

A Mathematical Journey Through Literature

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Mathematics is often called the language of the universe, because mathematics is the best tool we have to understand the hidden structures and patterns of nature. But human beings are part of the universe too, and so it is natural, even inevitable, that our forms of creative expression will also have inherently beautiful pattern and structure. In this talk I'll focus on the compelling and profound connections between mathematics and literature, drawing on themes from my recent book [3]. We'll explore the hidden mathematical structures behind everything from poetry to novels, such as the spiraling geometric progression of the chapter lengths in Eleanor Catton's *The Luminaries* (Figure 1). We'll also look at some of the beautiful mathematical imagery and symbolism in fiction, from simple fairy tales to classics like *War and Peace*, including the clever use of fractals to illustrate a key theme in Michael Crichton's *Jurassic Park* (Figure 2). My goal is to show that not only are mathematics and literature inextricably linked, but that understanding these links can enhance our enjoyment of both.

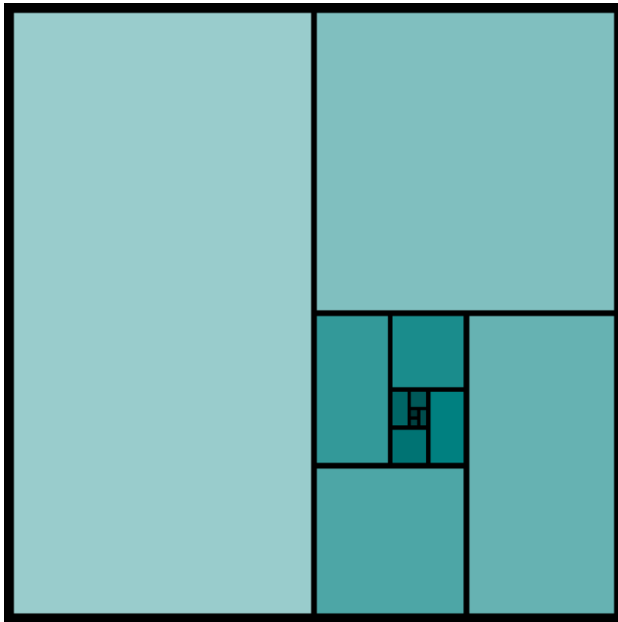


Figure 1: *Structure in The Luminaries* [1].

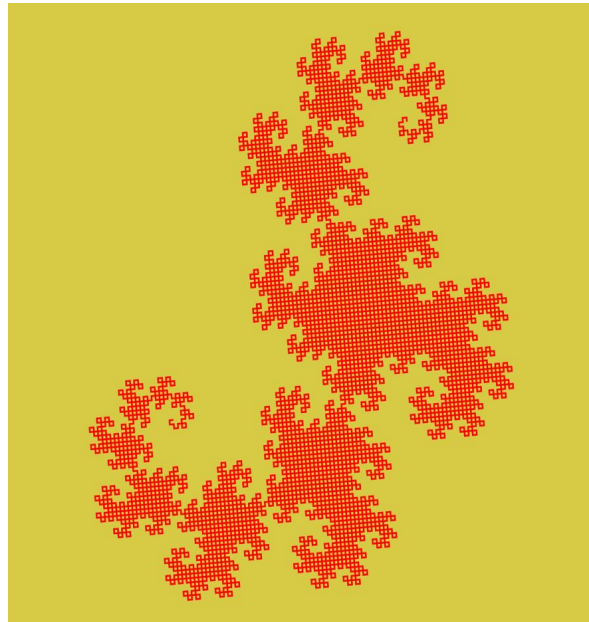


Figure 2: *Fractal motif from Jurassic Park* [2].

References

- [1] E. Catton. *The Luminaries*. Little, Brown and Company, 2013.
- [2] M. Crichton. *Jurassic Park*. Arrow, 1991.
- [3] S. Hart. *Once Upon a Prime: The Wondrous Connections Between Mathematics and Literature*. Flatiron, 2023.