

Introduction: Interpretation of sites and material culture from mid-high altitude mountain environments

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Mid to high altitude zones (1000 m a.s.l. upwards) in Europe have often been considered marginal niches where human activity has been limited to occasional forays during times of climatic amelioration. The most recent synthesis of the archaeology and history of the western Alps demonstrates how alpine archaeological research has concentrated on the lower altitudes (valley sides, and valley bottoms) (Jourdain-Annequin & Le Berre 2004). There are obvious reasons why there is a bias towards lower altitudes in mountain research: this is where most people lived most of the time, and lower altitudes are more accessible to archaeologists, just to mention two major reasons. However, mountainous zones are by definition the quintessential three-dimensional environment, with activities spread across the various vertical zones at different times of the year. The nature and intensity of these activities has varied enormously throughout the Holocene. The gaps in our knowledge of human activity at higher altitudes have led some archaeologists to attempt to rectify this lacuna. This volume comprises a representative selection of research projects that are currently investigating some of Europe's high altitude landscapes; there is a particular emphasis on the European Alps, plus one contribution from Caucasus, a mountain region resembling the Alps in many aspects.

Archaeological research in mid-high altitude environments is amongst the most interesting and exciting within European archaeology. Despite this, those teams working in such milieus share a common set of problems: most notably, the relative dearth of rich artefactual assemblages compared with those found in lower altitudes. Different teams have adopted various approaches to the study of human activity in these areas.

One fundamental difference that exists between many mountain-based projects is the spatial and temporal boundaries that they set themselves. Some projects concentrate on one particular period, or one particular theme. Some researchers may study an entire

valley or valleys (Curdy *et al.* 1999; Della Casa *et al.* 1999), whilst others concentrate on one particular topographical element or site within a valley (Barge-Mahieu *et al.* 1998). The definition of these research questions then has a profound influence on fieldwork strategies and methodologies. Much work in these high altitude environments relies heavily on palaeoecological data and broad-scale climate evidence (Bintz 1994; Bintz *et al.* 1995; Segard *et al.* 2003). This type of data often leads to the development of human/ecological models that consider the potential of a given alpine landscape for different types of human activity. Once we move into the Neolithic period and beyond, we often see the articulation of models that consider the extent of human impact on the mountain environment. An integral element within this type of interpretational framework is the reconstruction of past economic activities (or at best, practices). In this volume, a group of researchers, all of whom work in various mid-high altitude mountain landscapes round Europe, consider the ways in which peoples' relationships with mountain environments changed during the Holocene. Can we identify periods when people were reluctant or eager to exploit these risky and marginal environments? If such chronological variations do exist, are they uniform across different mountain ranges, or can we identify spatially specific trends?

This volume contrasts a range of strategies employed in Alpine research and presents a series of archaeological projects that consider both field project data as well as syntheses concerned with various themes in alpine archaeology. Some of the papers present syntheses of landscape archaeological projects from different mountain zones (Walsh *et al.* 2007; Garcia *et al.* 2007; Curdy 2007; Krause 2007; Reinhold & Korobov 2007), whilst other contributors consider specific themes (Perez 2007; Segard 2007; Rostan 2007; Py & Ancel 2007; Marzatico 2007); for example the role of alpine populations, and in particular of strategic topographic re-

source management, within supra-regional European exchange networks involving high altitude transit in the Central Alps of Switzerland (Della Casa 2007).

Segard (2007) addresses the complex issue of Roman activity in the mid-high altitude zones. There is an implicit assumption that from the Neolithic onwards, there is a steady and perhaps continual increase in the level of human activity in the mid-high altitude zone. Also, this activity, if it did wax and wane, this was partly due to changes in climate (Bocquet 1997). We might assume that during the Roman period, with probable increase in population and the development of sophisticated and extensive land exploitation strategies, there would have been an increase in activity in the high mountain zone.

Whilst projects in the French Alps (Garcia *et al.* 2007; Segard 2007; Walsh *et al.* 2007) have shown that there is evidence for activity in these zones during the Roman period, it appears that the intensity of this activity may have been lower than in the protohistoric periods. One of the problems that we have, certainly in the European Alps, is that certain periods suffer from a bias in the site-type available for study. For example, Perez's (2007) synthesis of the late protohistoric funerary evidence from the southern French Alps demonstrates that other types of archaeological evidence (domestic sites and structures) are rare or as yet undiscovered in this region.

This problem is also discussed by Garcia *et al.* (2007) in their presentation of a diachronic landscape project in the Ubaye Valley (Alpes de Haute Provence, France). Here, it is apparent that there has been continued activity in all of the vertical zones since the Neolithic, and perhaps earlier. However, the evidence does imply profound variation in the intensity and the nature of human activity within this valley. As mentioned above, not only is there a variation in site numbers for each period in this part of the Alps, but there is also an important change in the nature of the archaeological evidence across the various periods. Early prehistory is unsurprisingly dominated by lithic material. As we move into the late third and second millennia period, the first built structures appear (if these structures are indeed comparable with those found in the Parc Nation des Ecrins, see below). The Iron Age is largely represented by funerary sites and single finds of metal work. The quasi-absence of any domestic or economic structures is problematic. As we move into the Roman Period this pattern is almost turned on its head; there is little funerary evidence but a reasonable number of domestic and economic sites. However, all of these sites are located in the lower zones of the valley (valley bottoms and sides between c. 800 m and 1300

m). The absence, for the moment, of Roman sites in the mid-high altitude zone in the Ubaye is a phenomenon which is mirrored in the Ecrins.

Segard (2007) produces an assessment of the evidence for some kind of continuity in mid-high altitude activity during the Roman period in the form of habitats that are continuously used. In the context of the Roman Empire, we need to ask if these sites represent "Romanized" peoples, or a continuity in indigenous activity in these marginal zones. In either case, we then need to consider what it was that these people were doing. One thing is clear, the notion that the long-term history/archaeology of the mid-high alpine zone can be merely characterised in terms of the development of seasonal pastoral activity (transhumance) is misplaced.

However, Curdy (2007) – in his synthesis of two generations of archaeological survey in the Valais (Switzerland) – exposes convincingly a chronological and altitudinal gradient in the protohistoric colonization of the mid-high mountain environments, both for the main and the side valleys. A multi-level spatial organization of sites and activities emerges in the Iron Age. Interesting ethno-historic analogies are offered to explain this phenomenon as the onset of typical alpine cyclic and seasonal agro-pastoral activities. Marzatico (2007) discusses for the first time the substantial archaeological evidence for seasonal use of alpine pastures in the Bronze Age of the Trentino-Alto Adige (Italy). Notions of transhumant pastoral activities in terms of dairy alpine economy – *Alp-/Almwirtschaft* – for the protohistoric periods are developed (Primas 1999; Mathieu 1999), and it is apparent that the finds from Malga Vacil are of more than just regional significance.

A study from the northern Caucasus based on substantial survey and excavation data gathered systematically over many years in the Kislovodsk basin is presented (Reinhold & Korobov, 2007). Here again, the vertical distributions of sites and finds appear as the most exciting issue in the discussion. A GIS-based analysis of protohistoric spatial patterns, with a particular focus on a newly discovered mid-altitude sites is presented which for the time being lacks a contextual interpretation.

Kompatscher & Hrozny-Kompatscher (2007) focus on the use of high altitude landscapes in the south-eastern Alps by mobile hunter and gatherer populations of the Mesolithic. Their approaches include site topography and site catchment analysis, visual capacities and different models of functional, seasonal, and altitudinal mobility connected in particular to hunting activities.

Vertical zones also possess resources other than game and pasture. The presence of ores and minerals undoubt-

edly attracted people in some parts of the Alps from the Copper and Bronze Age onwards. Krause (2007) discusses the situation of the Montafon in Austria where early settlement thrived during the Bronze Age. Copper mining is attested in the region, especially for the later historic periods. However, as yet, Bronze Age mining activity is not proven archaeologically in this area, although it is quite probable that it did take place. Rostan (2007) focuses on even earlier mining activity, namely the exploitation of rock crystal from the Neolithic onwards in the upper Romanche Valley (French Alps).

Mineral resources were undoubtedly important for the Romans as well, and there is no doubt that once we move into the Middle Ages relatively large numbers of people were involved in mid-high altitude mining activity. It is via the specialist archaeological sciences that we can start not only to identify certain types of activity, but also certain practices associated with an activity. In an anthracological analysis of the carbonised wood remains from a number of archaeological sites from the Ecrins (France), Py & Ancel (2007) demonstrate how we might identify specific practices in the past rather than making mere generalised statements regarding settlement and economic activity.

This volume thus presents some diverse projects that all share a desire to understand the range of activities that different mountain societies have been involved in from the prehistoric periods through to the Middle Ages. The authors in this volume represent a diversity of approaches and the research presented in the following chapters demonstrates how mountain-based archaeology is thriving and can make a significant contribution to our understanding of how people lived in these often inhospitable and risk-laden environments.

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