Introducing Steven Strogatz

Reviewed by Shashidhar Jagadeeshan



or those who don't know him, Steven Strogatz is the Jacob Gould Schurman Professor of Applied Mathematics at Cornell University in the US. He is a passionate educator who spends considerable time and energy trying to communicate the intricacies of mathematics to the lay audience.

Strogatz believes that "Mathematicians are notoriously bad at [communication]," and he goes on to comment jokingly about the mathematical community: "we're writing on the board, with our back to the audience – it's like they don't even need to be there as far as we're concerned."

He is the author of several best-selling books like *The Joy of X: A Guided Tour of Math, From One to Infinity.* He writes frequently for the New York Times, and appears regularly on National Public Radio in the US.

The purpose of this short review is to alert readers to Steven Strogatz's work (http://www.stevenstrogatz.com) in general, and to draw special attention to 15 pieces, under the broad heading of 'Elements of Maths,' that he wrote for the New York Times from January 2010 to May 2010 (http://www.stevenstrogatz.com/essays/?tag=Elements+of+Math).

Here is how the author describes the purpose of these articles:

"I'll be writing about the elements of mathematics, from pre-school to grad school, for anyone out there who'd like to have a second chance at the subject — but this time from an adult perspective.

Keywords: communication, about math

It's not intended to be remedial. The goal is to give you a better feeling for what math is all about and why it's so enthralling to those who get it."

So the topics range from basic arithmetic to Group theory. The articles have catchy titles like 'From fish to infinity' and 'The enemy of my enemy' and investigate important areas in mathematics. Each article brings new perspectives to fundamental concepts, draws upon examples and illustrations from daily life, and ends with a list of suggested reading to deepen one's understanding.

For the lay person, these articles give a nuanced introduction to mathematics. For the student, they offer novel ways of thinking about the mathematics they are learning. And for the teacher, they are a great resource not only to enhance understanding of topics we take for granted, but also to enrich one's teaching.



SHASHIDHAR JAGADEESHAN received his PhD from Syracuse University in 1994. He has been teaching mathematics for over 25 years. He is a firm believer that mathematics is a human endeavour, and his interest lies in conveying the beauty of mathematics to students and demonstrating that it is possible to create learning environments where children enjoy learning mathematics. He is the author of Math Alive!, a resource book for teachers, and has written articles in education journals sharing his interests and insights. He may be contacted at jshashidhar@gmail.com.