulierte archäologische Ausgrabung umfasst. Das Projekt befähigt die Schüler dazu, kulturelle und technologische Aspekte der Urgeschichte zu begreifen und befördert darüber hinaus die Gruppenarbeit und das Selbstvertrauen der Schüler.

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■ **Ada Preite** is a Protohistoric archaeologist. She is a graduate of the University of Rome "La Sapienza". She has taken part into different research projects promoted by the FESR Ireland-Italy-Spain, the European Union and Italian Institutes and has followed different museum exhibits. She is presently studying Enotrian pottery decorations and following the exhibit layout of the archaeological anthropologic Civic Museum "Lodovico Nicola di Giura" in Basilicata.

Didactic experimental archaeology in Italy

In Italy there are currently numerous Archaeological Parks which deal with experimental archaeology and didactic laboratories in Prehistory. Many didactic laboratories for children deal with the realization of handcrafts, using techniques and materials known in Prehistory.

The Archaeological Park of Montale (Modena, Emilia Romagna) provides visitors with the opportunity to get to know the cultures of Terramare (<http://www.parcomontale.it>). The idea and scientific plan of the park belong to Andrea Cardarelli, Professor of Prehistory and Protohistory at the University of Rome "La Sapienza", while the archaeologist Ilaria Pulini deals with its management.

The Archaeological Park Villaggio Neolitico di Travo (Piacenza, Emilia Romagna) is run by the cultural non-profit Research Group "La Minerva" (<http://archeotravo.it>). The group avails itself of the contribution of specialized archaeologists to carry out didactic activities both in the archaeological museum and in the park. Among the archaeological didactic experimental activities the park proposes knapping, pottery making, weaving and cereals milling.

The Archaeological Park of Forcello (Bagnolo San Vito – Mantova, Lombardia) (<http://www.parcoarcheologicoforcello.it>) organizes laboratory activities for schools of different classes and level, based on various themes pertaining to the craftsmanship at the time of the Etruscans and to the archaeologist's profession.

The Archaeological Park Senales (Madonna del Senales – Bolzano, Trentino Alto Adige), near the little village of Unser Frau in Schnals, is placed at a height of about 1,500 m (<http://www.archeoparc.it>) in the Tisental valley, where, at 3,210m above sea level, the Ice-man was found. The purpose of this park is to recreate the past as vividly as possible.

In Italy there are also numerous work groups coordinated by qualified archaeologist and specialists in Prehistory and Protohistory. They carry out experimental archaeology activities both on a scientific and didactic level.

Among these we must mention **the association Arkè** (<http://www.arkearcheologiasperimentale.it>) run by Floriano Cavanna, the **Centre for experimental archaeology and archaeometry** in Civitella Cesi of Blera (Viterbo, Lazio), dealing with experimenting Villanovian and Etruscan forms of daily life (9th and 8th century B.C.), run by Angelo Bartoli (<http://www.antiquitates.it>), "**gli albori**" in Tuscany (<http://www.gliabori.com>), **Archeolab** (Massa Finalese – Modena, Emilia Romagna) run by Enrico Belgrado (<http://www.archeolab.com>).

Experimental archaeology carried out within Italian Archaeological Parks by the above mentioned work groups, apart from their scientific aims (reconstruction of the operating chains for object production) are also used as a technique for didactic learning. Clay modelling together with stone splintering are the most wide spread activities in the didactic field. Such activities provide an opportunity for expanding the ordinary school programmes with methods which go beyond traditional school teaching.