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Forgotten and Undiscovered Knowledge

Summary

Knowledge may lie forgotten or undiscovered in the literature, for a variety of reasons. Devising means for identifying an retrieving it is an important task for the information sciences.

Keywords

Forgotten knowledge; undiscovered knowledge; overlooked knowledge

In the latest of our series of articles commemorating the 60th anniversary of *Journal of Documentation*, Jack Meadows comments on one his own early papers, dealing with aspects of the study of scientific communication through citation analysis. He notes the phenomenon of publications which can lie neglected for many years, only to be rediscovered and gain a new significance. The initial work of Gregor Mendel, which established genetics as a scientific study, is quoted as a well-known example.

Mendel's studies of the hybridisation of peas were first reported at meetings of the Natural History Society of Bronn (now Brno in the Czech Republic) in 1865, and published as a paper in the transactions of that society in the following year. They were then largely ignored until the turn of the century, when several biologists almost simultaneously rediscovered them.

It is intriguing to speculate why the contents of this paper, which were later seen to have such significance, were almost entirely ignored. Peter Atkins, in his magisterial survey of the great ideas of science (Atkins 2003, p47) suggests several reasons:

- the results did not make clear any rational basis of hybridisation
- Mendel himself, disappointed in his failure to create a new species, lost interest in the topic
- the author was regarded as an 'intrusive amateur' in the field of biology
- his status as an Augustinian monk led to distrust
- his use of mathematics, albeit relatively simple, caused confusion
- the relevance of the work to the mechanism of inheritance was not appreciated

The last point is most interesting to the information scientist and documentalist. The identification of relevant knowledge which has in some way been 'forgotten', 'overlooked' or 'ignored', so that it may be linked to other knowledge to create something new, is one of the major challenges for systems of information and documentation. This is the issue identified by Don Swanson in his initial 1986 exposition of 'undiscovered public knowledge', which has led to his development of systems for identifying such linkages. The idea has been followed up by others, including Beghtol (1995) for concepts of documentation itself.

There is, of course, another sense in which knowledge may be, more literally, forgotten. As the technologies of knowledge change, it cannot be assumed that valuable information will be carried across in some way. This was brought home to me over twenty years, during a comparative study of retrieval of information on hazardous effects of chemical substances (Bawden and Brock 1982). One piece of important information was found only in an out-dated printed reference book, whose survival and availability was largely a matter of chance.

The identification of these kinds of undiscovered and forgotten knowledge, and the devising of means for assessing their relevance, is likely to be major challenge for documentation over the next decades.

Atkins, P. (2003), *Galileo's Finger: the ten great ideas of science*, Oxford: Oxford University Press

Bawden, D and Brock, A.M. (1982), Chemical toxicology searching: a collaborative evaluation, comparing information resources and searching techniques, *Journal of Information Science*, 5(1), 3-18

Beghtol, C. (1995), 'Facets' as interdisciplinary undiscovered public knowledge, *Journal of Documentation*, 51(3), 194-224

Swanson, D.R. (1986), Undiscovered public knowledge, Library Quarterly, 56(2), 103-118

David Bawden

Angela Haygarth-Jackson

We note with sadness the death of Angela Haygarth-Jackson (1929-2004), who for many years chaired the editorial board of *Journal of Documentation*. She spent most of her working life in the information services of the pharmaceutical division of the British chemicals giant ICI (Imperial Chemical Industries). Regarded as one of the pioneers of the discipline of information science, she was the first woman to act as President of the Institute of Information Scientists. A full obituary, by Wendy Warr, appeared in *The Independent* newspaper, 2nd June 2004.