Reviewed by Walter Krämer

O. W. Winkler: Interpreting socio-economic data—a foundation of descriptive statistics

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What is the opposite of mainstream? If the present writer has ever encountered a modern statistics textbook which sets itself miles apart from the rest of the bunch, then this is it. "It is the aim of this book to reorient statistics towards making sense of social and economic data". This leitmotiv, which is often paid some lipservice in statistics, but rarely taken seriously, is stated firmly at the outset, and in what follows, Othmar Winkler shows that he really means it: there is rather little abstract mathematics and a lot of common sense, of digging deep into the nature of the phenomenon under study and of trying hard to understand what things are really all about.

Most of what is covered in this book is either taken for granted or not discussed at all in standard textbooks on economic or social statistics, not to mention mathematical statistics. Take for instance the detailed discussion of the various ways that "real-life-objects" might end up in numbers which is analyzed in chapter 2: "From the facts in society to socio-economic data." Other than in the natural sciences, there is no canonical procedure to do this in the social sciences, where much of what is measured depends upon the intentions of the person who does the measuring. This theme is pursued further in chapter 3: "Structure and nature of socio economic data: the aggregate", which discusses the infinity of potential aggregates of a given population depending upon the dimension of the phenomenon under study across which aggregation is done. This is followed in chapter 4 by a discussion of "Ratios in the social sciences", which rightly points out all the nonsense that is being produced by percentages where the numerator and the denominator have little in common whatsoever. In the same vein, subsequent chapters on time series-forecasting and index-numbers highlight many problems that are usually wiped under the carpet in standard texts. An example is the observation in chapter 7 "that in price statistics, the 'real life object' ought to be the business transaction, not the merchandise", which acknowledges the undisputed fact that vastly differing prices are sometimes charged for identical products at almost identical points in time and space, which is usually being taken care of ought to be the business transaction, not the merchandise", which acknowledges the undisputed fact that vastly differing prices are sometimes charged for identical products at almost identical points in time and space, which

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is usually being taken care of by averaging. Winkler now argues that this is not sufficient, that the transactions as such should be the units under study. This is certainly worth wile some professional debate and will ring a bell with everybody familiar with the current debates on "felt" vs. "real" inflation in Germany.

Only in chapter 8 and quite late in the book there appears what is usually presented on page one of standard-texts: things like frequency distributions, averages, measures of dispersion and so on, followed by a discussion of the use and misuse of probability when analyzing real data, and a brief excursion into the interface between statistics and accounting or between statistics and geography in the final chapters 11 and 12.

Curiously enough and independently from this review, the present writer recently happened to stumble across a similar textbook by Wilhelm Winkler, Othmar Winkler's father, which had appeared in Germany in 1933 (Grundriss der Statistik, also by Springer Verlag). The focus and the approach are very much the same, and I am happy to report that this old-fashioned Austrian–German type of statistics is still alive. I do not know whether Othmar Winkler likewise has children with an interest in statistics. If not, I sincerely hope that this book will inspire some other colleague to keep this admirable tradition running.

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