

Prehistoric and Ancient Man at Higher Altitudes and Latitudes.

European Mountains : The Alps

Abstract

1. Mountains and high-latitude lands share a certain set of climatic conditions, hence a certain assortment of biotic (i.e. plant and animal) forms. In addition, mountains encompass two other classes of environmental characteristics : altitude, a geometric feature relative to the atmospheric layers ; and geomorphology, the conditions and combination of landform attributes. The environmental and ecological similarities between higher altitudes and higher latitudes have always been stressed.
2. Primates do not like mountains or high-latitude lands. In general, animal populations are strongly affected by the « bio-repulsive » factors inherent in the adversity of both high-altitude and high-latitude ecosystems. Man is about the only primate species, and almost certainly the only ape, who ever evolved adaptations to such ecosystems.

Despite specific bio-repulsive factors, man has been widely and persistently present in cold regions. For instance, upper palaeolithic groups have been documented up to about 66° N in the middle Pechora River valley. But, at the same time, one can confidently claim that the mid- and high-latitude mountains may well be the latest type of environment settled by man. This fact has been overlooked in accounts of human evolution and historical ecology.

3. The Alps, a region — not a single range — of about 145,000 square km at the crossroads of several climatic and biotic regions, provide an observatory of the utmost interest. It is especially interesting that, in a N-S direction, the Alps lie between Mediterranean and Temperate Europe and, in an E-W direction, between more continental and more oceanic («atlantic») districts of Europe.

The essential geographic feature of the Alps is an arched, dead-end enclosure in the western part of the region, and a relatively open area towards the east. Potential barrier conditions exist in the west where the highest peaks in Europe are found (4061 m to 4810 m in elevation).

4. A picture of the early peopling of the Alps is now emerging (F.G. Fedele & coll., 1973 - present). An anthropological and ecological understanding of the cultural processes involved is also taking shape, in spite of an archaeological record characterized by brilliant discoveries and anachronistic dark spots.

The present writer has suggested a model for the Alpine peopling organized around the following evolutionary stages : First contacts, Explorative, Experimental, Formative, and Integrative stages (Fedele, 1976, 1979 and in prep.).

5. Early human penetration into the mountains is now attested c. 130-70 ka ago in France and Italy. Following that, the mousterian (middle palaeolithic) use of mountain resources, including the performance of some remarkable high-altitude exploits, has been discovered both in Italy (Monfenera) and Switzerland (altitude caves). A cave in central Austria probably offers an additional case.

The upper pleistocene record from Monfenera, a cluster of mountain sites in NW Italy (Fedele, 1966-78), provides cultural and environmental sequences for the last 100,000 years. Because of the obvious glacial and bioclimatic situation, the Alps appear to have been deserted during the last glacial maximum, which coincided with the diffusion of upper palaeolithic cultures across Southern Temperate Europe.

6. The Explorative Period. Following the rapid deglaciation, a pattern of socially organized behaviour of the « advanced » hunting groups all around the Alps ensued, and, almost immediately, regular penetration into the mountain territory began. Later on, a remarkable phenomenon of high-altitude exploration and/or hunting developed, c. 9,000-6,500 B.C. (epipalaeolithic or mesolithic).

Most of this chapter of European prehistory has been discovered on the Italian side of the Alps during the last 15 years. In 1986 the writer and his colleagues found that palaeohunters of about 10,000 years ago had reached the Alpine Watershed, 2200 m high near Splügen Pass between Italy and Switzerland, i.e. between the Po and Rhine basins. Was the legacy of that mountain expertise passed on to neolithic groups ?

7. The Experimental Period. The apparent gap in the exploration of mountain ecosystems during the 7th-6th millennia B.C. poses problems. At the beginning of the 5th millennium B.C., several instances of acculturation of mesolithic groups by early food-producing ideas and/or peoples are now known from the fringe of the Alps and from some major valleys (Adige, Tessin, Swiss Valais).

Later on in the 5th millennium, localized penetration of the southern fringe of the Alps by the contemporary Po Plain neolithic culture, the Square Mouthed Pottery culture, becomes apparent. This culture shows eastern features. Other Danubian « influences » have been perceived in the Eastern Alps (Slovenia, Austria, Veneto) ; but on the whole it is doubtful whether the Po Plain neolithic culture had any real impact on the further exploration and occupation of the Alpine region proper.

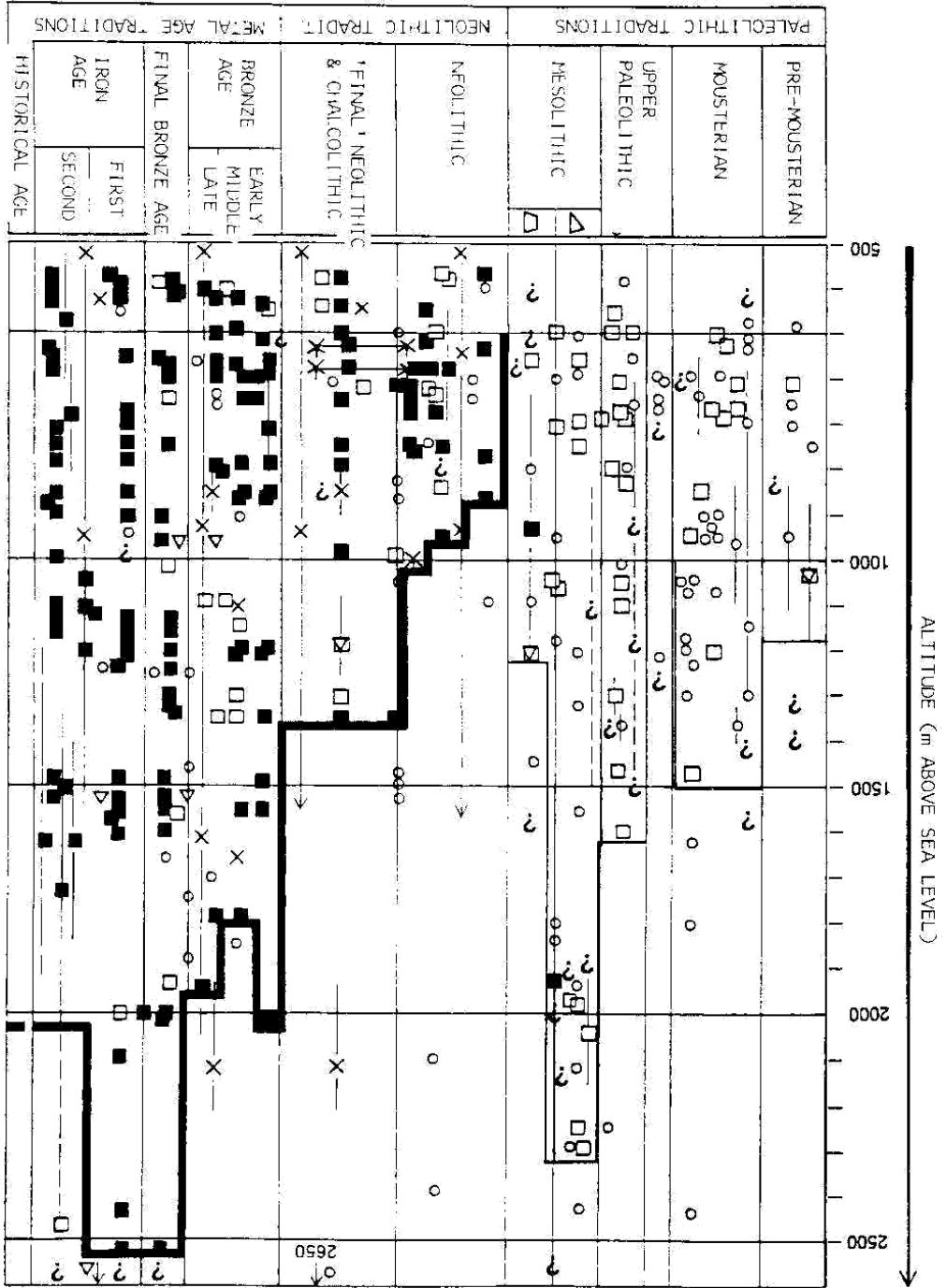


Fig. 1. Distribution of archaeological sites through time against altitude. (Filled square = Permanent villages, graves; open square = seasonal/ephemeral sites; open ring = occasional human presence; open triangle = productive activities; star = cult/ceremonial centres; cross = rock engravings, menthirs). (From Fedele, 1981).

□ Seasonal/ephemeral sites
 △ Productive activities
 ○ Occasional human presence
 × Cult/ceremonial centres
 ☆ Rock engravings, menthirs

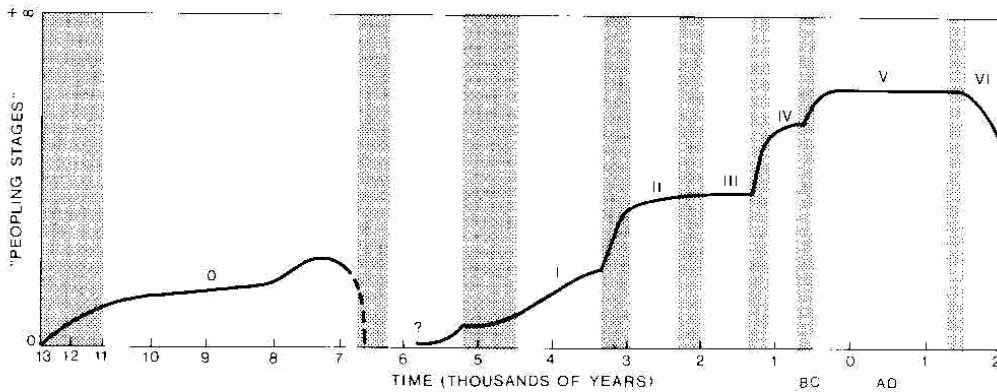


Fig. 2. A model of the peopling of the Alps during the last 13,000 years. Each « stage » represents an inferred level of human ecological-cultural integration within the Alpine ecosystems (cf. Fedele 1976).

8. The Formative Period of Temperate Europe : « mature neolithic » colonization. A new model, in the light of recent data from the Central and Western Alps, can be put forward (Fedele, 1985, 1986) : the human acquisition of the Alps as a chapter in the colonization of the Temperate European forests, c. 4,500-3,500 B.C. On the basis of neolithic evidence from the Central Italian Alps (the Breno culture, Alpine Lombardy) and a re-evaluation of the Swiss data, it is argued that the main thrust in the permanent acquisition of the Alps came from the north, not the south. Apparently it was the result of the expansion capacity of Rössen-Epirössen groups of Danubian ancestry.

In the Western Alps, an expansion of the Chassean tradition across the Alpine Watershed is being discovered. It is in this period that perhaps for the first time a series of local cultures, specific to the Alpine region, can be observed, in contact with — but different from — the groups of the surrounding lowlands.

9. The 4th millennium B.C. saw ecological continuity and ideological breaks : the development of the mature neolithic traditions was subjected throughout the Alps to the impact of some chalcolithic novelties, chief among them copper-working, prestige products, enhanced mobility, and new « religions » (the latter attested by continental megalithic monuments and rock-art evidence). According to a parallel paradigm, this was the time of the « secondary products revolution », i.e. the spread of milking, wool-making, plough agriculture, and animal traction (Sherratt, 1983).
10. The Integrative Periods : late chalcolithic and the metal ages. Throughout the Alps an acceptable amount of archaeological data strongly suggests that the 3rd and early 2nd millennia B.C. saw the development of full ecological integration with the mountain ecosystems — the invention of a life style based on specific forms of stock-raising, seasonal exploitation, seasonal mobility (often altitudinal), wood- and leather-working, trade in metal ores, and a rich oral literature.

Entirely Alpine cultures of a highly idiosyncratic alpine bronze age emerged in the Grisons as well as elsewhere in the Alps ; in the west the Rhone Culture, with its bronze production, represents a highlight in the Europe of the time. Austrian ores were exploited. This sort of culture had oscillations and some internal evolution during the 2nd and 1st millennia B.C., and in a number of respects survived the effects of foreign politico-economic domination by the Romans and their imperial successors (early Middle Ages). This was the Alpine type of culture which is now either disappearing or entering a new evolutionary stage.

F. G. FEDELE
Istituto di Antropologia
University of Naples
V. Mezzocannone, 8
I - 80134 NAPOLI

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