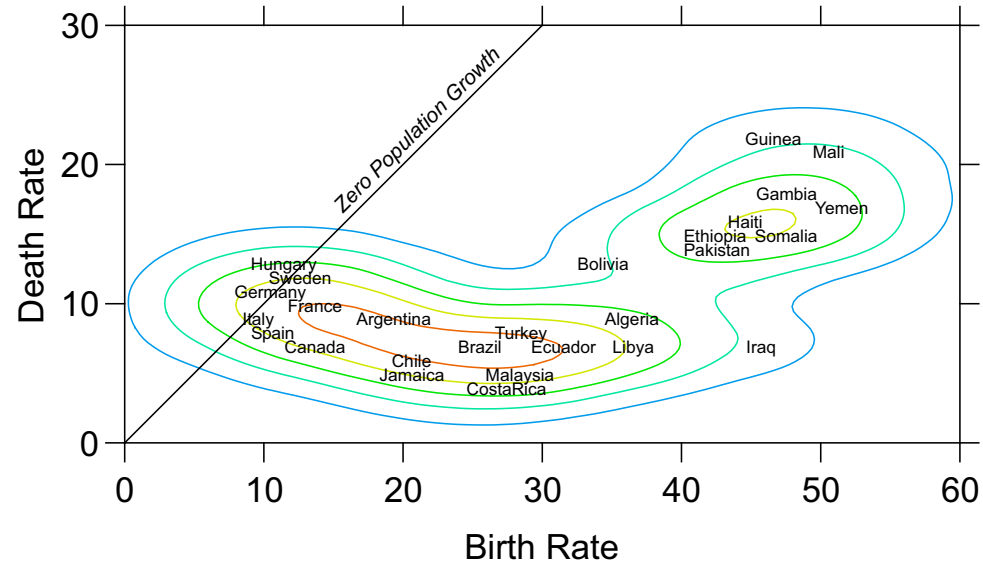


Dealing with Figures and Graphics



Leland Wilkinson

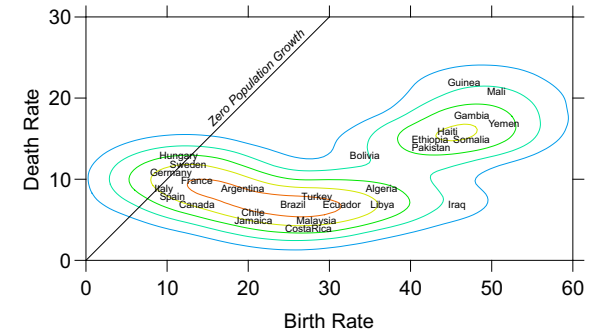
Systat Software and UIC Dept. of Computer Science

JSM

Salt Lake City, UT

July 29, 2007

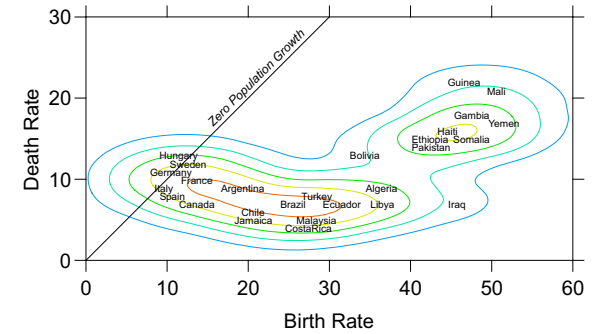
Guidelines



- Follow journal standards to the letter
- Use best graphic design principles (Tufte, Robbins, Cleveland, Carr, Kosslyn, Wilkinson)
- Label graphs clearly, especially in captions
- Avoid three-dimensional graphs. Contour plots or 2D paneled graphs are usually more effective.
- Avoid pie charts (because statisticians hate them, not because they are bad)

Formats

- Avoid color unless necessary
- Use black-line everywhere unless gray-scale is needed for grid lines or shading
- Use PDF or EPS whenever possible. Consider WMF if journal uses Microsoft software for production, which is unlikely.
- Keep figures and text separate. For review copy, put figures at end of text. Journal will do final typesetting from your TeX files. Computer science journals require you to do final typesetting.



Software

- R, S+ (especially for ASA journals)
- SAS, SPSS, SYSTAT, STATA (Social Science journals)
- SigmaPlot, Origin (Wet sciences)
- Touch up with Adobe Illustrator
- NEVER use Excel; reviewers will punish you if they see you using it for graphs

