Slide 3

Munzner describes four basic dataset types: tables, networks, fields, and geometry. But the last two are both spatial data; it is just that fields are regular grids and geometry are unconstrained locations. I don’t think that this is fundamental enough a difference to categorise them separately.

She describes five data types: items attributes, links, positions, and grids. But grids are just regularly spaced positions, so again I don’t think there the distinction is important.

Slide 4

It makes sense to say that the weather on one day is 20 degrees hotter than the day before. But it does not make sense to say that the weather is twice as hot because the zero on the Celsius scale is arbitrary.

The important point here is that we compare information all the time – and our visualisation should support meaningful comparisons but not meaningless ones.

Slide 5

Networks examples: in an articulated social network the nodes are people, and links mean friendship; in a gene interaction network, the nodes are genes, and links between them mean that these genes have been observed to interact with each other.

Regular grids example: image data. Here the data is usually stored as a matrix, and the location is implicit in the ‘grid reference’ of each cell.

Slide 8.

Six variables: the number of Napoleon's troops; the distance traveled; temperature; latitude and longitude; direction of travel; and location relative to specific dates without making mention of Napoleon; Minard's interest lay with the travails and sacrifices of the soldiers.