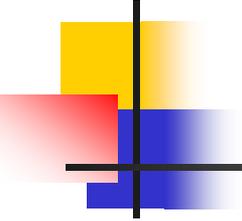


Statements of Faith --
Bach's B Minor Mass and
Michelangelo's Frescos

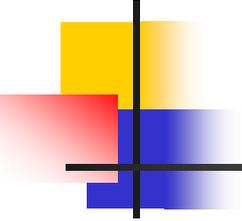
Silicon Valley
Forth Interest Group

July 23, 2016
Chen-Hanson Ting



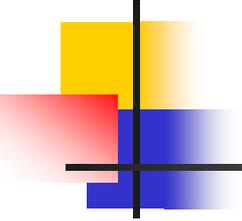
Statements of Faith

- Mass: professing of faith in Catholic Church since 328 AD
- Sistine Chapel Frescoes: Painted by Michelangelo in 1508-1512 and 1536-1541 AD
- B Minor Mass: Composed by J. S. Bach around 1749 AD



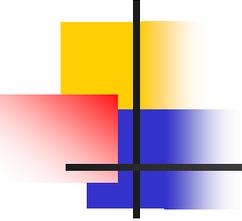
Bach B Minor Mass

- **Missa (12 mvmts)**
- **Symbolum Nicenum (9 mvmts)**
- **Sanctus (2 mvmts)**
- **Osanna (5 mvmts)**



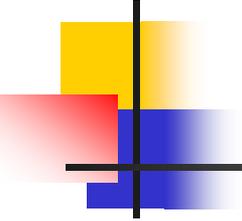
Sistine Chapel Frescoes

- Ceiling: Creation, prophets, and ancestors of Jesus, painted 1508-1512 AD
- Wall: The last judgement, painted 1536-1541 AD
- Restoration: 1980-1996
- New LED Lighting: 2014



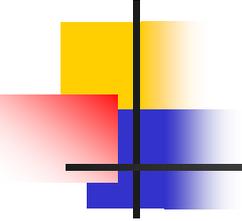
Sistine Chapel Frescoes

- Two picture books:
 - *Michelangelo—The Vatican Frescoes* by de Vecchi and Colalucci, 1996
 - *Michelangelo—The Frescoes of the Sistine Chapel* by Marcia Hall, 2002
- Same photographer: Takashi Okamura



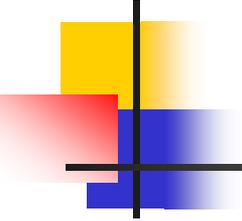
Digital Sistine Chapel

- Stitching together all the photographs to build two giant photographs, which I can pan and zoom at will.
- Limitations:
 - Photoshop is pushed to its limit
 - Not enough memory
 - Computer too slow



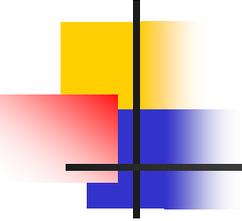
Practical problems

- It is very difficult to stitch pictures in the same book together:
 - Original room lighting
 - Original camera characteristics
 - Color separation
 - Color printing in the book
 - Scanner characteristics
 - Contrast, brightness and color balance



Current Status

- Two large pictures were assembled
 - Creation: 21125x7800 pixels
 - Last Judgment: 11216x12416 pixels
- Colors were pushed to saturation for best visual effect.
- Pictures are used as visual background of the B Minor Mass.



Tools used

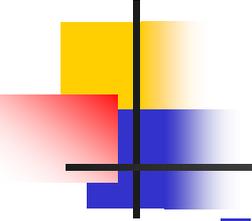
- Canon MF6550 printer / scanner, 800 dots/inch, 8.5"x14" flat bed
- Adobe Photoshop CS2
- Adobe AfterEffect CS2
- Cyberlink PowerDirector 12

Ceiling of Sistine Chapel



Flattened Ceiling

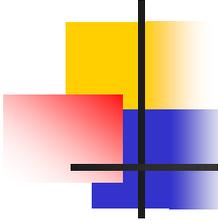
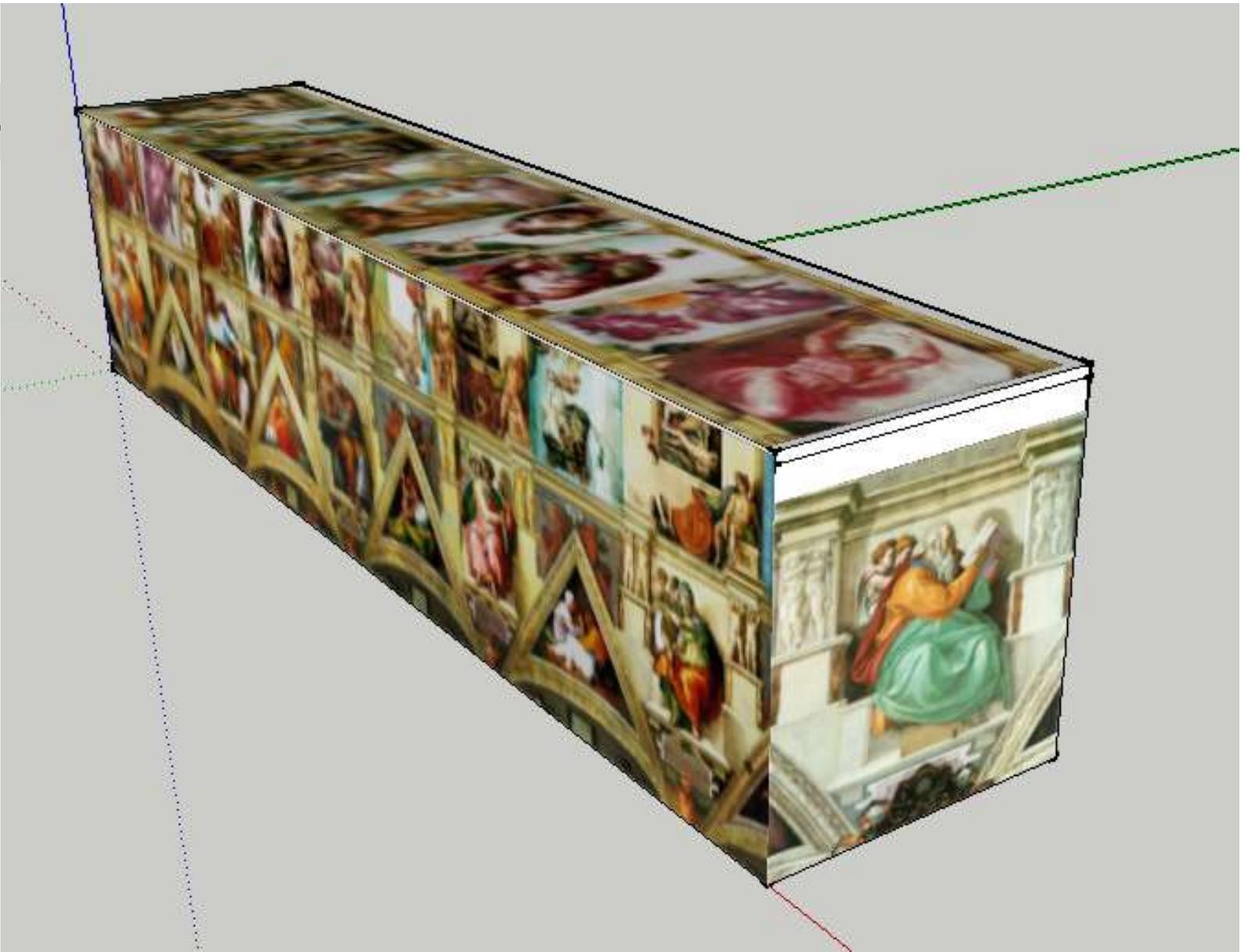


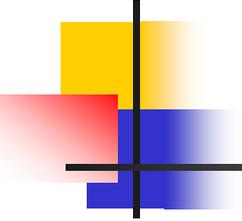


Hyper Space of Ceiling

- The pictures on the ceiling of Sistine Chapel were meant to be statues on the tomb of Pope Julius II.
- Michelangelo originally planned 40 statues for the tomb, but Pope pulled the project off and sent him to paint Sistine Chapel.
- Michelangelo built a virtual tomb on the ceiling of Sistine Chapel.

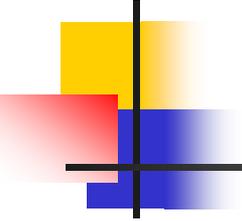
Hyper Space of Roof





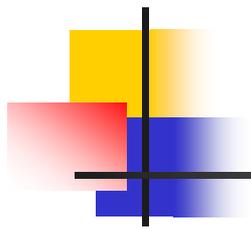
Show and Tell

- Pictures of Creation and the Last Judgment
- Sketchup Hyper Space model of Sistine Chapel ceiling
- 1st Movement of Bach B Minor Mass

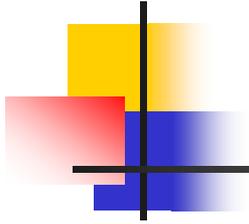


Show and Tell

- Pictures of Creation and the Last Judgment
- Sketchup model of Hyper Space
Sistine Chapel ceiling
- 1st Movement of Bach B Minor
Mass



Questions?



Thank you very much.