

Economic Archaeology in the German Low Mountain Ranges

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Theory; economic archaeology; low mountain ranges; environment; society

I. Introduction

In the last few years, a number of archaeological research projects in Germany and all over Europe aimed at the exploration of economical correlations. Casting a glance at the respective archaeological literature one can notice the widespread but increasingly uncritical use of the term “economic archaeology”. At least some of the authors who used that term tried to give a short explanation of their understanding of “economic archaeology”, but in general the term was and still is used without any further comment. This involves the risk of misunderstandings; what is missing is a comprehensive definition.

Referring to the growing importance of economical relations within the archaeological context the *Kommission für Archäologische Landesforschung in Hessen (KAL)* started a long-term interdisciplinary research program in the federal state of Hesse on this matter in 2000 (Recker 2001a, 276 f). Within the first two years, 13 projects covering nearly all archaeological periods were sponsored. Among them were studies on neolithic stone mining, the relation between centralization and raw material deposits in Bandceramic times, early copper-mining and early iron-mining activities, a saltern of the La Tène Period, Roman mining activities, the processing of raw materials in early medieval times, medieval pottery as well as medieval and early modern glassworks (Recker 2001b). They were complemented by archaeobotanical, archaeopalynological and palaeopedological examinations along with studies on vegetation history.

Based on the temporary results of these regional studies KAL and the *Deutsche Forschungsgemeinschaft (DFG)* initiated an interdis-

disciplinary colloquium in Marburg in 2001 which gave more than 40 scientists from various German universities, research institutions, archaeological departments and museums (see the list of participating institutions in Recker 2001a, 277) the opportunity to discuss possible fields of economic archaeological research in the German low mountain ranges between the rivers Rhine and Saale. As a result five teams were established in which archaeologists, historians, historical geographers, social researchers, legal historians, technological historians, economists, geographers, geologists, climatologists, human ecologists, human anthropologists, archaeozoologists, mineralogists, chemists, metallurgists, physicists and archaeobotanists discussed several aspects of the quarrying, mining and production of raw materials as well as natural resources and their consequences and repercussions on the environment and society.

At the end of the project a comprehensive definition of “economic archaeology” will be brought up for discussion and the draft version of an extensive research programme will be presented to the public.

First impressions of the main questions and possible answers are collected in the following.

II. Natural Resources – Environment – Society

All parties involved are agreed on the existence of a close relationship between the central points: natural resources, environment and society (fig. 1). Therefore the aim should be a diachronic reflection on all elements, general structures and specific frameworks of the economic activities of human beings in the

low mountain ranges. Moreover, all kinds of interactions, interdependences and dynamism that result from such economic activities should be studied. Comprehensive examinations (macro-perspective) are as necessary as regional case studies (micro-perspective) in order to gain an extensive insight into facilities, behaviour patterns and other facts which are of use to satisfy one's supply of food, tools, everyday necessities and household requirements. Natural resources like e.g. water, agrarian source materials, salt, wood, stones, different kinds of ore or even human labour take up the key position within the web of relations. They can be used as a peg to hang on questions concerning human management of resources and its interaction with the environment and society.

One has to examine whether the natural landscape and/or the social structures are serving as a basis for the economic activities of human beings. Furthermore it has to be checked whether the whole society is involved in the production of goods or only a number of members of the society. Very important are the type and scope of resources gathered by the members of society, e.g. number of staff, working hours, technical level etc. Moreover, the consequences and repercussions of economic activities on the society and the environment have to be taken into consideration. Consequently one has to investigate the interactions of communities and their members within the web of relations between natural resources, environment and society.

The more detailed one can answer these questions, the more information one can obtain about:

- the natural landscape and its changes because of the economic activities of human beings,
- the scale of the exploitation of natural resources in the various areas of the low mountain ranges,
- repercussions of environmental changes on economic systems as well as behaviour patterns and adaptation mechanisms of human beings,
- landscape development patterns and the formation of cultural landscapes because of economic activities,
- the organization and efficiency of work or work processes, the productivity per man-

hour worked, the division of labour, the rate of work and job characteristics with regards to different natural resources, periods of time and areas,

- technological adaptations and innovations,
- the different developments of social structures in general and the formation of power, systems of rule and ruling dynasties in particular,
- the road network, road transport and communications along with traffic regulations and the turnover of goods,
- the supply and demand of goods,
- the incentive mechanisms and control systems concerning the exploitation of natural resources,
- value systems and the changes in values.

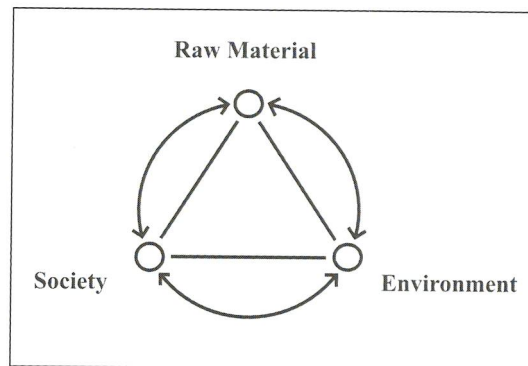


Fig. 1.

The intention is to capture typical phenomena and their changes in order to gain a representative impression and depiction of essential aspects of various economic systems and their consequences and repercussions on the environment and society. Because of the fact that a large number of very different aspects of human life can be looked at from the point of view of economic activities it is inevitable to focus one's research work on a selected area, a selected period of time and a well defined topic.

III. The German Low Mountain Ranges between the Rivers Rhine and Saale

The German low mountain ranges between the rivers Rhine and Saale are an obvious region for such intensive research, because they offer a wealth of small geographical units and a variety of natural and cultural landscapes as

well as a multitude of different natural resources.

The rivers and valleys develop the area of investigation more or less from South to North, divided from each other by wooded mountain ranges. Only a few roads open up the area in West-East-direction. Until today the rivers and valleys are important transit areas which connect the North German lowlands with the South. They contrast sharply with the higher mountain ridges. Obviously most of the personal contacts took place along the riverbed and the vast majority of goods was exchanged in the more easily to reach low-lying basins. In these areas the diffusion of innovations took place. But a survey in the high-lying woodlands followed by a specific capture of exceptional ensembles, which are not totally destroyed by younger human activities, may change our traditional way of thinking of the mountain ridges and give us the opportunity to get an inside look in pre- and early historical or medieval and early modern economic structures.

It might be possible to catch a glimpse of short-termed human economic activities and their interactions and interdependences with the environment and society. Researching such economic activities of local or regional significance will allow us to complete or correct our ideas of pre-industrial human economic activities.

IV. "Prägephasen" of long-term Developments

Following the French approaches of "geohistoire" and "longue durée" the long period of time taken into account opens up different ways of looking at the long-term developments of pre- and proto-industrial economic systems.

On the other hand the long period of time is a major problem because it comprises the risk of losing the track. In order to keep a general overview and to be able to compare congruences, differences and special characteristics of different periods a way had to be found to delimit the project to a limited number of so-called time-horizons. This was made possible by introducing the German term "Prägephase", that can be translated as "moulding phase" or "formative phase".

The term is used to describe a socioeconomic event that is strong enough to remodel a natural or cultural landscape. It leads to a fundamental restructuring of an economic area. Moreover the introduction of new economic systems or new technologies can have a formative influence. Especially in "younger" phases like the Middle Ages it is possible that "Prägephasen" can be better understood by historical, geographical or ecological means. Archaeological research work is confronted with the general problem that most of the time only the new structure is provable but not their origin. In most of the cases early formative changes can only be detected within the framework of interdisciplinary co-operation. Furthermore the term "Prägephase" also reflects on social changes. Production and trade are unavoidably connected with hierarchic intentions of the acting groups. Successful economic endeavour leads to a growing prosperity of a number of people and an increasing social distinction.

The temporal development of a "Prägephase" does not have to be linear and is subject to a number of external factors. Generally, three different stages of development appear to be of relevance:

Initialization / Initial Phase;
Consolidation / Stabilizing;
Pre-industrial Establishing Phase.

V. Résumé

Ecological influences as well as the efforts of human exploitation of natural resources can be studied at the edge of the ecumenicity much more clearly and at an earlier stage. This is why low mountain ranges in general and the selected area between the Rivers Rhine and Saale particularly act like an indicator. Up to now, five different time-horizons are defined for that area:

- Neolithic,
- Bronze Age,
- Iron Age,
- Early medieval times,
- Late medieval times.

All interested scientists are invited to contribute to this research project. The forthcoming years will show, whether the theoretical considerations can be put into practice and what the results will look like.

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