John Hale, "Entry on: Archimedes: the Man Who Invented the Death Ray by Shoo Rayner ", peer-reviewed by Elizabeth Hale and Daniel A. Nkemleke. Our Mythical Childhood Survey (Warsaw: University of Warsaw, 2020). Link: http://omc.obta.al.uw.edu.pl/myth-survey/item/995. Entry version as of November 21, 2026.

Shoo Rayner

Archimedes: the Man Who Invented the Death Ray

United Kingdom (2017)

TAGS: Archimedes Greek Philosophy





We are still trying to obtain permission for posting the original cover.

General information	
Title of the work	Archimedes: the Man Who Invented the Death Ray
Country of the First Edition	United Kingdom
Country/countries of popularity	worldwide
Original Language	English
First Edition Date	2017
First Edition Details	Shoo Rayner, *Archimedes: the Man Who Invented the Death Ray*. Shoo Rayner, First Trade ed., 2017, 28 pp.
ISBN	1908944358; 9781908944351
Genre	Graphic novels
Target Audience	Children
Author of the Entry	John Hale, University of Otago, johnhalenz@gmail.com
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This Project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 681202, *Our Mythical Childhood… The Reception of Classical Antiquity in Children's and Young Adults' Culture in Response to Regional and Global Challenges*, ERC Consolidator Grant (2016–2021), led by Prof. Katarzyna Marciniak, Faculty of "Artes Liberales" of the University of Warsaw.

Creators



Shoo Rayner , b. 1956
(Author, Illustrator)

Shoo (Hugh) Rayner is an author, illustrator, and teacher of drawing. He was born in Kingston-upon-Thames, the child of a member of the British Army who moved around the world. He spent his childhood in Germany, Pakistan, Yemen, and the United Kingdom. He is a graduate of Anglia Ruskin University (formerly Cambridge College of Art and Technology). He lives in Gloucestershire, near the Forest of Dean.He has illustrated over 250 books, and has two successful Youtube sites teaching drawing (Shoo Rayner Drawing, and Draw Stuff Real Easy).

Rayner creates picture books and middle-grade fiction for children. He admits that after failing his English O level he developed a visual approach to writing and telling stories. He refers to himself as a "storyteller illustrator" (see here, accessed: December 4, 2019). His published output is prolific: he has published a large number of series of Early Readers for children, including the *Lydia* series, the *Victor* series, the *Little Horror*s series, the *Ginger Ninja* series, the *Monster Boy* series, and the *Olympia* series.

Rayner's work in these series involves simple, easy-to-read stories, aimed at readers "at the most important stage of reading development where they can be put off, or enthused for life." (*Something about the Author*, 169)

Sources:

Official website (accessed: December 4, 2019)

Official channel on You Tube (accessed: December 4, 2019)

DrawStuffRealEasy, channel on You Tube (accessed: December 4, 2019)

Profile at en.wikipedia.org (accessed: April 6, 2019)

'Hugh (Shoo) Rayner,' *Something About the Author,* Ed. Lisa Kumar.

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Vol. 151. Detroit, MI: Gale, 2004, p. 168-171.

Bio prepared by Elizabeth Hale, University of New England, ehale@une.edu.au and Ayelet Peer, Bar-Ilan University, ayelet.peer@gmail.com

Questionnaire

Response to author's questionnaire on Author's Vimeo channel (accessed: April 4, 2019).

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Additional information

Summary

Archimedes: the Man Who Invented the Death Ray is an illustrated chapter book that explains the life and work of the Greek scientist (287–212 BC). Rayner explains that Archimedes lived in Sicily, in Syracuse, and his inventions (such as the Death Ray of the title) staved off the Roman conquest of Sicily for two years.

The chapters describe his discovery of fundamental principles of physics and maths: levers, pulleys, pi, the screw pump, the principle named after him (Archimedes' principle; then two military applications, his claw and his death ray (related to lasers). Each of these is explained, and illustrated, in a narrative given to his young son by the Roman general who finally overcame Sicily. The ingenious narration comes as the admiring tribute by a Roman to a Greek enemy.

By levering we can lift much greater weights than by straightforward exertion: "Give me a lever long enough and I will move the world," Archimedes is said to have said. By pulleys, the same only more so. He worked out the proportion of circumference to radius in a circle as 1: 34 approx and used pi to calculate areas of curving surfaces. Lifting again, his screw pump would lift water by bucket and counterweight, a "levertype crane." His celebrated Principle of displacement was discovered when he observed that the amount of water displaced by varying bodies, including his own, varied according to weight, not simply volume. His "claw" was a siege weapon defending his city against attacking ships. His "death ray" used curved mirrors to aim many rays of sunshine onto a single point.

Rayner points out that Archimedes' discoveries remain relevant: "His mathematical formulae are still used every day. Levers and cranes and pulleys are used everywhere." Lasers and odometers use his principles.

Analysis

Rayner aims to entertain his young readers while delivering mathematical knowledge. The many anecdotes about this important scientist are used to enliven the exposition of some basic principles. There's the legend, that upon working out his principle of displacement he leapt from his bath and ran outside naked, shouting

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	Eureka! “I have found it!” Not only that, but that he used the principle to detect a fraudulent mixing of gold with iron by a goldsmith. The pictures show his gadgets like the claw in vivid action. The dramatizing and indirections of the telling bring to life the often tortuous way in which Greek ideas entered the Roman mind, and so into the universal science of the modern day. A challenging, quirky example of the reception history of Greek thinkers.
Classical, Mythological, Traditional Motifs, Characters, and Concepts	Archimedes Greek Philosophy
Other Motifs, Figures, and Concepts Relevant for Children and Youth Culture	Knowledge Past Science

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