

**UNIVERSITY "BABEȘ-BOLYAI" OF CLUJ-NAPOCA  
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## **SUMMARY**

*CONTINUITY AND CYCLICITY IN THE  
ANTHROPIZATION OF THE CARPATHIAN  
MOUNTAIN SPACE. CASE STUDY: APUSENI  
MOUNTAINS*

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Keywords: Carpathian space, Apuseni Mountains, continuity, cyclicity, anthropization, GIS.

*Continuity and cyclicity in the anthropization of the Carpathian Mountain Space. Case study: The Apuseni Mountains* are part of a topic of interference of geography and history. Through this work we aim to carry out an analysis of the geographical-historical evolution of the carpathian space. Although our case study is on the Apuseni Mountains it was necessary to

make an introduction to the entire Romanian carpathian space. The anthropization of the Carpathian space took place differently from one mountain group to another, but the Apuseni Mountains stand out through the prism of the subsoil resources due to which the anthropization began from the earliest times.

In order to be able to highlight as faithfully as possible the continuity of the anthropization we have established four cycles of anthropization. The four established cycles are of a historical nature encompassing the temporal period from the Paleolithic to the contemporary. The Apuseni Mountains space has been subjected to anthropization since the earliest times, which is demonstrated by traces of habitation discovered in several caves. Due to their genesis in the basement of the Apuseni, countless subsoil resources were formed through which the phenomenon of anthropization was in a millennial continuity and cyclicity.

The first chapter included "*Theoretical and methodological basis*". The theoretical foundation comprises the most relevant works on our subject consisting of specialized bibliographic titles from the geographical and historical field that were the scientific basis for the achievement of the proposed objectives. The methodological basis shall include the detailed presentation of the research principles and methods used for drawing up the written corpus supplemented by the cartographic support.

The second chapter "*Carpathians as habitational space*" is an analysis of relevant aspects concerning the anthropization of the Romanian carpathian space. In order to achieve this chapter it was necessary to identify geographical elements that enabled and stimulated anthropization.

As a result of the fragmentation of the carpathian space, intramontan carpathian depressions were produced, which favoured the location of the settlements. The depressions provided the population with optimal survival conditions, which allowed the continued population. Excluding the Apuseni Mountains, extensive settlement activities were noted in the rest of the Romanian carpathian space, starting mainly with the medieval period and continuing with the modern-contemporary period. The intracarpathian depressions were used to the maximum for the naturalization of new populations that performed various functions (defense, military). Colonizations encompassed the Eastern Carpathians from the northern parts to the Carpathian curvature region. The best known were the *secuii* and *saşii*, populations of different origins. Also important religious mission had the Teutonic knights who populated the parts of the Land of Bârsa. Slovak, Hungarian, German, Ruthenian, Croatian, Serbian, Italian and Czech-Moravian workers were brought to the Banat Mountains and the Petroşani Depression.

The usefulness of leveling platforms has proven to be of great help in carpathic shepherding activities. Due to the smoothness and positioning at high altitudes the platforms allowed the formation and existence of a rich vegetable carpet, and the animals could be grazed for months at a time.

Communication was and is important for the anthropogenic component. This was made possible by the existence of a large number of passes and passers-by positioned throughout the Carpathian mountain area. Connectivity on either side of the Carpathians was achieved through these geographical elements which were at one time places of historical importance. Historically, the passes and passers-by were used to transit the battle troops and as battle places to stop the advance of the invaders. These geographical points were also used for the conduct of commercial activities. The population could cross on either side of the Carpathians to sell, buy, exchange various goods. Commercial and information flows were made possible by the high density of passes and passers-by.

Climate development has established themselves as a decision-maker on carpathian anthropization. Climate oscillations have been passed on to the anthropogenic component which required the continuous adaptation of the population to new and new climatic environmental conditions. The climate not only acted on the health of the population, but also on agricultural activities. By endangering agricultural crops, the population is subject to risk phenomena (epidemics, famines). The climate acts on humans and indoor assemblies in many other forms such as temperature oscillations, fallen rainfall amounts.

Water resources were another element that helped to foster the emergence and continuity of carpathic anthropization. The water resource has established himself as a good without which life cannot exist. The Romanian Carpathians are crossed by a multitude of watercourses which in their drainage form true corridors of valley. Their compliance provided a suitable framework for the location of habitat vetres, with the population having immediate water proximity and a possible communication route. The importance of river courses has increased with the passage of time, and the power of water falling and how this can be harnessed is discovered. Since the 20th century the carpathian space has been subjected to a hydric anthropization man erecting real dams used to produce electricity for the water supply of industrial complexes, for the reduction of flood waves and for recreation. Water resources are complemented by a smaller number of natural, glacial, volcanic lakes.

Biogeographical resources through zoogeography and phytogeography have been exploited by man since the first moments of its appearance. The drawn marks of the two biogeographical branches were discovered in caves dating back to different periods. The

Romanian Carpathians are among the last areas of forests where the diversity of ecosystems is unique. Ecosystem diversity is reflected in many types of habitats in which rare animal and plant species live. For the continuity of these biological riches it is necessary to involve man through information and awareness activities on the importance of the biogeographic coating.

Basement resources are an unforgettable component for our study. Numerous deposits of natural resources resulting from geological-geomorphological activities of great diversity and intensity have been formed in the mountain carpathian space. Their presence favoured movements of alohton populations towards the Carpathian space, which led to the beginning of the phenomenon of anthropization. For the exploitation of deposits the population had to think and build appropriate mining logistics (tools, processing assemblies). The continuity of mining has followed from one cycle to another, favouring the increase of anthropogenic pressure on mining areas, but also the diversification of extraction and processing methods constantly increasing the structure of the environment.

In the third chapter entitled "*Anthropization of the Carpathian Space*" was moved to the detailed research of the phenomenon of anthropization on the Apuseni Mountains which represents the case study of the work. Four cycles of anthropization have been established. A first cycle took shape over the earliest periods of anthropization of the Apuseni Mountains. "*Paleolithic-Neolithic population*" is the oldest cycle under study, which is distinguished by the presence of human traces discovered in caves, but not only. Traces of prehistoric man and derivatives of the man such as cave paintings made on the walls of caves that served as a shelter were discovered.

The second cycle is "*Dacian and Daco-Roman civilization*" being the cycle in which the first evidence of colonizations in the mountain space is attested, namely the intensification of subsoil deposits. The desire of the Roman Empire to exploit the basement of the Apuseni led to the outbreak of two great conflagrations between the Dacians and the Romans that resulted in the romans winning. Immediately the Roman Empire began the infusion of alohton demographic component brought and colonized in the Apuseni Mountains. For mining operations, large numbers of skilled and unskilled labour were needed, so the new populations formed entire villages positioned mainly around mining areas.

In the continuity of the two cycles mentioned, the third is "*Medieval Period*". During the Middle Ages the space of the Apuseni Mountains came under the influence of new powers. Mining activities continued, with new activities such as the exploitation of the forest fund and agriculture starting to emerge in parallel. Arpadian domination of the Apuseni required the exercise of acts of giving to various trusted men of kings. Mining remains the main economic

activity, new logistics for the processing of ores appears. A series of stamps are constructed which are put into operation by hydraulic force. Demography is positioned in the countryside, recording fluctuations in the natural spore blamed on conflicts that had the framework of deployment of the Apuseni Mountains.

The fourth cycle is "*Modern and Contemporary Antropization*". This last cycle encompasses the continuity of mining activities through the emergence of new industrial ore mining and processing buildings. Anthropization in this cycle was felt significantly after the entry of the Apuseni Mountains under the command of the Habsburg Empire. This power was constantly concerned with the exploitation of subsoil resources requiring large numbers of labour to be brought from other places. After Habsburg rule the Apuseni Mountains came under Austro-Hungarian rule, the continuity of anthropization being maintained by activities similar to the previous ones. The 20th century was noted by a large-scale demographic explosion and a significant number of new settlements were documented. The new settlements emerged from demographic inflows due to mining, but not only. The rural population rapidly expanded to altitudes of more than 1,000 metres with the emergence of new settlements. The rural area would be subject to an extensive depopulation process from the 1970s onwards, due to the forced industrialization programme proposed by the socialist regime. It was intended to canton the rural population in urban areas, in this way laying the foundations for the depopulation phenomenon of villages in the Apuseni Mountains. After 1989, industrial restructurings, especially mining, led to an increase in the depopulation of the Apuseni Mountains, and new demographic risk phenomena (young migration, demographic ageing).

The fourth chapter "*Carpathian archetypal elements in the structure of the Romanian mental space*" constitutes a grouping of elements related to the construction of a mental space with which the carpathian population identifies. Over time, the Carpathian space has been the basis for the emergence of occupations with which the dynamic component identifies itself as part of the economic activities of production and support. In addition to the occupations, a series of festivals with long traditions for the Apuseni Mountains appeared, which were intended to bring together as much population as possible in order to form and strengthen new and new human relations. Due to the historical past, numerous mythological figures related to mountain life appeared in Apuseni over time. At the same time, discography presents a diverse picture in which archaic words are highlighted, or keywords from the local life and horizon of the human component are brought to the auditor.