Design space: definition

Each *decision* is a dimension
Each *dimension* has a range of *values*
Each *design* is a point in n-dimensional space
Dimensions may *interact* with each other
Constraints may indicate that some of the space is not available
Some areas of the space might be preferable to to others

Design justification explains why one particular point has been chosen instead of another

Design is all about good *choices*

Choices… with justifications

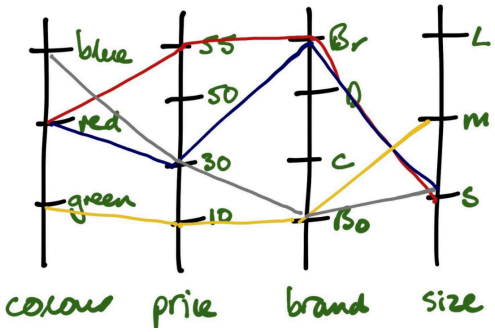
- which data to present
- which visualisation method to use on that data
- How to present the data attributes in the chosen visualisation: what colours, fonts, sizes, marks, symbols…

Questions Options Criteria (QOC)

A more formal way of representing the Design Choice process and Design Rationale

- **Questions:** the key issues/choices of the design
- **Options:** possible answers to the questions
- **Criteria:** reasons for arguing for or against the options

for multidimensional data



Design process

- What are the design decisions?
- Which combinations are
  - possible
  - impossible
  - relevant
  - preferable
  - under-explored (gap-detection)
- Which options best satisfy our criteria?