

Supercontinent

[Science](#), [Geology](#)



This paper will probe the theory that the continents of the Earth were originally a single supercontinent. It will describe the reasoning behind the theory, review the evidence that supposedly supports it, and present the reasoning for its rejection. It will also present an alternative view. It will explain the use of fossil records to link pieces of history, and why they may be one of the more significant methods used.

The paper proposes that the theory of the supercontinent and the study of fossil records lack a confident conclusion to the geological history of the Earth and its present state, meriting the consideration of an alternative view. In 1912, a German meteorologist submitted the idea of the continental drift. His name was Alfred Wegener, and although he was not the first to explore this theory, his pursuit of the idea held more determination than any other did. ¹ Wegener believed that the continents originally were attached in a single supercontinent he called Pangaea (“all land” or “all earth”).

He also believed that the continent, surrounded by one global ocean, then broke apart and drifted to separate places on Earth. He reasoned that the process repeated itself over a period of time. A complete cycle from beginning to end could take approximately 300-600 million years. To support his theory, Wegener provided evidence, such as how the shapes of the continents appear to fit together like the pieces of a puzzle. He is also noted how mountain ranges continued between continents, and appear to link them together.

Wegener also submitted evidence that fossils and rock matter found on different continents were very similar to each other. Most interestingly, were

the instances in which plant and animal fossils were found on the coastlines of South America and Africa (If looking at a world map, it can be said that Africa's west coast and South America's east coast seem to fit together). To Wegner, this was the most compelling evidence that the two continents once were one. 2 Although all of Wegner's evidence seemed to coincide, his theory lacked a crucial point: a valid explanation of what pushed the continents apart.

Wegener reasoned that the continents plowed through the ocean floor. His peers immediately rejected this idea. Studies conducted years later aided in the development of the concept of plate tectonics, as well as the subsequent confirmation of continental-drift theory. As previously mentioned, fossil records were among the evidence used to support the continental-drift theory. They provide some evidence of when and how life began, what types of organisms existed and how long they lived. Fossils also tell what the climate was and how it changed, as well as provide clues to the Earth's tectonic evolution.

With the study of fossil records, it is conceivable that when the continents separated and rejoined, that animals once known to one specific region, now traveled in and about the other continents. 3 The shifting of the continents caused climatic changes that influenced this migration; however, climatic change was not the sole reason. Animal migration is indicative of the fact that animals were adapting to their surroundings (the availability of food, water, etc. in a specific area). Fossils have had great historical influence.

Much of what we know about history has come from the study of fossils. The idea of plate tectonics was significantly aided by the notion that fossils now found widely spaced across the globe had to exist on the same original landmass that subsequently split apart. The African fossil record is arguably the most significant source of evolutionary history. Its fragmented components may be scattered throughout the continent, but considerably an integral part of piecing together history. Even with its supporting evidence, there are notable flaws in the idea of the continental drift.

The theory states that all continents were once part of a single supercontinent, but does not explain how the supercontinent itself formed. The Creationist view offers an answer. By account of the Bible, the creation of the supercontinent and the subsequent shifting of the continents are explained in Genesis: In the beginning God created the heavens and the earth...God said, " Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. Thus, God made the firmament, and divided the waters that were under the firmament from the waters that were above the firmament; and it was so.

And God called the firmament Heaven...Then God said, " Let the waters under the heavens be gathered together into one place, and let the dry land appear"; and it was so.... This is the history of the heavens and the earth when they were created...4 Genesis also tells us that God caused it to rain on the earth for forty days and nights. This event is recorded as the Great Flood. Arguably, the division of the firmament, in addition to the effects of the flood, caused the shifting of the continents. The Bible also states that

during the flood God destroyed both man and cattle from the earth. Those on the ark were the only survivors.

Therefore, it is reasonable to believe that those human and animal remains would later be discovered fossilized deep within the earth. The continental-drift theory reasons that all continents formed from a single supercontinent. The use of fossil records has been used to support this theory. Initially rejected, other studies reportedly confirm the theory. However, upon closer inspection the theory raises more questions than answers. One is the question of the supercontinent itself. The theory tells us that subcontinents formed by the breaking apart of one supercontinent, but does not elaborate on how the supercontinent formed.

Creationist suggests a different view. The idea of biblical creation tells us that God created the earth and then caused it to break and shift apart.

Endnotes 1. John Reader, *Africa: A biography of the Continent* (New York: Vintage Books, 1999), 21. 2. NASA. "Evidence supporting Continental Drift", 2003. <http://kids.earth.nasa.gov/archive/pangaea/evidence.html>. 3. Reader, 39. 4. *The Holy Bible: New King James Version* (Nashville: Thomas Nelson, Inc., 1984), Genesis 1: 1, 6-9, 2: 4. Bibliography Answers.com. "Plate tectonics: definition and much more from answers.com", 2008. <http://answers.com/topic/plate-tectonic> (accessed 8/4/2008). John Reader, *Africa: A biography of the Continent* (New York: Vintage Books, 1999). NASA. "Evidence supporting Continental Drift" Sharron Sample, 2003. <http://kids.earth.nasa.gov/archive/pangaea/evidence.html>. *The Holy Bible: New King James Version* (Nashville: Thomas Nelson, Inc., 1984). Wikipedia. "

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