

The Nature of Scientific Change

Chapter 18

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The Process of Change

- Revolution of Science and Math usually occurs when it is believed that the previous views are flawed
- Scientific change favors change and openness
- Scientists must base their new ideas on inductive logic when conducting previous experiments
- Science must keep in account the religious views all over the world
- Must not try to disprove God
- Darwin's idea of evolution

Spheres of Influence

- Just like governments all over the world, science and math are afflicted by external factors and change
- Political relations between different nation states can be explained by the theory of “spheres of influence”
- **sphere of influence (SOI)** is an area or region over which a state or organization has significant cultural, economic, military or political influence
- First thought of in ancient Greece to imply “all people who think like us”

(continued)

- As math is concerned, spheres of influence can be listed as
 - 1. Neolithic, pre-liberate European and North American
 - 2. Sumerian, Babylonian, Akkadian, Chaldean, Phoenician
 - 3. Egyptian
 - 4. Greek/Roman-first Pax Romana...

The Future of Mathematics

- Computers make it easier to calculate
- Creates new visions of mathematics
- We need to be liberated from “old” ideas
- Opens up new doors
- We must be open for change
- We must find new ways with the help of old ideas