
ISR Editorial

For Michael S. Mahoney, *Vale!*

When Anthony Michaelis founded this journal in 1976 – the year I began my doctorate on Milton at Toronto – he declared that a reliable understanding of the sciences is ‘essential for any cultured human being’ (2001: 1). In addition to articles on ‘the interactions between two or more natural sciences, or technologies [and] the effects of science and technology on Society’, he determined from the outset that *ISR* would also further ‘the cultural and intellectual links between science, the arts and the humanities’ (2001: 311). It has done so, quietly but successfully, for the last 32 years. The tale of *ISR*’s origins may be found in Michaelis’ remarkable memoirs, *The Scientific Temper: An Anthology of Stories on Matters of Science*, out of print but thankfully preserved online by Eugene Garfield. In beginning my tenure as Editor, with strong determination to develop the last of Michaelis’ three goals, I am encouraged to have discovered it in the original charter and to learn from my predecessor, Howard Cattermole, that in his opinion *ISR* has been moving ever more in that direction for the last several years.

A journal named *Interdisciplinary Science Reviews* might seem culpably trendy for the sciences, both trendy and dangerous for the arts and humanities. But *ISR*’s history in promoting exchange and cross-fertilisation of ideas among those otherwise unlikely to share the same disciplinary forum began long before interdisciplinarity became a transcendental virtue, everywhere proclaimed but rarely if ever understood. Then as now it was a virtue more to be striven for than claimed, and almost always a virtue achieved only in collaboration. From the beginning *ISR* has been a collaborative project whose kaleidoscopic view of research implicitly triangulated on Erwin Schrödinger’s bold aim of an ‘integrated totality of knowledge’. The ‘strange dilemma’ he proclaimed at the beginning of *What is Life?* (1944) is ours as well: we sense convergences of knowledge but are frustrated by the inability of any one mind fully to command more than a fraction of the elusive whole. Schrödinger saw ‘no other escape’ than to embark on a synthesis nevertheless, however much ‘at the risk of making fools of ourselves’. At the same time, recent history and philosophy of science has strongly emphasised ‘specific theory’ in a ‘deeply dappled’ world (Galison 2004; Cartwright 1999: 59). Theorising of complex systems, especially in the biological sciences, has brought great emphasis to ‘the historicity of all serious epistemology’, as the late John Ziman, a long-time friend of *ISR*, wrote, and so upped the ante of any such synthesis. But, Ziman continues, ‘this is just what the poets, philosophers and prophets have always been proclaiming. It is to the benefit and credit of our science that we can at last build a bridge of understanding to that other continent of the mind’ (2004: 1631).

For the humanities the obvious danger lies in the misconstruction of such bridge-building as a form of conquest. But the geopolitical metaphor of turf and territory, however descriptive of institutional tensions, is or should be anathema to the intellectual

life. Alain de Lille's famous definition of God, *centrum ubique, circumferentia nusquam*, 'centre everywhere, circumference nowhere', comes much closer to the mark for scientists and humanists alike (Alverny 1965: 297). 'It takes a good deal of maturity', Northrop Frye wrote in *On Education*, 'to see that every field of knowledge is the centre of all knowledge, and that it doesn't matter so much what you learn when you learn it in a structure that can expand into other structures' (1988: 10). When, as here in *ISR*, many engage with research which expands outward from their particular centres, the *interdisciplinary* intersections tell a tale that may be the direct professional concern of very few but is crucial to us all.

Michaelis used the word 'science' not in the etymological sense of unqualified 'knowledge acquired by study' (*OED* 2.a.), and so inclusive of the *lettres et sciences humaines*, but idiomatically, for what the natural sciences do. *ISR*'s strengthened emphasis more on the interactions than just on the links among the sciences, arts and humanities might suggest a change of name is in order. There are a number of reasons not to do this, perhaps the most important of which is to retain the problematic character of the word. "Science" has become something of an honorific term', John Searle mildly notes, claimed by 'all sorts of disciplines' and used to browbeat others; he would do without it if he could (1991/1984: 11). But we cannot, nor should we: it is an honourable name for an amalgam of activities central to our culture, as Michaelis said. Nor would it be wise to dilute the problematic by adding other areas of enquiry to the name. That problematic is a stimulus not only to *ISR*'s original mission, which remains a part of what it does, but also to its renewed project for cultivating a common ground, or perhaps building a shared vehicle of exploration, with the arts and humanities. I know from many years of work in humanities computing that very good use can be made of the challenging opportunities for hooking-up with the world that the natural sciences are now furnishing in abundance.

Years ago Jerome Lettvin referred to the neurological models of the time as crude golems, acknowledged their lack of resemblance to human counterparts but noted that they nevertheless were pointing the way to further research (1988: v–vi). That research has happened, and the resemblance is now remarkably, disturbingly closer. As Norbert Wiener said in the mid 1960s, we are encumbered by layers of prejudice in our approach to the questions the fact of this convergence raises. He charged us then, scientist and humanist alike, 'to entertain heretical and forbidden opinions experimentally', even if we are finally to reject them (1964: 3–5). One place to do that is in the pages of *ISR*. Another place has for the last two years been at the U.S. National Humanities Center, where an ongoing conference, 'Autonomy, singularity, creativity: the human and the humanities', has been exploring advances in science that 'are changing the limits of human life and therefore disturbing traditional understandings of what it means to be human'.¹ That there are many other such places nowadays is a sign of robust intellectual health.

ISR strives explicitly to recognise the creative dilemma in which it operates: living up to Schrödinger's brave example on the one hand, and on the other paying attention to the complexity and multidimensionality of phenomena. As Ian Hacking recently remarked in his review of Geoffrey Lloyd's masterful *Cognitive Variations* (2007), the two are signposts; 'indeed, the action is mostly at the interplay between the two' (2007: 17).

The journal will seek out contributions that measure up to the highest excellence in scholarship but that also speak to an audience of intelligent non-specialists. It will begin more actively to explore the differing trajectories of the humanities and the sciences, to clarify what each is attempting to do in its own terms, so that constructive dialogue across the disciplines is strengthened. It will both report on interdisciplinary work and be a site where it happens. Collaborative projects which span the disciplines, for example between manuscript studies and engineering or literary studies and computer science, will be solicited for contributions. (Such projects have become considerably more numerous in recent years due to computing but have tended not to find venues for discussion of their cross-disciplinary interchanges.) Interdisciplinary conversation within the journal itself will be encouraged through a combination of thematic issues on broad topics attractive across the disciplines and by special issues derived from wide-ranging interdisciplinary colloquia and conferences, as has often happened in the past. Such topics could include, for example, memory, colour, gesture, performance, history, evolution and computing. Each would be the occasion for asking what we know about such things when each is considered from a specific disciplinary perspective.

A number of changes have already happened or are in progress. To broaden the social network required to support *ISR*'s project, the Editorial Board has been partially reconstituted to include people from a wider variety of intellectual backgrounds than was previously the case. The balance of age and of gender has been significantly adjusted. My predecessor has become Consulting Editor, and also for the first time *ISR* has a Book Reviews Editor, Dr Julianne Nyhan. An editorial website is now online, at www.isr-journal.org. Over the coming months this website will be improved in various ways, acquiring several new features to encourage interaction among authors and readers, to provide an archive of past issues and several other things. The cover and text of the journal will be redesigned for 2009.

Because contributions to *ISR* will tend not to be the primary expression of research for most to nearly all of the potential contributors, broadened versions of more specialised writings will be strongly encouraged. In at least some cases, contributions from specialised projects can be used to fulfil the projects' obligation to disseminate research results to non-specialist audiences. As with much other intelligent popularisation, *ISR* will thus become a way of providing entry points into more narrowly focused areas of research. At the same time, however, authors will be strongly encouraged not merely to open their doors invitingly but also actively to seek connections elsewhere. When appropriate, replies to and commentaries on submissions will be commissioned.

Finally, the dedication. While composing the first draft of these words I learned of the death of my friend, mentor and colleague Mike Mahoney, Professor of History at Princeton and an Editorial Board member whom many readers will have known. I won't repeat here what I wrote for the electronic seminar *Humanist*,² rather dedicate this new beginning to him.

Willard McCarty

Editor-in-Chief, *Interdisciplinary Science Reviews*

Professor of Humanities Computing

King's College London

willard.mccarty@mccarty.org.uk

NOTES

1. See asc.nhc.rtp.nc.us/ (24 July 2008).
2. *Humanist* 22.137 (24 July 2008), www.digitalhumanities.org/humanist/.

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