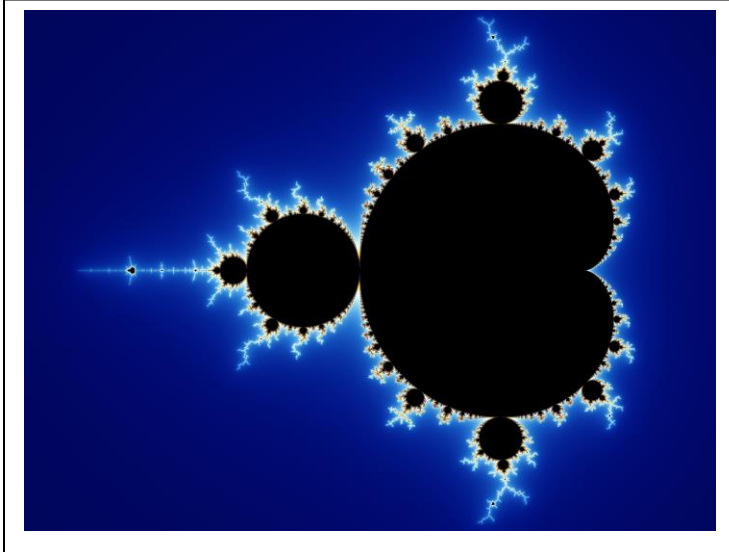


From the Planners' Bookshelf...

Benoit Mandelbrot: Fractals and the art of roughness

<https://www.youtube.com/watch?v=ay8OMOf6AQ>



Fractals [from Wikipedia]

Complex Geometry, Patterns, and Scaling in Nature and Society

“Fractal geometry is a new branch of mathematics. Since the birth of Fractals, which is largely attributed to Benoit Mandelbrot, it has received tremendous attention in many sciences and engineering applications.” “Now it has become widespread and multidisciplinary, and its applications have evolved into many disciplines...”

Fractal geometry is very new. Benoit Mandelbrot's famous book, *The Fractal Geometry of Nature*, was published relatively recently in 1982.

<http://www.worldscientific.com/worldscinet/fractals>

Fractals, like the *Powers of Ten*, is a concept seemingly unrelated to urban design and city planning. However, understanding natural patterns and pattern recognition is a critical city planning skill. Knowing about fractals helps. The more you know, the more you know.

TED

<http://www.ted.com>

“At TED2010, mathematics legend Benoit Mandelbrot develops a theme he first discussed at TED in 1984 -- the extreme complexity of roughness, and the way that fractal math can find order within patterns that seem unknowably complicated. TEDTalks is a daily video podcast of the best talks and performances from the TED Conference, where the world's leading thinkers and doers give the talk of their lives in 18 minutes. Featured speakers have included Al Gore on climate

change, Philippe Starck on design, Jill Bolte Taylor on observing her own stroke, Nicholas Negroponte on One Laptop per Child, Jane Goodall on chimpanzees, Bill Gates on malaria and mosquitoes, Pattie Maes on the "Sixth Sense" wearable tech, and "Lost" producer JJ Abrams on the allure of mystery. TED stands for Technology, Entertainment, Design, and TEDTalks cover these topics as well as science, business, development and the arts. Closed captions and translated subtitles in a variety of languages are now available on TED.com, at <http://www.ted.com/translate>. Watch a highlight reel of the Top 10 TEDTalks at <http://www.ted.com/index.php/talks/top10>”

ALSO VIEW: Fractals: The geometry of Nature? - Benoit Mandelbrot at <https://youtu.be/fjNPtWURpc>