This section of Resonance presents thought-provoking questions, and discusses answers a few months later. Readers are invited to send new questions, solutions to old ones and comments, to ‘Think It Over’, Resonance, Indian Academy of Sciences, Bangalore 560 080. Items illustrating ideas and concepts will generally be chosen.

How Many Birds are Unwatched

Suppose $n$ birds land randomly on a wire connecting two columns (we assume it is not a live wire!) where $n \geq 2$. Each bird is watching its nearest neighbour. What is the expected number of unwatched birds?

“Knowledge of a flute or a kettledrum is not sufficient to understand all the other instruments in a symphony orchestra or to predict their characteristics. Nor is knowledge of a single species, however complete, adequate for understanding diverse species. Diversity of research organisms in the laboratory must at least dimly reflect the diversity of species in nature.”

David Perkins, 1991