

Report of the *Encontro Ciência e Arte: Vida e Obra da Angrense Maria Ramos Valadares*. Angra do Heroísmo, Biblioteca Pública e Arquivo Regional Luís da Silva Ribeiro, 8th November 2024.

Maria de Lourdes Ramos Moniz da Costa Valadares (1904-1985) was a Portuguese biologist and artist. Born in 1904, in Angra do Heroísmo, Azores, she started her studies in fine arts, having studied at the Fine Arts School of Porto in the 1920s, particularly in the areas of drawing and sculpting. Later, Maria Ramos Valadares graduated in biological sciences in 1937, at the Faculty of Sciences of Lisbon, and worked in biological research throughout the rest of her life. Using the fruit fly *Drosophila melanogaster* as her preferred model organism, Maria Ramos Valadares worked on different lines of research within the field of genetics, from the study of mutations and chromosome analysis to the assessment of the inheritance potential of morphological changes induced by nutritional imbalance.

Maria Ramos Valadares had remained largely unknown to the Portuguese community of biologists and of historians of science until very recently. In fact, her scientific work only came to light through her husband, the well-known Portuguese physicist Manuel Valadares, during the preparations for a double commemoration of the 120 years of his birth and the 50-year anniversary of the Portuguese Physics Society, which took place in 2024. Since then, research on Maria Ramos Valadares' life has uncovered a rich scientific career, but also a complex one, not only for the different lines of research within the field of genetics and physiology that she pursued, but also the hardships faced, on scientific, institutional and personal levels, marked by issues related to gender and the political turmoil of the twentieth century.¹

On November 8th of 2024, a meeting titled “Encontro Ciência e Arte: Vida e Obra da Angrense Maria Ramos Valadares” (Science and

1. CABRITA, A., SIMÕES, A., FLORENSA, C. (2024), «Manel e Maria: um casal (in)julgado de cientistas?», *Gazeta de Física*, 47 (1), 51-58.

Art: Life and work of the Angrense Maria Ramos Valadares) was organized in Angra do Heroísmo, paying homage to its local scientist and artist. It comprised an afternoon of activities that included a series of talks on topics related to Maria Ramos Valadares' life – personal, scientific and artistic – as well as a visit to an exhibition about Maria Ramos Valadares, and the performance of a play based on Maria Ramos Valadares' life.

The meeting took place at Angra's public library "Biblioteca Pública e Arquivo Regional Luís da Silva Ribeiro" and it gathered several Portuguese academics, who delivered a series of talks related to Maria Ramos Valadares' life. These talks covered topics that ranged from life in Angra do Heroísmo during Maria Ramos Valadares' time, to historical perspectives on her life and career, as well as her husband's, and to scientific talks on current day practices of the fields she had researched, such as the use of *Drosophila melanogaster* in genetic studies and the use of X-rays for the analysis of artwork. Taken together, the variety of topics discussed made this meeting quite educational not only from a historical but also from a current scientific perspective.

The meeting was open to the general public, having as its main target audience school students and teachers. In fact, many efforts seem to have been made to advertise the meeting and the activities surrounding it, with pamphlets and posters having been distributed through Angra do Heroísmo. It is also worth noting that the meeting was fully recorded and made available online, although the talks were not open to questions from the public.

The exhibition "A Singularidade de Maria Ramos" (The Uniqueness of Maria Ramos) had been on display at the same public library since October 22nd of 2024. While a small exhibition, placed at a waypoint in the library which allowed easy access to visitors, it aimed at encompassing Maria Ramos Valadares' life in its artistic and scientific dimensions. The objects exhibited mostly concerned Maria Ramos Valadares' early life in Angra do Heroísmo, with documents related to her early education, local newspaper articles on local artists, as well as some of her artistic work, such as caricatures and sculptures from private collections. The section regarding Maria Ramos Valadares' scientific work, while not having objects or documents displayed, consisted of a comprehensive timeline of the major known events of her career, as well as an informative display regarding the relevance of the use of *Drosophila melanogaster* as a model organism in genetic research nowadays. The exhibition was accompanied by a catalogue, which complemented it through short articles on Maria Ramos Valadares' life within the scope of her artistic practice, on current day genetic research, and a history of science reflection on her life and career, written by different Portuguese researchers.

The play "Maria por entre Ramos de Ciência e Arte" (Maria between branches [Ramos] of Science and Art) was performed in the evening. Directed by the theatre group "O Teatrinho," written by Valter Peres, the play portrayed Maria Ramos Valadares' life through a first-person perspective monologue, with the actress Filomena Ferreira playing the role of Maria Ramos Valadares. The play was based on the primary sources found so far related to

her personal life as well as artistic and scientific careers. The first-person perspective allowed for interesting reflections of Maria Ramos Valadares' life particularly with regards to gender questions. The play portrayed an interesting view of the hardships that Maria Ramos Valadares went through and an interpretation of how they might have affected her, such as her journey from Azores to continental Portugal as a young woman and the difficulties she might have faced during a period in time when communication and family visits were hard and infrequent, or how she faced a scholarship in the USA during the peak of the Second World War, alone and pregnant. However, it also allowed for creative liberties which, from my perspective, might have led to unnecessary dramatization of Maria Ramos Valadares' life, both personal and professional, as well as the interpretation of what her personality might have been like. This was particularly evident, for instance, on the portrayal of the early relationship with her husband, who had been her professor before they married, where infatuation and jealousy tropes were relied upon, at times in what seemed to have been a comedic attempt. While there might be a certain appeal in using such narrative devices for storytelling purposes, it is important to reflect on how these are used, portrayed and taken up by the audience, when using such an engaging format as a play to communicate or help bring awareness to topics related to history of science and gender.

Initiatives such as this meeting and related activities are important to help bring visibility to the largely invisible work of scientists (and artists) such as Maria Ramos Valadares, bringing forth a vaster range of historical reports which allow a deeper understanding of scientific practices and to question the traditional narratives and myths of a scientific past. But they also present an opportunity to reflect on how these topics can be communicated to the general public or be used in educational activities, without inadvertently recurring on those "myths," particularly regarding the history of science and gender.

The variety of activities and modes of communication that were used in this meeting made not only for an engaging contact with the life and work of Maria Ramos Valadares, but also for the communication of current scientific practice. Additionally, it is worth mentioning that the effort to record and make easily available the talks that were delivered shows an important commitment to the educational aspect of this meeting.

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