## Visualization and Images

- 1. Foucault wrap-up.
  - (a) Structures of thought.
- 2. Key terms and distinctions
  - (a) archeological knowledge vs epistemological knowledge (xiii)
  - (b) episteme (p. 57, etc.) The 'middle region' (xxi)
  - (c) Natural and conventional signs (p. 61-62). (Not so important).
  - (d) Measurement vs order (p. 53)
  - (e) Sign, signifier, and similarity (63-65)
    And oh-semiotics
    Sign, signififier, and similarity (p. 63-65)
- 3. Don Quixote.
- 4. Why is Foucault doing this?
- 5. Visual Conventions
- 6. Visual History
  - (a) Bedolina Map Space as space Time as space quantity as space
- 7. Data visualization
  - (a) Time as Space.

Thus the abstract idea of TIME, though it be not the object of any of our senses, and no image can properly be made of it, Yet because it has real quantity, and we can say a greater or less space of time, it admits of a natural and easy representation in our minds by the idea of a measurable space, and particularly that of a line; which, like time, may be extended in length, without giving any idea of breadth of thickness. And thus a longer or a shorter space of time may be most commodiously and advantageously represented by a longer or a shorter line. –Priestley (5)

- 8. The invention of everything.
  - (a) William Playfair

Line Chart and Bar Chart: 1786

- i. Line Chart
- ii. Invented the Pie Chart: 1801
- iii. Circle Chart
- iv. What Playfair doesn't do.
- (b) Multivariate division:
- (c) Scatter Plot
- 9. 19th Century: A golden age.
  - (a) Ecosystem for Plotting:
    - i. The Pictogram, 1884