temperature requirements for the blueschist, since the extra heat of a volcanic intrusion was necessary for full metamorphism. Furthermore, this item confirms the view that the crust was shattered in another way.

E. PRESENCE OF INTRUDED BELTS OF SERPENTINE Between the Franciscan and the Great Valley Sequence lies a large intrusive mass of serpentine that is at least 70 miles long and up to three miles across. A "plastic intrusion" of materials well below the melting point into the fracture between these two masses that represent offshore abyssal deposits and offshore continental shelf deposits is very evident. That serpentine might be involved in this type of flow under pressure is well known (p. 87). The points of contact are remarkably sharp. The serpentine separates the huge hogbacks representing the ends of the Great Valley Sequence from the Franciscan graywacke and shales of the area.

It is the reviewer's opinion that the serpentine mass represents an intrusion in a major fault which now separates once united structures, and that this intrusion took place at the time of the final elevation of the Franciscan to its position dominating the western horizon beyond the Great Valley. This intrusion of serpentine may be considered, of course, another indication of extreme catastrophism, abrupt diastrophism. The broken roots of the Great Valley Sequence lie shattered, folded and upended against the serpentine mass.

It is difficult to avoid the implications that the world's most catastrophic crust-shattering series of faults and mass movements ever known occurred during the Mesozoic "era." These movements resulted in the present configuration of the continents as they were massively restructured and resurfaced during the long period of the retreat of the Noahic flood. Thus the present reviewer attributes "Mesozoic" catastrophism to the years after the Noachian deluge.

V. Conclusion

More than a score of evidences of geological upheaval and tectonic disturbance set forth in the Bulletin, *Franciscan and Related Rocks and Their Significance in the Geology of Western California*, have been examined. An extensive weakness in the macrochronological interpretative framework by which these structures have been explained in this remarkable and valuable book has been identified. While the contribution of the Bulletin to one's knowledge of California is beyond reproach, for it is a superbly collected and edited work, the startling "significance" of the Franciscan assemblage is obscured.

It is the conviction of the reviewer that many of the standard works in the field of geology, while on the surface appearing to be destructive to our faith, would actually prove to be of keen interest and of great significance to the flood geologist after a careful removal of their "outer husk" of uniformitarianism. It will be seen that many of the facts contained therein (and even the arguments for erroneous views) are in reality consistent with the accurate Biblical account.

The Christian geologist must never retreat from such a question as, "But where did all of the sands come from?" Rather, he should grasp the occasion and turn the attack with a question that should prove quite embarrassing to the uniformitarian: "Yes, where indeed did all of the sands come from? Have you ever noticed the problem in the Franciscan assemblage?"

References

[']Cook, Melvin. 1966. Prehistory and earth models. Max Parrish, London, England.

^aKelly, Allan O. 1966. Continental drift: is it a cometary impact phenomenon? Carlsbad, California: Published by the author. 100 pp.

³*Ibid.,* p. 60-61.

Ernest, W. Gary. 1969. California scientist says trench 100 million years old, *San Fernando Valley Times*, Saturday, Oct. 25, p. 5.

NOTE ON SCOPES TRIAL

Readers will be intersected in a quotation mentioned in a letter from George W. Cooper, Instructor of Psychology, Madison Area Technical College, Madison, Wisconsin, on the point that John T. Scopes wrote: "I didn't know enough about evolution to lecture on it," in his book *Center of the Storm* (Holt, Rinehart and Winston, Chicago, 1967) on page 193.

Of further interest is the statement, on page 60 of the same book: "To tell the truth, I wasn't sure I had taught evolution." Or as a reviewer of the book expressed the idea: "... to the best of his recollection, he (Scopes) never actually

taught evolution," in "The Day the Bible Beat the Monkeys" (LIFE, December 9, 1966, p. 98).

Such an admission of the non-teaching of evolution by John Scopes was published a year earlier by Sherwin D. Smith in the New York *Times Magazine* of July 4, 1965:

The strangest aspect of the case, however, lies in a casual remark that Scopes let drop before a reporter the day the trial ended. He had not wanted to be called as a witness, he said, because then he might have had to admit that on April 24, the day cited in the indict-*(Continued on Page 203)*

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ment, he *had been absent* from school. He had *never taught the lesson* that set off the Monkey trial. (Emphasis added)

Even more confounding, as to the ethical nature of motives of those who sponsored the Scopes trial, is a much earlier revelation of this "strangest aspect of the case" as published in 1951 in the autobiography (*The Preacher and I.* New York: Crown Publishers, Inc.) written by Charles Francis Potter, an ardent supporter of Scopes and his "defense":

The day we left, as the train whistled in the distance, Mrs. Potter said: "Johnny, I'd like to ask you one question before we go. You don't need to answer it if you think it would make trouble. But I wonder if you really ever did teach evolution in Rhea County High School?"

Scopes quickly looked up at my wife with surprise and admiration and said, with a broad

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grin: "In the high school I'm science teacher, or at least I was. Taught chemistry and biology and such. But my hardest job is coach in athletics-football in the fall, basketball in the winter, and baseball in the spring. I was pretty busy. Sometimes we had to use the biology period for planning our plays, and I reckon likely we never did get around to that old evolution lesson. But the kids were good sports and wouldn't squeal on me in court."

On the train I asked her: "How *did* you know?"

And she replied: "Oh, I began suspecting something several days ago when Mrs. Rapp told me she overheard Darrow coaching the schoolboys what to say and what not to say on the witness stand. It took him a whole evening to get them letter-perfect."

Someone has well said that woman's alleged intuition is eighty-five per-cent suspicion. (pp. 293, 293) JOHN N. MOORE

Shaw, R. Daniel