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Problem 6.2.5

The problem with the claim is that it is not true. If a was computed to a confidence interval of [0.9,1.1], it is incorrect to claim that a has a 95% chance of being in that interval. Suppose that a was known to us, but not the people conducting the experiment. Let's say a has a value of 1.2. If the researchers computed a confidence interval of a to be [0.9,1.1] and tried to claim a was in that interval with 95% certainty, they would be wrong—a is simply not in the interval; there is nothing left to chance there.

A better interpretation would be "if we did this experiment a bunch of times and computed the 95% confidence interval each time, about 95% of those intervals would contain a." Indeed, it is not correct to make statements about a single particular interval; rather, it is describing a large number of intervals.

Good