A recent letter in *Science* (DOI: 10.1126/science.322.5901.528a) by Simcha Lev-Yadun in the Department of Science Education, Biology, at my institution, The University of Haifa, proposes a method of streamlining the process of peer review for scientific publications.
Professor Lev-Yadun points out that: "In standard reviewing practice, editors send manuscripts simultaneously to several reviewers, whose comments are considered by the editor and then sent back to the author."

As a guest and associate editor for several journals, Lev-Yadun finds "all reviewers have to spend time on a text with many problems. Moreover, making trivial corrections may distract reviewers from more substantive critiques," and he has instituted a "gradual review system", i.e. he sends the manuscript first to a single reviewer, the returned paper together with the first referee's comments are sent to the author for revision and only afterward to the remaining chosen reviewers. The latter can focus on important aspects of the study rather than deal redundantly with trivial problems in the text. The total time taken by reviewers is reduced and most of the trivial corrections are winnowed out in the first stage.

Lev-Yadun believes that overall "This tactic could save precious reviewing time and increase the general willingness to review manuscripts".

To my mind there is wisdom in what Professor Lev-Yadun says, however, I think, it is one-sided. Everything has a price. The advantage of the most common current method of simultaneously sending a manuscript to more then one reviewer is that it averages the overall opinions of a group (2-3) of reviewers and does not put the total verdict in the hands of a single individual. In the proposed "single reviewer first" approach the saving of time by reducing redundancy across the whole system may be paid for by some unjustified rejections (or unjustified acceptances).

Some journals already use the "single reviewer first" tactic, some even do so by empowering their associate editors or even the editor-in-chief to just thumb through the submitted paper and make an initial reject/not-reject decision.

There are a number of possible options that might be employed to streamline peer review, and I do not think that a single method would (or should) emerge. And clever authors try to take note of a journal's review process when deciding where and how to submit their work.

Professor Yair Censor,
Department of Mathematics,
University of Haifa,
Mount Carmel, Haifa, Israel

To view this item on Alex Reisner's Internet page "The Funneled Web" go to:  http://www.the-funneled-web.com
And click on the Op-Ed of October 27, 2008, on the right-hand side menu.