no A.B. degree, hence should not be listed as "not accepting" psychology to satisfy the science requirement it does not have.

(b) Similarly the University of Florida, although it gives the A.B. degree, has no science requirement in connection with that degree.

(c) At Rutgers and Vanderbilt Universities, the A.B. laboratory sciences are placed in the work of the Junior Division. Psychology is in the Senior Division, where it is accepted as a laboratory science.

These recent changes necessitate corrections in the material published by Winter. The tabulation now stands as follows:

(1) Fifteen of the original 75 institutions have no laboratory requirement for the A.B. degree. (One of these, the Massachusetts Institute of Technology, does not give the A.B. degree.)

(2) Twenty-two of the remaining 60 institutions (37 per cent.) now accept psychology to satisfy the A.B. laboratory science requirement.

(3) Thirty-six of the 60 institutions (60 per cent.) do not accept psychology to satisfy the laboratory science requirement.

(4) Two consider it too advanced for this basic requirement.

The increase from 29 to 37 per cent. acceptance in 5 years may be taken as evidence of a definite trend toward the inclusion of psychology among the laboratory sciences which satisfy the requirements for the A.B. degree.

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AN EXPANDING UNIVERSE AN INDETERMINATE PROBLEM

CERTAIN fundamentally important considerations in connection with this and other problems appear to have been overlooked or neglected in many writings and discussions of questions in ultra remote astronomy.

Nothing can possibly be known or ascertained about an object one hundred million light years distant from the earth, later than conditions as they were one hundred million years ago. It is wholly unwarrantable to assume that no material changes have taken place in that immensely long period of time and that conditions that we *observe* now are the same as those that *exist* at present. In other words, there is a complete absence of any certainty that changes which might entirely invalidate any deductions or conclusions based on this assumption have *not* taken place since the date of the latest available evidence.

For two objects distant, respectively, one hundred million and two hundred million light years from us, in the same region of the sky, we have no basis for considering their relative contemporaneous positions and other conditions except upon an assumption that no relative changes had taken place, up to one hundred million years ago, during the preceding one hundred million years. Such an assumption is manifestly quite untenable, or at least problematical.

The light-year, as the unit of measurement for great astronomical distances, is really *one yearly light mileage*. It might better be designated one Y L M.

The problem of whether the universe is "expanding" *now* or not is something like trying to determine several unknown quantities from a less number of independent equations than the number of values sought. The problem is not solvable: It is indeterminate.

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NICOTINIC ACID

THE reaction of the public to hastily reviewed or hastily read scientific articles, especially those relating to diets, vitamins or tumor growth, is something that deserves consideration. A good example may be pointed out in regard to nicotinic acid. The only reason for changing its name to "niacin" was because of the unfortunate linking in the lay mind of nicotinic acid and tobacco. In regard to hastily reviewed articles, one news release headlined an article dealing with the fortification of white bread by nicotinic acid—"Tobacco in Your Bread"! The lay response to this article may well be imagined.

The recent work dealing with cancer induced by the feeding of butter-yellow and modifications by specific diets is definitely newsworthy and probably headed for popularized review. I do not believe that any amount of explanation will suffice to separate "butter-yellow" from "butter" in the lay mind, and I therefore would like to enter a suggestion that steps be taken to change the name of "butter-yellow" to a form that does not have such an undesirable connotation.

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BIOGRAPHY OF THE EARTH

IN my recent popular book, "Biography of the Earth" (Viking Press, 1941), representing an attempt of synthesis of to-day's astronomical, geophysical, geological and paleobiological knowledge concerning the history of our globe, I have used to a large extent the results of Professor Charles Schuchert, of Yale University, on the distribution of waters and lands in past geological epochs. In doing so I was acting under the conviction that the published results of any scientific research become an intrinsic part of science, and can be used freely for the purpose of further study or popularization. Professor Schuchert informs me, however, that in this case the situation is different, since the results collected in his paleogeographical