

A (rough) classification of math-art

Luke Wolcott
Lawrence University

A (rough) classification of math-art

... (roughly) based on the relationship
between the math and the art

Luke Wolcott
Lawrence University

“about”

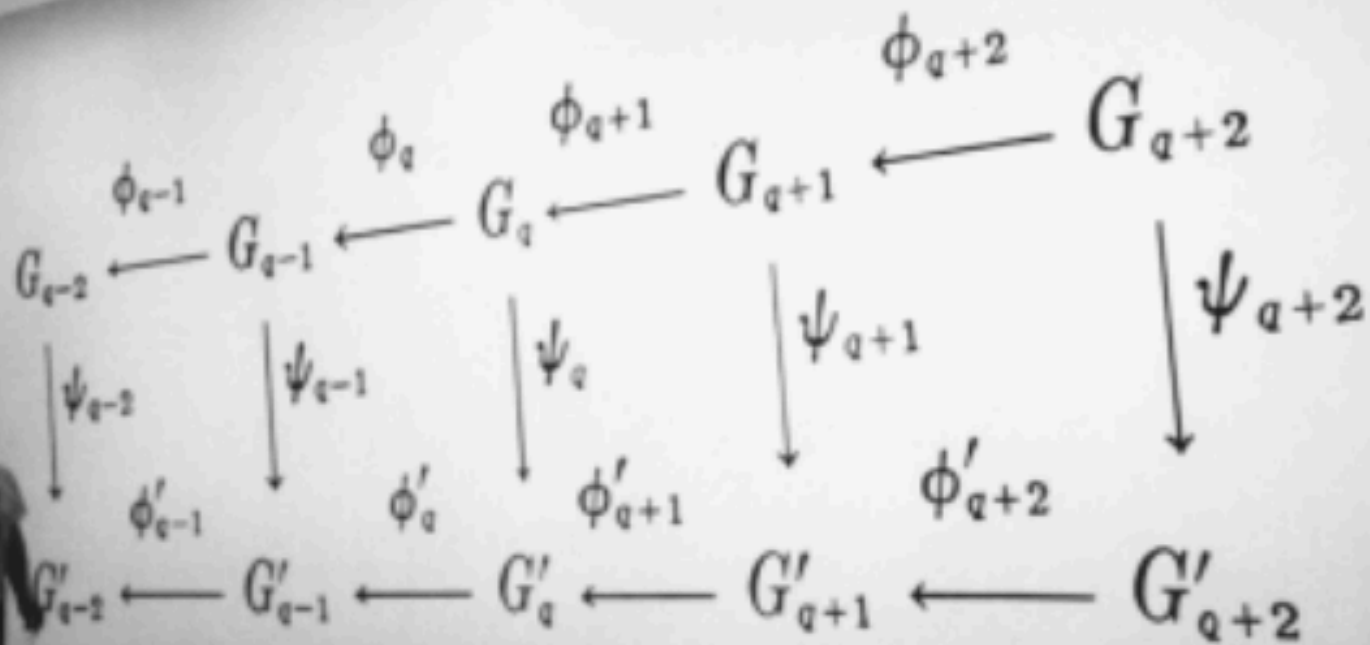
math about art, or art about math
illustrative, literal
pointing

the strength:
gives us an excuse to look deeper,
to appreciate

the truth:
when we look, we find math in the world
when we look, we find beautiful and artful math



Hiroshi Sugimoto



Mathematical Ideas in Ancient Indian Poetry

Sarah Glaz
Department of Mathematics
University of Connecticut
Storrs, CT 06269, USA
E-mail: Sarah.Glaz@uconn.edu

Abstract

Modern mathematics owes a big debt to India's contributions to the subject. Of particular importance is the decimal, place value number system that appeared in India during the Vedic period or soon after, circa 1300 BC to 300 AD, and made its way to Europe during the Middle Ages. That period of time in India also produced a heady mixture of poetic works: poems, songs, grand epics, biographies and books of instruction in verse covering millions

The calculus of Gothic architecture

Michael R. Huber*

*Department of Mathematics and Computer Science, Muhlenberg College, 2400 Chew Street,
Allentown Pennsylvania 18104, USA*

(Received 20 February 2009; final version received 14 May 2009)

When you look at the facade of the Cathedral of Notre Dame in Paris, what do you see? The rectangular towers, classical Gothic arches, massive domes and stained glass rose windows of this famous cathedral offer excellent examples of areas for students to calculate via integration. Most modern calculus texts use simple examples of finding the area of an ellipse or circle when incorporating trigonometric substitution. This article describes an

“behind”

math used to generate or inspire art
algorithmic art, music
feels like there's something mathematical
going on

the strength:
mathematically interesting and
aesthetically pleasant

the truth:
mathematical algorithms encode interesting processes
art creation = process + aesthetic selective pressure
modernism: the power of math



Saul Schleimer and Henry Segerman



Craig S. Kaplan



Bridges mathematical art exhibition 2012

“structuring”

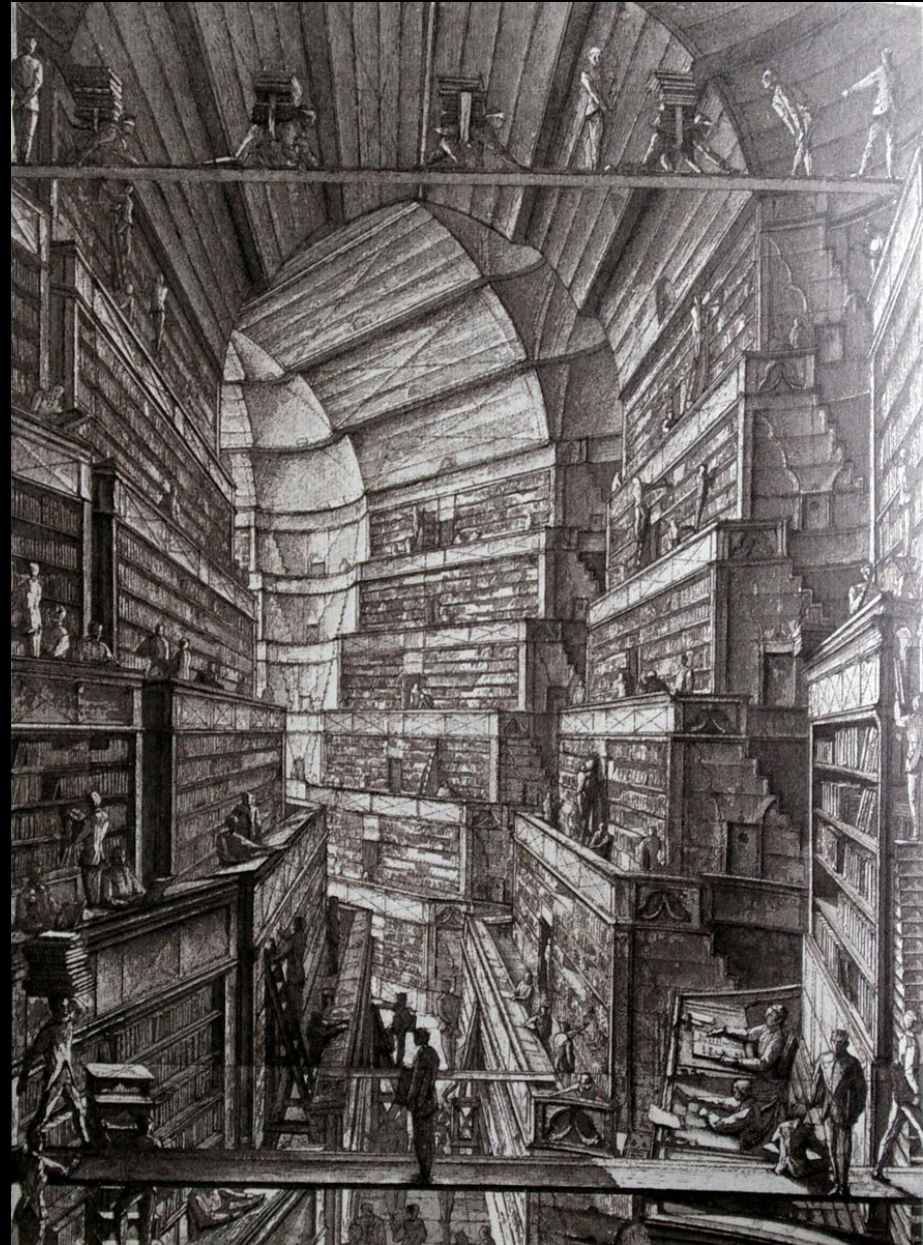
math plays an organizational role,
a frame not a recipe
more abstract, conceptual, and about ideas
enfolds material and context

the strength:
conceptual richness
whole is greater than sum of parts

the truth:
humanism of math, not equations but ideas and life
postmodernism: context! material!



Jorge Luis Borges

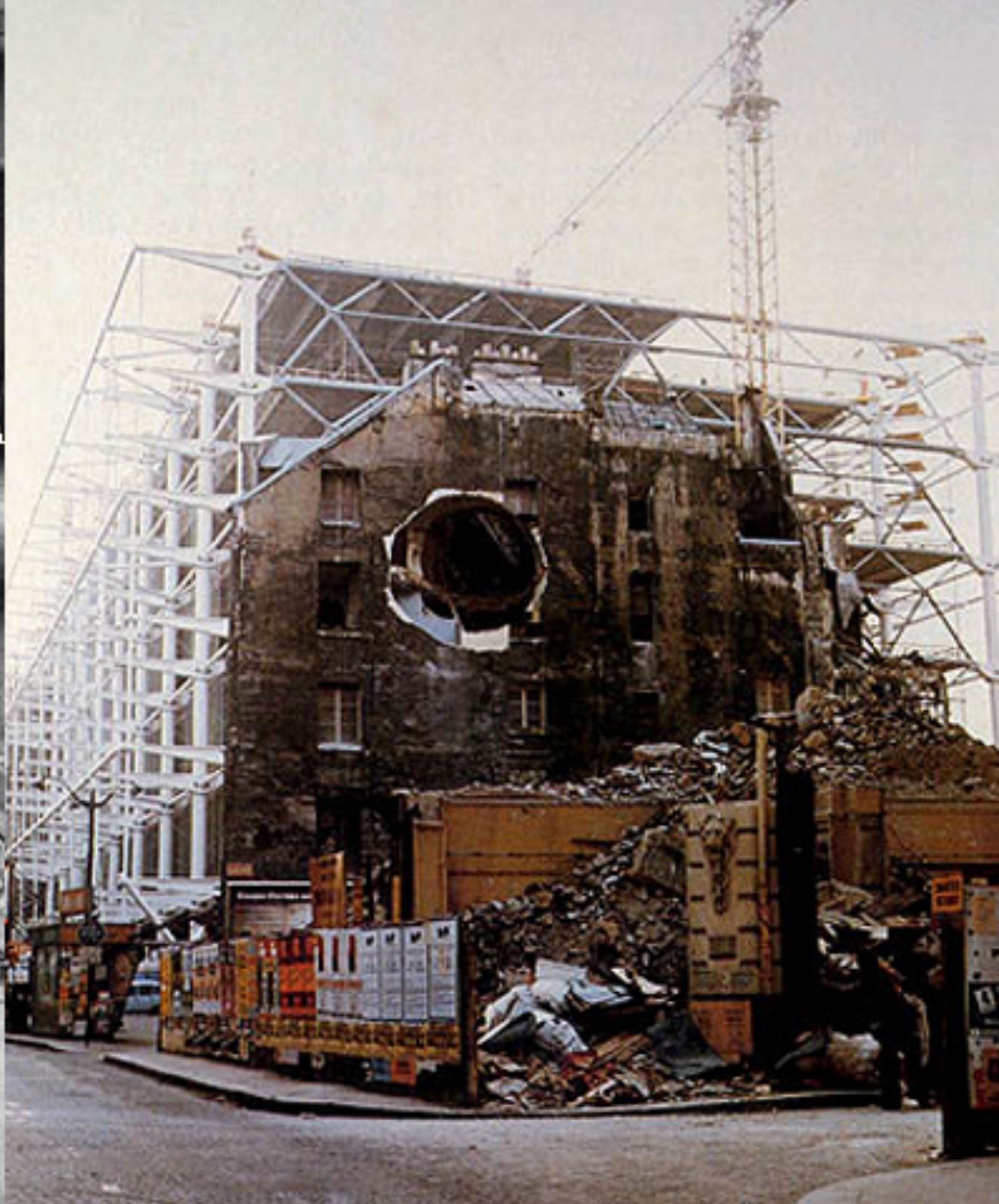




Tony Smith



Nathan Selikoff



Gordon Matta-Clark

“transcend and include”

is what we would like to see

contemporary mathematics and contemporary art
contributing to mathematics and contributing to art
transcending and unifying both

the truth:

math and art are two manifestations of a certain
way of processing, and perhaps understanding, existence.

the deepest is the connection between the
artistic experience and the mathematical experience.



Elizabeth McTernan and Luke Wolcott



more info: www.forthelukeofmath.com