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## COMPTES RENDUS

VICTOR MITOCARU, 2004 – Cu Ion Borcea, prin veacul frământat (With Ion Borcea, through a troubled century). Editura Corgal Press, Bacău: 1 – 607.

The author of this thick book on the scientist Ion Borcea's (1879 – 1936) public life and biological works is the well-known writer, journalist, editor and museologist from Bacău, Victor Mitocaru. The book was written at Prof. Dr. Neculai Barabaș's suggestion, a distinguished biologist, the director of "Ion Borcea" Museal Complex of Natural Sciences from poet George Bacovia's town.

Although it seems unbelievable, the life and the works of the great forerunners of various disciplines of the Romanian biology, founders of schools and institutions, did not draw the science historians' attention for a long period of time. The first steps were made just the last decades of the last century, with the book "Figuri de naturaliști" (1960) (Naturalists' portraits) published by Constantin Motaș. Only Emil Racoviță (C. Motaș, 1969; Gh. Racoviță, 1999), Grigore Antipa (Gh. Bârcă and M. Băcescu, 1969; Șt. Negrea, 1990) and Emil Pop (coord. A. Ardelean and V. Soran, 1999) were presented in books dedicated entirely to these titans of the Romanian biology. Now, it takes Ion Borcea's turn. He fully deserves an important biographer, being a first-rank personality of the Romanian and European biology, the founder of the Romanian school of oceanology and of the Marine Zoological Station from Agigea. Other important personalities wait for their biographers. First of all, I am thinking of Constantin Motaș (already present in my "working site") and of Mihai Băcescu.

The author of the book, proposed himself to depict Ion Borcea not only as a scientist but as a native, "în ipostază de persoană publică, angajată în numeroase întâlniri propagandistice cu locuitorii satelor și cu fruntașii țărăniști ai organizației din județul Bacău" (as a public person, involved in many propagandistic meetings with the village inhabitants and with the leaders of the Bacău organization of the Peasants Party). And he continues: "În perspectiva aceasta cred că am ajutat la acoperirea unui infim segment al istoriei locale. Este vorba despre meleagurile băcăuane de care sunt legate nume literare de vârf ca Vasile Alecsandri sau George Bacovia, nume științifice ilustre ca Ion Borcea, Ion Athanasiu și Ion Simionescu sau personalități din viața publică locală ca Mircea Cancicov, Dimitrie și Nicolae Ghika-Comănești, Petre Giurgea-Negrilești, Radu R. Rosetti, Leon Sachelarie, Criste Cristoveanu, Panait Gh. Cantili și mulți alții, străjuind fiecare cu personalitatea lui, iluzia preschimbărilor comunitare" (From this perspective, I think I helped to unveil a minute section of the local history. It is about the region of Bacău from which emerged literary personalities like Vasile Alecsandri or George Bacovia, famous scientific personalities like Ion Borcea, Ion Athanasiu and Ion Simionescu or personalities from the local public life like Mircea Cancicov, Dimitrie and Nicolae Ghika-Comănești, Petre Giurgea-Negrilești, Radu R. Rosetti, Leon Sachelarie, Criste Cristoveanu, Panait Gh. Cantili and many others, each guarding with his personality, the illusion of the communitarian changes).

The chapters of the book flow, following quasi-chronologically, Ion Borcea's thread of life, brutally cut at only 55 years. The author begins with the scientist's origin, with data on his parents' ancestors but without a genealogic tree. In this way we discover the Borceas, a family of priests (of his father) and the Marcus, also priests (of his mother), the rural universe (the Buhoci and Letea villages, near Bacău) where he spent his childhood and attended the primary school. At eleven years old, the boy raised among peasants went to the National High-School of Iași. Graduating the Boarding High-School, he went to the Faculty of Sciences where he had the chance to have Paul Bujor as a permanent guide in the zoological field. In 1900, he had his bachelor degree in "Natural Sciences" and, in the same year, he began his university career as a laboratory assistant in the Animal Biology laboratory – a career interrupted only by the PhD exams held in France. Well-informed pages are dedicated especially to the "French period" when Borcea studied intensely in the laboratories of the Roscoff Marine Biology Station, so closely intertwined with Emil Racovița's career, and in those of the zoological Station from Napoli, where Grigore Antipa specialized in the biological research of the seas and oceans. The author tries to draw Ion Borcea's portrait to emphasize the complexity of his personality, placing at the very top of his qualities the immense energy and persistence in his work.

Returned from France in 1906, Ion Borcea was appointed lecturer at Leon Cosmovici's zoo-physiology chair. It was a good occasion to make structural changes in teaching from an evolutionist perspective, as he had learned from his famous French professors. The chapter "Sub semnul evoluționismului" (Under the sign of evolutionism) (pp. 65 – 106) is dedicated especially to the problems linked to the evolutionist theory, in fashion among the French biologist that time, but also in Romania, inside the Association of the Young Naturalists, founded in Iași by the professor and socialist militant Paul Bujor, problems also discussed in Vasile Conta's works and published in the collection "Convorbiri literare". Borcea also used the scientific revue "Vasile Adamachi", founded in 1910, in order to spread the evolutionism among the young people. In Victor Mitocaru's opinion, it is a pity that the scientific discourse from Ion Borcea's papers surpassed the political one, so he tries to fill this gap.

The chapter "Din aulă în agora" (From the lecture room to agora) (pp. 107 – 232) refers to the works of popularizing science (where, Victor Mitocaru points out the sobriety of expression, the clarity of the demonstration and the concision of the expression), the problems of the secondary and higher education, the problem of the biological pest control, the importance of the parasitological and bacteriological studies during wars and many others. The First World War and its consequences in the country and in the University of Iași are broadly discussed, with references to Borcea's position and papers till 1923. The chapter "Țărănistul Borcea" (Borcea, the politician) (pp. 233 – 346), laden with original data, gathered and processed by the author very carefully and meticulously. This chapter shows Borcea as a landowner politician "aflat mereu în substanța fibroasă a curentului, moștenită prin tatăl său, preotul, de la generații care pătiseră datorită originii lor țărănești și a căror nemulțumire de extracție rurală completează unul dintre cele mai extinse capitole ale istoriei naționale" (always in the midst of the flow, inherited from his father, the priest, from generations who suffered because of their country origin and whose dissatisfaction of rural origin completes one of the most extensive chapters of the national history). As V. Mitocaru points out, he did not enter the Peasants Party

by chance or from interest: “Partidul țărănesc nu a făcut altceva decât să-i confirme țărănismul ca pe o povară purtată cu mândrie, asemenea unui certificat de noblete” (The Peasants Party only confirmed his politics as a burden carried with pride like a sign of nobility). We give no details, leaving the reader interested in politics to discover a little-known Ion Borcea.

The chapter “Întemeieri” (Foundations) (pp. 347 – 402) presents the history of the main achievement, the Marine Zoological Station from Agigea and Borcea’s scientific school – a true source of specialists, some of them of world fame, as Constantin Motaș and Mihai Băcescu are considered today. The last chapters, “Discursuri parlamentare” (Parliamentary speeches) and “În triumf” (Triumphing) complete Ion Borcea’s portrait as politician and analyse the conflicting relationship between him and Grigore Antipa, who never gave credit to the often harsh and ungrounded critics of his nephew. The last chapter of the book, entitled “Ultima după-amiază la Agigea” (The last afternoon at Agigea) presents the tragic circumstances that led to the premature death of the founder of the Romanian oceanology and of the Marine Zoological Station from Agigea, revived in the last decade of the last century like the Phoenix bird from its own ashes. The book has very useful “Note și comentarii” (Notes and comments) which are completing very well, for each chapter, the quotations of the text.

Without any doubt, Victor Mitocaru’s book is an excellent monograph of Ion Borcea’s life and achievements, which underlines more the public person and not the scientist. These are pages belonging to the history of science and culture, written with talent and scientific objectivity as a true arbiter of posterity. The author may be considered the first and the most authorized biographer of the scientist from Agigea, so deeply involved in the marine biology but also in the social life of Romania at that time and, especially, that of the Bacău district. From now on, Ion Borcea will be seen as Victor Mitocaru has described him – because surely, this is a reference book. Such book regarding scientists and men of culture are much wished for.

ȘTEFAN NEGREA

TEODOR GLĂVAN, 2004 - Ecologia piciformelor din teritoriul cuprins între Prut și Nistru. (Piciformes ecology from the territory between Prut and Nistru). Editura Europolis, Galați: 1-242.

The volume comprises the results of a long lasting research period on avifauna, especially on the Order Piciformes, from Republic of Moldova, made between 1987 and 1997. Firstly, all these data were used in the author’s PhD thesis, and then they became the base of the book, where a part of the information on this bird group is updated and the data on the ecology and ethology of the nine woodpecker species between Prut and Nistru are completed.

The book is written in Romanian and it is structured in five chapters. There are 15 photos in it, as well as 45 figures, 24 tables and it is completed with a very rich bibliography of about 400 titles.

The area between Prut and Nistru, which stretches the Republic of Moldova, is in South-East Europe. Geographical location within the temperate area of the European continent determine mostly the climatic conditions, landscape features, the soil, biological diversity of flora and fauna of the studied region. Geographically, the territory between Prut and Nistru is a forest – steppe interference area, between mountains and plains, between continental climate and

the marine one, all these generating the appearance and evolution of some unique landscape associations.

After this physical and geographical presentation of the studied territory, the author deals in each chapter with the methods used in his study. The systematics of the studied group and the original results of the study are presented in the chapters four and five, the richest of the volume.

Order Piciformes is sufficiently studied in Europe. The studies on the woodpecker populations of the Palaearctic region made in the 20th century are varied in the discussed problems and with a rich content. The bibliography which the author studied includes a large variety of systematical, faunal, zoogeographical, ecological and ethological data. The results presented here enrich the data on the territorial and reproduction behaviour, of ecology, following the distribution, phyto-cenological affinity, phenological dynamics of the woodpecker populations from the region placed between Prut and Nistru.

Geographical environment, specific to the territory between Prut and Nistru, favoured the development of a floral and faunal biodiversity which was strongly damaged in the second part of the 20th century. Dramatic changes of fauna are a result of the natural habitat destructions by the intensification of agriculture, draining of the wet areas and the exploitation of the ameliorated terrains, regularization of the water flows, forest clearings, pollution of the natural ecosystems with industrial waste. The present state is worsened also by the lack of ecological knowledge, by the irresponsibility of those who decide different arrangement works of the territory for the benefit of urbanizing, ignoring the present laws of environment.

In the studied area there are nine woodpecker species, whose populations and distribution suffered important changes during the last decades. The author presents also some necessary protection measures, as: the preserving of large afforested surfaces from the central area of Codrilor, of the valleys of Prut and Nistru; the preserving of the biodiversity of the arboreal species, especially the beech and oak forests, as well as the preserving of the old trees which are preferred by woodpeckers for building their nest and searching for food.

This book represents a successful crowning of ten years dedicated by the author to the research of Piciformes in a less known area. It is a study of maturity, which brings us new data and completes, at least for the ornithological literature in Romanian, a less studied segment. Even it has no abstract in an international language, this volume will be a model and a base for the new studies on the species of Piciformes for the young ornithologists whose mother tongue is Romanian, from both countries.

ANGELA PETRESCU

ADRIAN BĂLĂȘESCU, VALENTIN RADU, 2004 - Omul și animalele - strategii și resurse la comunitățile Hamangia și Boian. (Man and animals – strategies and resources in Hamangia) Muzeul Național de Istorie a României, Biblioteca Muzeului Național; Seria Cercetări Pluridisciplinare IX, Editor Dragomir Popovici, Editura „Cetatea de Scaun„: 1-304.

The volume presents a synthesis of Adrian Bălășescu's and Valentin Radu's PhD theses. The paper is the result of the studies made on the spot in different archaeological sites of over 20 prehistoric settlements, of the laboratory studies and

in libraries. This association of several contemporary archaeological-zoological research fields led to a larger general view on the studied period. The period approached in this volume is the neo-Aeneolithic one, and the research cultures are Hamangia and Boian, which evolved within a geographical area which covered, in Romania, Dobrogea and Muntenia 4500 years ago.

Although it is written in Romanian, the book has around 30 pages of abstract, list of the explanations of the figures, tables and photos in English. The book consists of seven illustrated chapters with 83 figures, 60 photos, 60 tables, and the bibliography includes 330 titles.

Physical and geographical features (the relief, hydrographical net, soil, climate, vegetation and fauna) of the studied areas form the first chapter. South-East Romania is represented by the historical provinces Muntenia and Dobrogea. Analyzing the fauna, the following limits were marked for Muntenia: Olt river flow to West, the Danube to South and East and the Southern Carpathians to North. Dobrogea is represented by the area between the Danube, to West and North, the Black Sea to East, and to South, the present border with Bulgaria.

The second chapter deals with the archaeological and zoological methods, which include the way of taking samples, taxonomical identification of the remains basing on some important collections, or using the bibliography. Also, the methods of reconstruction of the discovered taxa are minutely described. The age estimation and sex identification, taphonomy and the quantification of the abundance of each taxon, the estimation of the individual number, their weight, as well the conservation of the remains are also approached in this chapter.

The studied paleo-faunal material, found in the neo-Aeneolithic strata, is extremely diversified and includes several invertebrate and vertebrate animal groups. The presentation of the species and of their description is made in the following two chapters. Per total the studied material consists of 47,000 faunal remains of the following groups: Invertebrates (Mollusca: Gastropoda and Bivalvia) and Vertebrates (Pisces, Reptilia, Aves and Mammalia).

The studied material permitted the observation of some particularities of the paleo-economy of the communities Hamangia and Boian.

Faunal materials for Hamangia culture originate in six prehistorical settlements. The six faunal samples consists of 4,874 remains, out of which the authors identified more than 70.4%. The breeding animal activity is prevalent. Cattle and, in a smaller degree, sheep and goats, have the largest share in the number of the identified pieces. Suinae have a small percentage, and the authors consider that is due to the mobility of these communities. Hunting was secondary in importance, for supplementing or completing the food. Species of a large or middle size were hunt (wild boar, Cervidae and Evidae). Harvest and fishing had a reduced share within the paleo-economy of the Hamangia community.

Fauna lots, dated as Boian, are divided in three cultural stages: seven lots Boian-Giulești, three Boian-Vidra and six Boian-Spanțov from 14 settlements. Quantitatively they consist of 42,984 remains, and the identification degree of the material varies between 60-84%. In Boian culture, animal breeding was the main activity. Cattle are frequently occurred in the studied samples. They are followed by sheep and goats and by Suinae, whose percentages are almost similar. Small and large horned cattle were bred also for their secondary staff (wool, milk, leather). In some settlements, the dog was an alternative source of food, this aspect not being occurred in Hamangia culture.

In the evolution of this culture, studying the material, the authors observed that in the stage Boian-Giulești, cattle reach percentages of over 70%, and towards the end of this culture, in the stage Boian-Spanțov, the percentage is of 40-50%. They consider that the diminishing of the cattle percentage is tied by the sedentariness of the neo-Aeneolithic tribes, this thing generating the increasing of the goat and Suinae percentage.

Hunting was secondary in completing the food. Species which gave a greater quantity of meat were hunt: stag, ox, wild boar, deer, Ecvidae.

Fishing contributed to the paleo-economy of the Boian communities, especially in the settlements placed near the water flows, as those near the Danube. Among the 13,512 fragments, 15 species of freshwater, anadromous migratory and marine fishes (sturgeon, pike, ciprinids, bream, carp, roach, etc.) were identified.

Capture of molluscs has a minor place in paleo-economy but contributed to the diversity of food. Bivalvae were best represented (*Unio crassus*, *Unio pictorum*, *Unio tumidus*, *Anodonta cygnea*, *Dreissena polymorpha*).

This study tries and succeeds in characterizing the relationships between climate, vegetation and fauna, but also the complex relationships established between the neo-Aeneolithic communities and the environment. The authors succeed in sketching a reconstruction of the environment in all his complexity, a hard and difficult try finished successfully.

I am convinced that good study on Hamangia and Boian neo-Aeneolithic communities will remain a model for the future archaeological and zoological studies, helping in getting enough information for characterizing prehistorical communities.

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