Risk and marginality at high altitudes: new interpretations from fieldwork on the Faravel Plateau, Hautes-Alpes

Kevin Walsh*

Living at high altitude carries risks, so settlement there can be thought marginal. Its success or failure ought to be dependent on the environment and the climate. But recent fieldwork in the French Alps shows that exploitation was not coincident with climatic conditions: Mesolithic people found the hunting good; in the climatic optimum of the Roman period the high altitudes were said to be uninhabitable and apparently were; while in the Little Ice Age of the fourteenth century and later, the high Alps were at their busiest. The author hypothesises that social control and perception, rather than climate, were the determinant factors.

Keywords: Holocene, French Alps, alpine zone, landscape archaeology

Introduction

This paper summarises a sequence of settlement over nine millennia at high altitude in the French Alps. Such regions are often considered marginal and the possibilities of living there must have been determined by climate and the consequent local environment. It would be logical to suppose that as climate improved or deteriorated, so settlement waxed and waned. The sequence obtained in the study area considered here certainly fluctuated in intensity between the Mesolithic period and the later Middle Ages, but not in harmony with the climate. The variation in activity can be better explained by changes in the perception of the relative importance of the risks and hazards present in this milieu. Whilst we can identify a set of physical risks or hazards (extreme variation in weather, landslides, dangerous topography, long distances from centres of occupation and support), the relative importance attached to these risks differed for each generation. Consecutive peoples found that they could or could not cope with the altitude depending on a wide range of other factors. In brief, they were exercising a kind of risk management.

Methodology

Despite the fact that research informed by archaeological fieldwork on specific periods or themes has taken place in a number of alpine landscapes (Bailly-Maître 1996; Bailly-Maître & Bruno Dupraz 1994; Barge-Mahieu *et al.* 1998; Bintz 1999a; Della Casa 1999, 2000; Fedele 1992), no one as yet has taken an explicitly diachronic approach to the

* Department of Archaeology, University of York, King's Manor, York YO1 7EP, UK.

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Risk and marginality at high altitudes

investigation of a specific high-altitude landscape, where changes in activity in one clearly defined space over the Holocene can be assessed. The present results are based on five years' fieldwork (which included surface inspection, excavation and paleoecological sampling) on the plateau of Faravel situated between 2200 and 2400m above the upper Durance in the French Alps (Figure 1). The commune of Freissinières in which it lies comprises a 20km long hanging valley, the entrance to which lies on the western side of the Durance River. The valley is delimited by a series of peaks, some of which reach an altitude of 3200m (Figure 2). Much of the commune's land comprises steep mountainsides, plateaux and lakes. The slopes are usually afforested up to about 2000m (the present tree line). Many of the lower south-facing slopes comprise grassland and are often employed as pasture. The decision to focus on the Faravel plateau, and the immediately adjacent areas, allowed us to build up a sequence in one place, discovering new sites each summer, and so produce a precise image of changing phases of human activity. The absence on the plateau of large-scale construction, or destructive agricultural practices, combined with a relatively stable flat land surface protected from erosion, has resulted in an island of archaeological survival. The area thus provides an almost pristine record of human activity since the departure of the glaciers.

Fieldwork began in 1998. A team of five professional archaeologists and five students covered a total area of about 30 km² over a period of three weeks, the extreme topography confining us to areas adjacent to footpaths and any open spaces within the valley. This survey was immediately followed by the sampling of three 'promising' sites at 2200m asl (Figures 3 and 4). During the following four years, eight other sites, ranging from a Mesolithic flint scatter, through to medieval stone-built structures, were sample-excavated on the plateau. Meanwhile, more surface scatters of lithic material were added to the inventory. Analysis of the artefacts and the charcoal found on the sites together with palynological evidence from the immediate region has provided a sequence of climatic and settlement data from the Mesolithic to the Middle Ages (Figure 4 and see below). The results also draw on the work of our 'sister' project in neighbouring Champsaur (an area directly to the southwest of Freissinières) (Figure 1). This project, directed by Josep-Maria Palet-Martinez from the Universitat Autonoma de Barcelona, has also included the excavation of a number of high-altitude sites.

Sequence of settlement and environment

Apart from the find of a Palaeolithic back-blade, the sequence begins with two *Mesolithic* flint scatters: Faravel XIII (FXIII) comprising *c*. 400 pieces of Mesolithic worked flint (149 objects, or fragments, plus 291 pieces of débitage) (Tzortis 2001), and F XVIII with 273 pieces, just 200m to the east. The assemblage includes microflakes and prepared cores, indicating that some of the tool production would have taken place on site. Geometric and non-geometric microliths were produced, as well as geometric points fabricated by the micro-burin technique. The assemblage includes scrapers and burins, Montbani bladelets, a concave-truncated trapeze microlith (Montclus trapeze) and elements of Sauveterrian or Castelnovian points. These are the first open-air Mesolithic sites to be found at this altitude in the French Alps. To the north-west, Pierre Bintz and his team have brought to light a number of sites across a range of altitudes from 300m up to *c*. 1400m (Bintz 1999b).

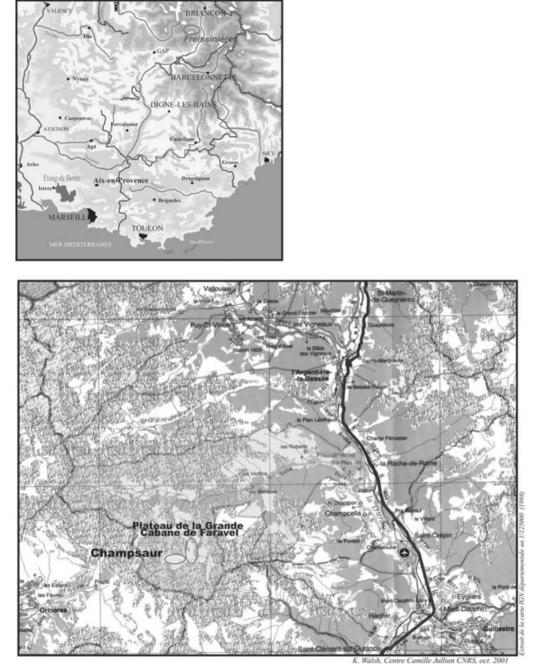


Figure 1. Location map of the Freissinières Valley.

The one site that is above this altitudinal range is the Aulp-du-Seuil cave at 1700m where the lithic and animal bone assemblages demonstrate that this site was a seasonal hunting camp (Bintz 1995). The closest parallels to the sites at Faravel are to be

Risk and marginality at high altitudes

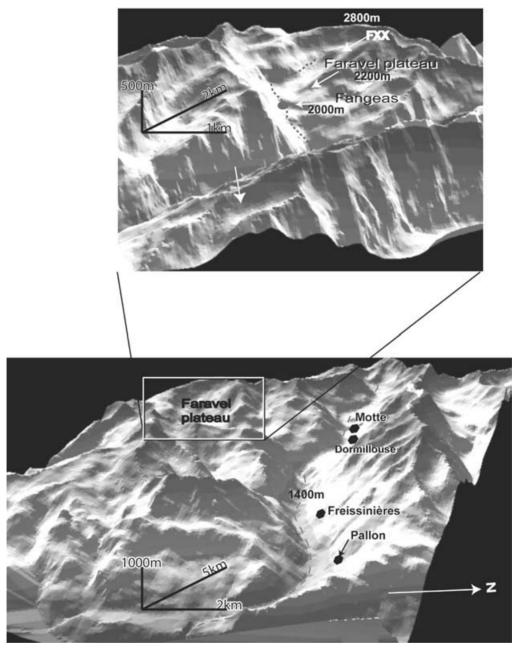


Figure 2. Digital terrain model of the Freissinières Valley with principal sites.

found in the Italian Alps, where a large number of Mesolithic sites exist in similar locations to those found on the Faravel plateau (Fedele 1999). The local pollen diagrams confirm the advance of the fir and pine forest, while pollen diagrams from the adjacent valley, as well as other southern French alpine sites, demonstrate very similar trends



Figure 3. General view towards the south across the Faravel plateau with the location of two of the important sites indicated (distance from point of view to edge of plateau is about 2 km).

(de Beaulieu *et al.* 1994). Thus far, Mesolithic research in the Alps points to hunting activity at all altitudes within the alpine zone. Clearly, some hunting activity was specialised and seasonal, and certain species were being followed up to the altitudinal limit of their grazing areas during the summer.

Four *Neolithic* flint scatters have been located on the plateau (FXIIIa, FXVI, FXVII, FXXII). F XXII yielded 23 pieces of flint, including one medial fragment of a retouched blade as well as other blade fragments. F XVII produced flint and one piece of Neolithic pottery. Some stratified flint was also found on one of the excavated sites. The period around 3000 BC coincides with a climatic optimum, and some argue that even in the alpine zone, the first agriculturalists were having an impact on the landscape (Miramont *et al.* 1999, 191). There is no direct evidence that implies agricultural activity around Faravel; based on the characteristics of the tool assemblages, it seems that seasonal hunting was taking place. The pollen diagrams from the *Ecrins* reveal some pastoral (and in some instances, arable) activity. Bearing in mind that these pollen assemblages must contain allochthonous material, it is still not possible to confirm the exact nature of Neolithic activity in these upland areas (de Beaulieu 1994). The relative lack of Neolithic sites at lower altitudes across the region is undoubtedly a result of extreme taphonomic processes, but also a consequence of limited research at these altitudes. Research in other areas of the Alps,

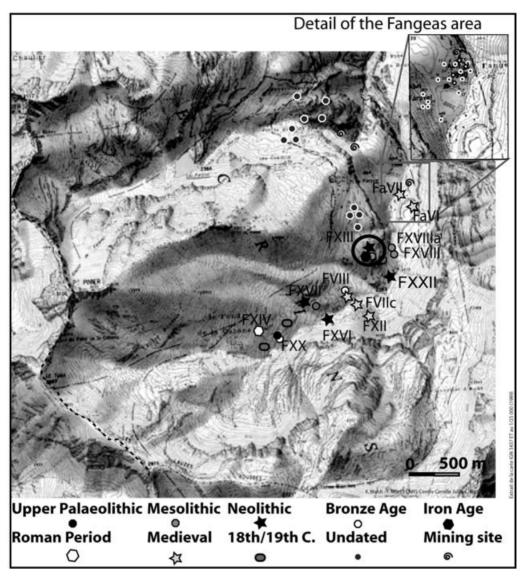


Figure 4. Map of the study area and distribution of archaeological sites.

such as the Valais in Switzerland (Baudais *et al.* 1990), indicates that Neolithic peoples were engaged in the development of complex strategies for the exploitation of the various vertical zones within alpine valleys.

During the *Bronze Age* (and the second half of the sub-Boreal period, 2000-1000 BC) there is an expansion of sedentary activity across the Alps and an opening up of the forest (see Ponel *et al.* 1992, 2001). Evidence from the Juran lakes implies a relatively short period of climatic deterioration at around 1700 BC (Magny 1995). Two Bronze Age sites from Faravel were occupied before this event, whilst three middle/late Bronze Age sites from the neighbouring Champsaur area were occupied during the period of climatic deterioration

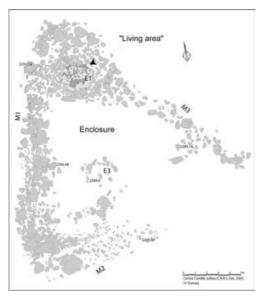


Figure 5. Plan of Bronze Age site, Faravel XXa.

(Palet et al. 2003; Segard et al. 2003). The Bronze Age structures from both Faravel and the Champsaur possess similar characteristics: they comprise roughly lozengeshaped 'enclosures' (walls comprising unworked blocks of local rock) that exploit topographical features, such as natural terraces and small gullies. An example of this form of structure is F XX (Figure 5). Here we have a lozenge-shaped 'enclosure' of c. 100m² situated at 2400m. Inserted into the north-eastern corner of this lozenge, a small, roughly circular, sub-structure has been interpreted as the living area (Walsh 2002). The walls on all of these sites are quite substantial and vary between 80cm and 3m in width. The widths tend not to be uniform across any given site as the builders exploited naturally occurring

groups of rocks and boulders. This site is dated to 3670 ± 45 BP (Pa 1969). A very similar site, F VIIId produced a radiocarbon date of 3665 ± 40 BP (Pa 1841); almost exactly the same as that from FXX.

The nature of activity associated with this type of structure is difficult to infer as these sites are aceramic, and bones do not survive in the acidic soils. However, the local palynological evidence included indicator species such as *Rumex* and *Plantago* (Argant & Argant 2000; Digerfeldt *et al.* 1997), and this, combined with our assessment of the structures, allows us to propose that the area was being used for seasonal pasture (Segard *et al.* 2003: 24-6). The size of the enclosures suggests two possible regimes: either small flocks that were intermittently guarded within these walls or, small enclosures designed to keep ill or injured animals from a much larger flock.

Across the French Alps, Bronze Age activity at lower altitudes is represented by a relatively small number of finds of metal objects, and burials for the later Bronze Age (Bocquet 1997). At Freissinières there are at least two valley-bottom sites, including one small arms hoard. While it is quite difficult to give an unambiguous account of the nature of activity at lower altitudes during this period, it is apparent that the Bronze Age across the Alpine arc witnesses an increase in activity at all altitudes (Primas 1992).

The *Iron Age* (1000-200 BC) is often referred to as a period characterised by climatic deterioration, especially towards the end of the Hallstatt period (Provansal 1995). One site at Faravel has produced an Iron Age radiocarbon date (F XIIIb) which is contemporary with the Göschenen 1 climatic deterioration (Magny 1995: 65). The present state of archaeological knowledge in the Alps implies that Iron Age activity was concentrated in lower altitudes and/or in specific valleys (Bocquet 1997). At lower altitudes, finds of single objects along with funerary monuments, are relatively common across the Alps. In our study-area, two tombs are known in the Champsaur, and a silver torque from Pallon in the

Freissinières valley represents this phenomenon (Figure 2). When we consider the relative visibility of Bronze Age and early prehistoric sites on the Faravel plateau, the obvious dearth of Iron Age sites is interesting and requires explanation.

During the *early Roman period* (200-0 BC) it seems possible that a climatic amelioration did occur at a continental scale (McDermott *et al.* 2001), and that this warm period facilitated communications across the Alps. When discussing the Roman period in the Alps, Braudel (1995: 41) observed that 17 of the 23 Alpine passes were used by the Romans. The archaeological evidence demonstrates that there was a gradual increase in settlement along valley bottoms during this period (Bérard 1997; Collective 1991). Consequently, the increased demographic pressure, along with ideal climatic conditions for the increased exploitation of upland zones, might lead us to assume that there would be a relatively large number of Roman sites in the alpine zones.

Thus far, only one site from Faravel has produced a Roman date (XIV) (1985 \pm 50 BP (Pa 2097)). This structure comprises a small circular wall defining an internal area of about $3m^2$ (just large enough to shelter one person, or perhaps one or two animals). The radiocarbon date was derived from charcoal taken from a hearth area: This implies that the structure was intended as a shelter for people. A series of terraces and enclosed areas adjacent to this site were surveyed. It is possible that these areas are contemporary with the excavated structure. Despite the date from this construction, this is not a Roman site; it is contemporary with the establishment of Rome within the Alps. Two sites from the Champsaur have been dated to the very end of the Roman period (Palet *et al.* 2003) and it seems quite possible that neither of these sites is contemporary with the Roman presence in the Alps.

Evidence for Roman forest clearance in the Alps is ambiguous: whilst some species such as *Abies*, do decline there is sometimes a concomitant increase in *Picea* (Ponel *et al.* 1992). FXIV is situated at an altitude of 2400m, 400m above the modern tree line, and almost at the limit of contemporary vegetation growth. One possible explanation for the location of a site (plus animal enclosures) at this altitude is that open areas for grazing were in fact limited by a tree line that actually covered all or a part of the Faravel plateau, the forest having advanced as a consequence of the improved climate.

Despite the dearth of high-altitude sites contemporary with the period of Roman occupation in the Alps, there is a great deal of evidence for lowland activity. New urban centres form during this period. *Brigantium*/Briançon, located some 30km to the north-east of Freissinières, was, and still is, the principal urban centre for the southern French Alps. Just below the entrance to the Freissinières valley the Roman station of *Rama* was located next to the Durance River on the route leading north up the Durance valley to *Brigantium*. The location of this site was confirmed in the summer of 2003 by air-photographs taken during the extraordinarily dry weather.

The *early medieval period* witnessed a minor climatic deterioration centred on AD 700 (Magny 1995: 66). At Fangeas 100m below and directly to the east of Faravel around 25 individual sites have been identified which comprise walls, built with unworked stone. One of these Fangeas VII a small roughly circular site less than 2m in diameter, has produced radiocarbon date centred on the ninth century AD. A climatic amelioration followed (The Medieval Warm Period), probably centred on the period AD 950-1045 (Esper *et al.* 2002). During the eleventh and twelfth centuries, a series of hamlets developed at the lower

altitudes of the Freissinières Valley. Traditionally considered as a valley settled by the Vaudois, the hamlets that exist today have medieval origins. The most enigmatic of these hamlets is Dormillouse, situated at 1500m some 4km to the north of Faravel and Fangeas (Figure 2). On the edge of this hamlet, the extensive remains of a motte and associated dry-stone walls represent the decision by the medieval seignorial elite to protect and survey access to the silver mines in this area (see below).

The Little Ice Age started during the fourteenth century, and continued through to the middle part of the nineteenth (Grove 1988). At the very start of this final period of climatic deterioration, the greatest number of sites at Faravel were occupied (FVII, FVIII and FXII, plus *c*. 20 sites which possess similar characteristics, but have not been investigated) (Figure 4). All of these sites (including those that have not been excavated) are substantial rectangular buildings, most of which are clearly visible and in some cases upstanding today



Figure 6. View of Medieval structures at Faravel VIII.

(Figure 6). In many cases, these structures exist in pairs or groups of three such as at FVIII. The walls are dry-stone constructions of between 50 and 80cm thickness. The external dimensions are between 6m and 8m in length and 3m to 4m in width. Most of these structures are built within drumlins that were partially dug out before the external dry stonewalls were built up against the face of the excavated hollow.

As we move into the Little Ice Age, activity on these upland plateaux continued, or even intensified. The documentary records indicate that many of the structures are linked to mining activities that evolved during the eighteenth and nineteenth centuries. Other sites are undoubtedly shepherds' huts and related enclosures. Two of these sites have been excavated: Fangeas VI and Fangeas VII (see above). At Fangeas VI, a small rectangular cabin produced a radiocarbon date centred on the mid-eighteenth century and pieces of silver-bearing lead slag were found in the occupation layers.

It was during the medieval and post-medieval periods that the Alps, including the highaltitude zones, were at their busiest. In Provence, the great transhumance is attested to by written sources. Tens of thousands of sheep were moved from winter lowland to summer alpine pastures (Coulet 1986, 1988). Research carried out by historian H. Falque-Vert (1997) on le Dauphiné during the thirteenth century gives a clear impression of both the intensity and the nature of economic activity in this part of the French Alps. Falque-Vert also describes structures from lower altitudes that are similar to those investigated archaeologically at Freissinières and in the Champsaur. At this time the high-altitude zones were exploited for mineral resources as well as their pastures. A number of silver mines exist in this area (centred on the appositely named town of Argentières-la-Bessée) (Ancel 1995, 1999). There are at least three or four mines in the immediate area around Faravel and Fangeas. The analysis of the carbonised wood from Fangeas VI is dominated by species associated with disturbed ground rather than grazing (Py 2002).

Faravel XX Faravel XII	Upper Pal. Mesolithic.	-			
Chichin II	Mesolithic.		45		
aravel XVII-XVIIa	late Mesolithic		10		
Faravel XI	middle/late Neolithic.			\rightarrow	
Faravel XV	middle/late Neolithic.			A	
Faravel XII	middle/late Neolithic.			A	
Faravel X4I	middle/late Neolithic.				
Faravel XM	middle/late Neolithic.				
FaravelXM	middle/late Neolithic.			$ \square $	
FaravelXIIa	middle/late Neolithic.			$ \square $	
Chichin IV	middle/late Neolithic.			\bigcirc	
Chichin V	middle/late Neolithic.				
Faravel XXa	3670 ± 45 BP				
Faravel VIId	3665 ± 40 BP				
Lac des Lauzons	1 3470 ± 100 BP				
Jujal III	3275 ± 40 BP				
Lac des Lauzons I	3180 ± 60 BP				
Jujal I	3145 ± 60 BP				
Jujai I	2945 ± 35 BP				
Col du Palastre I	1 2770 ± 95 BP				
Faravel XIIb	2460 ± 50 BP				
Faravel XV	1985 ± 50 BP				
Col du Palastre II	II 1915 ± 80 BP				
Clot Lamiande	1 1620 ± 55 BP				
Cheval de Bois II	1550 ± 40 BP				
Clot Lamiande II	1230 ± 30 BP				
Fangeas VI	1180 ± 80 BP				
Clot Lamiande IN					
	IV 1105 ± 35 BP		- 11 - 11		
Clot Lamiande I	V 960 ± 35 BP				
Jas du Cros	955 ± 70 BP				
Cheval de Bois I	895 ± 35 BP				
Faravel VIIb	857 ± 40 BP				
Faravel XIIa	680 ± 30 BP				
Faravel XIIb	660 ± 40 BP				
Faravel VIC	XVe s.				
Faravel VIIa	XVe s.			U	
14C da date fr	ate BC. om ceramic material	10 000 BC.	Period of c	5 boo BC. climatic deterio	o
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Figure 7. Plot of securely dated sites against chronology and phases of climatic deterioration.

Discussion

This sequence of high-altitude exploitation is summarised in Figure 7, which incorporates the results from both Freissinières and the Champsaur (Palet *et al.* 2003). Our research has demonstrated that climate cannot be cited as an explanatory factor for changes in the intensity of occupation. Relatively high levels of activity existed during periods of climatic deterioration, whilst periods of inactivity (as attested to by the archaeological record) have characterised periods of amelioration (note especially the Roman period). Such trends should not necessarily lead us to question the importance of 'marginality' as a factor in settlement. There is little doubt that mountain environments are risky. The possibility/probability

of landslides, avalanches, forest fires (in the Southern Alps), and extreme weather events (which are at worst, life threatening, at best economically destructive), have always existed, and many of these risks increase with altitude. The diachronic study of a specific microregion can suggest how notions of risk and hazard are structured within specific spatial and chronological contexts. A consideration of modern anthropological and cultural theoretical assessments of hazard and risk is also informative (Beck 1992; Douglas 1992; Smith 1996; Oliver-Smith 1996).

Notions of marginality *are* contingent on place and time, and societies in different places and at different times define and treat it differently. Many supposedly risky environments were at some point in the past successfully managed, and were therefore not marginal. The controlled *management* of alpine niches (where risk levels are high) is difficult, whereas their *exploitation* is relatively straightforward. Braudel argued that mountains were often on the fringe, and were not always integrated within the broader processes of 'civilisation' that took place elsewhere (Braudel 1995: 34). This view was based on the relative isolation of mountain peoples, which supposedly led to both technological and cultural differences with lowland peoples. Horden and Purcell (2000: 81) consider that mountains '*Can seem hostile and marginal areas; yet they are closely integrated into patterns of production and communication that abut them*'.

Despite the fact that there has been a trend in post-processual archaeology to dismiss 'marginality' as a modern construct, promoted by an environmental archaeology that supposedly suffers from a bad case of the determinist chills, we have to consider seriously how peoples' perceptions and attitudes towards potentially dangerous *milieux*, where economic productivity is not assured, have evolved over time. The contradiction here is that whilst some post-structuralists have endeavoured to put individuals back into the landscape (e.g. Tilley 1994), they have adopted discourses that fail to engage with issues of environmentally structured difficulties, i.e. the risks and hazards which would have been contingent upon activity within any given landscape. The actual experience of these environmentally structured difficulties would have been mediated through cultural understanding. Horden and Purcell (2000) in their assessment of Mediterranean marginality, articulate a mode of human/landscape dynamics that forgets how ordinary people dealt with contingent environmental processes, that are at best, controls on economic output, at worst life threatening. Their approach prioritises the role of high status perceptions of the landscape, denying the fact that life of many people within certain Mediterranean landscapes would have come to terms with risk and hazard.

With these ideas in mind, we can revisit our high Alpine sequence (Figure 7). Tim Ingold's analyses of hunter–gatherer's relationships with *taskscapes* are obviously pertinent for the *Mesolithic* (Ingold 1993). The temporary camp at F XIII was situated on the tree line, in an area where animals could be observed moving between the upper edge of the forest and open ground. Game concentrated in such areas would have been more visible than within the actual forest itself. Consequently, hunting in such an environment makes perfect sense, and may have been more successful than at lower altitudes. The upland milieu was chosen because a successful hunt was almost guaranteed. For hunter–gatherers, the pursuit of game across a landscape was thus not necessarily influenced nor constrained by relief or potentially extreme weather conditions; their notions of risk and hazard are almost beyond our grasp.

Risk and marginality at high altitudes

Another important aspect of hunter-gatherer relationships with their environments is the sheer scale of the areas over which they may have moved (see also Angelucci et al. 1999). Petrologic analyses of the flints from Faravel reveal a large range of potential sources for the raw materials exploited (Bressy 2002). The closest is some 50km away; a great distance within a mountainous landscape. Although some exchange of flint between different bands may have taken place, there is no reason to assume that these groups were not involved in their own resource-gathering strategies. They therefore ranged over large areas, even in an environment where journeys were complicated by the extreme topography. For many people today (and perhaps going back to the Roman period) movement through mountainous regions usually takes place along valleys and over passes. Hunter-gatherers, and other groups who settle and work in the higher altitudes, may well have moved between valleys via mountain ridges. Another reason for avoiding movement down and through valleys is that the forest would have been both higher and denser, perhaps making movement through valleys more risky than over mountain ridges. There would have also been the added risk from dangerous animals that would not have been visible in the enclosed forest. The evidence for Neolithic activity at Faravel indicates that hunting was then still taking place at the higher altitudes. Pastoral activity with its associated changes in the perception and understanding of this landscape did not really take hold until the end of this period and into the Bronze Age.

The defining characteristic of *late prehistoric and protohistoric* activity in alpine zones is undoubtedly the emergence and development of complex economies. During this period, a dual economy of pastoral agriculture and mining developed across the Alps. These activities would have exploited the forest resource, as well as pastures and mineral deposits. It is reasonable to assume that both of these activities would have taken place during the summer months, probably from June through to September. The *Bronze Age* sees an increased level of high-altitude activity in the Alps. Part of the secondary products revolution (Sherratt 1997) included the exploitation of a wide range of ecological niches, and where possible, the application of a complex exploitation strategy, where two or more productive tasks take place within one niche. As with the medieval period (discussed below), it appears that a relatively large number of people may have been present in these high-altitude zones, and that risk levels were reduced by the presence of other people, who through their very numbers reduced isolation and therefore the level of perceived risk.

The sites from Faravel and the Champsaur reveal a high level of investment in the construction of structures that represent activities that were probably repeated each year. Moreover, such structures would probably not have been built unless the occupants had used them for a good portion of the summer. We can almost envisage that shepherds moved from one site to another as the summer grazing season unfolded. It is interesting to note that Faravel VIII (at 2200m) and Faravel XX (at 2400m) produced almost identical radiocarbon dates. This could represent the presence of several shepherds exploiting adjacent pastures, or the movement of one flock up over pastures of increasing altitude during the summer. The emergence of sedentary societies in the valley bottoms and the related seasonal exploitation of Alpine sectors undoubtedly led to the development of early structured, *vertical* land-scapes. To the south-east of our study area, in the Vallée des Merveilles (Alpes Maritimes), pastoral activity is attested by the presence of indicator species in pollen diagrams (Kharbouch &

Gauthier 2000). Frachetti and Chippindale (2002) rightly emphasise the importance of rock art in contributing to the structuration of time and its perception within alpine societies. However, they do not explicitly investigate how time and vertical space relate to one another. Cyclical time, and the importance of seasonal activities, and the relationship between *where* and *when* these activities take place, is fundamental to our appreciation of human interaction with alpine milieux. Risks and hazards must also have had culturally structured, seasonal characteristics: activities in upland zones during the summer are inherently less dangerous than during the spring, autumn and winter.

The relative dearth of *Iron Age* sites across our study zone implies a reduction of activity at high altitudes. Perhaps settlement became concentrated at the nodes of exchange and commerce lower down. Despite the lack of archaeological excavation in valley bottoms, there is plenty of evidence for protohistoric activity in the Alps. The distribution of burial and associated metal work demonstrates that complex trading patterns did exist (Bocquet 1997). We have to assume that many of the towns that grew during the Roman period have protohistoric antecedents, although this hypothesis is not without its problems (Arnaud 2002). People may well have been attracted to the developing complex urban centres, and a part of this could have been a new emphasis on valley-based communication and a reduction of activity at higher altitudes. All of this could have resulted in a change in risk and hazard appreciation.

In spite of the favourable climate, at Faravel and in the Champsaur, the only sites that exist which could potentially be referred to as *Roman* are all dated to the very beginning and the very end of Roman presence in the Alps. A low level of Roman activity in high-altitude zones is also attested in the Pyrenees (Galop 1998). Central to an appreciation of landscape perception in the Roman period is the idea of the transfer of urban values (where possible) onto rural contexts. Changes in notions of ownership and control of territories during the Roman period would have radically altered the manner in which the landscape was defined and perceived (see Leveau 1993; Belotti 2000).

As ever, variations in perception would have been largely contingent on status within society. While ordinary people prioritise basic social and material necessities, natural disasters can be considered as crises revelatrices, exposing structures of power and ideology (Sahlins 1972). Moreover, after any kind of disaster, whether directly caused by people or 'natural', people always look for a scapegoat and attempt to apportion blame (Douglas 1992). The control of the population, and rigid rules regarding landownership and boundaries may have included the talking up of environmental difficulties and the discouragement of settlement at higher altitudes. Thus Cato considered that the Alps were an 'impregnable barrier which protects Italy like a rampart', and the Alps were a barrier 'where mortals were prohibited' according to Silicus Italicus (quoted in Jourdain-Annequin 1999: 101-102). Despite this view, the Romans did not avoid mountain ranges per se, but rather those vertical habitats that were the most environmentally 'risky or hazardous'. As Tarpin (1991: 31) observes, Titus Livius and Silius Italicus saw nothing in the mountains other than wild animals and strong people who were barely civilised distributed in many small tribes, and the corollary of this view was the idea that the Alps were an impassable barrier, a rampart and a natural limit for Italy (Tarpin 1991: 42). Eventually the Alps became less of a barrier, but something which still had to be traversed. Van Berchem (1982) contests that once the Alpine barrier

had been conquered, traversing the Alps as quickly as possible was key for the Romans, and therefore priority was given to the construction and maintenance of route ways over certain ridges such as the Petit Col Saint Bernard.

Therefore, we might consider that Roman 'absence' from high-altitude environments was not determined by a perceived lack of economically useful niches, but rather socially and culturally constructed attitudes towards this particular type of environment that convinced people to avoid exposure to unnecessary hazard. Also, we should not forget that whilst south-east Gaul became part of the Empire in 121 BC, the south-western Alps were not conquered until 14 BC – the integration of this zone being either not a priority, or difficult to achieve: so re-defining its quintessential marginality.

The start of the high-medieval period saw the expansion of large numbers of people into the Alps from urban centres such as Lyon; their migrations initiated by religious dissent, and some would argue, persecution (Audisio 1998). During the medieval and post-medieval periods, it seems likely that mutual support, through the presence of relatively large numbers of people in upland zones, would have redefined the possibility and thus the perception and experience of personal risk. The 'busy' alpine zone would have introduced the capacity for economic support, e.g. watching over one another's flocks, or assisting during mining activities and providing help during emergencies. The characterisation of this 'busy', late and post-medieval landscape, and the evolution of a new way of living and working in the high-altitude zone, should also consider how risk-taking develops within different groups. The negotiation of risk often contributes to the construction of group identity, and may even contribute to the development of cultural insularity. Moreover, we should not forget the importance of religious construction of attitudes towards hardship and risk; an important element of dissent is the rejection of the perceived extravagance and corruption of the established church (Audisio 1998). This dissent included the rejection of urban lifestyle and the consequent desire for a harsher, secluded way of life.

Conclusion

Fieldwork in the southern French Alps demonstrates that simple environmental models cannot explain the waxing and waning of human activity at high altitudes. Neither can we assume that the Neolithic marks the start of a continual seasonal presence of pastoralists in these areas. Even periods of climatic amelioration and demographic pressure did not result in increased activity. In order to fully appreciate the archaeological and environmental evidence, we need to consider how such milieux were understood and perceived at different periods in the past.

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