
Book Review: Logicomix: An Epic Search For Truth

Aman Gupta: Apostolos Doxiadis was born on the 6th of June 1953, in Brisbane, Australia. He grew up in Greece. Although he was fascinated by fiction and humanities from his youngest years, a totally unexpected and sudden relationship with mathematics led him to study at New York's Columbia University at the age of fifteen. He then graduated and did Graduate work on the functioning of mathematical models for the nervous system at the École Pratique des Hautes Études in Paris.

An Epic Search for Truth was published in autumn 2009 as a graphical novel and was co-authored by Christos H. Papadimitriou, with art by Annie di Donna and Alecos Papadatos. The book's story is based on the epic seek the foundations of mathematics. Logicomix was published in Autumn 2009 by Bloomsbury within the U.S. and the U.K. and has been translated, to date, into over twenty languages. The book has also received numerous awards, including The Philosopher Society Award, The Premio Carlo Boscarato (Holland), The Prix Tangente (France), The Royal Booksellers Association Award (Holland) and The New Atlantic Booksellers Award (USA). It was also the Number 1 New York Times Bestseller and was chosen as the Non-Fiction Book of the Year by TIME Magazine, Publishers Weekly, the Washington Post, the Financial Times, Globe and Mail, and many other publications.

Christos H. Papadimitriou is one of the most colourful and influential researchers and educators in Computer Science today. He was born on the 16th of August 1949, in Athens, Greece. Known as one of the world's leading computer science theorists, he is best known for his work in computational complexity and assists in the expansion of it's methods. He has also explored other fields which include Biology, Economics, Theory of Evolution, Game Theory, Networks and the Internet, Robotics, Artificial Intelligence and the study of the brain through his algorithmic lens. Papadimitriou received his BS in Electrical Engineering from Athens Polytechnic in 1972 after which he did his MS in Electric Engineering in 1974 and got his PhD in Computer Science and Electrical Engineering in 1976 from The Princeton University.

He is a member of The National Academy of Sciences and a fellow of The National Academy of Engineering and The Association for Computer Machinery who has been awarded IEEE's John von Neumann Medal, The Knuth Prize, The IEEE Computer Society Charles Babbage Award, the Gödel Prize and The EATCS Award.

An Epic Search for Truth, is a graphical novel about Bertrand Russel which focuses on his and other people's work on the foundation of Mathematics. The novel is structured in a way where the storyline is a frame within a frame. Art is a major component of this novel since it is a Graphical Novel. This novel continues the trend of comics devoted to serious topics. This novel demands serious intellectual scrutiny as well. This graphical novel takes the reader along a quest for logical certainty in mathematics. The period between the 19th century and World War II was when this novel was narrated. This period was also when the nature of mathematical truth was being debated furiously. The cast includes Bertrand Russel along with the greatest logicians, philosophers and mathematicians of the era, Adolf Hitler an apocryphal barber.

The Authors first meet in Greece where they begin to discuss the story. The story opens on the

historic date of the 4th of September 1939. This was the day the United Kingdom declared war on Germany. This was also three days after the Nazi attacked Poland. Angry independents in the crowd challenge Russell to clarify how logic could legitimize taking an interest in a World war when he was giving a lecture at an American university about the role. He reacted by saying “Ah, but what is logic?”

Russell describes his epic battle with that question in the form of a series of flashbacks. As a child, Russell was raised by his grandparents in the 1870s after the mysterious disappearance of his mother and father. His grandfather, Lord John Russell, a reformer and an aristocrat, had been the Prime Minister twice. However, it was his stern and devout grandma who dominated his adolescence. In addition to the fact that he suffered from loneliness, although his Aunt Agatha wasn't too sane either, he was convinced that his Uncle Willy must be locked away as a violent and furious lunatic. This was just the beginning of his everlasting terror of genetic madness, and the propulsion for many nightmares, which was extremely well depicted by the cartoonists.

Hence, the adolescent Russell looked for shelter in the abstraction of mathematics. His vision of a charmed coherent world was jolted, however, when he arrived at Cambridge and found that the mathematics practiced there was way more advanced than he'd ever imagined and was dependent on thorough confirmation. He was convinced that if he wanted to gain knowledge, he would have to rebuild his understanding of mathematics on solid and logical foundations.

Russell's mission for certainty amounted to becoming an extremely interesting career for him. We see him seeking Alys, the American Quaker girl who also became his first wife. The youthful couple then set off on a voyage through the Continent, where Russell looks for Gottlob Frege, the best rationalist since Aristotle, and Georg Cantor, the individual who created the mathematical theory of infinity. The two men, to Russell's frustration, end up being somewhat daft. In Paris, at the 1900 International Congress of Mathematicians, he observes a massive conflict between David Hilbert and Henri Poincaré, who were two of the biggest mathematicians back then, over the significance of intuition versus proof. After coming back to England, Russell spent the following decade working with Alfred North Whitehead to finish the 'Principia Mathematica'.

While we are reassured that no deviations occurred in “The Great Adventure of Ideas”, the story did meander because Russell never met Cantor or Frege. Cantor did go mad every now and then, as did numerous different figures in this story. Kurt Gödel, who singlehandedly proved that none of the existing logical systems could prove Mathematics in its entirety, starved himself to death out of a distrustful dread that people were poisoning his food. Frege, the quintessential philosopher, wound up an enemy of the Semite. Even though his hereditary madness was proven when his granddaughter and elder son became schizophrenic and his granddaughter set herself on fire hence committing suicide, Russell managed to keep his grip on his own sanity. Russell's philosophical certainty, in any case, was broken by his onetime understudy Ludwig Wittgenstein, who caused him to understand that he had never truly comprehended what rationale was. One of Russell's students, Ludwig Wittgenstein, shattered his philosophical confidence when Ludwig made him realize that he never really understood what logic entailed.

I would like to conclude by saying that I immensely enjoyed reading the book *Logicomix: An Epic Search for Truth*. I feel that the authors have managed to explain an extremely complicated subject in a very interesting and entertaining way. The story was delivered in a very different

fashion and I enjoyed experiencing such a subject in such a manner or method.

References

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