

## THE GEOLOGIC COLUMN'S CONUNDRUM

1. Introduction
2. The Geologic Column

Standard Geologic Column	
<i>Usual Upward Sequence</i>	<i>Usual Ages</i>
CENOZOIC (Tertiary and Quarternary)	66 millions yrs to present
MESOZOIC (Triassic up to Cretaceous)	245 to 66 million yrs
PALEOZOIC (Cambrian up to Permian)	570 to 245 million yrs

- a. Different groups of fossils are found in sedimentary rock all over the earth → historical geologists (NOTE this is science trying to study history) then “correlate” sedimentary rock in different locations by a common group of fossils in them.
  - b. Fossils → after creation, after death began at the fall; rapid burial under water → Noahic flood key
  - c. Church fathers—Tertullian, Chrysostom, and Augustine and early flood geologists (16<sup>th</sup>-17<sup>th</sup> centuries) attributed fossils to the Noahic Flood
  - d. Others regarded fossils as spontaneous generation from rocks, jokes of nature, etc.
  - e. Gradually a “column” was artistically constructed by combining correlation and superposition. By Darwin’s day, evolution and historical geology became inseparable
  - f. Perspective: There are 10 basic geologic sedimentary periods from Cambrian to Tertiary BUT 2/3 of earth’s land surfaces have 5 or fewer of the 10 and only 15-20% of earth’s land surfaces have 3 periods in correct order
3. **Conjectural interpretation of the geologic layers**
    - a. The Heroic Age of Geology (1790-1820)
    - b. The Genesis-Geology Debate 1820-1845  
Charles Lyell (1797-1875) published 3-volume *Principles of Geology* claimed to be following Newtonian uniformity of nature
    - c. The triumph of the doctrine of “uniformitarianism” for all historical geological interpretation

**BIBLEFRAMEWORK**

## Uniformitarianism decoded

Lyell used the term "Uniformity" as purposeful equivocation in 1830  
 S. J. Gould first exposed the equivocation in 1980 – 150 years later!

Different meanings	Explanation
Uniformity of law	Presupposition of all science
Uniformity of process kinds (actualism)	Past processes no different from presently observed processes
Uniformity of process rates	Processes common to past and present have same rates

**BIBLEFRAMEWORK**

## Empirical Challenges to Uniformitarianism

Empirical Challenge	Explanation
Polystrata fossils	rapid deposition of multiple layers of material <del>gradualism</del>
Clearly catastrophic event: Lake Missoula flood (Pacific Northwest)	rapid, massive simultaneous erosion <del>gradualism</del>
Clearly catastrophic event: Mt. St. Helens eruption	rapid (photo documented) deposition erosion <del>actualism, gradualism</del>
Clearly catastrophic event: Grand Canyon with nearly the same radioactive decay dates at bottom and top layers	rapid, massive deposition and later erosion while sediments were soft <del>gradualism</del>

The Bible supports uniformity of law because of creation and providence (**Col 1:16-17**). But that does not mean that God providentially always uses the same processes going on today and at the same rate they are going on today.

**Job 38:4** "Where were you when I laid the foundations of the earth? Tell me, if you have understanding."

**2 Peter 3:3-7** "Knowing this first, that scoffers will come in the last days, wailing according to their own lusts, and saying, 'Where is the promise of His coming? For since the fathers fell asleep, all things continue as they were from the beginning of creation.'" For this they willfully forget: that by the word of God the heavens were of old, and the earth standing out of the water and in the water, by which the world that then existed perished, being flooded with water. But the heavens and the earth which are now preserved by the same word, are reserved for fire until the day of judgment. . . ."

#### 4. Conclusion

- a. In today's post-modern culture deep logical conflicts are left undiscussed
- b. Modern idea of a "narrative" is like what Lyell did, but he called it "science."
- c. Some secular geologists like Gadi Kravitz are speaking out: "It can be said that the geologists' knowledge of the past is based on pre-theoretical assumptions, often of a metaphysical nature, not susceptible to logical or empirical proof. In a certain sense, they are the products of the geologists' imaginations." (*Rethinking the Fabric of Geology*, 2013)