MAGNITUDES AGAIN

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(1) A YARDSTICK WITHOUT SUBSTANCE

An assemblage of astronomers scarcely needs reminding that stellar magnitude is the measuring stick with which we sound the depths of space. Upon this unit, in some way or other, depend our distances of all the more remote objects in the heavens and, indeed, the dimensions of the universe itself as far as we know it. Triangulation, the perspective-sharpening of star streams and the backward sweep of stars which reflects our own forward motion through space locate our nearer neighbors; but we quickly pass the useful limit of such methods and thereafter must deal with distances so great that no change in the position of the observer produces any answering shift in the faraway star. The principle of measurement is exhausted, and a new one must be found.

1 Address of the retiring vice-president and chairman of the section on astronomy, American Association for the Advancement of Science, Indianapolis, December 28, 1937.