## Contrary to Nature?

Reprinted from The Scientist ® 2(16):12, 5 September 1988.

The science story of the summer—if one can judge such things by the amount of attention received in the general press—was plainly the Benveniste affair (see page 1). Jacques Benveniste and his research team at INSERM in Clamart, France, published in *Nature* (June 30, 1988, pages 816-18) their report on observations that, if true, would seem to validate principles of homeopathy. Their claim was fantastic, and *Nature* said as much, holding its nose as it published the article.

So why did editor John Maddox decide to print it? "One of the purposes that will be served by publishing the article," reads an accompanying editorial, "will be to provide an authentic account of this work for the benefit of those, especially in France, who have gathered rumours of it from the popular press. Another is that vigilant members of the scientific community with a flair for picking holes in other people's work may be able to suggest further tests of the validity of the conclusions" (page 787).

That explanation appears reasonable. After all, the paper had been reviewed, and it had been revised by the authors in response to criticisms; the reviewers, while

perplexed, did not reject it out of hand. Nature might have decided. despite reviewers' comments, to refrain from publishing the piece, or it might have let another journal publish it, but instead published it with the stated intention of allowing the scientific community to judge for itself (or so it seemed). One might question the wisdom of that, given the high probability that proponents of homeopathy would use Nature's reputation to validate their beliefs: however, one cannot control how people use or misuse the scientific literature. It was an unusual article, to be sure, but up to that point Nature seems to have played the role of an honest broker between a team of researchers and the scientific community.

It was the aftermath that has turned the Benveniste affair into the Maddox affair.

In sending its own team (including Maddox) to France to investigate the experiments, *Nature* showed poor judgement. Why the team did not include an immunologist is baffling. In broader terms, it is even more regrettable that the journal took upon itself this role of jury *after publishing the article*. Why not before? A better course, as many have noted, would have been to send

an independent, fully expert group before a decision to publish had been reached—in effect, a more intensive process of peer review. If it had done so, and had still decided in favor of publication, it could have printed it and the independent investigators' report in the same issue.

Could it have been that the "story" (in the journalistic sense) was just too good—guaranteed to cause a sensation and garner publicity for *Nature*? The serial quality of the *Nature* articles, and the press releases it issued, reinforces this impression. If so, it is truly disappointing that an otherwise first-class journal of science put its own interests—above those of the community it serves.

Many scientists cannot understand why the episode was handled as it was—if not for the sensation of it all.

Furthermore, the investigators' report (July 28, pages 287-90), in tone and length amounting to a

bludgeoning of Benveniste and company, only reinforces the question, "Why didn't they check this out before publishing it?" Moreover, Benveniste's seemingly sincere and wounded response (page 291) prompts real sympathy for the French investigator, despite what may be thought of his experiments and claims.

Nature made a regrettable series of editorial decisions—sloppy at best, irresponsible at worst. Even Walter Stewart, one of the investigators and a reviewer of Benveniste's original paper, now says that its publication was "an imposition on the scientific community" (Wall Street Journal, July 27, page 30).

Nature remains a journal of first rank. It has a splendid history and a distinguished editorial staff. But its service to readers fell short in this instance. The scientific community and science journalists are justified in expecting better from the likes of Nature.