

The point is certainly not lost on the business world, which has responded with both advice and spending opportunities available in their thousands from an internet search engine near you. Contingency plans to deal with concerned customers are already in place. Bankinfo is an internet site established specifically as “a resource center for Year 2000 information” for financial institutions. Prominent among its features is a range of articles that deal with customer anxieties about the future of the banking system. For example, a clinical psychologist provides a detailed discussion of the psychology of anxiety and offers excellent hints for dealing with worried customers based on cognitive-behavioural principles—which could equally serve as a useful resource for general practitioners dealing with similar problems.<sup>9</sup>

Richard Landes directs the Centre for Millennial Studies at Boston University, which provides a unique look at the year 2000 phenomenon from a historical and cultural perspective and hosts a highly acclaimed website ([www.mille.org](http://www.mille.org)). By reference to medieval history and analysis of previous millennial movements, Landes identifies two characteristic responses that he typifies as “roosters” and “owls.” Roosters are the apocalyptic visionaries who crow, “The dawn is imminent, awake.” Owls respond more conservatively, hooting, “Hush, the night is young, back to sleep.” Examples of both stances occur throughout history and are equally evident today.

But our ability to perceive responses in this way is itself a recent phenomenon and a tribute to the ubiquity of the ideas of Sigmund Freud, the century’s foremost cultural theorist. Freud introduced the hypothesis of projection—that process by which

internal psychological states are attached to objects and events in the external world. Based on this concept, projective tests evolved as a means of exploring a person’s unconscious fantasies by their interpretation of ambiguous visual images. The Rorschach inkblots are the most well known example—and are still in use today, 80 years after their invention. In this sense the ambiguity of the year 2000 phenomenon makes it the largest projective test of all. Individuals’ responses to the millennium reflect their unconscious fears. The internet provides the gestalt. The way our society deals with the next six months will provide a window into the soul of the 21st century.

Jeremy Anderson *director*

Centre for Clinical Effectiveness, Monash University-Southern Healthcare Network, Melbourne, Victoria 3168, Australia ([jeremy.anderson@med.monash.edu.au](mailto:jeremy.anderson@med.monash.edu.au))

- 1 Ullman E. The myth of order. *Wired* 1999;April:126-9.
- 2 Feder BJ. Year 2000 glitch meets people problem: possible panic. *New York Times* 1999;9 Feb.
- 3 Emotionally coping with Y2K. *Townchat Y2K BBS*. <http://townchat.com/y2k/bbs/coping/index.html>. Accessed 14 May 1999.
- 4 Weiller E, Bisslerbe J-C, Maier W, Lecrubier Y. Prevalence and recognition of anxiety syndromes in five European primary care settings: a report from the WHO study on Psychological Problems in General Health Care. *Br J Psychiatry* 1998;173(suppl 34):18-23.
- 5 Rice DP, Miller LS. Health economics and cost implications of anxiety and other mental disorders in the United States. *Br J Psychiatry* 1998;173(suppl 34):4-9.
- 6 Y2K Advice. *1-800-THERAPIST*. [www.1-800-therapist.com/Y2K.html](http://www.1-800-therapist.com/Y2K.html). Accessed 14 May 1999.
- 7 Rabasca L. I’m OK and you’re OK, but not so sure about Y2K. *Monitor Online*. [www.apa.org/monitor/jan99/ok.html](http://www.apa.org/monitor/jan99/ok.html). Accessed 14 May 1999.
- 8 Miller, H. Y2K Symposium. *World Congress on Information and Technology*. <http://conferencecast.worldcongress1998.org/transcripts/miller.htm>. Accessed 14 May 1999.
- 9 Salmon, P. The psychology of anxiety and the Y2K issue. *Bankinfo*. [www.bankinfo.com/year2000/anxiety1.html](http://www.bankinfo.com/year2000/anxiety1.html). Accessed 14 May 1999.

## The joy of being electronic

*The BMJ’s website is mushrooming*

WEbsites are like gardens. Turn your back on them for a few weeks and they’re overrun with weeds in the form of out of date coming events and hypertext links leading nowhere. But, like gardens, websites offer amazing opportunities to experiment. Plant something that doesn’t take or produce the effect you wanted and you can take it out and try something else. And, like a garden, the internet is very forgiving—no hard copy archive survives to mock your false starts and wrong turns.

The launch of the *BMJ*’s full text website in April 1998 coincided with a frenzy of new planting, much of which is coming to fruition this (northern) summer. Most work has been devoted to our collected resources—210 virtual pages each devoted to a single topic. These rely on the coding of each journal article with one or more clinical and non-clinical topic codes (for example, the first paper this week has been coded: liver, perinatal, pancreas and biliary tract, and chemical pathology). Not only can website visitors review the archive of all papers published by the *BMJ* on a particular topic; they can also read relevant papers in the eight online specialist journals published by the *BMJ* Publishing Group (see box). Each topic page links

### BMJ Publishing Group specialist journals available in full text on line

*Annals of the Rheumatic Diseases* [www.annrheumdis.com](http://www.annrheumdis.com)  
*Archives of Disease in Childhood* [www.archdischild.com](http://www.archdischild.com)  
*British Journal of Ophthalmology* [www.bjophthalmol.com](http://www.bjophthalmol.com)  
*Gut* [www.gutjnl.com](http://www.gutjnl.com)  
*Heart* [www.heartjnl.com](http://www.heartjnl.com)  
*Journal of Neurology, Neurosurgery, and Psychiatry* [www.jnnp.com](http://www.jnnp.com)  
*Thorax* [www.thoraxjnl.com](http://www.thoraxjnl.com)  
*Tobacco Control* [www.tobaccocontrol.com](http://www.tobaccocontrol.com)

to relevant Cochrane abstracts, job advertisements on our classified site, and the virtual bookshelf for that specialty within our electronic bookshop—from which books can be bought on line. Over the next few months, we will be adding more resources, beginning with the *eBNF* (the electronic version of the *British National Formulary*). We also plan to appoint green fingered editors for each collection and let them see what they can grow.

We have several email alerting services, which, like the website content, are free to all. The fastest growing

are our customised @lerts, which allow users to select the topics on which they want to be kept informed. Instead of being emailed the entire table of contents for the journal each week, they are alerted only when articles are published that match their interest. This time saving service has attracted 20 000 subscribers in its first 16 months.

Over this time, our "rapid response" feature has revolutionised the way we handle letters to the editor. Before its introduction we were publishing less than a third of the letters we received, and those up to six months late. Now readers can respond to papers as they're reading them on the web and (in most cases) see their responses posted within 24 hours. We're receiving around 100 such responses a week, and they make rich reading. They seem to be more passionate than traditional paper letters. Interestingly, we have had not one complaint about the spelling mistakes and strange grammar that are common in rapid responses—illustrating yet again how the web is a different medium from paper. One of the joys of being an editor has been to see quickly which articles touch a nerve and produce a flood of responses. It's hard to predict which articles they will be, but now readers can join in seeing which they are.

All rapid responses are considered for publication in the paper journal, but as the number of responses in whatever medium has increased we can now publish only 15%. Our aim is to reduce the time to publication in the paper journal to around six weeks. Those letter writers who aren't submitting directly on line have responded to our request to submit electronically—either by email or computer disk—which makes them easier to post on our website. Responses are posted over the weekend, so our site contains new material every day. Another alerting service is planned for rapid responses: users will be able to subscribe to alerts whenever a particular article attracts a response. Authors will automatically receive this service on their own papers (as long as we have their email address).

Non-UK authors can now email us their articles, and this service will soon be extended to UK authors. We have begun work on providing a web interface for manuscript submission and on conducting our entire peer review process electronically. Whatever medium they feel more comfortable in, authors this week have reason to celebrate: our revised and enhanced Advice to Contributors, which includes every guideline, checklist, and supporting *BMJ* editorial and article, has now been posted on the website ([www.bmj.com/advice](http://www.bmj.com/advice)). It includes the 200 plus pages of the *BMJ*'s legendary stylebook as used by our technical editors. This week's other new feature is our hit parade: for each week's journal we will be publishing the number of times each article is downloaded in the seven days after publication. Though a mixed blessing for authors, others should find the results fascinating.

The possibilities of the web are likely to change both the format and timing of publication of articles. We have judged successful our experiment (conducted in the *BMJ* of 3 April 1999) of publishing full articles on the web with abridged versions in the paper *BMJ*, and this approach is likely to be instituted for all original papers in the next year. We also intend publishing these full versions of papers on the web "asap" (as soon as publishable, and therefore ahead of print). We expect that the web versions will begin to exploit

multimedia—we already have audio clips on the site; later this year we will be adding video.

How are we doing? About 40 000 computers access the site each week, which we think translates into about 56 000 individuals,<sup>1</sup> or three times the number of non-member subscribers to the paper journal. Of the world's 7 million websites,<sup>2</sup> Netscape rates us 3573rd in popularity,<sup>3</sup> or within the top 0.05% of websites (*New England Journal of Medicine* is ranked 3111th,<sup>4</sup> *Lancet* is ranked 10 436th<sup>5</sup>). Our last questionnaire survey of website visitors, whose full results have just been published,<sup>1</sup> shows that the *eBMJ* is reaching people with little previous contact with the journal: two thirds come from outside the UK, one third "rarely or never see" the paper *BMJ*. We don't solicit testimonials, but they came in by the barrow load when we complained that other medical journals refused advertisements for our website.<sup>6</sup> The *Lancet* has since relented, although the *New England Journal of Medicine* and *JAMA* are standing firm. They needn't worry—paper subscribers remain loyal to that medium. In our questionnaire of website visitors 82% of BMA members (who receive the journal as a benefit of membership) and 72% of *BMJ* subscribers agreed with the statement "Despite the availability of the electronic journal, I want to keep receiving the paper journal."<sup>1</sup>

Every year since 1995 has been predicted as the year when the internet would take off, and this year the prediction has finally come true. Suddenly, big money is being thrown at providers of medical information, along with everybody else. In May, Healtheon paid \$5.5bn in a stock swap with WebMD, a website providing medical information to doctors and consumers, which began operating only six months previously. The consumer health site [www.drkoop.com](http://www.drkoop.com) was valued at \$84m on its initial public offering in June, just nine months after its launch. And CBS has recently bought a 35% stake in Medscape, a website for doctors that is soon to be extended to consumers.

Our editorial board praised us in the summer for having done wonderful things on a shoestring, but we are having to think seriously about investing more, taking bigger risks, and increasing our rate of experimentation. Perhaps the *BMJ* will be swept away when the tsunami of the internet hits medical publishing, but we think that we can use the advantages of the web and whatever follows to continue to achieve our mission of helping doctors worldwide practise better medicine and influencing the international debate on health.

Tony Delamothe *web editor, BMJ* ([tdelamothe@bmj.com](mailto:tdelamothe@bmj.com))

Richard Smith *Editor, BMJ* ([rsmith@bmj.com](mailto:rsmith@bmj.com))

1 Online questionnaire 8-15 October 1998. [www.bmj.com/aboutsite/quest98.shtml](http://www.bmj.com/aboutsite/quest98.shtml) (accessed 16 August 1999).

2 Netcraft web server survey. [www.netcraft.com/survey](http://www.netcraft.com/survey) (accessed 16 August 1999).

3 <http://cgi.netscape.com/cgi-bin/rlcgi.cgi?URL=www.bmj.com/> (accessed 16 August 1999).

4 <http://cgi.netscape.com/cgi-bin/rlcgi.cgi?URL=www.nejm.org/> (accessed 16 August 1999).

5 <http://cgi.netscape.com/cgi-bin/rlcgi.cgi?URL=www.thelancet.com/> (accessed 16 August 1999).

6 Censored! <http://www.bmj.com/cgi/content/full/318/7184/DC1> (accessed 16 August 1999).

We ask all editorial writers to sign a declaration of competing interests ([www.bmj.com/guides/confli.shtml#aut](http://www.bmj.com/guides/confli.shtml#aut)). We print the interests only when there are some. When none are shown, the authors have ticked the "None declared" box.