

BOOK REVIEW

Geacu Sorin, *Raul Călinescu – fondatorul biogeografiei românești*, Editura Curtea Veche, București, 2019, 333 p.

Doctor Sorin Geacu, a devoted biogeographer, with PhD degree acquired in both Geography and Biology, senior researcher in the Institute of Geography of the Romanian Academy and a unique researcher and explorer of libraries and archives, provides us with impressive documentation on the life and scientific career of prof. dr. Raul Călinescu – the founder of the Romanian Biogeography.

After the *Foreward* signed by the academician Dan Bălțeanu – the Director of the Institute of Geography of the Romanian Academy –, the manuscript is organized into 29 chapters, which follow, chronologically, the main steps in the professional development of the distinguished biogeographer. The biogeographical data are supported through illustrated documents (e.g. Bachelor's degree diploma in Geography – Natural Sciences; PhD and Docent diplomas in Biogeography). Graduate of the Faculty of Science of Cluj, under the mentorship of G. Vâlsan, R. Călinescu followed his urge to specialize in Biogeography. Moreover, working in the Zoology Laboratory of prof. A. Popovici-Băznoșanu (Faculty of Sciences of Bucharest), Călinescu has acquired expertise in the determination of many vertebrate species. With E. Racoviță, the promoter of the concept of species as morphological and geographical entities, as the President of his PhD Commission, Călinescu gained

the ability to mainstream geographical concepts in his work.

His 40-year teaching career was shortly related with the high school education, but it lasted much longer in the higher education, where he started his activity (from the time of his university studies) at the Botanical and Geography institutes of the Faculty of Sciences of Cluj University. In Bucharest, Călinescu began his activity at the Faculty of Sciences, first in the Laboratory of Descriptive Zoology and then, in the Laboratory of Physical Geography, evolving to the university assistant position in the Physical Geography Department, until 1956, when he became a full professor in Biogeography at the University of Bucharest. These main steps in his teaching career are illustrated through copies of 12 documents, as well as through 27 photos reflecting moments from the field works with his students.

R. Călinescu started his activity in the Institute of Geographical Research (Bucharest) since its establishment (1944), being one of its founders, where he had different management positions.

He also was the head of Biogeography Section. The copies of 8 documents and 13 photos show episodes from the various projects in which he was involved in this institute.

From his positions in higher education, he developed networking and cooperation activities with the research stations of Sinaia, Agigea and Eșelnița-Oroșova. The latter was led by Călinescu from its establishment (1964) until he passed away in 1970.

R. Călinescu started his research activity as a student, as a collaborator with the *Oltenia's Archives*, publishing different papers referring to the Oltenia region. Early in 1923, he launched the commendable idea of founding a *naturalist museum* in Craiova, which was established on December 2nd, 1923 – as a section of the existing Oltenia Museum (since 1915).

At the same time, Călinescu supported the founding of a *Naturalist Society*, which in 1928 has become the *Association of Naturalists of Oltenia and Banat*. As founder and president of this association, Călinescu organized numerous conferences. Meanwhile, Călinescu was having an assistant position in the Laboratory of Descriptive Zoology of the Faculty of Sciences in Bucharest. The basic functioning rules of the new Museum of Natural Sciences of Craiova were in line with the foreseen aims of the Association. Călinescu had insisted on the methodical research of the Cerna and the Iron Gates region, to elucidate the biogeographic problems related to the faunistic and floristic elements, relics and of Mediterranean origin.

From the sixth part of the book *Biogeography in Raul Călinescu's vision – definition, principles, methods, issues*, it appears that R. Călinescu promoted Biogeography in response to the request of his professor of physical geography in Cluj (namely G. Vâlsan). His call for Biogeography was encouraged and supported, also after his

employment as an assistant at the Laboratory of Descriptive Zoology of the Faculty of Sciences of the University of Bucharest.

For Raul Călinescu, Biogeography meant "*the geography of life*", a science "*with geographical principles and methods*", but in close connection with other disciplines such as Botany, Zoology, Biology, Paleontology, Paleogeography, Physical Geography and Human Geography. In his vision, Biogeography had to focus on "*biological facts, which mirror geographical conditions*". R. Călinescu saw the spreading areas of plant and animal species, in a permanent dynamic. In antithesis to the "stability" of relict and endemic species, the overlap of the spreading areas by the biogeographic methods was a way towards the identification of the "*zoogeographic centres*". The poly-area spaces were seen as "*geographical spaces in which several biogeographic areas overlap, of species formed in them, under the influence of special conditions*". Phytogeography and Zoogeography are the two branches of Biogeography, which Călinescu defined as "*the science that studies the geographical spread of living beings and their complexes (biocenoses) on the surface of the terrestrial globe, as an integral part of the geographical envelope, analyzing, at the same time, the historical (genetic) and ecological causes of this spread*".

For 40 years, Călinescu conducted research studies on Zoology and Zoogeography topics, which resulted in numerous papers, brochures, monographic volumes and maps. "*The mammals of Romania and their biogeographic-economic problems*" and "*The Sciuridae species of the R.P.R.*" are among his main synthesis works. In respect to the rodents, Călinescu was interested in the biology and the spread of poplars, squirrels, marmots.

He highlighted the need of reintroduction of marmots into the national fauna, an action which took place in 1973.

Since the early stages of his career, Călinescu was interested in the biology of mustelids. For the hoofed species, he elaborated the first maps of their spreading areas. He published in three editions (1935, 1939, 1945) *The determinant of mammals for hunting in Romania*. Some of his articles referring to the mammals have been published in the Hunter's Journal. He wrote about dolphins, the *Monachus albiventer* seal of the Black Sea, the Australian dingo dog, the camels and the antelopes. He also published a biogeographic comparison between the mammals of Bulgaria and Romania.

The eighth chapter of the book refers to R. Călinescu's interest in the Romanian hunting cartography, richly illustrated with maps showing the spread of many species. In collaboration with other specialists, Călinescu has elaborated the *Biogeographic map of the world* and *The Map of Romania's plant and animal wealth*. These contributions, together with all the other maps he elaborated, represent a valuable documentary resource for further comparative research on the dynamics of fauna.

One of Raul Călinescu's youthful passions was related to the knowledge of the biology of reptiles. He followed this passion in his PhD thesis (in Geography), in which he studied the amphibians and reptiles in Romania. Călinescu emphasized that: "*the herpetological fauna of a country has double importance: a scientific one, on systematic and zoogeographic problems, and a practical one, these animals being of a valuable auxiliary of agriculture and forestry*".

The zoogeography of some invertebrates was mainly addressed in the

first part of his scientific activity. He was also interested in studying some species of plants, and in 1956 published the *Map of Romania's vegetation*, scale 1: 400,000, which is still considered a valuable teaching material.

Other studies of Călinescu focused on the biogeography of different regions: Oltenia, the South-Dobrogean territory, the surroundings of Bucharest, the Danube Delta, the Curvature Carpathians, the Danube Gorge, etc. He published also the *Biogeographic Regionalization of Romania*. Among his synthesis works, he published the *monographs of the Serpent and Ada-Kaleh islands* (1940), *Introduction to the Biogeography of Romania* (1946). Later, in 1957 he published the book *Life in the equatorial forests*. In 1960, he contributed to the elaboration of the *Geographical monograph of Romania* (fauna and vegetation), and in 1969, he coordinated the editorial activities for the publishing of the *Biogeography of Romania* treaty.

Dr. Sorin Geacu reveals to the readers another side of R. Călinescu's scientific interests, namely, his impressions from different research trips or field campaigns (the volumes *Crossing the Southern Dobrogea*; *Crossing the Bărăgan region – Icons from nature*; *The Danube – A touristic Waterway*; *The Eastern Mediterranean*; *In the surroundings of the Bucharest Capital*).

Raul Călinescu was very active in the newspapers of Bucharest (writing over 320 articles, notes, chronicles, reviews), promoting scientific knowledge. According to the author of this book, Raul Călinescu was an example of honouring the memory of his masters who inspired his passion for Biogeography: G. Vâlsan, E. Racoviță, Al. Borza, G. Antipa, I. Borcea etc.

Since 1967, the PhD professor do-cent R. Călinescu was the first to acquire a PhD degree in Biogeography. He was also the head of the “Zoogeographical Center” (1929-1930). R. Călinescu had also contributions focusing on fishing and hunting in the monographic campaigns (1935-1938), initiated by D. Gusti, in the Șant (Bistrița-Năsăud county) and Drăguș (Brașov county) communes. During the same period, he worked as an inspector of the Royal Cultural Foundation.

The founder of Biogeography coordinated the “Biogeographic Discussion Group” of the Faculty of Sciences of the University of Bucharest (1945-1948), promoting the biogeographic studies in the country. He was part of the editorial boards of some journals such as *Natura*, *Gazeta Vânătorilor* and *Probleme de Geografie*. Together with G. Antipa, they established the Zoological Garden in Bucharest. He was a member of several scientific societies in the country and abroad. In a distinct chapter, the author of this book presents the memories of some distinguished scholars from Romania about R. Călinescu.

In Chapter 26, readers could find the list of the 276 publications of Călinescu, published as papers in different journals, proceedings, synthesis volumes or maps and the list of the 327 newspaper articles that he wrote. In Chapter 28, the author presents the list of 52 reviews related to Călinescu's works and the list of the 59 reviews made by himself on the works of other authors. In the last chapter of the book, it is also presented the list of the 83 communications presented in a various conference held in Bucharest or elsewhere in the country.

The elaboration of this bibliography relied on 120 titles of works which have been consulted by the author. The last 6 pages represent the English abstract of the book. With this valuable biography, Dr. Sorin Geacu showed a great meticulousness and he is masterful in handling and organizing the impressive amount of documentary information about the life and work of Raul Călinescu.

Therefore, I consider that, apart of being devoted to the memory of the founder of Biogeography, this book is a valuable contribution to the knowledge of the history of scientific research in Romania, especially through the presentation of his impressive teaching and research activity. I congratulate the effort and the success of the author in presenting with extraordinary detail the complexity of Călinescu's life and career and I welcome this book full of knowledge, which is necessary for the libraries of all those interested in the history and evolution of biological and geographical sciences in Romania.

DUMITRU MURARIU

*Director of the Institute of Biology, Romania
Corresponding Member of the
Romanian Academy*