

# **MATH 123**

(Day 7)

## Mathematical Painting and Sculpture

Richard Hammack

<http://www.people.vcu.edu/~rhammack/Math123/>

Beth Campbell



## Beth Campbell



Beth Campbell



## Beth Campbell



# George Hart



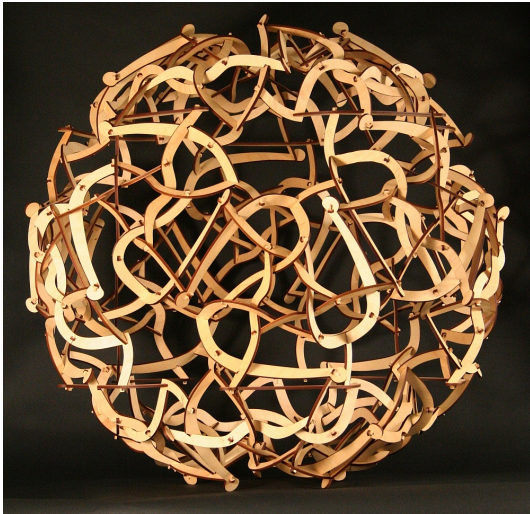
*72 Pencils*

See: [www.georgehart.com](http://www.georgehart.com)



**George Hart, *Millennium Bookball***

See: [www.georgehart.com](http://www.georgehart.com)



**George Hart, *Spaghetti Code***

See: [www.georgehart.com](http://www.georgehart.com)





**George Hart, *Labia***

See: [www.georgehart.com](http://www.georgehart.com)

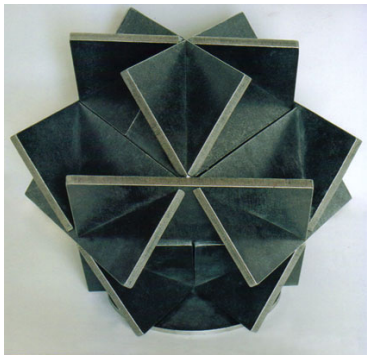




**George Hart, *Bathisphere*, aluminum**

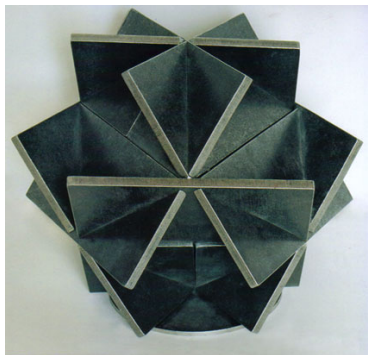
See: [www.georgehart.com](http://www.georgehart.com)

Peter Forakis



*Peter's Cube*, 2005, steel 22" × 22" × 22"

## Peter Forakis

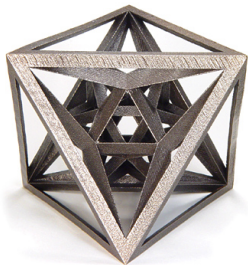


*Peter's Cube*, 2005, steel 22" × 22" × 22"

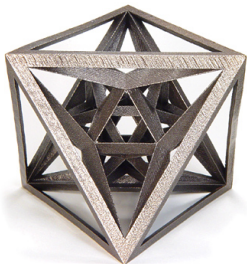


*Hypercube*, 1967, aluminum

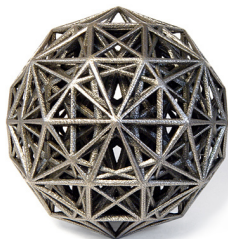
See: <http://peterforakis.org/>



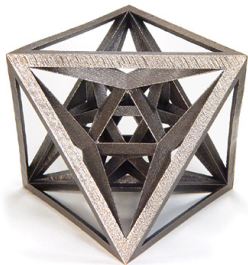
*24-Cell, metal print, 4"*



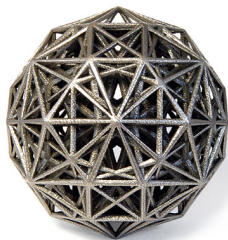
*24-Cell, metal print, 4"*



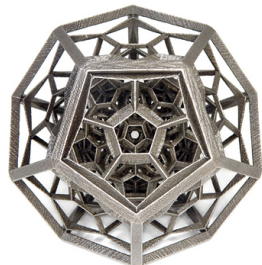
*600-Cell, metal print, 4"*



*24-Cell, metal print, 4"*

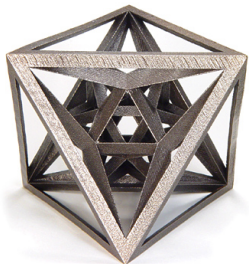


*600-Cell, metal print, 4"*

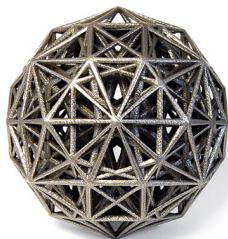


*120-Cell, metal print, 4"*

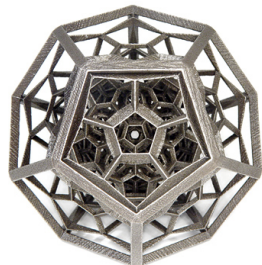




*24-Cell, metal print, 4"*



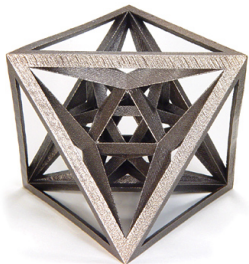
*600-Cell, metal print, 4"*



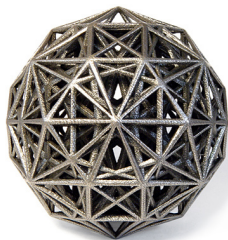
*120-Cell, metal print, 4"*



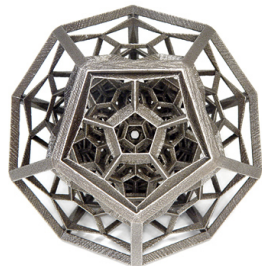
*120-Cell, metal print, 4"*



*24-Cell, metal print, 4"*



*600-Cell, metal print, 4"*



*120-Cell, metal print, 4"*



*120-Cell, metal print, 4"*



Bathsheba Grossman

See: [www.bathsheba.com](http://www.bathsheba.com)



*Borromean Rings*, metal print, 2"

Bathsheba Grossman

See: [www.bathsheba.com](http://www.bathsheba.com)



*Borromean Rings, metal print, 2"*



*The Gyroid, metal print, 3"*

Bathsheba Grossman

See: [www.bathsheba.com](http://www.bathsheba.com)



*Borromean Rings, metal print, 2"*



*The Gyroid, metal print, 3"*



*Schwartz' D-surface, metal print,  
3.25"*



*Solstice*, 1985



*Solstice*, 1985



*Eclipse*, 1973, 35 feet



*Continuum, 1976*



# Helaman Ferguson

See: [www.helasculpt.com](http://www.helasculpt.com)



# Helaman Ferguson

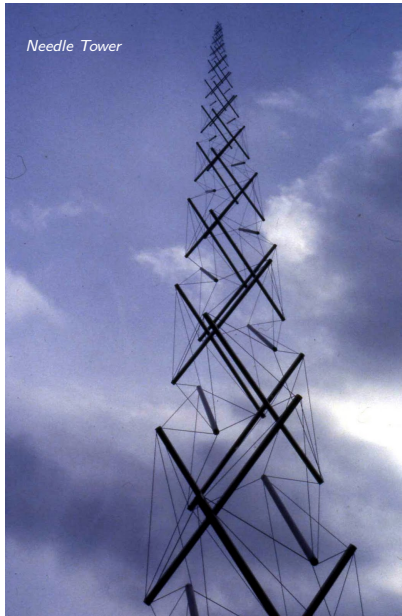
See: [www.helasculpt.com](http://www.helasculpt.com)



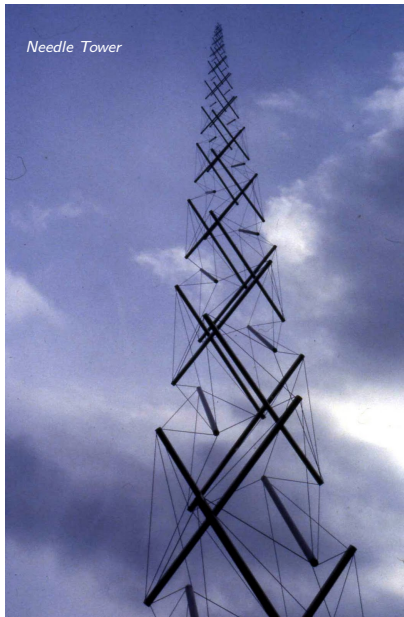
*Umblic Torus*

# Kenneth Snelson

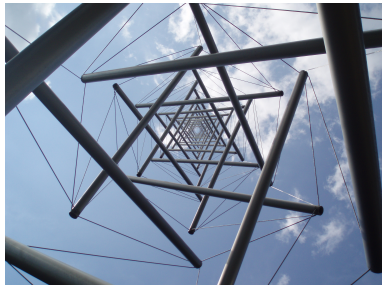
See: <http://www.kennethsnelson.net/>



# Kenneth Snelson

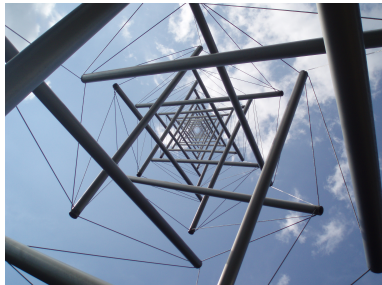
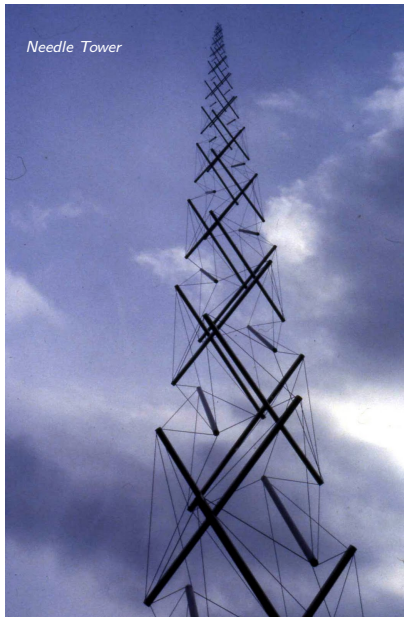


See: <http://www.kennethsnelson.net/>

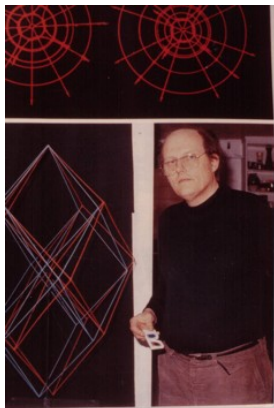


# Kenneth Snelson

See: <http://www.kennethsnelson.net/>

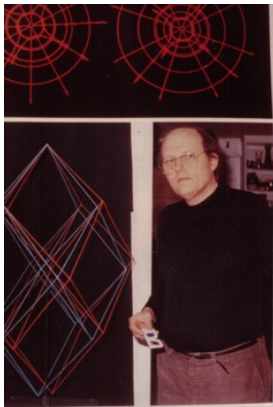


## David Brisson



David Brisson, 1930–1982

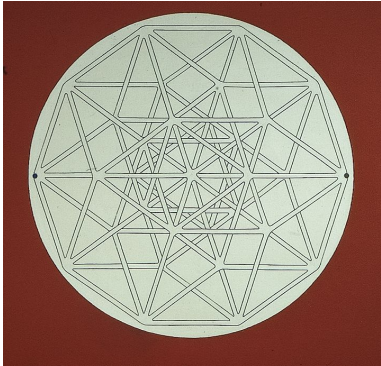
## David Brisson



David Brisson, 1930–1982

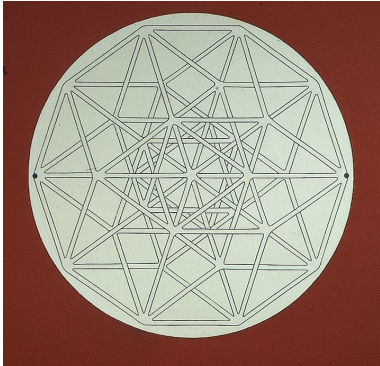


David Brisson, c. 1958

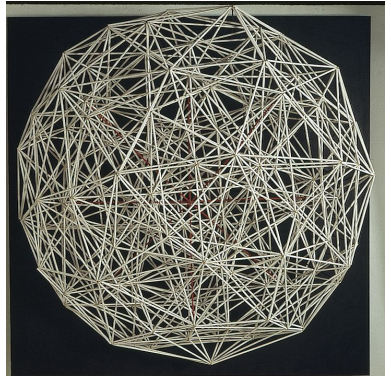


**David Brisson, Five-dimensional cube**

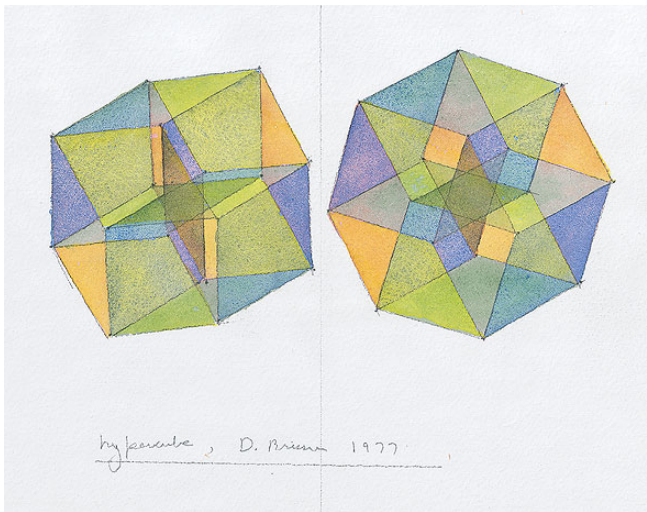




**David Brisson, Five-dimensional cube**



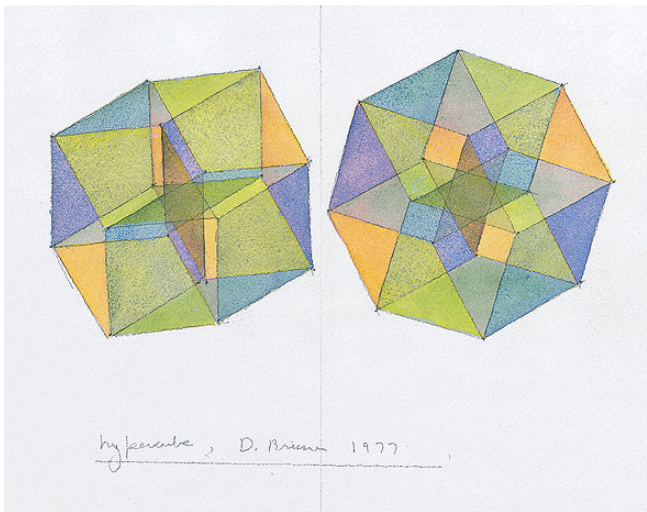
**David Brisson, Model of the 4-D Icosahedron**



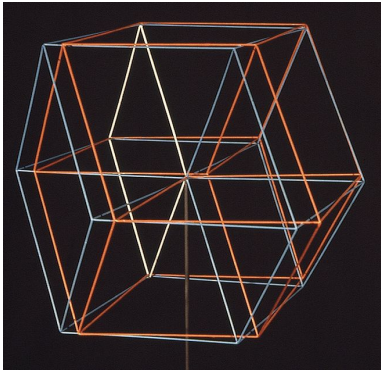
David Brisson, *Hypercube*, (hyperstereogram) watercolor, 1977



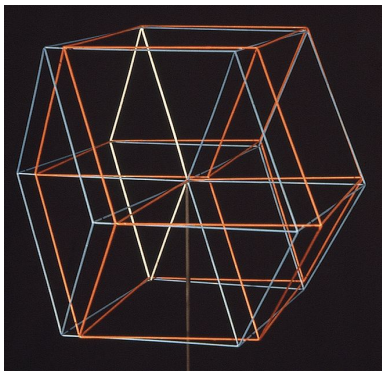
David Brisson, watercolor, 1974



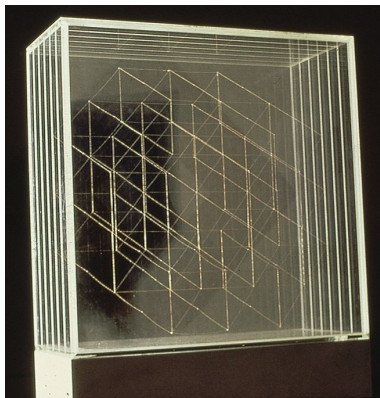
David Brisson, *Hypercube*, (hyperstereogram) watercolor, 1977



**David Brisson, Hyperanglyph of 4-D cube**

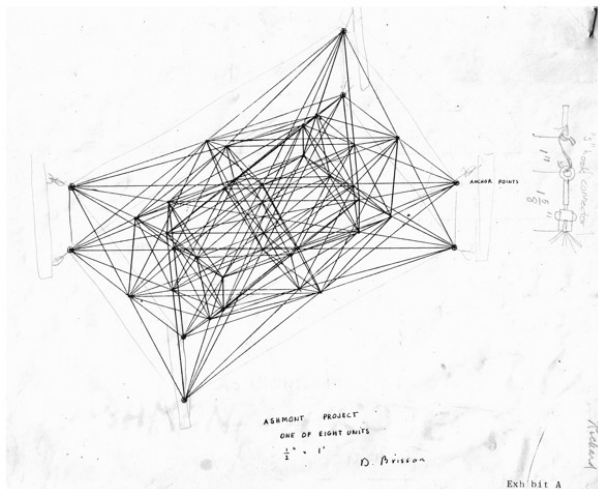


David Brisson, Hyperanglyph of 4-D cube

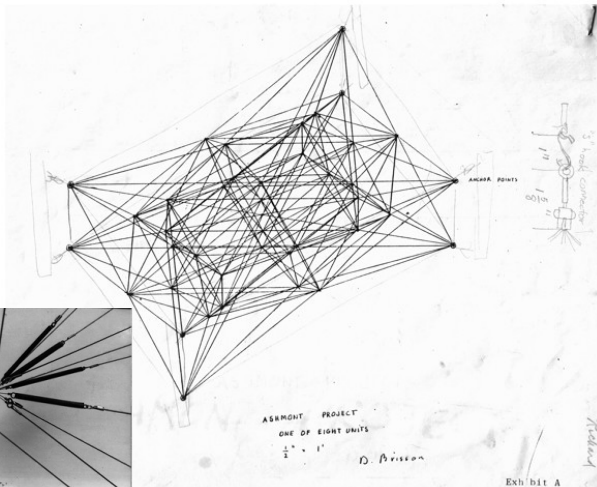
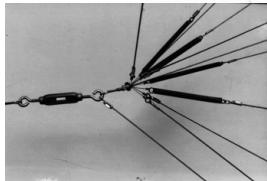


10 of the 16 hypercubes around a point in 4-D space,  
Gold chain and plexiglass

# Ashmont Project



# Ashmont Project



ASHMONT PROJECT  
ONE OF EIGHT UNITS

$\frac{1}{2}'' = 1'$

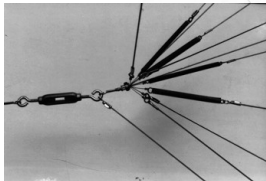
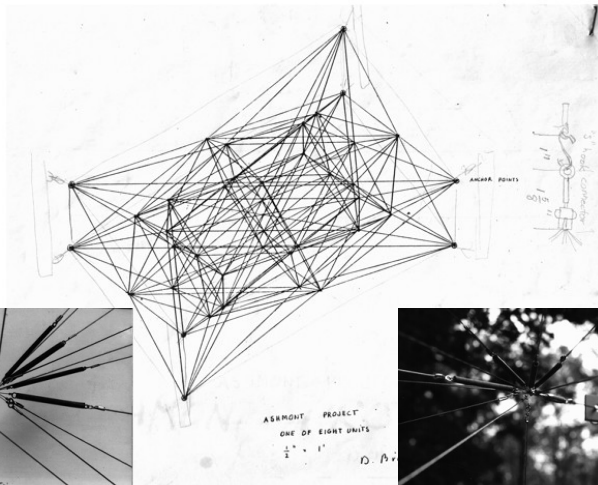
D. BRISSON

Redwood

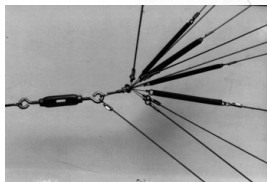
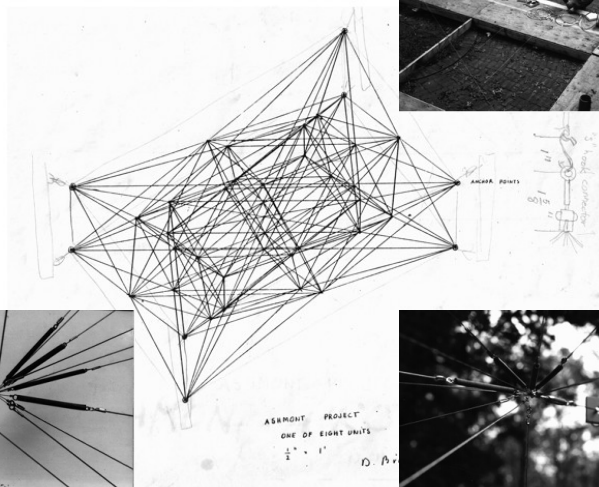
Exhibit A



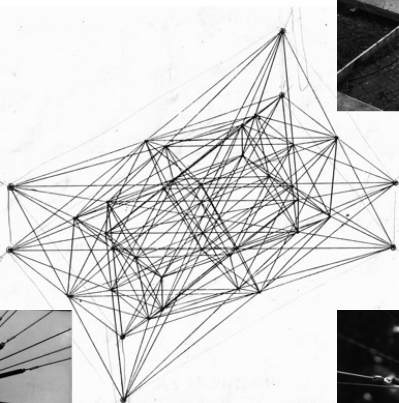
# Ashmont Project



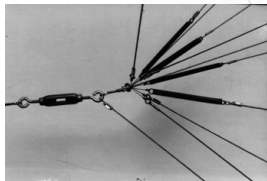
# Ashmont Project



# Ashmont Project



ANCHOR POINTS



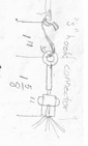
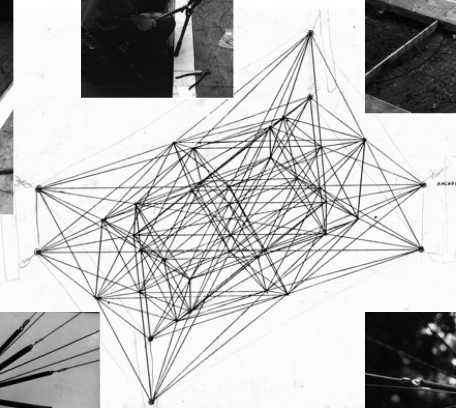
ASHMONT PROJECT  
ONE OF EIGHT UNITS

$\frac{1}{2}'' \times 1''$

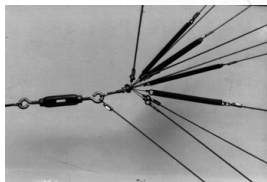
D. B.



# Ashmont Project



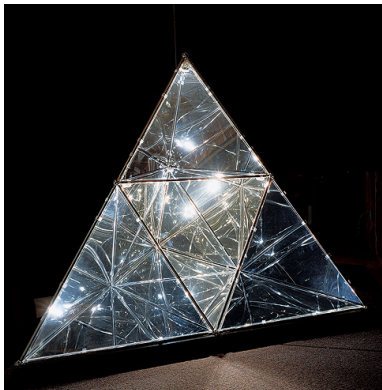
ANCHOR POINTS



ASHMONT PROJECT  
ONE OF EIGHT UNITS  
1/2" x 1"  
D. B.

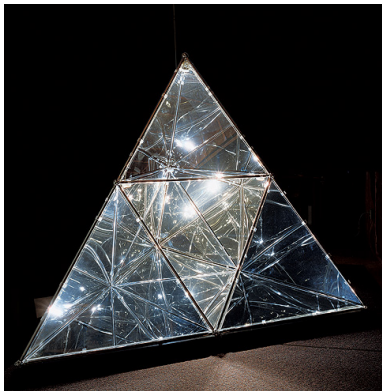


## Harriet Brisson



*Kaleidoscope*, 2001, two-way mirror plexiglas, chrome-plated steel, halogen lights

## Harriet Brisson

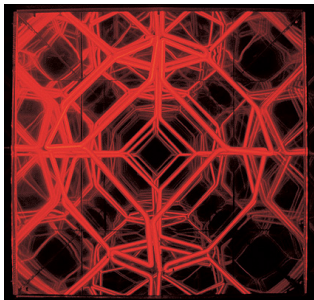


*Kaleidoscope*, 2001, two-way mirror plexiglas, chrome-plated steel, halogen lights

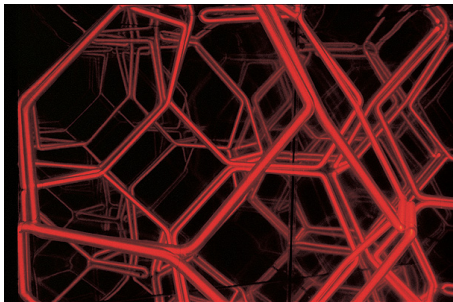
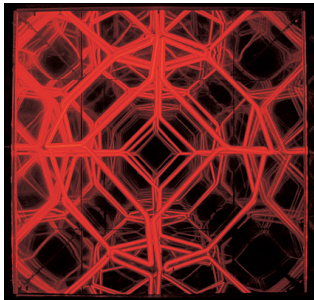


*Simplex*, 1986, neon, two-way mirror glass

**Harriet Brisson, Magic Cube 1977, neon, two-way mirror plexiglas**



**Harriet Brisson, Magic Cube 1977, neon, two-way mirror plexiglas**









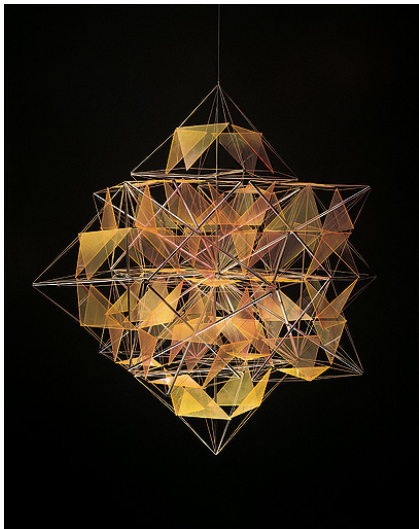
**Harriet Brisson**  
*Schwarz Surfaces*, 1985, porcelain



**Harriet Brisson, *Clouds*, 1990 stoneware**



Harriet Brisson, *Clouds*, 1990 stoneware

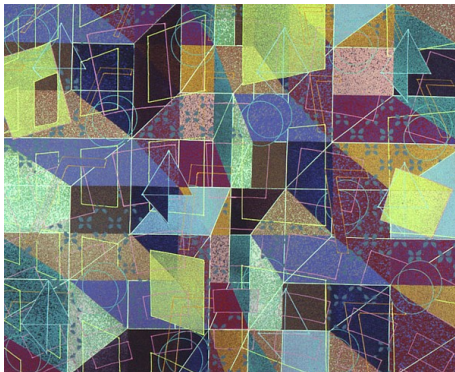
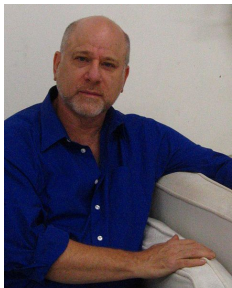


Close Packing Octahedra, Cubes, Rhombic Dodecahedra  
1980, plexiglas, nylon cord, aluminum rods

Tony Robbin



Tony Robbin



1980



**Tony Robbin, 2007**



**Tony Robbin, 2006**

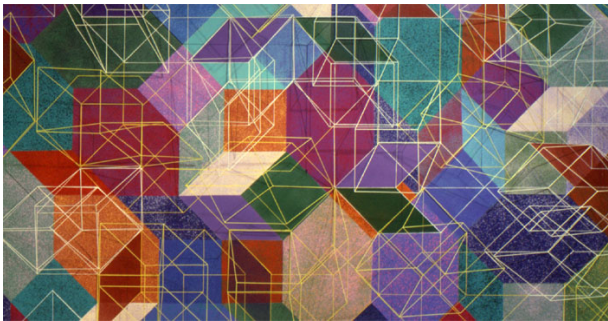




**Tony Robbin, 2006**



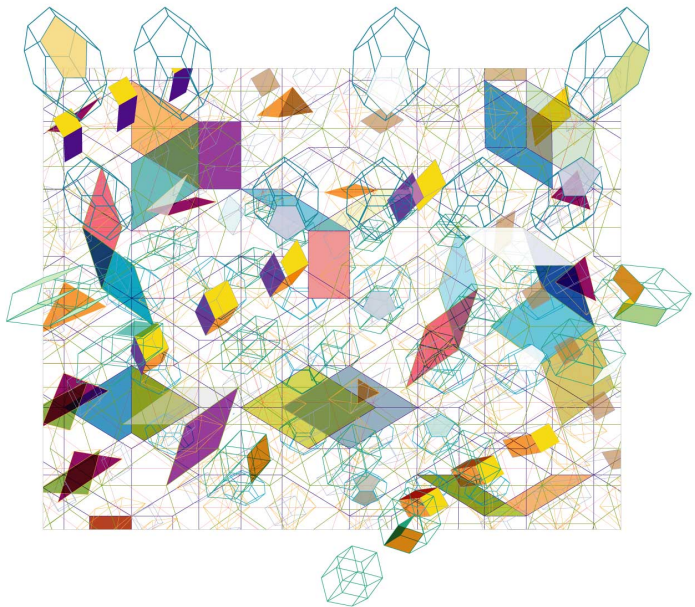
**Tony Robbin, 1979**



**Tony Robbin**, *Fourfield*, 1980



**Tony Robbin, *Lobofour*, 1982**



**Tony Robbin, digital print**

Next time:

Mathematics in Architecture

<http://www.people.vcu.edu/~rhammack/Math123/>