

POSTER SESSION ON FURTHER DEVELOPMENTS ON GRAPHICAL
METHODS FOR STATISTICAL DATA DISPLAY

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The poster session was organized in order to supplement the session on "graphical methods for presenting statistical data".

In the poster session examples were given of actual possibilities of progress in the graphical statistical field through avenues such as:

- (a) clarification of some basic concepts of graphical presentation;
- (b) reduction of limitations and shortcomings of classical methods;
- (c) introduction of new graphical symbols.

The explanation was based on the following exhibits (prepared at the Hebrew University of Jerusalem, apart from 2.1-2.2 and 4.4).

1. New Univariate Symbols

- 1.1 Examples of Graphical Rational Patterns (GRP)
- 1.2 Comparison of GRP method and diagrammatic method
- 1.3 - 1.4 GRP representing double-entry tables
- 1.5 A function of X and Y shown by GRP
- 1.6 Cumulated percentages (Y) of Women of Age X, with number of children Z (shown by GRP)
- 1.7 Circles proportional to population of towns over a map showing rural densities by GRP
- 1.8 GRP showing traffic density
- 1.9 Scale of compact GRP 1 - 99
- 1.10 Compact GRP proportional to population of SMSA
- 1.11 - 1.12 Compact GRP showing percentages of Blacks over the population of SMSA. In 1.12 the area of the basic circle is proportional to total population, and that of the compact GRP is proportional to Black population.

2. New Bivariate and Multivariate Colored Symbols

- 2.1 - 2.2 Examples of the method of blending colors for the presentation bivariate maps (Bureau of the Census)
- 2.3 - 2.5 Bivariate colored symbol for SMSA located over a map of the USA
- 2.6 - 2.7 Bivariate colored symbols for SMSA over a scatter diagram showing two additional variables

- 2.8 Multivariate colored symbols for SMSA over a scatter diagram showing two additional variables

3. Improving the Common Diagram

- 3.1 Linking the scales of X and Y in diagrams
- 3.2 Modified frequency polygon compared to a histogram and to a common frequency polygon.
- 3.3 Diagram showing magnitudes and absolute and relative variations

4. Graphing Regional Averages

- 4.1 Map of median income by states of the USA, obtained by covering the area of each state by one out of a few patterns
- 4.2 Map 4.1 re-drawn by covering the area of each state by a repeated GRP
- 4.3 Map 4.2 re-drawn by giving in each state a number of GRP proportional to the population
- 4.4 Percentage of area urbanized in each county of California shown by Tobler's scale (Bureau of the Census)

As most of the exhibits were in color, they cannot be reproduced here. A verbal description of graphs would also be impractical.

Therefore, the reader is referred to a detailed publication which is being prepared at present by the Bureau of the Census. In this publication all the exhibits will be reproduced, together with the detailed explanations and papers given at both sessions on graphical methods.