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Reply to Bennett Fox

For many years simulators have had considerable difficulty in analyzing the output of their simulations. While this is still a formidable task, I feel some progress has been made recently in providing methodology for this analysis. To approach this problem in a scientific manner, the simulation community should begin by developing methods that perform well on simple models for which analytical results are available for confirmation. This is one reason the $M/M/1$ queue is frequently used as a test vehicle for new procedures. No one has ever suggested that these results be taken blindly over to much more complex simulations. The problem of producing reliable estimates for such simulations is a great challenge. However, unless we first master so-called "idealized" models, the realistic ones will never be brought under control.

Steady-state behavior is emphasized because it is often the most challenging problem and of real interest to many simulators. For the transient behavior there is always the alternative to replicate and use classical statistics. This is not to say that further methodology for the transient problem would not be welcomed. The clever use of control variables probably deserves further exploration.

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