

# SEAS





## The Science of Fractals & Patterns of Chaos:

# Art On the Wild Side with Carrie Lederer



Artist Carrie Lederer’s daily up-close encounter with nature is a 50-foot journey through the family garden from her Oakland, California, home to the studio. Lederer, who graduated from the MSU College of Arts and Letters in 1977 with a BFA in sculpture and a BA in art education, says that she is continually captivated by nature’s fervent exuberance—a spectacle of complexity—beautiful, simple, and haphazard. And for Lederer, this has proven to be a very good thing for her art.

“I’ve been an avid gardener for twenty years, and my humble garden continues to serve as an inspirational lab, feeding my studio practice with imagery, color, texture, movement, and sound,” Lederer says. “My art is inspired by life forms in nature and much of the work addresses our relationship with the natural world. I’m keenly interested in both the macro and micro—a single square foot of plant in the garden can offer as much content as the huge night sky. When I’m out in nature, looking up and looking down is a constant in my life-work of gathering inspiration for my art practice.”

Lederer says that her paintings and sculpture often combine imagery that’s both recognizable and abstract.

“I like the idea of enveloping birds or plant life in a swirl of color, shape and texture,” she says. “My paintings and sculpture depict turbulent gardens informed by nature’s riotous colorful beauty, or the deep dark space of our universe filled with a Byzantine intricacy of patterns, shapes, and constellations.”

### Fractals and patterns

“I’m drawn to the challenge of visually portraying the order beneath the confusion found in these two worlds—the garden and universe—both of which are astounding, full of beauty and seemingly anarchic. The science of fractals and patterns of chaos are particularly important to my work.”

A fractal is a complex geometric figure made up of patterns that repeat themselves, each time on a smaller scale, and each smaller version is referred to as a “self-similar” form. At first glance, they seem to be a tangle of order/disorder or beauty/violence. Lederer says she is drawn to nature’s intrinsic capacity to create and reproduce pattern as both a source of imagery and working process for her art.

“Fractals basically tell the story of the wild transformations in nature that take place on a daily basis, and they give order to a chaotic world of energy and change,” Lederer says. “My paintings, sculpture and installations are a response to these natural wonders.”

“I’ve always been drawn to color, textures, and repeating pattern, too,” she says. “When creating a painting, I like to disrupt the pattern and change up the size, intensity or shape. My use of media is elastic, and I regularly introduce mixed media (fabric, found papers, objects, etc.) that can help pilot the work into a different direction.”

Lederer adds that she thinks some of her interest in fabric and pattern stems from her youth with an introduction to textiles from her mom and family (her aunt, grandma and great aunt).

“Sewing, quilting, and rug weaving were everyday Finnish family crafts,” Carrie says, “particularly for my Aunt Helen in East Lansing and my Grandma Mattson and Great Aunt Tynne who lived in the Upper Peninsula of Michigan and (in part) lived off the land. Old wool suits were made into quilts and blue jeans were woven into rugs; for my ancestors, the concept of upcycled was essential to survival.”



*“My piece, titled The Shape of Nature, included a 10’ x 14’ celestial backdrop, logs and wood rounds piled high, suspended sculptures of plant life (I call them garden planets), along with hundreds of found objects and both real and constructed nature.”*

### **Turtle Bay Museum installation**

Lederer’s site-specific installations range in size, but are usually large, sprawling, and dense with objects filling the entirety of a defined space. For instance, in 2013, she was invited to create a piece at Turtle Bay Museum for an exhibition called Age of Wonder: Artists Engaged with the Natural World.

“My piece, titled The Shape of Nature, included a 10’ x 14’ celestial backdrop, logs and wood rounds piled high, suspended sculptures of plant life (I call them garden planets), along with hundreds of found objects and both real and constructed nature,” Carrie says. “I’m always in pursuit of unusual objects that can be woven into the whole of an installation—from curious, funny and bizarre, to endearing or beautiful.

“Sometimes they’re nature-based, such as birds, ducks, or floral, while others are entirely abstract. Of course, I couple the ready-made transformed objects with pieces that are constructed using wood, clay or materials. My installations are a major undertaking and usually take a minimum of three to five days to build. In-between projects, I’m in ‘hunt and gather’ mode.”

### **Early Influences**

“I credit my mom and dad for my career in the arts,” Lederer says. “They are both life-long cultural enthusiasts who continue to embrace the visual arts, love to read, listen to music and enjoy the theater. While I was young, my mom was a docent at the Detroit Institute of Arts (DIA), and my dad (an engineer for the City of Detroit), played guitar and encouraged us to play and sing along.

“My parents frequently brought us to the DIA and we would wander the galleries from American and European to Greco-Roman art—it was (and still is) a museum brimming with discovery. Standouts from my childhood include sitting in the Rivera Court feeling dwarfed as we marveled at the expansive Diego Rivera murals depicting the Ford Motor Company—these murals are truly a tour de force artwork.”

Adds Lederer, “I’d also call out Artemisia Gentileschi’s Judith Slaying Holofernes, which, as a young girl, struck me simultaneously as horrifying and beautiful. I was transfixed by the suspense of the narrative, which of course is heightened by Gentileschi’s dramatic light and vivid color.”

### **Numerous collections**

As for Lederer’s own artwork, it is in the collections of Oakland Museum of California; Stanford University Medical Center; Prudential Insurance Company, NY, NY; First Western Trust Bank, CA; Risk Management Solutions, Newark, CA; The DiRosa Foundation and Preserve, Napa, CA; The Conn Collection, San Francisco; Sweetwater Development, Inc., Sweetwater, CA; and Niehaus, Rhan, Wong, San Francisco; as well as in a dozen additional private collections.

Since 1985, Lederer has held thirteen solo exhibitions, primarily in the San Francisco Bay Area, New York and Denver. She has also participated in 65 group exhibitions ranging from various cities in California, to Taos, New Mexico; Columbia, Missouri; Denver, Chicago, Atlanta, Philadelphia, as well as cities in Virginia, North Carolina, Wisconsin, Montana, Alaska, and internationally at the Franz Mehring Gallery in Berlin, West Germany.



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