

The largest of the stalactites were about the size of a lead pencil and about 10 inches long. All were quite fragile.

As to the time required for these depositions no definite statement can be made. The fort was in use during the Civil War, and it is likely that the roof remained in fair condition for thirty years longer. The impression received was that the rate of deposition had been much greater than is commonly thought to be the case in the growth of limestone cave deposits. It is thought that the stalactites had not very recently been disturbed, as the floor deposits were fairly commensurate with the amount of material still hanging to the ceiling. The rate of deposition may have been an inch a year. And the entire deposit came from the meager supply of limy material contained in the mortar of the brick roof.

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THE LANGUAGE OF CLERGYMEN

I HAVE read the article entitled, "The Language of Scientists," by the Reverend George W. Lay, with a great deal of pleasure. Some of the mispronunciations to which he calls attention are really delightful. Certainly every scientist should be meticulous in the use of scientific terminology. But I wonder if it is not equally important for theological scientists to be somewhat careful of the structure of sentences. In Mr. Lay's amusing castigation of his fellow members of the Association for the Advancement of Science, I see this amazing statement: "An example of ignorance or carelessness appeared in an important paper by an eminent scientist that was published in SCIENCE." I want to congratulate the publisher who undertook so stupendous a task as that. We have all heard of books that are published, but this is the first time that I, for one, have ever heard of publishing an eminent scientist. Later in his article, Mr. Lay writes: "These words are practically always derived from the Latin or the Greek . . ." Does he mean that they are *usually* so derived? Still later, the supercritical (or is it hypercritical) Mr. Lay gives us this charming bit of English: "Attention has been called recently to two examples of unscientific confusion in the meaning of words." Perhaps Mr. Lay would be good enough to tell us what *scientific* confusion would be like. One more delightful bit of English meets us near the end of his article. He writes: "Scientists can not even trust each other." Are there, then, but two scientists who are thus antagonistic? Perhaps all scientists distrust *one another*. I have no doubt that Mr. Lay is quite correct in all his pronunciations, but a good rhetoric would

tell him that there is as great a danger in misplaced phrases and misused words as in misplaced accents. If we are to carry culture into the laboratory, by all means let us expand the meaning of the word "culture" to include correct sentence structure.

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"THE Language of Scientists" was certainly worth publishing. However, it suggests to me two questions. Mr. Lay speaks of a "co-ed graduate student." Are all participants in coeducation female?

He states later that one micromicron is a thousand times greater than another. Is it possible that he meant "a thousand times as great as"? Or, if you will, "999 times greater than"?

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BABYLONIAN MATHEMATICS

IN SCIENCE for December 12, 1930, page 601, Professor G. A. Miller writes: "The Babylonian mathematics is of special interest in view of the fact that our division of the circle into 360 parts called degrees, and our division of the degree and the hour into 60 parts called minutes and of the minute into 60 parts called seconds can be traced back thereto." May I suggest that nothing would be of greater interest to readers of SCIENCE than a presentation of references to *sources* where these various statements may be checked? Cantor makes no such claim, nor does he, in his references to Babylonian geometry, give adequate references to sources to check even the statement he does make: "for a certainty we have the division of a circle into 6 parts, then into 360 degrees." Heath reproduces no such statement. Tropfke in the third edition (1930) of Volume 1 of his history does not furnish proof of Professor Miller's claims. In 1928 Thureau-Dangin argued merely that the division of a circle into 360 parts was natural, but that further sexagesimal division was unnatural. During the past year I have given in SCIENCE¹ some references suggesting the difficulty, in the present state of our knowledge, of arriving at any definite conclusion in this regard.

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AN ENGINEER IN AUTHORITY

MOST scientific men were delighted when for the first time since George Washington an engineer be-

¹ SCIENCE, 71, 117-118, January 31, 1930; 71, 342, March 28, 1930. Many more detailed references are given in my "Bibliography of Egyptian and Babylonian Mathematics" in Chace's edition of the Rhind Mathematical Papyrus, 1927 and 1929.