An interesting question, to which the authors have made substantial contributions, concerns what can be said about the range of a charge. If the range is bounded and infinite, then it is dense in itself; if, in addition, the domain is a σ-field, the range contains a dense sequence of perfect sets. However, the range need not be a Borel set; by applying Kolmogorov's zero-one law and its category analogue, the authors show that on any infinite σ-field there exists a probability charge whose range is not Lebesgue measurable and does not have the property of Baire. Here is one example. Let $\mathscr{F}$ be the field of all subsets of $N = \{1, 2, \dots\}$. For each $A \in \mathscr{F}$ define $\mu_1(A) = \Sigma\{2^{-n}: n \in A\}$, and let μ_0 be a 0-1 valued charge on $\mathscr{F}$ that is equal to zero for every finite set in $\mathscr{F}$. Then $\mu = \frac{1}{2}(\mu_0 + \mu_1)$ is a probability charge on $\mathscr{F}$ whose range has the stated properties. In fact, that part of the range of 2μ that is contained in $(1, 2]$ coincides with a set whose nonmeasurability was proved by Sierpiński [**2**].

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A problem seminar, by Donald J. Newman, Problem Books in Mathematics, Springer-Verlag, New York, 1982, 113 pp., $12.95. ISBN 0-3879-0765-3

> There was once a bumper sticker that read, "Remember the good old days when *air* was clean and *sex* was dirty?" Indeed, some of us are old enough to remember not only *those* good old days, but even the days when Math was *fun*(!), not the ponderous THEOREM. PROOF. THEOREM. PROOF,..., but the whimsical, "I've got a good problem."
>
> Why did the mood change? What misguided educational philosophy transformed graduate mathematics from a passionate activity to a form of passive scholarship?
>
> In less sentimental terms, why have the graduate schools dropped the Problem Seminar? We therefore offer "A Problem Seminar" to those students who haven't enjoyed the fun and games of problem solving. (Preface to *A problem seminar*).

1. Opening shots. *A problem seminar* is, pound for pound, the finest collection of the problem-solver's art that I have ever read. It is a master class conducted by a man completely in command of his methods. Unfortunately, it is severely compromised by several relatively superficial failings. These failings