

## Telling it like it is

John Galloway

**Dazzle 'em with Style: The Art of Oral Scientific Presentation.** By Robert R. H. Anholt. W. H. Freeman: 1995. Pp. 200. £9.95 \$11.95 (pbk).

WORD has it that scientists can't communicate. The jury is still out on whether the problem is science itself. Is science just dull or is there something peculiar about scientists and their culture? Or both?

The philosopher A. J. Ayer once told me about a meeting he chaired in Oxford at which Bertrand Russell gave an address on mathematical logic. The audience, of an intellectual calibre only a place such as Oxford can muster, were stupefied by Russell's incomprehensibility. Invited by Ayer at the end of the talk to ask the great man questions, the floor remained silent. Ayer shouldered the burden and asked Russell to clarify a point that he had "failed to appreciate fully". He was rewarded by Russell's uncompromising refusal in words to the effect of "your intellectual shortcomings are hardly my responsibility". Russell's topic was difficult. But whatever his motives in giving the talk, enlightening his audience was not apparently one of them. The story is all too familiar: a complicated subject and a lecturer unwilling or unable to make it intelligible.

Faced with the same problem, Robert Anholt has not been content to sit still. He does not tell audiences how to endure scientists' talks stoically; rather, he advises science lecturers on how to communicate more effectively. If their lectures are clear, he cunningly points out, then they are more likely to persuade governments or industries to give them grants or jobs. Well, up to a point. As someone once said to me: "If your thoughts are rubbish merely, better not write too clearly".

*Dazzle 'em with Style* contains some good old-fashioned advice about giving lectures. It is the sort of advice that any half-decent communications consultant would give — for a hundred times the price. If the advice seems like common sense, then that's because it is: think about who you are speaking to; lead the audience carefully through the labyrinth surrounding your subject; and ensure your listeners know what question you are trying to answer and why the question is, for the moment at least, uniquely important and interesting. Then come the tricks of the trade: don't talk with your back to the audience; don't talk in a monotone; make good use of the pregnant pause; don't write on the blackboard unless you actually know how to; prepare your talk well so that it is smooth and unrushed; make sure your slides are readable and do not con-

tain too much information; and learn how to deal with questions — in particular how to savage the opposition in the nicest possible way.

As a handbook, it can't really be faulted — except in one respect. The real trouble scientists have with communication is with language itself. They often seem incapable of using it precisely or vividly. What characterizes a good talk or article is not difficult to define. Asked what makes a good poem, Robert Graves said: "It makes complete sense and says all that it has to say memorably and economically". If it demolishes the audience's preconceptions, so much the better. Mark Twain said it all in "Fenimore Cooper's Literary Offences" when he wrote that the rules of literary art require that an author shall say what he is proposing to say, not merely come near it; use the right word, not its second cousin; eschew surplusage; not omit necessary detail; avoid slovenliness of form; use good grammar; and employ a simple and straightforward style.

These points are reprinted in Herbert and Eve Clark's *The Psychology of Language* under the heading — and I joke not — "Indirect Utilisation of Utterances". As Anholt reminds us, titles matter. They provide important information. *Dazzle 'em with Style* is OK as a title, but as it says nothing about the book. The subtitle, *The Art of Oral Scientific Presentation*, is complicated, abstract and ambiguous — it could refer to what a patient does at the dentist's. What is wrong with *How to Give a Good Talk*?

This is not to say that Anholt's book is not useful. Many science lecturers would benefit from it. But the author has concentrated on what seems to me to be window dressing. Many of the best talks are given without the use of slides. Indeed, outside science, the idea of scientists needing slides is thought to be rather funny. Robert Graves also said that a good poem is written for no reasons other than poetic ones. Similarly, scientific presentations should be more than just a public relations exercise.

Sadly, very few scientists have a sense of theatre. When I was growing up in Sheffield in the late 1950s, George (now Lord) Porter, who later won the Nobel prize for his work on photochemistry, gave 'lectures' to some 2,500 local schoolchildren at a time in the City Hall. This was chemistry as pantomime: noisy, vivid, colourful — and the kids learned something, too.

Most science does not lend itself to such theatrical fireworks. But any talk can be precise, forceful and memorable. If you want to know how to speak well, listen to some good poets reading their own work or good actors reading someone else's. (Anholt gives a list of suggestions for further reading rather than a list for further listening.) And if you'd prefer to

listen to a scientist, then try the recordings of the famous series of lectures delivered by Richard Feynman at the California Institute of Technology from 1961 to 1963 (*Six Easy Pieces: Essentials of Physics Explained by its Most Brilliant Teacher* by Richard Feynman, Addison-Wesley, 1994; available on audio cassette or compact disc). There are no slides, no gestures; you don't know what he is wearing; and the sound quality is terrible. But they are superb examples of "the art of oral scientific presentation". □

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■ A revised edition of *Selling Science: How the Press Covers Science and Technology* by Dorothy Nelkin has just been published by W. H. Freeman at £11.95, \$15.95. In this provocative and probing book, Nelkin examines the complex relationships between scientists and journalists that affect American media coverage of science, both in print and on television. She reveals not only the constraints, biases and myth-making of journalists but also the surprising public-relations strategies of scientists, universities, corporations and governments. Topics now include the reporting of DNA fingerprinting, biotechnology disputes and cases of scientific fraud.

### New Journals

This year, *Nature's* annual new journals review supplement will appear in the issue of 21 September. Publishers and learned societies are invited to submit journals for review, taking note of the following criteria:

- Journals that first appeared during or after June 1993 and issued at least four separate numbers by the end of April 1995 will be considered.
- Journals covering any aspect of science are eligible, although those dealing with clinical medicine and pure mathematics are excluded, as are publications of abstracts.
- Frequency of publication must be at least three times a year. The main language used must be English. Translation journals in English are, of course, eligible.
- Deadline for submission is the end of May.

When submitting journals for review, please send at least four different issues (the first, the most recent and any two others) of each title, together with full details of subscription rates (personal and institutional) and frequency of publication to: Peter Tallack, *Nature*, Macmillan Magazines Ltd, Porters South, Crinan Street, London N1 9SQ, UK. Tel: +44 (0)171 843 4567.