

THE GRADUATE SCHOOL

The Graduate School Human Development in Landscapes is an interdisciplinary affiliation of 15 institutes belonging to six faculties at Kiel University, of the Leibniz Institute for Science and Mathematics Education (IPN) and of the State Archaeological Museum at Gottorf Castle (Schloss Gottorf).

The doctoral candidates of the Graduate School carry out research on the interrelationship between humans and nature in the past, supervised by experienced scientists. Many of the doctoral projects are designed along interdisciplinary models and link, for example, archaeology and computer science, geosciences and physics or genetics and ancient history.

The investigations focus on the complex interplay between natural, social and cultural factors that influence the development of human societies in landscapes.

The Graduate School was established in 2007 within the framework of the Excellence Initiative of the German federal and state governments, organised by the German Science Foundation (DFG).

CONTACT

Graduate School Human Development in Landscapes
Leibnizstraße 3, D-24118 Kiel

Dr. Walter Dörfler

e-mail: wdoerfler@ufg.uni-kiel.de; phone: 0431 880-4059

Jirka Niklas Menke

e-mail: jmenke@gshdl.uni-kiel.de; phone: 0431 880-5924

www.gshdl.de



The design of the exhibition *Manipulated Landscapes* is the result of cooperation between the Graduate School Human Development in Landscapes and the Muthesius Academy of Fine Arts and Design in Kiel (Muthesius Kunsthochschule Kiel). A modular conception of space was specifically developed for this exhibition in order to enable a sensory experience of the walk-in installation which links humans and landscapes.

MANIPULATED LANDSCAPES 10,000 YEARS OF CHANGE

*An exhibition by the Graduate School
Human Development in Landscapes*

Landscapes are our habitats which constantly change. Humans have contributed to these changes by increasingly manipulating landscapes across time and, in particular, during the last 10,000 years. Humans use resources and adjust nature to their own needs. The development of previous as well as present human societies is therefore inseparably linked to changes in landscapes. In turn, these changes have decisively influenced our thoughts, behavior and actions.

Viewing and deciphering the traces of humans in landscapes from different points of view opens new perspectives in order to better comprehend the dynamic and interactive processes between humans and the environment.

This understanding is vital for the further development of our present society and environmental awareness.



Exhibition items

BEN KRAUSE-KYORA

NEAR EASTERN ANCESTORS

As a source of food, the domestic pig has become an integral part of our daily diet. The time phase when our ancestors commenced with pig husbandry and breeding, rather than merely hunting wild boars, can be retraced thanks to age-old DNA traces.

While the wild boar had already existed for a long time on the North German Plain, the ancestors of the domestic pig lived in the Near East. They were probably brought to Central and Western Europe by members of the Linear Pottery culture some 7,500 to 6,500 years ago. Members of this culture were the neighbors of the people of the Ertebølle culture, who lived north of the Elbe River and hunted wild boar, but did not keep domesticated pigs in their villages or in the woodlands.

That this situation soon changed was verified by Ben Krause-Kyora by analyses of old pig DNA that was recovered from archaeological excavations in Northern Germany and other regions of Europe. He showed that the first domestic pigs stemmed, in fact, from Near Eastern species – meaning that not only the idea of pig breeding, but also domesticated animals crossed the Elbe River. Thus, a direct exchange between the two very different cultures can be verified.



A domesticated pig – its ancestors came from the Near East.



Lower jaw of E24, one of the first domesticated pigs in what is today Schleswig-Holstein.

JUTTA KNEISEL



These bronze axes found at Bruszczewo were used for woodworking – and sometimes as weapons.

decreased and agricultural fields eroded. Dung, rubbish, and refuse were deposited between the houses and at the shores of the lake, which was over-fertilized. Numerous activities, such as goldsmithing, bronze casting, woodworking, vehicle construction, and tool making, are verified. The inhabitants produced ceramics, ground flour, and wove textiles. They kept pigs, sheep and cattle, went hunting, cultivated barley and emmer, and took part in long-distance trade.

Not all inhabitants were equal: some of them were buried in simple graves, whereas others were buried in large grave mounds with many burial objects. It is seldom possible to reconstruct such an extensive picture of life that existed 3900 years ago.

RISE AND FALL OF A BRONZE AGE SETTLEMENT

In order to be able to comprehend the life of humans in the past, it is necessary to combine insights from various disciplines and scientific fields. Large-scale settlement studies enable us to currently reconstruct a very exact picture of living conditions and the environment which existed 3900 years ago.

The settlement excavation at Bruszczewo (Greater Poland) is a joint project of Kiel University and Adam Mickiewicz University in Poznan. From the outset, the archaeological investigations were based on interdisciplinary cooperation and close collaboration between archaeologists, botanists, zoologists, geologists, pedologists, dendrologists and material scientists. Extensive excavations and investigations, which reveal a settlement that existed from 3500 to 4000 years ago, enable us to describe its development and decline. The first construction phase of the settlement is characterized by a huge fortification enclosure, which is unique in this region. Further houses located at the lake waterfront were destroyed by fire and abandoned as the water level rose. At the end of the Early Bronze Age, the settlement was deserted.

The environment also shifted during this time span. Tree populations decreased and agricultural fields eroded. Dung, rubbish, and refuse were deposited between the houses and at the shores of the lake, which was over-fertilized. Numerous activities, such as goldsmithing, bronze casting, woodworking, vehicle construction, and tool making, are verified. The inhabitants produced ceramics,



A reconstructed view of Bruszczewo. The diary of an imaginary time traveller (in the foreground) informs about life in the Early Bronze Age settlement on the touch screen in the exhibition (in German).