



CARVALHO, Rómulo de (Lisbon, 1906 - Lisbon, 1997)

Rómulo Vasco da Gama de Carvalho was born on 24 November 1906 in Lisbon and died in the same city on 19 February 1997. He graduated in Physical and Chemical Sciences from the School of Sciences of the University of Oporto (1931) and, the following year, completed a degree in Pedagogical Sciences at the School of Arts and Humanities of the Classical University of Lisbon. In 1933, he completed his teaching internship in Lisbon at Camões Secondary School, where he taught until 1947, collaborating in the preparation of the reform of secondary education enacted that year. He moved to Pedro Nunes Secondary School (1948-1950), and in 1950, he was transferred to D. João III Secondary School (Coimbra) on a service contract. He returned to Pedro Nunes Secondary School in 1957, where he worked as a methodologist teacher in the Physics and Chemistry Group until his retirement in 1974, having influenced successive generations of teachers. On 11 May 1990, he became director of the Maynense Museum of the Academia das Ciências de Lisboa and two years later, he became a corresponding member of that Academy. At the age of 50, he published his first book of poetry, achieving a prominent place in Portuguese culture under the pseudonym António Gedeão.

A many-sided personality, in addition to his remarkable poetic work, Rómulo de Carvalho excelled as a pedagogue, science communicator, historian of education and science, author of textbooks, essayist, fiction writer and playwright. He published a vast bibliography, spoke publicly in very different places (higher, secondary and basic education establishments, cultural institutions, factories...), gave talks on the radio, and gave interviews to newspapers, radio, and television. He was co-editor of the pedagogical magazine *Palestra* [Lecture], published by Pedro Nunes Secondary School (1965-1974) and of the *Gazeta de Física* [Physics Gazette] (1946-1959).

Since the end of the 1940s, Rómulo de Carvalho focused on producing studies to disseminate science, which made a significant contribution to the education of young people and adults interested in these subjects and whose access to them was practically denied. In 1947, he published a volume in the 'Biblioteca Cosmos' [Cosmos Library], directed by Bento de Jesus Caraça, entitled *A ciência hermética* [The hermetic science], in which he stated that it was the author's 'intention that this volume should be the first of a vast and complete *History of Chemistry*'. Due to the restrictions of that period, it was only followed by a second title, *O* 

embalsamento egípcio [The Egyptian embalming] (1948). However, this first attempt at well-structured scientific dissemination was taken up again in the 1950s and 1960s, with the preparation of eight studies which, together with another by Ilídio Sardoeira, made up the collection 'Ciência para Gente Nova' by Editora Atlântida (Coimbra) and which dealt with the history of the telephone, photography, balloons, static electricity, the atom, radioactivity, isotopes and nuclear energy. Some of these volumes were reissued over the years. Later (1979-1985), Rómulo de Carvalho published the 'Cadernos de Iniciação Científica' [Scientific Initiation Notebooks] series for Editora Sá da Costa (Lisbon), with a total of 18 titles covering topics as diverse as A descoberta do mundo da Física [Discovering the world of Physics] (1979), A pressão atmosférica [The atmospheric pressure] (1982) or Ondas e corpúsculos [Waves and corpuscles] (1985). Also, still in the field of science dissemination, he wrote Física para o povo [Physics for the people] (2 vols., 1968) and translated Mr Tompkins Explores the Atom by George Garnow (1956). As a historian of education, in 1959, he published the study História da fundação do Colégio Real dos Nobres de Lisboa [History of the foundation of the Royal College of Nobles of Lisbon] (1765-1772), dedicated to the memory of Professor Joaquim de Carvalho. This work, which is still an obligatory reference for historians in the field today, was already part of a series of personal works on the history of Science in Portugal produced on the basis of detailed analysis of hitherto unknown archives. In Rómulo de Carvalho's own words, his research method consisted of 'documenting everything that is affirmed, systematically questioning the statements already made on the same subjects', with the scientific aim of 'helping to establish the truth of events and, at least, that which, with sufficient guarantee' seemed to be more truthful. This research work was a breakthrough in the field of the History of Education, following the so-called 'Annales School', breaking with the trend of Portuguese historiography that was limited to an erudite descriptivism in which pedagogical facts were presented detached from the social context.

This publication was followed by several others, mainly devoted to studying the origins and progress of the teaching of Physical Sciences and Mathematics in Portugal. These piecemeal works led Rómulo de Carvalho to publish a remarkable work in 1978 – *História do Gabinete* de *Física pombalino da Universidade de Coimbra: desde a sua fundação (1772) até ao jubiléu do professor italiano Giovanni Antonio Dalla Bella* [History of the Pombaline Physics Office at the University of Coimbra: from its foundation(1772) to the jubilee of the Italian professor Giovanni Antonio Dalla Bella] (1790) – as part of the 2<sup>nd</sup> centenary of the Pombaline reform of the University of Coimbra. Rómulo de Carvalho's research into the teaching of Physics extended to related themes because, in his words, 'by touching on that field we were exploring the subject of Portuguese culture with all its multiple implications'. Thus, in the 1980s, he published works on Experimental Physics, Astronomy, and Natural History in Portugal in the 18<sup>th</sup> century, highlighting above all the 'prestigious position' that these sciences achieved with the Pombaline reform, 'within the framework of the programmed subjects': he released an extensive work on *A actividade pedagógica da Academia das Ciências de Lisboa nos séculos XVIII e XIX* [Pedagogical activity of the Lisbon Academy of Sciences in the 18th and 19<sup>th</sup> centuries] (1981) with a view to leaving 'amply documented the Academy's interest in the legacy that the Duke of Lafões had

bestowed on it, by turning it into the possessor of the excellent collection of more than three hundred pieces of didactic material for the teaching of Physics'; in the 'Biblioteca Breve' [Brief Library] collection, jointly directed by the Ministry of Education and the Institute of Culture and Portuguese Language, he published A física experimental em Portugal no século XVIII [Experimental Physics in Portugal in the 18th century] (1982); collaborated in the commemorations of the 2<sup>nd</sup> centenary of Pombal's death (1982) with the study As ciências exactas no tempo de Pombal [Exact Sciences in the time of Pombal], included in a commemorative issue of the magazine Brotéria; during the commemorations of the 2<sup>nd</sup> centenary of the Academia das Ciências de Lisboa (1986), at the 1st Conference on the history of the development of Science in Portugal, he presented the paper 'A Física na reforma pombalina' [Physics in the pombaline reform]. In 1986, the Education Department of the Calouste Gulbenkian Foundation published one of his most noteworthy studies, his extensive book História do ensino em Portugal. Desde da fundação da nacionalidade até ao fim do regime de Salazar-Caetano [History of Education in Portugal. From the foundation of nationality to the end of the Salazar-Caetano regime] (965 p.), which once again filled a huge gap in Portuguese historiography. This whole project was developed taking into account that the history of education is not limited to the history of teaching and its institutions but is linked to the history of social movements, the political situation and, more directly, the evolutionary process of cultural activities; not only archival material, official publications on teaching and others were researched, but also a vast bibliography that includes specific aspects of Portuguese pedagogical activity from the dawn of nationhood until 25 April 1974.

This was a huge task to provide a comprehensive view of Portuguese education, which is still essential today for students, teachers, researchers, and other scholars in the field and which has been published several times over the years. As an acknowledgement of the research he had conducted into the history of education, Rómulo de Carvalho chaired the last session of the First Meeting on the History of Education in Portugal, held in October 1987 by the Education Department of the Calouste Gulbenkian Foundation and the Department of Education of the School of Sciences of the University of Lisbon, which was attended by a very significant number of researchers who had been working on these topics. As far as the history of science is concerned, Rómulo de Carvalho addressed it in various works and also developed specific research, namely during his honoris causa doctorate - Actividades científicas em Portugal no século XVIII [Scientific activities in Portugal in the 18th century] . From the 1950s onwards, Rómulo de Carvalho left us other historical studies, including biographical works on men of science, such as Ferreira da Silva. From Homenagem de ciência e de pensamento 1853-1923 [Tribute to Science and thought 1853-1923] (1953), and Albert Einstein (1879-1955) (1956), to Relações entre Portugal e Rússia no século XVIII [Relations between Portugal and Russia in the 18th century] Portugal and Russia (1979). In his capacity as a methodological teacher, he left a considerable number of articles published especially in the periodicals Boletim do Ensino Secundário, Gazeta de Física and Palestra and in the daily newspapers, Comércio do Porto [Porto Trade] and Jornal de Notícias. A final word for the book published by the Calouste Gulbenkian Foundation, Origens de Portugal: história contada a uma criança [Origins of Portugal: Story told to a child] (1998), with illustrations by the author

himself, written during the Second World War and addressed to his seven-year-old son who had just started primary school.

In recognition of all his work and the legacy he has left us, the Presidency of the Republic awarded him the insignia of Grand Officer of the Order of Public Instruction (1987) and, on his 90<sup>th</sup> birthday, honoured him with the Grand Cross of the Ordem Militar de Sant'lago da Espada. On the same occasion, the Ministry of Science and Technology (24 November 1996) promoted a national tribute to him, in collaboration with institutions and personalities of the academia, education and culture, which took place at the Academia de Ciências de Lisboa [Lisbon Academy of Sciences]. The date was then proposed as 'National Day for Scientific Culture, a privileged moment each year for stocktaking, reflection and action on the role of knowledge in our future'. The previous year, the University of Évora had awarded him an *honoris causa* doctorate. In 1992, his name was given to the Cova da Piedade Secondary School (1992) and, posthumously, to a street in Lisbon's Marvila neighbourhood (1997). Throughout his life and after his death, other tributes were paid to him in recognition of his value, in public sessions, on radio and television, in collections of his texts and in the preparation of academic papers on his work.

Active bibliography: Sobre os compêndios universitários exigidos pela reforma pombalina (Figueira da Foz, s.n., 1963); A Física na reforma pombalina (Lisboa, Academia das Ciências, 1986); A História Natural em Portugal no século XVIII (Lisboa: Instituto da Cultura e Língua Portuguesa, 1987); Bibliografia das obras de autores nacionais publicadas durante o séc. XX que se ocupam das actividades científica e técnica dos portugueses nos séculos anteriores (in História e desenvolvimento da ciência em Portugal no séc. XX (Lisboa, Academia das Ciências de Lisboa, 1992, vol. III: pp. 1781-1938); O material didáctico dos séculos XVIII e XIX do Museu Maynense da Academia das Ciências de Lisboa (Lisboa, Academia das Ciências, 1993); Colectânea de estudos históricos (1953-1994): cultura e actividades científicas em Portugal (Évora, Universidade de Évora, 1997); Memória de Lisboa (Lisboa: Relógio d'Água, 2000); Ser professor: antologia de textos de pedagogia e didáctica (Lisboa, Gradiva, 2006); Rómulo de Carvalho [Memórias] (Lisboa, Fundação Calouste Gulbenkian, 2010); Rómulo de Carvalho: bibliografia científica do século XVIII em Portugal (coord. de Frederico de Carvalho, Lisboa, Fundação Calouste Gulbenkian, 2013).

Passive bibliography: Abreu, Artur Galamba Fernandes, *The contribution of Rómulo de Carvalho to Portuguese Science Education (1934-1974): a humanistic project?* (tese de Doutoramento. Leeds, University of Leeds, School of Education, 2013); Araújo, José Moreira de, *Rómulo de Carvalho na Universidade do Porto, 1928-1931* (Porto, Universidade do Porto, 2006); Carvalho, Cristina, *Rómulo de Carvalho, António Gedeão: príncipe perfeito* (Lisboa, Editorial Estampa, 2012); *Doutoramento "Honoris Causa" do Dr. Rómulo de Carvalho* (Évora, Secretariado Editorial, 1996); Pita, João Rui (coord.), *Ciência e experiência: formação de médicos, boticários, naturalistas e matemáticos: homenagem a Rómulo de Carvalho (1906-2006)* (Coimbra, Imprensa da Universidade, 2006); Vieira, Célia & Rio-Novo, Isabel (org.), *Actas do Colóquio* 



internacional António Gedeão & Rómulo de Carvalho: novos poemas para o homem novo (Maia, Instituto Superior da Maia, 2008).

Áurea Adão

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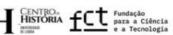














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