

An occasional column, in which Caveman and other troglodytes involved in cell science emerge to share their views on various aspects of life-science research. Messages for Caveman and other contributors can be left at caveman@biologists.com. Any correspondence may be published in forthcoming issues.



Q&A offense and defense

From my usual place in the 'cheap seats', I had a pretty good view of the battlefield.

Off to one side was the speaker. He was looking over-heated and frazzled. He was in constant motion, shifting his weight from one foot to the other but never leaving the sanctuary apparently afforded by the lectern. The clip-on microphone was now in one hand (why wear it for the talk and take it off to answer questions?), and the laser pointer in the other. He took turns in gesticulating with the microphone, which resulted in an unnerving oscillation in the strength of his voice from an almost deafening bellow to a whisper, and then with the laser pointer, which was rather threatening for the innocent onlookers in the audience. He was shocked and outraged. Of the several hundred people in attendance at the meeting, he was for the most part focusing on only one person in the audience.

The object of his ire was standing, in contrast to him, calmly. The microphone was casually hanging at her side. Her posture was non-threatening, her look content but authoritative. But then, of course, she had already launched her 'cruise missile question', which had quickly and unerringly found its target. The result of its impact was not a pretty sight.

Her question was not the first after the talk had finished. It had been preceded by several rather soft, fuzzy "Welcome to our friendly little group", "Gosh, we think that you are just great", "Don't forget you are reviewing one of my papers" non-threatening, "Please, oh Great One, teach us, your miserable underlings, your ideas", easy questions. We could all see that the speaker was feeling pretty good at this stage. No longer constrained by the requirement to show any data, his recollection of experiments, speculations and conclusions was extensive, flowery and bordered on hallucinatory. Most of the audience was getting pretty nauseous by this time, and those of us in the 'cheap

seats' were about to stage a jailbreak for the bar.

I do not think that there was any complicity between those asking these initial questions and the person armed with the cruise missile question. However, afterwards, over a few beers, some of us wondered about a possible conspiracy. At the time the cruise missile question found its target, the speaker was a sitting duck: the initial questions had lulled him into a false sense of security, his defensive shields were down and his mind was in 'idle'.

The question started off pretty tamely, "Please excuse my ignorance of this field [pause], and I may have missed something in your talk or written it down wrongly in my notes, but [pause]..." Now, those who have been to a few meetings know that these phrases have nothing to do with 'ignorance' or 'inattention' but are used for target acquisition and arming the cruise missile question. The speaker was one of those, and we could see him stiffen and become more focused. His sixth sense was alerting his brain (and other vital organs) for 'in-coming'. But his shields did not come on-line fast enough. "...I see several discrepancies in the data your presented, your conclusions and those of two other groups in this field." She followed with a short, critical summary of data that belayed her original apologies for ignorance of the field and poor note-taking.

Our thoughts of the jailbreak for the bar were put on hold.

As the cruise missile question was bearing down on him, the speaker let go some chaff (no, not some form of gastrointestinal response, but a defensive measure used to divert an in-coming missile). "Sorry, I didn't hear the question. Could you repeat it, please?" Those of us in the cheap seats

recognized this defensive maneuver. The speaker had, of course, heard the question perfectly well, but needed time to bring his defensive shields on-line, get his brain working and think of a suitable response. Also, as the speaker and the rest of us knew well, the recitation of the question had another purpose. The questioner would have to try and repeat the question as originally asked, which always makes one feel a little stupid, especially, as in this case, when the question is long (and the bar is beckoning).

But the question was repeated calmly and precisely – the missile remained on target. The speaker was looking decidedly unhappy – alarm bells were going off in his head, he was starting to perspire excessively, and he was looking around for help. Unfortunately for the speaker, the accuracy of the recitation and the clarity of the speaker did not allow him to throw-up a second wave of chaff, namely "I am sorry, but I am confused. In listening to the last part of your question, I forgot the first part. Could you repeat it again?" The speaker stood as the full force of the missile hit him.

So, here we are watching the fall-out from the impact. As I said, it was not a pretty sight. The damage was extensive. The speaker was flustered. He had called for the projector to be switched on again, and had tried unsuccessfully to find several files in his computer that would, apparently, provide some supporting data. He had had to tone down some of his more hallucinatory responses to earlier questions and recognize that others had performed similar experiments but drawn different conclusions. He agreed that further experiments were needed to test his hypothesis and that the suggestions for several controls were very useful and would be incorporated into those experiments.

He finished with the desultory remark "Perhaps we should discuss this further at the bar." Most of us in the cheap seats voted afterwards that this was by far his best response.

Upon reflection, many speakers are very good at a superficial presentation of their work, especially given the use of PowerPoint and the ease with which summaries, cartoons and models can be shown. Because the speaker governs the pace of the talk, the experiments fly past too fast for the observer to fully comprehend them as the speaker hastens to get to the model. And it is the model that often finds its way into notebooks, rather than the primary data. This contrasts with reading a manuscript, as the reader, not the writer, controls the pace of the presentation of the work, and the primary data rather than the model are fully examined. At scientific meetings, at which a wide range of topics may be presented, there is a tendency to present the big picture – why dwell on the details when the majority of those in the audience are not experts; just cut to the summary and model. And there is something of a 'finality' to the models as presented in PowerPoint slides that belays the lack of real data linking proteins to pathways, location to function, mutation to mechanism. In addition, the questions at the end of talks generally call for speculation on the part of the speaker, rather than a detailed defense of the work, experimental design and interpretation. And so the occasional cruise missile question, couched in knowledge gained from a comprehensive analysis of the work, can be a surprise to the speaker and refreshing entertainment for the audience.

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