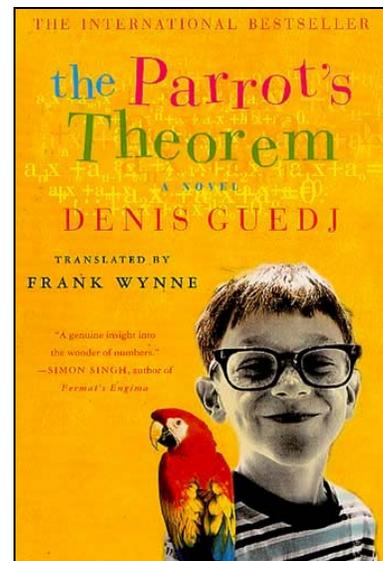# READING GROUP GUIDE

The Parrot's Theorem
by Denis Guedj

St. Martin's Press
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Introduction to *The Parrot's Theorem*

Mr. Ruche, a Parisian bookseller, receives a bequest from a long lost friend in the Amazon of a vast library of math books, which propels him into a great exploration of the story of mathematics. Meanwhile Max, whose family lives with Mr. Ruche, takes in a voluble parrot who will discuss math with anyone. When Mr. Ruche learns of his friend's mysterious death in a Brazilian rainforest, he decides that with the parrot's help he will use these books to teach Max and his brother and sister the mysteries of Euclid's Elements, Pythagoras's Theorem and the countless other mathematical wonders. But soon it becomes clear that Mr. Ruche has inherited the library for reasons other than enlightenment, and before he knows it the household is racing to prevent the parrot and vital, new theorems from falling into the wrong hands.

An immediate bestseller when first published in France, *The Parrot's Theorem* charmingly combines a straightforward history of mathematics and a first-rate murder mystery.

Praise for *The Parrot's Theorem*
"A genuine insight into the wonder of numbers."—Simon Singh, author of *Fermat's Enigma*

"*The Parrot's Theorem* is a unique book, in that it is both a wonderful novel and the best short history of mathematics I have ever read. The author draws his characters with care, develops an intriguing plot, and on the way teaches the reader about mathematics and its history. This is one of the most satisfying books I have read in a long time."—Amir Aczel, author of *Fermat's Last Theorem*

"A charmer indeed . . . A wonderful little book . . . tender and impassioned."
—*Kirkus Reviews* (starred)

"A richly textured narrative [that] half way through, turns into an uncut diamond, polished to a brilliant shine towards the end."—*The Independent* (London)

"Guedj has demonstrated, with the virtuosity of a Pascal or a Euclid, that the European novel of ideas need be neither desiccated nor dull."—*The Sunday Telegraph* (London)

"What a delightful book! It's about Sidney, an incredible parrot whose greatest pleasure is to teach algebra and geometry to young people. If you want to learn a lot of mathematics in a short time, you should definitely read *The Parrot's Theorem*."
—Professor Robert S. Banks, author of *Slicing Pizzas, Racing Turtles,* and *Towering Icebergs, Falling Dominoes*

"Whimsy is not a word commonly associated with theoretical mathematics, yet Guedj's story of three children's journey through the history of numerical reasoning brings to this doggedly academic material a childlike sense of playfulness and adventure. Guided by an enigmatic neighbor, Mr. Ruche, and a garrulous parrot named Sidney, young Max Laird and his two siblings discover the inner life and beauty of theorems and formulas. Framing their discoveries is an unfolding mystery involving Sidney, a set of brilliant new theorems, and a master thief. In its intricate combination of potboiler plot with a profound expression of the sheer wonder of human knowledge, the novel resembles Umberto Eco's Aristotelean detective story *The Name of the Rose.* Guedj, however, writes with the optimistic wisdom of a fondly remembered childhood teacher, far removed from Eco's dark vision. For readers whose schooling in these subjects is nearly forgotten, it may provide a glimpse of another path, a world left unexplored."
—Will Hickman, *Booklist*

Reading Group Guide Questions

1. What do you think of *The Parrot's Theorem* in relation to the work of Jorges Luis Borges and Umberto Eco? Is the emphasis on math rather than "the word" a fundamental difference between the works, or not?

2. What do you think of *The Parrot's Theorem* in relation to *Flatland* or *Gödel, Escher, Bach: An Eternal Golden Braid*, which also use fictional tales, in whole or in part, to illustrate mathematical ideas? Did *The Parrot's Theorem* help you to understand math any better? Did it make you more interested in math?

3. How does *The Parrot's Theorem* compare to *Sophie's World*, which teaches philosophy through a novel? Is one more effective than the other, and why?

4. Mr. Ruche remained in Paris, Grosrouvre went to Brazil, Don Ottavio loves his native Syracuse, and the parrot, according to Aristotle, hails from India (p141). Mr. Ruche divides the Rainforest Library by region as well as time. What role does geography play in *The Parrot's Theorem*?

5. What do you think about Perette's revelation to her children early in the book about their origins? What significance does it have to the rest of the story?

6. Where you surprised by the confluence of math, religion, poetry, politics, and philosophy by historical characters in *The Parrot's Theorem*?

7. What historical characters in *The Parrot's Theorem* did you find most interesting/admirable/villainous?

8. Opposites and contrasts run throughout *The Parrot's Theorem*: Being and Nothingness, the secretive Pythagoreans v. the open Library of Alexandria; the free city of Athens v. the hierarchical governments everywhere else; Jon-and-Lea, the "identical-but-not-identical twins" (p13). What other contrasts can you think of? What significance do all these contrasts have? How do mathematical proofs fit in amongst all these contrasts? What do you make of the following passage from *The Parrot's Theorem* (p167): "This was the most important function of mathematics, he [Mr. Ruche] decided, to state precisely in which cases, under what conditions and subject to which hypotheses a statement is true. Grosrouvre's index card had reminded Mr. Ruche how valuable mathematics could be as a reminder of the dangers of absolutism."

9. Do you think Don Ottavio is right about Grosrouvre's motivations for keeping his theorems secret? Why or why not?

10. Do you think Grosrouvre was murdered, committed suicide, or died by accident?

11. Do you think Grosrouvre succeeding in his proofs, or did he make a mistake?

12. What did you think of the epilogue, in which Sidney/Mamaguena explained Grosrouvre's proofs to the conference of birds?

13. What do you think of Mr. Ruche's growing bond with Perrette's family, especially with Max? What do you think about Don Ottavio's offer to provide Max with an inheritance?

About the Author

Denis Guedj is Professor of the History of Science at Paris VIII University. He has spent many years devising courses and games to teach adults and children math. He is the author of *Numbers: The Universal Language*.