**(Note that operational definitions are applied also to the independent variables, for example, in the method section of an experimental paper appears a description of the stimuli and their conditions of presentation.)**

**There are no UMs for motivation or training, the independent variables, which appear in the learning function and which are designed to explain behavior.**

**In view of the above brief review, one may reach the following conclusions. First, to most of the methodological problems in psychology reasonable solutions have been offered. Second, in many cases the natural sciences are troubled by problems similar to those in psychology. Therefore, one might suggest that psychology may be considered a science like the natural sciences. However, I believe this claim is mistaken.**

. **For example, given that the length of stick (S) is 3 meters (S=3 meters), we can state that the relation between the length of S and its unit of measurement (meter) is 3 (S/meter = 3).**

**On this Michell (1999) wrote: “… there has been little serious scientific research undertaken to show that the relevant attributes are really quantitative and, therefore, that the relevant attributes are measurable,” (p. 187). In other words, psychologists have bypassed or ignored the need to show empirically that the psychological property to which numbers are being applied is indeed a quantifiable property that can be characterized by an additive structure.**

**The JND is a theoretical concept and this is expressed in several ways.**

**The paper proposes that the failure to develop a unified theory is a major factor that differentiates psychology from physics. One possible explanation for this failure is UMs-equivalency, which helps bridge the theory-observation gap in physics but not in psychology. Alternative accounts such as reductionism and consciousness, and models that generate interval scales, were examined as well, but were found bad explanations. Hence, UMs-equivalency seems to be the best answer to the question of the developmental gap between these two fields. Furthermore, it seems that UMs-equivalency constitutes the basis for a solution to Wigner’s problem: the amazing success of mathematics in describing and explaining nature.**