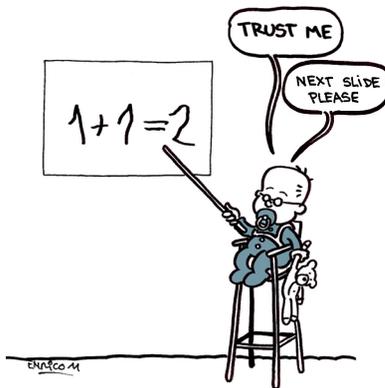


Dr Fisher's casebook

Why do young people mumble?



Last summer I went to some conferences. Well, what could be nicer than mixing with a lot of statisticians, and talking about statistics, about our non-statistical colleagues, or even about football? A few things perhaps, but not many! Even better is a symposium (from the Greek *sympotein*, “to drink together”). To pay for the socialising (or for the drinking together) I listened to a lot of presentations of a statistical nature. Three things struck me. They did not strike me for the first time, because they have struck me during conference after conference.

The first was that it costs a vast amount of money to assemble all these statisticians (or doctors or biochemists or sociologists or whatever – I go to a lot of meetings) from around the world. So why do we present them with visual aids that nobody can read? Things have improved since my early conference days, when medics would present blue 35mm slides with tiny text and statisticians handwritten overhead transparencies that had been smudged because the pens had water-soluble ink. Bill Gates has given the world something useful in PowerPoint (as well as fighting malaria – good for you, Bill), and the data projector is certainly an advance on the overhead and acetate. But at these meetings there were too many graphs with tiny labels on the axes. Eight-point font is just not enough for my ageing eyes, even if I sit at the front. For one session I made the mistake of sitting on the left of the lecture room, so I was reading the minute vertical axis labels upside down. Hopeless. Modern software can easily vary text size, so why not do it?

The second was mathematics. Now, I am good at mathematics. I have a good degree in it from one of the world's top universities (and that's official). But I cannot follow mathematics at conference speed. By the fourth screen of equations, I have quite forgotten the difference

between subscripts i , j and k , and which parameter is θ and which is λ . And it's not just me. When it is published in *JASA* or *JRSS*, that's fine, I can check back and, if I need to go into all the details, I can. But I don't need it in a 20-minute presentation. I'll take your word for it until it is published. If you must, put the equations on your website and refer me there. Then, if I feel the urge, I can read them at my leisure. If you're one of our younger readers, you can put them on your Facebook page, along with that picture of yourself with your pants on your head, if you like.

The third was context. Not everybody at a conference is working in the same field as yourself. Not everyone is familiar with the intricacies of microarrays or of the criminal justice system. You need to start your talk by explaining what it is all about. Otherwise, you appear to be saying: “If you are not one of us, go away.” Watch others present to conferences. The most experienced, the ones you want to emulate, are inclusive and general. They bring everybody in. Don't worry about underestimating your audience. H. L. Mencken once said: “No one ever went broke underestimating the intelligence of the American people” (regular readers knew a quotation would arrive if only they waited). Likewise, no statistician was ever booed off stage for underestimating the non-statistical knowledge of statisticians. Some of us don't even know what day it is. My M.Sc. supervisor, whom I greatly admire, used to tell me: that's good (I'm boasting here), but now go away and rewrite it so that your little sister would understand it. I tell my students much the same. My little sister never did understand it, but at least I think that I did, in the end.

So if you are going to present at your first conference, here are Dr Fisher's top tips. First, remember that the audience don't know about this, that's why you are telling them. Take it gently and give them the background. You don't need to cram in your life's work; just tell us why you are interested in this and why we should be interested, too. Second, if you must have mathematics, relegate it to a remote webpage. Mathematics is wonderful and lovely, but so is blood, and we don't need either of them all over the screen. Take a tip from a presenter I greatly admired; he said when it came to the mathematical bit: “Trust me!” I did. Third, take your presentation to a nice, quiet lecture room, stand at the back on the left-hand side as you face the screen, and project your talk. If you cannot read everything in it really easily, your audience will not be able to read it at all. And what a waste of their and your time that would be.

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