COMMENT

Whither general journals?

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There is something disconcerting about a journal that sandwiches a deliberately accessible dissertation on quantum switches, sodium channels in brain cells and the mind-body problem between 'Emendations to a proof in the general 3-D theory of oscillatory sources of waves' and a 42-page treatise on 'Singular global bifurcation problems for the buckling of anisotropic plates'. There has never been a better time to submit to *Proceedings of the Royal Society* says an editorial in the same issue (8 January), and faster and more open editorial procedures newly introduced (see below) give weight to such a claim. But the question is begged as to why one should submit there at all.

No-one could suggest that *Proc. Roy. Soc.* is anything other than prestigious by virtue of the high quality of papers written or communicated over the years by the Society's Fellows. Its history of great names amongst its authorship adds to its cachet. Its typography is the most aesthetically pleasing of any scientific journal. And it surely deserves credit for an enlightened policy towards freedom of expression; witness a critical reanalysis of an improbable and all but impracticable test of general relativity using a Foucault's pendulum at the South Pole, devours costly page space with enticing prose: 'The necessary expenditure of time, skill and money should therefore only be incurred for the delight of meeting a challenge rather than hope of glory' (A B Pippard 1988 420 81). Such a journal, unlike most, has a chance of conveying the idea that its authors enjoy writing papers and that its readers might therefore enjoy contemplating them.

All the more regrettable, then, that such enjoyment manifests itself so rarely, and that the editors of *Proc. Roy. Soc.* appear not to insist that their authors explain why it matters that, for example, 'Heat transport into a shear flow at high Peclet number' has found its way into print. Regrettably, in most cases nobody but the professionally dedicated few need concern themselves with the fact. For those papers, in truth, their disciplines would have been better served had they appeared in the best specialist journals.

There is no 'general' journal that has escaped such difficulties. All find it necessary to surround truly interdisciplinary or otherwise widely appealing results with a significant proportion of papers that might as well have appeared in more narrowly focused publications, and all have great gaps in coverage for one historical reason or another. To their credit *Nature, Science* and, in a narrower ambit, *Physical Review Letters* present their papers in such a way that non-specialists have a chance of perceiving their significance. To their discredit *Europhysics Letters, Physics Letters and Modern Physics Letters* appear to do nothing to encourage physicists of different persuasions to interest each other in their work. True, the prime function of those journals is to publish important results concisely and rapidly, but paying more attention at least to making introductions and conclusions more accessible could only enhance their impact.

The problem with *Proc. Roy. Soc.* is one not only of accessibility but, more fundamentally, of identity. If it did not exist, would it now be necessary to invent it? Hardly, in its present form. Perhaps those worried (quite rightly) about overabundant new journals might also reflect on the need for some of the older ones in the light of such a conclusion.

The new policy allowing anyone to submit papers directly to its editors rather than, as hitherto, insisting on a Fellow's involvement may reveal in time just how useful the society's wider community considers this general journal to be. If, as it should, the Royal Society wishes to encourage those who seek to cross disciplinary barriers or who are able to stimulate in the best and broadest intellectual sense, it should at least announce its intention to give priority to such papers. Who knows, if authors of specialist papers take the hint and go to other destinations, it may eventually make sense to surround the currently distinct physical and life sciences parts of the journal. Such a publication would be a truly appropriate home for a paper by a physicist searching beyond the limits of neurobiological description.
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