

Editorial

This Radical Statistics News opens with two articles providing plenty of ideas for the application of statistical techniques - from the highly sophisticated to the most basic - in the context of voluntary and statutory community services. Practical applications of statistics and a range of hard and soft operational research techniques are the focus of Charles Ritchie's opening article on the work of the Community Operational Research Unit at Northern College, which has recently received the well-deserved allocation of further (albeit decreasing) financial support from the Operational Research Society.

At the Radical Statistics conference, Steve Simpson focussed on aspects of data collection and analysis in community surveys. Here he provides an account of his experiences in community development work with Calderdale Council, with its tensions, contradictions and potential rewards for statisticians (amongst others). Then Andrew Philpott Morgan provides a 'commentary on the commentators' - the economic forecasts of leading 'gurus'.

Sub-groups do not appear to have attracted much membership activity recently! But Health Group interests surface in two pieces by Alison Macfarlane. Following the first of these, we have several papers and reports from a successful conference held at Leeds University on 23 February. Reports from Alison and the Troika flag up more forthcoming activity on official statistics - providing important opportunities for participation. Several later items also make calls to action, and one ideal focus for readers responses is the Membership Questionnaire circulated with this issue!

In addition we have news of human rights activities by statisticians across the Atlantic, and closer to home a report on the imperfect reality of Labour Party health policy making. Anthony Finkle and Hugh Lowe provide diverse proposals intended to provoke membership response. Somewhat surprisingly, only one member, Monica Walker, responded to the 'debate' initiated in RSN 47 between Roy Carr-Hill, George Davey Smith et al. To wind up, Monica's letter is followed by a book review by David Lane, and Paul Marchant's entry for the Data Graphics Award, mercifully without graphical examples! Keep these entries coming!

Letters

From: Hugh Lowe

I am responding to the hint thrown out at last weekend's conference for suggestions from members, who may lack expertise and access to the figures, to define and possibly collaborate with "professionals" in particular areas which they think need study. My suggestion:

Wanted: a study of the means-tested state.

The replacement of the welfare state by the means-tested state, or a slide back into the Poor Law, is realised in a general sort of way by campaigners, particularly pensioners, in housing and health/social services etc. Putting numbers on it is another matter. It's not too hard to find figures for the loss to the exchequer of mortgage interest relief, £7.5 billion, or tax relief on private pensions and insurances, £13 billion, (sometimes called the middle class welfare state). These are the "swings"; what about the means-tested "roundabouts"?

Some £2-3 billion is raised, largely from the sale of owner-occupied houses, to pay the fees of residents in nursing homes and homes for the elderly; which is mostly a cheap way (to the exchequer) of providing low grade substitutes for NHS health care. Increasingly domiciliary means-tested community health and social service care is paid for out of occupational pension income and by the re-mortgaging of owner-occupied houses, which is also the main source of cash for house repairs and adaptations. Many who, in middle age, recently bought their council houses will never own them unencumbered due to this.

It is virtually impossible to live solely on the basic state pension but income support and housing benefit etc. are means-tested, so largely is unemployment benefit for those nearing retirement age. The exchequer saves £billions this way. How many? Pensioners apart, not all borrowings on re-mortgaging go to pay for luxury consumer goods but offset lack of income due to low pay and unemployment. Incidentally this is a huge bonanza for the finance companies.

Naturally the better off you are the more you gain on the swings and the less you are likely to lose on the roundabouts. What is break even point?

Returning to the swings for a moment. How much does the exchequer forfeit by the ridiculously low rates of inheritance tax? (£130,000 starting point without recourse to any accountants dodges). Suppose we returned to the tax structure which existed 40 years ago how much would the exchequer benefit?

Hopefully this indicative list will attract the attention of Rad. Stats. members willing and able to explore the anatomy of the means-tested state.

From: Monica Walker

I have subscribed to Radical Statistics for many years and the standard of the articles has been high. However, in the last number (47, Winter 1990) I found Roy Carr-Hill's comments, on an article in the BMJ by Davey Smith, Bartley and Blane, quite offensive. Roy virtually called these authors liars, and said they had abused statistical data "in the service of politics". The reply by the authors was equally offensive, especially in the way that they kept rudely and childishly referring to "Doctor Carr-Hill".

Apart from this, for those who had not seen the original article, it was difficult to assess the critical points of the two sides of the argument.

It is a pity these two articles were published in this form.

Book Review

Contemporary Soviet Society: A Statistical Handbook. By Michael Ryan. (Aldershot and Vermont: Edward Elgar, 1990. 283pp. £35)

*David Lane*¹

Until relatively recently the use of statistics in the analysis of state socialist society has been underdeveloped. On Soviet society the main sources have been the yearly *Narodnoe khozyaystvo SSSR* (The Soviet Economy) (and similar annuals for the republics and lower government bodies), population censuses, taken approximately every ten years, and numerous other data published in the periodical *Vestnik statistiki*. These sources have provided very useful data for social scientists though they have been relatively underutilised by Western researchers. Exceptional is the handbook published in 1973 and edited by Ellen Mickiewicz which itemises social, economic, political and communication trends from the Revolution of 1917 to the late sixties. However, state planners as well as social scientists have been hampered in their work by absent or inadequate statistical sources. Until perestroika the Soviet authorities published no statistics on various forms of crime, deviance and poverty: there were no indicators of suicide, murder, robbery, alcoholism, prostitution and destitution. The only estimates here were made by Western authors basing their figures on local surveys.

Perestroika has changed the position considerably. From a political point of view, the reformers leading from the top have utilised statistics as an agency of political change rather than as hitherto and by governments universally as legitimating devices. Ryan has performed the very useful job of collecting and translating the wealth of data now available. These he has taken from the monthly reports of the State Commission on Statistics (*Statisticheskii press byulleten*) and the weekly mass newspaper, *Argumenty i fakty*; he also includes some data from the newly formed Institute of Public Opinion Research. His book has eleven major sections containing tables on: population, urbanisation, vital statistics, marriage and divorce, ethnic composition, education, the environment, crime, income support, women, and public opinion. Many of the tables are divided spatially to indicate differences between the different republics.

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The tables have some inadequacies. Compared with Mickiewicz's earlier handbook, the various topics lack an editor's introduction and few comparative data are given. None of the tables is presented in diagrammatic form which would have been more revealing for the student reader. A few maps would have made the interpretation of data more accessible for the non-specialist and to illustrate migration. Many of the tables do not include definitions of categories. One might sympathise with the author here for usually Soviet data are presented with no explanations: however, definitions of urban/rural distinctions have been given in *Naselenie SSSR* and more searching would have revealed other definitions. It would have been useful to have had some data on the social background of the members of the newly elected parliaments.

The data are still officially collected and authorised. Why then have the authorities pursued this statistical glasnost (openness)? The strategy is quite novel and lies in the hope that the revolution from above will succeed in gathering support from below if the inadequacies of the previous regime are exposed. This in turn calls for the reader to take critical interpretation of "critical statistics". For instance, western commentators have in recent times used infant mortality statistics to delegitimise the Soviet health service. Similar arguments have been used by the Soviet Minister of Health in 1990 to advocate changes in the organisation of the health service and to castigate its previous deficiencies. Some of these statistics are fallacious: a careful analysis of the data shows that much of the increase in infant mortality has been due to better recording and to a change in the ethnic incidence of births (a shift in proportion from the urbanised European areas to the rural central asian districts) and has nothing at all to do with a decline in health service provision. The Soviet data too may be criticised in that no details of sampling procedures are given.

Overall the tables in Ryan's book make interesting reading. They will be useful for courses on industrial societies when comparative data are required. However, they fall far short of the statistics available on Western societies in publications such as *Social Trends*.

Data Graphics Award entry

A picture speaks a very few Blahs

Paul Marchant

I was pleased to read Steve Simpson's review in Radical Statistics 47 of the excellent book by Edward Tufte, *The Visual Display of Quantitative Information*. (Incidentally, I was so impressed by the book that I submitted my own review. A few days later Steve Simpson's arrived!) In Steve's review, he asked for examples of graphical excellence. Well, I've no particular example of excellence but I do have one of the opposite.

A higher education institution with which I am acquainted, Leeds Polytechnic, has recently produced an Annual Report for 89/90. It contains the usual 'business' graphics (3 barcharts & a pie chart). On page 17 of the Report there is a barchart with 4 bars. The graphic takes up an area of 130 cm² giving it a data density of 0.03 cm⁻². The 4 items of data are also presented in tabular form above the graphic and so a whole page, of 580 cm², is taken to present 4 numbers. This gives an overall total data density of 0.007 cm⁻². This is about 3 times worse than Tufte's worst example (p162) and is a breathtaking million-fold worse than his best (p166).

On page 21 of the Annual Report, there is another chart with 7 bars which includes 2 small ones (labelled OL and SF). It is rather difficult to estimate the values that these represent because there are no tick marks on the vertical axis, but measurement suggests blocks must represent about 180 and 320 respectively. Again the table of values is presented, this time on the facing page, and low and behold the quantities in question are only 12 and 73! One can only assume that since the scale ranges up to 6,000, values as small as 12 and 73 would be barely perceptible on the chart, so 'artistic' (scientific?) license has been used to improve the look of the plot!

It is known that the report 'was primarily written for influential audiences' outside the institution.

It says something of the poor state of education in the UK when it is deemed satisfactory to place such an emphasis on style and disregard content and integrity. It is worrying that 'the influential audience' is thought to be so easily impressed.

One might say that the major part of the report is to catch the eye, in the way of an advert and ultimately, as elsewhere, the 'business' graphics are just a bit of decoration. But surely an institution of higher education should primarily be in the business of clear, concise, correct and effective communication and not produce a load of empty, overblown nonsense. This should apply equally to data as well as word.

One final point, the charts, of which I write, are presented in fashionable dark green and maroon which makes them impossible to photocopy! Therefore, perhaps another rule should be added to Tufte's useful maxims. That is: 'If it is worth printing, it is worth making copyable'. So let's have clear high density graphics that can be copied, passed around, assessed, checked, commented on etc etc.....

[No risk of any of this sort of thing in *this* newsletter! Eds.]

Things to do

- * Return your completed membership questionnaire **immediately** (page 3)
- * Find out how you can benefit from, or contribute to, community OR (page 4)
- * Join the debate on official statistics, at the meetings in Bradford or London (pages 26 & 47)
- * Help the Health Group with its campaigning and forthcoming publications - contact Alison Macfarlane (page 38, cover)
- * Offer to help with or host the next Conference - contact the Troika (page 39, cover)
- * Contribute to the quest for a better Labour health policy - contact Karen Buck (page 44)
- * Respond to Hugh Lowe's plea on the means tested welfare state (page 50)
- * Send in an entry for the Data Graphics Award! (page 55)
- * Revive another sub-group - or start a new one (cover)
- * Contribute an article - long or short - to the next newsletter, or voice your views on the items in this one - contact Dave Gordon (cover)