With the advent of the fourth edition of *Images in Paediatric Cardiology*, the Journal now celebrates its first anniversary. Creating a journal, on-line, from scratch, has been an interesting experience. In this year, the Journal has progressed from only publishing invited articles, to editing de-novo submissions, and is now able to process video files, and not just static graphics. The Journal's increasing ability to harness and apply multimedia in medical papers is undoubtedly one of the Journal's greatest assets. Our early enthusiasm with web page design has matured such that the initial colourful Journal including a plethora of animations has evolved into a more sober production which downloads far more readily. Increasing technical expertise has also allowed us to streamline the website, and include a hit counter and a site search facility in line with other Journals striving to maintain modern standards. In future, the Journal also hopes to publish papers which contain audio files. The Journal is now also available on CDROM.

A new journal launched at this time must face issues of peer-review, copyright and publication concerns that have been brought increasingly to the fore because of the flourishing of the internet.

**Peer review**

The validity of the peer-review system is frequently questioned\(^1,2\) but until something better comes along to replace it, peer-review remains a fundamental requirement. That such review is not only carried out, but is also *seen* to be carried out is particularly important on the internet where a wide variety of websites can be found which supply all sorts of information, none of it necessarily accurate. Without peer-review, a journal will find itself unfavourable categorised with these types of websites. The internet is also
being used as a forum for the posting of manuscripts, and such web postings may be categorised into one of the following:\(^3\)

1. An electronic draft constituting material posted at an individual or institutional website that is used for collaborative purposes, and is available to predetermined members of the medical community, but not accessible to any others.
2. An electronic preprint of a paper posted on the internet for general informal review and comment prior to possible amendment as suggested by readers, with eventual conventional submission to a journal.\(^4,5\) The principle is similar to that whereby papers are presented as abstracts in conferences and eventually published formally.
3. An electronic preprint of a completed journal article that has undergone the peer review process and awaits formal publication.
4. An electronic print which is the final version of the published article, complete with volume and page numbers. This may be made available as a web page, or as a downloadable PDF file (Portable Document Format - Adobe).
5. An electronic letter which is an email comment that can be automatically posted by a server on receipt, allowing rapid exchange of ideas and information.

However, some journals refuse to publish material that has appeared on the web as in 2. above, arguing that this constitutes prior publication and dodges the peer-review process.\(^6\)

It has been suggested that the process of ‘open’ peer-review should be encouraged, whereby manuscript authors are supplied with the identities of reviewers and vice versa,\(^7\) and in future, we will ask our reviewers for permission to supply their identity to prospective authors.

**Copyright**

A recurrent and progressively more important theme in web publishing is the importance of the protection of intellectual property rights. The use of a picture or a video file without its creator's or copyright owner's permission is especially prevalent when the image is distributed electronically, as a digital copy does not suffer degradation, unlike a photographic copy. Copyright gives the creator of an original work the right to protect such work from unauthorized use. Hence, copyrighted work may not be duplicated or distributed without the owner's consent. This provides incentive for the creation of new and original works by granting authors a monopoly over their work. Copyright protects any original work that is in a tangible form and original work becomes protected by copyright as soon as it is in a tangible form such as on publication. Copyright protects the form in which ideas or facts are expressed, not the ideas or facts themselves, and is owned by the author unless expressly passed on to an individual or an institution. It is current practice for authors to be asked by publishers to sign over copyright to journal publishing house prior to printing. However, all this is subject to the proviso of ‘fair use’ which allows copying and use of original and copyrighted work for the purposes of criticism, news reporting, teaching or research.
Readers of on-line material may wish to copy content from on-line journals not only for their own use, but also to pass off copied work as their own. However, copyright protection applies as described above, therefore electronic copying also requires the permission of the copyright holder, or a licence, in the same way as paper copying.

It is very easy to copy graphics off a website. Standard protection schemes, such as locked files, data encryption, distributing only low-resolution previews, and marking images to make them unusable, inconvenience both the authors and the readers. More elegant techniques include the embedding of an invisible digital watermark within the graphic, or the pasting of a visible watermark as a logo within graphics. *Images in Paediatric Cardiology* currently employs the latter technique.

**The future**

The United States’ National Institutes of Health (NIH) propose to set up a single electronic database and full text repository for peer reviewed biomedical research papers, as a natural extension of the National Library of Medicine's PubMed service. This new service would be funded by the US taxpayer, as is the current financing of Medline. Such a step would be the most revolutionary change in scientific publishing since the appearance of the first peer-reviewed publications. A similar service has been used by the physics community since 1991. Such a proposal would not only be of tremendous benefit to researchers, but would also free up the budgets of libraries worldwide at the publishing houses’ expense. Such a repository would also force most journals to move exclusively on-line in order to exist on diminished budgets due to subscription losses. It would also mean that authors would retain copyright rather than relinquishing it to publishers. However, others have argued that the publishing houses are inextricably wedded to the research establishment, and that the former are too powerful to crumble before the NIH proposal.

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We hope that readers have found the Journal to be a useful on-line resource, and we shall continue to strive to maintain as well as improve the current high standards of informational content and technical quality.
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