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FREELANCE

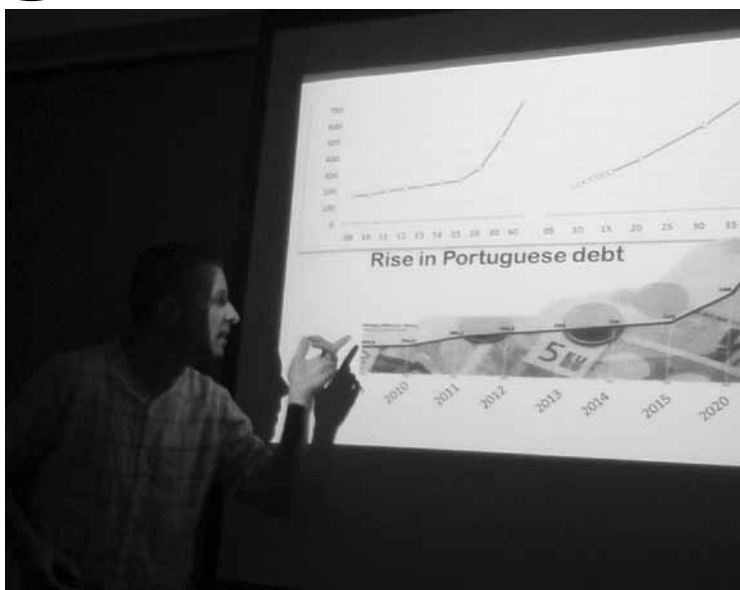
That figures shock!

NOT BEING bamboozled by statistics was the topic of September's London Freelance Branch meeting. Our speaker was mathematician David Schley of the Pirbright Institute. He said that scientists talking to journalists have a "common interest in finding out the truth." And a lot of what David does is ask: "Is this really a story?"

Laughter followed when David displayed a BBC non-story referring to the "49 per cent who get less than the national average broadband speed." Well, yes, it's an average! So you'd expect about half of the sample to fall below it, wouldn't you?

The "interactive bit" followed, with David handing out electrickery that displayed "votes" on a screen (they're called ResponseCards or RFLCDs) and asking the audience to guess which figure was the correct total for NHS annual budget. LFB's guesses became more accurate when Dave asked us to pick the "NHS spend per person per week" – choices ranged from 3p a week to £300 a week. Most went for £30 and got it right. As we "broke it down to per person per week, more and more of us came to the right answer... if you can get a human scale on the numbers, it makes it more sense for your readers."

Then there's "Daily fry-up boosts



David Schley deconstructs the rise in Portuguese debt graph, with its dodgy intervals between dates along the bottom axis

Image © Mike Holderness

cancer risk by 20 per cent" in the *Express* – but it "doesn't tell you what the absolute risk is... 20 per cent more likely than what? Relative to what?"

As David explains, "Five strict veges per 1000 die in a lifetime from pancreatic cancer. How many regular bacon-eaters die per 1000 from pancreatic cancer? Six. I don't know about you, but it's not enough to

make me give up bacon." There's a different between relative risk and absolute risk.

David then deconstructed another BBC news website headline, "Worrying jobless rise needs urgent action – Labour" from 2011.

This said that "The number of people out of work rose by 38,000 to 2.49

million in the three months to June, official figures show." Well, not quite they don't. Office of National Statistics (ONS) numbers are compiled by sampling some (not all) job centres, so they're released with a "confidence interval". That crucial extra information is the spread of figures between which the real number definitely lies, with the statisticians 95 per cent confident of this.

The ONS release on which the BBC piece was based gave a figure of 38,000 out of work, with a confidence interval of 87,000 – so unemployment either rose by up to 125,000, or fell by anything up to 49,000. "Job figures have definitely gone up or down" is not much of a story.

Always ask the statisticians for the confidence interval, advises David: "never accept a single figure for estimates... Ask those releasing the data to 'be honest about how much uncertainty there is.'" There's a much longer version online.

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ResponseCard (aka RFLCD) voting gizmo used by LFB members to indicate their guess at the average person's number of people weekly tax bill for the NHS budget

Image © Mike Holderness by 38,000 to 2.49

Tell us how work's going... and about contracts being imposed on you

THE NEW survey of NUJ freelance members is imminent as we go to press. It's an important effort to gather information about how the world of freelance work is developing – and about the wellbeing of freelances.

We strongly encourage you to take a few minutes to complete it. Watch your inbox for news – and if

for some reason you don't see any, revisit this story online at www.londonfreelance.org/fl/1310surv.html for an update. The *Freelance* is particularly keen that you fill in details of unfair or coercive contracts that you've been "offered" by publishers, broadcasters or whatever. Even more important is gathering details of any cases in which one has

said in writing that such a contract is non-negotiable or that you won't work for them unless you sign it. Cases in which you're "asked" to agree to a contract only after you've done the work are significant, too.

This is essential to your union's efforts to raise in Westminster and in Brussels the issue of unfair contracts being imposed on you.

LFB meetings

11 November

Everything you need to know about digital journalism

9 December

Seasonal networking

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