Walking with producers

Is science on television often edited for impact rather than accuracy?

Simon Lamb

magine the following exchange one evening at your local pub. "I have just seen this amazing programme on the box. These scientists have discovered that dinosaurs once lived on Mars and were transported to Earth by aliens." "Yeah, I really like those science programmes. They are so interesting."

The next morning, on the other side of town, in the coffee room of a university geology department: "I saw a dreadful documentary last night. All that nonsense about the evidence for life on Mars. And Bloggs made a real fool of himself." "What do you expect? It's only TV, after all."

Parody, certainly, but there is a grain of truth, too. Science on television both fascinates and confuses a non-scientific audience. But it is often fundamentally unsatisfying to scientists. Nevertheless, television is probably the main medium through which most people learn about scientific ideas.

Why do scientists seem unable to get their message across? After all, they are interviewed on camera, and they are not knowingly going to talk rubbish. But it is never quite like that. For a start, in my experience, you are usually approached out of the blue for odd pieces of isolated information. You will have little idea how your contribution fits into the overall programme. And then the editing changes everything. Juxtaposition of material can decide how the individual components come across. For example, a recent prime-

here is a tremendous temptation to exaggerate. This is just the start of the slippery slope to yet another overblown and sensational programme. time TV documentary, ostensibly about the geology of the planet Venus, intercut comments on planetary physics by a leading geophysicist with the ceremony of a religious cult who seemed, as far as I could tell, to believe that aliens live on Venus. This made the geophysicist look foolish and boring.

It is common practice to cut and even, sometimes, to change the words the scientists actually say — all, of course, for the sake of clarity. How? It is a simple matter to snip out the caveats or preamble that you have carefully put round your scientific statement. The mays, mights, possiblys, ifs and buts can be removed. This way a cautious and tentative conclusion becomes a well-known fact. Finally, it is all stitched together with a commentary. This, more than anything else, determines the tone and content of the programme.

I learnt a lot when I approached a major TV science strand to make a documentary on the idea that continents can flow, behaving essentially as a fluid. The response was very cool. I had failed to understand where TV producers are coming from. As journalists, they are after a human story. And as film makers, they want to make something that is visually exciting. So I repackaged the science in terms of the pioneering discoveries of a remarkable New Zealand geologist. I was getting warmer. A human story was beginning to emerge. But it apparently was still not visually interesting enough for television. I tried once again, this time emphasizing that the New Zealander had started his career as a gold prospector, and it was this experience that had ultimately led to his major scientific discoveries. Bingo! I had a visual story with a personality, and the documentary was eventually made.

I was lucky to be involved in all stages of the making of this programme. And I found that this was the only way to ensure that my vision of the science got across. Decisions made at each stage can be very difficult to undo at the next. But, without doubt, it is in the editing and commentary writing that you have the most control.

There is a tremendous temptation to exaggerate. Lines of commentary such as "a startling discovery that has unlocked the mysteries of the Universe, changing for



Smile for the camera: TV producers are after a visual story with a 'personality'.

ever the way scientists think", or "the most violent event to affect the planet since its creation", are so easy to write. This is just the start of the slippery slope to yet another overblown and sensational science programme. For example, the scientists have not discovered what we hoped they would. It is just not exciting enough. Couldn't we make A's speculative ideas more into fact? How are we going to handle the fact that it was B, not A, who did the research? Perhaps we should just focus on A, or B? Who sounds better on camera? And that bit of scientific evidence is just too complicated for TV — let's skip it. And so on.

In the editing room, I began to feel that I was a sort of quality-control officer. Time and time again the editor or producer would ask: "Couldn't we just say ...?" "No!" "Surely, we could say ...?" "No!" "Well, then, what can we say?" And we would have to roll up our sleeves and thrash it out. If we were faithful to the science, the final result was always better than any amount of fudging.

In the end we managed to explain to my satisfaction the new theory of mountains, including plenty of field geology and fundamental physics — in fact, all the things I had originally been told were boring. And the television executives thought it was fascinating! The whole process was hard work, but I never forgot that the final programme would be watched by millions of people who, I believe, really want to understand how scientists think and work.

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