

From the outset both European associations aimed to produce a style manual modelled on CBE's *Style manual for biological journals* [2] (now published as *Scientific style and format* [3]). The *Editerra editors' handbook* [4] began to appear in 1976, based on the work done earlier which had appeared in the circular letters, and by 1984 some 10 chapters and a looseleaf binder had been produced. For its part, ELSE produced not a style manual but, at the suggestion of Knut Fægri, a guide for authors [5]. This led ELSE and Editerra to sponsor advice for editors in a second book [6], also produced by a commercial publisher.

After the merger the example of the *Editerra editors' handbook* eventually led to the production of the *Science editors' handbook*. As was arranged for the earlier version, members were sent chapters when each was written and 14 chapters appeared spasmodically between 1993 and 2002. Then, to celebrate EASE's 21st birthday, and with much inspiration, perspiration and pushing by Hervé Maisonneuve, its chief editor, the *Handbook* suddenly shot up to 47 chapters. This looseleaf publication was given to participants at the 2003 assembly in Bath [7] and is now on general sale. More chapters will appear as time goes by (one is included with this issue of *ESE*).

Structure, meetings and other activities

Like its predecessors, EASE is directed by a Council that is elected at the triennial assembly and conference, after a postal ballot. A publications committee oversees the journal, the *Handbook* and EASE's web site, and a small nominations committee is activated at the appropriate time every three years.

EASE's triennial assemblies and conferences have been held in many different countries, among them Hungary, Switzerland, Norway, England, France and Finland, since the first meeting in France in 1982. The next assembly will be in Kraków, Poland, on 15–18 June 2006 (non-members are welcome, of course).

During 2000 EASE became a company limited by guarantee, incorporated in England and Wales. The annual general meeting that must now be held provides an opportunity for the Council to meet members in whichever country the AGM takes place.

In their early days EASE's parent organizations set up several working groups on aspects of editing. One of the ELSE groups was on medical ethics; another

was on reference style, on which the group reported in 1977 [8]. A workshop in November 1977 then published revised suggestions for a "unified system of bibliographical references" [9] for either name-year or numbered references (as used in updated form in the reference list below). Later, EASE was represented on the relevant committees of the International Organization for Standardization and the British Standards Institution.

ELSE, and afterwards EASE, formerly took part in a number of annual workshops organized by the *BMJ*. These meetings have faded out but in 2004 a successful EASE seminar, "Scientific publications in a digital age", was held in Barcelona in conjunction with the AGM. A second seminar in Barcelona is planned for 29 April 2005 and it is hoped that the series will continue.

Since 1996 EASE has sponsored several short courses on writing scientific papers, held mostly in Eastern Europe but including one in China. More information about these courses and about other EASE activities is available on the web site (www.ease.org.uk). Six-month-old issues of the journal are also on the web site, now that the open access message is spreading.

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Editing around the world

Editing scientific journals in mainland China

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Since 1978, the editing and publishing of Chinese scientific journals has made tremendous progress. In 1949, the last year marred by war chaos, about 80 scientific journals were published in China (Song

2003). With the improvement in the political and economic situation, the number of Chinese scientific journals increased to 400 by 1965. However, during the period of the Great Proletarian Cultural

Revolution (1966–1976), China was once again in a turbulent situation and almost all scientific journals stopped publishing.

After 1976, when stability had been restored, the Chinese government paid much more attention to science and education. By 1978, about 400 scientific journals had appeared; some were newly founded and others were older ones that had resumed publication. Since then, the number of Chinese scientific journals has expanded rapidly. In 1987 the number had increased to about 2800, reaching 4400 in 1997 (Song 2003, Zou 2004). According to recent statistics (end of 2003), 4497 scientific journals are now published in mainland China (excluding Hong Kong, Macao, and Taiwan) (Li 2004).

Profiles of scientific journals and databases in China

Of the 4497 scientific journals published in mainland China, about 210 are published in English, and another 20 in minority languages (Uyghur, Kazak, Mongolian, Tibetan, etc.). The remaining journals are all published in Chinese.

Zou (2004) classifies Chinese scientific journals in four classes according to publication policy and contents: academic (basic research) journals, 30.4%; technical journals, 48.3%; popular science journals, 9.3%; and guides and directories published by information centres or government agencies, 12.0%.

Universities sponsor the majority of academic journals (45%); institutes or agencies of local governments sponsor 22%; societies of the China Association for Science and Technology (CAST) 18%; and institutes of the Chinese Academy of Sciences 15% (Li & Ding 2003).

Circulation rates of Chinese scientific journals vary quite a lot. The journal with the highest distribution is a popular science journal, *Family Doctor*. Its circulation is about 8.7 million copies per issue. In general, technical journals have higher circulations (about 3000 copies per issue) than journals publishing basic research results (about 1000 copies per issue). Journals in English or minority languages often have print runs of 200 to 500 copies.

Since the early 1990s several information and documentation centres have developed databases for Chinese scientific journals. At present there are four nationally renowned databases, all commercially operated:

(1) *Wanfang Data* (www.wanfangdata.com.cn). More than 2300 Chinese scientific journals are selected and covered in this database; full text for all these journals can be read or downloaded. Based on Wanfang Data, the Institute of Scientific and Technical Information of China (ISTIC) publishes

Chinese S&T Journal Citation Reports (CJCR) annually. CJCR has been published since 1987 and has gained a good reputation in journal and research evaluation.

A profile of scientific journals in China can be derived from CJCR–2002 (ISTIC 2003). This report covers 1534 “high quality” scientific journals (including 28 in English). The distribution by discipline of these journals is: mathematics, 39; physics, 45; chemistry, 30; geosciences, 107; medicine, 391; biology, 133; technology, 573; multidisciplinary, 216. In 2002 these 1534 journals published an average of 156.5 papers, had a mean impact factor of 0.294, and had a mean of 278 citations (Table 1).

(2) *ScienceChina* (<http://sciencechina.cn>). This is based on the Chinese Science Citation Database, sponsored by the Documentation and Information Centre, Chinese Academy of Sciences. It covers about 2000 scientific journals. More information about ScienceChina is given by Jin et al. (1999, 2001).

(3) *Vip Information* (www.cqvip.com). Vip Information is sponsored by the Southeast Information Centre, Ministry of Science and Technology. As well as covering nearly 4000 Chinese scientific journals, Vip Information acts as an intermediary agent for some international scientific journals.

(4) *China National Knowledge Infrastructure* (www.global.cnki.net/). This database was founded by the Tsinghua Tongfang Optical Disc Co. Ltd, and is a spin-off company of Tsinghua University. At present, it covers about 5300 journals (including some social science journals).

As well as the above four databases, a book entitled *A guide to the core journals of China*, compiled by the Library of Peking University, is often mentioned in journal or research evaluations. The *Guide* is edited and published once every four years; its fourth edition was published in July 2004 (Dai & Cai 2004). For this latest edition of the *Guide*, over 10,000 Chinese journals underwent bibliometric evaluation (the number of articles indexed by relevant databases, the impact factor of each journal, etc.). In total 1798 journals were incorporated in this core publication, covering all fields of science, including philosophy, the social sciences, humanities, natural sciences, medicine, agriculture and engineering.

In 2003, the Science Citation Index (SCI) indexed 76 Chinese scientific journals, 67 of which were included in *Journal Citation Reports–2003* (JCR). Among these 67 journals, 49 are published in English while the rest are in Chinese, with English abstracts. In JCR–2003, the maximum impact factor of the Chinese scientific journals was 3.318 and the maximum number of total citations was 2410. For all 5907 journals in JCR–2003

Table 1. Bibliometric data for the 1534 journals covered in *Chinese S&T Journal Citation Reports–2002*. Values are numbers and percentage of journals.

Published papers (P)			Impact factor (I)			Total number of citations (T)		
$P > 500$	27	1.8	$I > 1$	30	2.0	$T > 1000$	62	4.0
$500 \geq P > 100$	969	63.2	$1 \geq I > 0.1$	1214	79.1	$1000 \geq T > 100$	982	64.0
$P \leq 100$	538	35.1	$I \leq 0.1$	290	18.1	$T \leq 100$	490	31.9

the corresponding data are 52.28 and 384,393.

Editorial practices in China

In China, journal publishers are often the journal's sponsoring institutes, universities or associations. In general, journal editors are employed full time and need to take care of everything other than the scientific assessment of articles. The "editorial office" is most often an independent department in a journal's sponsoring institution. The number of editors of a journal varies according to the journal's scale and periodicity; a monthly journal usually has three to five editors.

Almost all Chinese scientific journals use peer review. Generally, every submitted article is reviewed by two people. Reviewers are often selected by journal editors or members of the editorial board. These members of the editorial board and also the chief editor are usually prominent scientists in the relevant research field or fields.

Due to the large numbers of scientific journals and journal editors, activities related to science editing are prominent in China. Among the societies or associations with national scope and impact are the China Editology Society for Scientific Periodicals (CESSP), the China Periodical Association (CPA), the Editology Society of Natural Science Periodicals of the Chinese Academy of Sciences (ESNSPCAS), and the Society of China University Journals in Natural Sciences (SCUJNS). Several journals are solely devoted to science editing. Among these, *Acta Editologica* (sponsored by CESSP) and the *Chinese Journal of Scientific and Technical Periodicals* (sponsored by ESNSPCAS) have the greatest impact on the Chinese science editing community. Each of these journals has a distribution of about 3000 copies per issue.

Since the late 1990s, many Chinese journals with English editions have signed contracts with international publishing houses for cooperation in editing and distribution. With China entering the World Trade Organization, the Chinese science editing community has become even more eager to communicate and cooperate with international societies. In August 2002, the 11th International Conference for Science Editors was held in Beijing, an event co-sponsored by the International Federation for Science Editors (IFSE), CESSP and ESNSPCAS. The theme of IFSE-11 was "Global science communication in the new century", and the topics presented included the present and future of scientific communication, global citation and access to scientific literature, the peer review system, and electronic databases and digital libraries.

Problems encountered by Chinese scientific journals

As shown above, Chinese journals (in particular, China's English-edition scientific journals) generally have a low impact, as measured by citations, and many have low distributions (Moed 2002, Ren & Rousseau 2002, 2004). Why do China's scientific journals play a small role in science communication and how could their role in domestic and international

science be improved? We have made several suggestions (Ren et al. 1999, 2002, 2004):

(1) The number of Chinese scientific journals should be cut back, and new journals should be subject to "birth control". In China, almost every university, institute, and professional society has at least one and frequently several journals. It is not possible for a system with limited resources to support so many journals. Hence, it may be a good plan to combine small journals covering the same or related topics, and publish larger journals.

(2) The low visibility of China's scientific journals is related to low numbers of subscribers. Moreover, most of China's scientific journals are not covered by international (or even national) databases. Often they do not even have their own web sites, and do not publish an electronic edition. No wonder such journals are invisible.

(3) China's scientific journals encounter serious difficulties in receiving good quality articles. Under the pressure of scientific evaluation procedures in which journal impact factors are of critical importance for grant renewal and promotion, Chinese scientists tend to publish their more important work in international journals (Jin & Rousseau 2004). As a result, China's journals are locked in a classic vicious cycle: domestic journals do not gain prestige and high impact factors because researchers publish their best results abroad, but Chinese scientists publish abroad because domestic journals are not visible on the international scientific scene.

With more and more international publishers paying attention to China's big market potential, China's scientific journals now have more opportunities to develop through mutual cooperation. Moreover, as Chinese journals do not operate on a purely commercial basis, the newly developed open-access movement is quite feasible for them. In fact, some journal editors and publishers have already made their published papers freely available on the internet (www.wjgnet.com; www.scienceinchina.com; www-2.zju.edu.cn/jzus/index.php; etc.). All these methods are helpful in increasing the impact of China's scientific journals on the international and national scientific community.

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Viewpoint

An unhappy equation: mistrust + confusion + politics = interference with science information transfer

What have editors done and what should they (and EASE) do about apparent or actual attempts to block scientific articles originating in certain countries?

What would you do if your government told you that your journal was not allowed to edit manuscripts submitted by authors from certain countries? Publish them as received and hope readers would be willing to put up with the unpolished version? Refuse to consider manuscripts from those countries? Try to reason with the government in the hope of getting the politicians to change their mind? Or simply ignore the prohibition and continue your publishing activities as usual — even at the risk of severe economic penalties?

These were the choices faced in 2003 and 2004 by editors of science journals published in the USA, where the decision by one large professional society to comply with the government's interdiction against providing "substantive or artistic alterations or enhancements" of manuscripts from Iranian researchers triggered waves of unease and indignation among academic publishers and civil liberties organizations.

Confusion over enforcement of the trade embargo

Confusion arose when the Office of Federal Assets Control (OFAC), an agency of the US government's Department of the Treasury, responded to a request for clarification from the Institute of Electrical and Electronics Engineers (IEEE). The agency considered editing (described initially as reordering paragraphs or sentences, correcting syntax or grammar, and replacing inappropriate words prior to publication) to be a service provided to enemy countries and therefore illegal under the terms of the US trade embargo against Iran, Sudan, Libya and Cuba [1]. Although OFAC did not explicitly "ban", "prohibit" or "prevent" peer review, technical editing, substantial editing, copy-editing or publication outright, they stipulated that certain activities might result in a "substantially altered or enhanced product." Performing these activities without a

"license to edit" from OFAC was tantamount to violating the embargo and risking prosecution by the Department of the Treasury.

How did scientific societies, editors and editorial associations react?

IEEE

As news of OFAC's hard line on reviewing and editing for the enemy spread, editors in the USA were left wondering how far the government was prepared to go to control the publication of manuscripts from the sanctioned countries. The IEEE, having been "caught" by their bank and OFAC for trying to pay an Iranian hotel bill by bank transfer after a conference in 2001, had suspended many membership benefits for its approximately 2000 members in sanctioned countries for fear of violating the embargo. Apparently they had also stopped editing manuscripts from these countries, although they continued to review and publish articles as long as they were suitable for publication with no copy-editing [2, 3]. In response to an OFAC letter of 30 September 2003 the IEEE, which publishes about 100 journals, formally applied for either a license or exemption from the need to obtain a license to perform copy-editing [4]. Between October 2003 and April 2004 IEEE (like other academic publishers) liaised with OFAC to seek clarification and a practicable solution. At the same time IEEE battled the many critics of their widely denounced compliance with the embargo, interpreted as evidence of discrimination against some of their own members, in violation of the institute's own code of ethics.

Other scientific societies

Reactions by other scientific societies and their editors varied. Some editors invoked the First Amendment and freedom of speech as grounds for their refusal to discriminate editorially against scientific information from any country. Others interpreted the language of