

In the Bookstores

A Sonnet to Science: Scientists and Their Poetry

By Sam Illingworth
Manchester University Press

2019 (hardback);
2020 (paperback)
ISBN: 978-1-5261-52268
(paperback)
€12.99. 224 pages



Last year, I wrote my first poem – 10 lines of free verse that, after three rejections and 229 days in queue, was purchased and published. Although I have been selling short stories since 2016, poetry is something new for me, undiscovered territory, something to be explored with exhilaration, enthusiasm, and perhaps also apprehension. Why apprehension? As a scientist, the two disciplines seem polar opposites, science based in logic and rules, poetry based in beauty and creativity. They are disciplines that don't often cross paths, sharing very little common ground. Two sides of two very different coins. Why, then, have there been so many scientists that have written poetry in the past? What is it that draws these two disciplines together? Sam Illingworth attempts to answer these questions in *A Sonnet to Science*.

A Sonnet to Science is 224 pages of historical non-fiction containing six short biographies – or biographettes, if you will – of famous scientists who also wrote poetry. The author, who is himself a scientist, science communicator, and a poet, delivers his perspective on the opposing worlds of science and poetry through reliving the life of each of the six scientists. He examines each scientist's struggles and triumphs, both personal and scientific, through the lens of their poetry. And in doing this, each biographette is an examination of beauty, logic, and creativity.

The book begins with a short introduction where Illingworth states his purposes for writing *A Sonnet to Science*. He explains his hypotheses and his methods for selecting the subject of each biographette, which are scientists from the western world, where mixing poetry and science is viewed less "acceptable"; and scientists that published in English or approved translations of their work within their lifetime.

In the introduction, Illingworth also mixes this scientific approach with poetry, using poetry

from John Keats and Edgar Allen Poe (whose "Sonnet – To Science" is alluded to in the title of this book) to illustrate how the two disciplines are often viewed as oppositional to one another. However, the juxtaposition of a passage from a scientific paper and a poem shows that both media beautifully describes the lives and deaths of birds, and serves as a powerful reminder that both science and poetry share many similar characteristics, such as observation, description, and attention to detail.

The biographettes in the book are arranged to create a chronology, beginning with the birth of the "modern scientist" (late eighteenth century), passing through six overlapping generations, which stretch to the beginning of the 21st century. Each of the six is provided with their own poetic description.

The first scientist-poet that Illingworth puts under his microscope is Humphrey Davy ("the Romantic scientist"). He was a chemist whose experiments with electricity led to the isolation of potassium and sodium, and whose experimentation with nitrous oxide led to the nickname "laughing gas". Humphrey Davy, however, did not only impress in the laboratory. He was the author of many poems, was friends with the romantic poet Samuel Taylor Coleridge, and is even mentioned in a poem by Lord Byron.

The next biographette is that of Lord Byron's daughter, Ada Lovelace ("the metaphysical poet"). Illingworth writes of Lovelace's contributions to mathematics and the "Difference Engine", a precursor to the modern computer. Lovelace's creativity, sharpened through her literary guile, led her to make additions and improvements to the scientific translations on which she worked, contributions which helped to imagine the power of the modern computer, in the 1840s.

James Clerk Maxwell ("the lyrical visionary"), who is known for his discovery of the Maxwell equations, four mathematical equations that govern the laws of electromagnetism, follows Lovelace. We learn that religion, science, and poetry intertwined throughout his life and career. After Maxwell there is a biographette of Ronald Ross ("the medical metrist"), a British physician who won

SECTION EDITORS



Alison McIntosh

AMcIntosh@clinipace.com



Stephen Gilliver

stephen.gilliver@gmail.com

a Nobel Prize for his work on the lifecycle of the parasite that causes malaria. Spending most of his life in India, he explored his thoughts on art and science in verse in poems such as "Thought" and "Indian Fevers".

Maybe the most delightful biographettes are the final two. These are the two scientists in the book with whom I found myself identifying with most strongly. Both Miroslav Holub ("the reluctant poet"), a Czech immunologist, and Rebecca Elson ("the poetic pioneer"), a Canadian astronomer, were unknown to me before I read *A Sonnet to Science*. Holub, a survivor of the Nazi occupation of Pilsen, lived most of his life behind the Iron Curtain. Holub published papers in *Nature* describing the production of antibodies by lymphocytes and is perhaps more often recognised as a poet than a scientist. Elson wrote both short stories and poetry while researching star clusters. She was a prominent astronomer, using the Hubble telescope to make many discoveries before her life was tragically cut short at only 29 years of age. Her poetry and other writings were published posthumously.

In *A Sonnet to Science*, Illingworth tells a tale of two disciplines, winding it through lives and generations, on a path to discover what draws these two opposites together, and in doing so explains how logic, beauty, and creativity entangle in science and our hearts. I would recommend this book to anyone interested in the history of science and scientific communications or to anyone with a heart for poetry.

Nathan D. Susnik

nds@posteo.de

www.nathansusnik.wordpress.com

Poetic medical writers

Are you a poet who is also a medical writer? Or a medical writer who is also a poet? However you define yourself, consider submitting your poems to *Medical Writing*. We are interested in receiving submissions whose themes would have special resonance with nature, science, or our audience of professional medical writers.

Please send poems or questions about submission to Nathan Susnik, MEWpoetry@posteo.net.