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Speculating and Evolving in Documentation

Summary

The new series of articles 'Speculations in Documentation' is introduced. The initial article, on 'Evolution and Information', is set in the context of debates as to the reality and significance of the link between the growth and development of human information and knowledge, and of biological (genetic) information and evolution. (6 refs.)

Keywords: evolution of information; biological information; genetic information; speculations

We introduce in this issue a new article designation: 'Speculations in Documentation'. This will be devoted to items which - though they will be refereed to the usual standards of the Journal - will allow their authors to express ideas and opinions which may lack the support of hard evidence.

Strange though it may seem to suggest so, speculation may actually be more productive and useful in assessing the future of the information sciences than the more intellectually respectable prediction. The record of prediction, so far as developments in the technologies of information and communication is concerned, is dire. There are numerous anecdotes about dramatically, sometimes humorously, failed predictions, from the insignificance of the telephone in view of the numbers of available messenger boys, to the world market for roughly five computers, to the implausibility of anyone wanting a computer in their home. Free speculation, sometimes in the form of fiction, can be regarded as having done rather better, in some respects, than sober prediction [Bawden 1997].

Our first 'speculations' article, by Andrew Madden, discusses the link between biological information, as expressed in the genetic code, and information in the sense of communication between humans. The apparent similarities between biological and communicative information, and in particular the ways in which information may, in both cases, be quantified by Shannon / Weaver information theory, have intrigued scholars from several disciplines for at least thirty years, since the publication of Lila Gatlin's (1972) book: a productive work of speculation if ever there was one. Whether the linkages between these senses of information reflect some underlying deeper reality, or whether they are, rather, useful analogies or 'mere' metaphors, is still an open question, and Madden's paper adds a new perspective to it.

The title of Madden's paper, 'Evolution and Information', reflects another decades-old theme: the extent to which information and knowledge may be said to 'evolve', as distinct from simply growing or accreting. This idea has been approached from various stand-points: from philosophy, most notably by Karl Popper (1972), and from evolutionary biology, in the work, for example, of Campbell (1982) and of Plotkin (1994), to name only two. It has reached its apogee - some would argue going here beyond science - in the ideas of mimetics: see Blackmore (1999), for a popular account. On this topic too, Madden offers a new perspective. While some readers may consider that his account pushes the evolutionary approach further than is justified, I believe that its publication will add to an important debate.

We welcome feedback from readers on the topics raised in the new 'Speculations' series, and will be pleased to publish comments.

David Bawden

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