Relativity, A systematic Treatment of Einstein's Theory. By J. Rice. London, Longmans, Green and Co., 1923. xvi + 397 pp. $6.00.

The Mathematical Theory of Relativity. By A. Kopff. Translated by H. Levy. New York, E. P. Dutton (printed, however, in Aberdeen). viii + 212 pp. $3.20.

These two books illustrate very well indeed the two tendencies of the flood of books on relativity that is now flowing from the presses of British publishers. On the one hand, we have a few books of great value, such as Eddington's *Mathematical Theory of Relativity.* On the other hand, we have innumerable translations of German expositions of "*Einstein*" that pay no attention to current progress in this field.

Mr. Rice's book is of the first type. In spite of a few instances of poor proof-reading, it contains a somewhat novel treatment of the restricted theory, an excellent development of the general theory, and a most valuable comparative study of the work of Einstein, Weyl, and Eddington. In an addendum, it contains a brief but interesting account of Einstein's recent amendment to his general theory, which appeared in the Berlin SITZUNGSBERICHTE of March, 1923. In short, this volume would be a valuable addition to the library of anyone interested in the problems on which Einstein and others have made noteworthy progress.

The volume by Kopff is an English translation of one of a multitude of German works on "*Einstein*" rather than on *relativity.* Kopff has presented the now classical theory in a scholarly manner. The book needed, however, an editor as well as a translator, the English edition being full of footnotes referring exclusively to German sources. For those to whom this work would be of value, the German edition would be a less expensive volume of equal value.

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Die Buntordnung. By Arnold Kowalewski. Heft 1. *Entstehung und mathematischer Ausbau der Buntordnungslehre.* Leipzig, Wilhelm Engelmann, 1922. 53 pp.

The subtitle of this work describes it as "mathematical, philosophical, and technical considerations concerning a new tactical idea". The new idea is as follows: To arrange the $\left|\begin{smallmatrix} n \\ p \end{smallmatrix}\right|$ combinations of n things (elements) taken p at a time in a row in such a way that every set of k successive p-ads in the row shall contain no common element. Such an arrangement the author calls a diversified row (Buntreihe) of degree $k-1$. If such a row of degree $k-1$ is possible, while one of degree k is not possible, the row is called the "most diversified" for the given n and p. For given n and p the problem is naturally to find the most diversified rows. The solution of this problem is said to be of importance in experimental psychology (where the problem was indeed suggested) and in many other domains, including analysis situs.