T-61.271 Information visualization

Exercise 1. Thu 10.10.2002:12-14 T4

- Tuftes theory on graphical excellence
- Basis of visual perception

1. Improve a standard graph from MS Excel, Matlab etc. according to Tuftes principles.

2. Write an equation for the (perceived) brightness (B) of the monitor output as a function of the electron gun voltage (V), gamma (γ) and ambient room illumination (A). Why is gamma often less than three, $\gamma < 3$? Hint: See Ware p. 96 onward.

3. Explain the Hermann gird illusion and brightness contrast effects by the DOG (Difference Of Gaussians) model.

You should solve the exercises prior to the sessions, where the solutions will then be presented and discussed. There will be a list to which you can mark which problems you have solved. You should be prepared to present your solution for the class.