

Chaos, Fractals, and the Arts

Ralph Abraham
www.ralph-abraham.org

Porter College 63F, UCSC
Winter 2017

Meeting #2, January 19

- Nova Chaos
- Guest: Dino Nickolas
- The four threads
 - B. Basic chaos theory (1D, 2D demos)
 - C. P5 programming (HW#2)
 - A. Art History (Early Visual Music)
 - D. Discussion

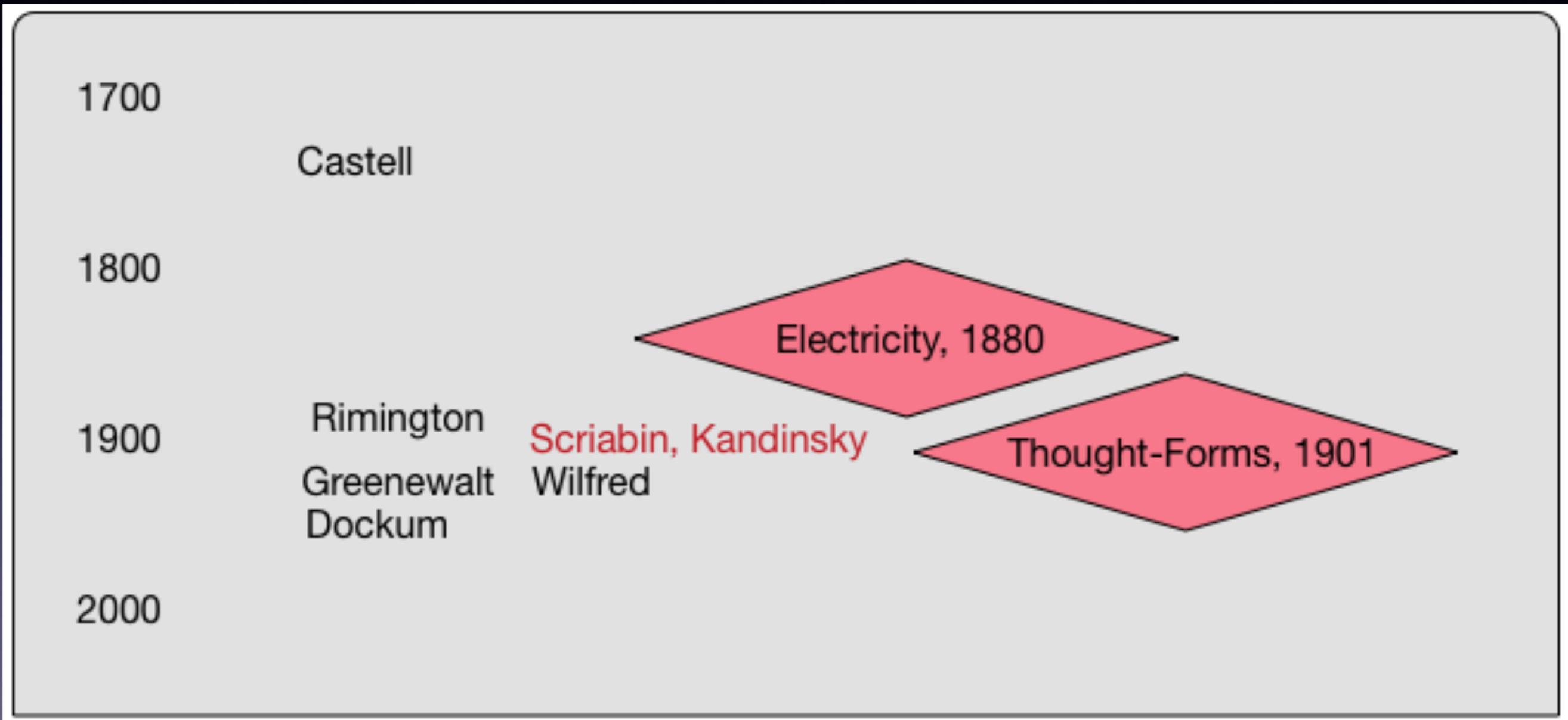
Tentative Syllabus by Week

- A. Bifurcations in art history
 - A1. Models of Consciousness
 - A2. Early visual music performers
 - A3. Guest: Frank Galuszka
 - A4. Early animated film artists
 - A5. Guest: Gerd Stern, multi-media pioneer

B. Basic Chaos Theory

- Attractors, basins, and separatrices
- Bifurcations
- Periodic windows
 - 1D: The logistic scheme (NetLogo models)
 - 2D: The Mira scheme (P5)

A. Early Visual Music



Histomap

Alexander Wallace Rimington, 1893



Mary Hallock-Greenewalt, 1918



Thomas Wilfred, 1920



Charles Dockum, 1935



Father Castel, 1730



Thomas Wilfred, Op 147, 1920



Porter 63FW2017 Meeting #2

End Lecture

Begin Discussion

End at 10:25 am