

Peculiar Deaths of Famous Mathematicians

Ioanna Georgiou

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Ioanna Georgiou is a liar. And her illustrator, Asuka Young, is a liar too. Quite a bold way to start a book review, I admit, but it's all part of the fun of *Peculiar Deaths of Famous Mathematicians*.

Each of the ten chapters of this lovely book gives biographical sketches of a famous mathematician, followed by a brief summary of some of their better-known results, and finishing with details of their deaths. The stories told span two and a half millennia, from Pythagoras to Gödel. All of this is delightfully illustrated in full colour.

The lies, or twists, of Georgiou and Young are contained in two different places. First, one of the deaths is not true, and this is made clear in the introduction and on the back cover, teasing readers with the challenge of identifying the invented account. Fear not, all is revealed in the final chapter. To aid their sleuthing, Georgiou provides rough probabilities for different components of each mathematician's cause of death. This clever element adds an interactive layer, transforming readers into amateur investigators as they analyse the details, making educated guesses about the fabricated fatality.

Second, complementing the engaging narrative, most of Young's parallel illustrations contain 'an item or symbol misplaced in time' (p. viii), rather poetically called an 'anachronism'. Again, a full confession is included at the end of the book, with a comprehensive list of the anachronisms put in their rightful place in time. Archimedes would not have had a rubber duck in

the bath, because they weren't created until two thousand years later, and Pythagoras (570–495 BCE) would not have used the familiar Hindu–Arabic numerals of today, because they were created sometime between the sixth and seventh centuries CE.

I will certainly not reveal which of the deaths was made up by the author, but I will admit that I only knew how one of the mathematicians – Évariste Galois – died, before reading this book. In fairness, the life of Galois is particularly memorable: he died at the age of twenty (no spoilers as to how, though!),

yet produced enough mathematical work in that time to have an entire branch of mathematics named after him, *as well as* being involved in French political activism during the long 19th century.

The history of mathematics is an option that I will always regret not taking as part of my undergraduate degree. In part because we learn all about theorems with mathematicians' names attached to them but little, if anything, about the people behind the names. And in part because I elected to take algebraic geometry instead, which was a subject in which I proved that I had little to no competence whatsoever. At least it is easier to casually dip into books on history than algebraic geometry when the formal study of mathematics is but a distant memory.

I was warned before reviewing this book that it is aimed at secondary school and above, but reading it was a most pleasurable way to pass a couple of hours on a lazy Saturday afternoon. This book will

certainly appeal to motivated students around GCSE age (14–16 years old), and the anachronisms make for a fun diversion for those younger. Of course, subjects like Gödel's incompleteness theorems and Galois theory are not going to be studied in depth by students at this age, but are covered with sufficient detail to whet the appetite to pursue the study of mathematics to a level when it becomes so much more than a string of expressions joined by an equals sign.

George Matthews

