

Human-Computer Interaction

Lecture 2: Visual representation

	Graphic Resources	Correspondence	Design Uses
Marks	Shape Orientation Size Texture Saturation Colour Line	Literal (visual imitation of physical features) Mapping (quantity, relative scale) Conventional (arbitrary)	Mark position, identify category (shape, texture colour) Indicate direction (orientation, line) Express magnitude (saturation, size, length) Simple symbols and colour codes
Symbols	Geometric elements Letter forms Logos and icons Picture elements Connective elements	Topological (linking) Depictive (pictorial conventions) Figurative (metonym, visual puns) Connotative (professional and cultural association) Acquired (specialist literacies)	Texts and symbolic calculi Diagram elements Branding Visual rhetoric Definition of regions
Regions	Alignment grids Borders and frames Area fills White space Gestalt integration	Containment Separation Framing (composition, photography) Layering	Identifying shared membership Segregating or nesting multiple surface conventions in panels Accommodating labels, captions or legends
Surfaces	The plane Material object on which the marks are imposed (paper, stone) Mounting, orientation and display context Display medium	Literal (map) Euclidean (scale and angle) Metrical (quantitative axes) Juxtaposed or ordered (regions, catalogues) Image-schematic Embodied/situated	Typographic layouts Graphs and charts Relational diagrams Visual interfaces Secondary notations Signs and displays

ANALYSIS EXAMPLES

Kyrie eleison (I)
Adagio

The musical score is arranged in a system with the following parts from top to bottom:

- Flauto traverso 1
- Flauto traverso 2
- Oboe d'amore 1
- Oboe d'amore 2
- Fagotti
- Violino 1
- Violino 2
- Viola
- SOPRANO 1
- SOPRANO 2
- ALTO
- TENORE
- BASSO
- Continuo

The vocal parts include the following lyrics:

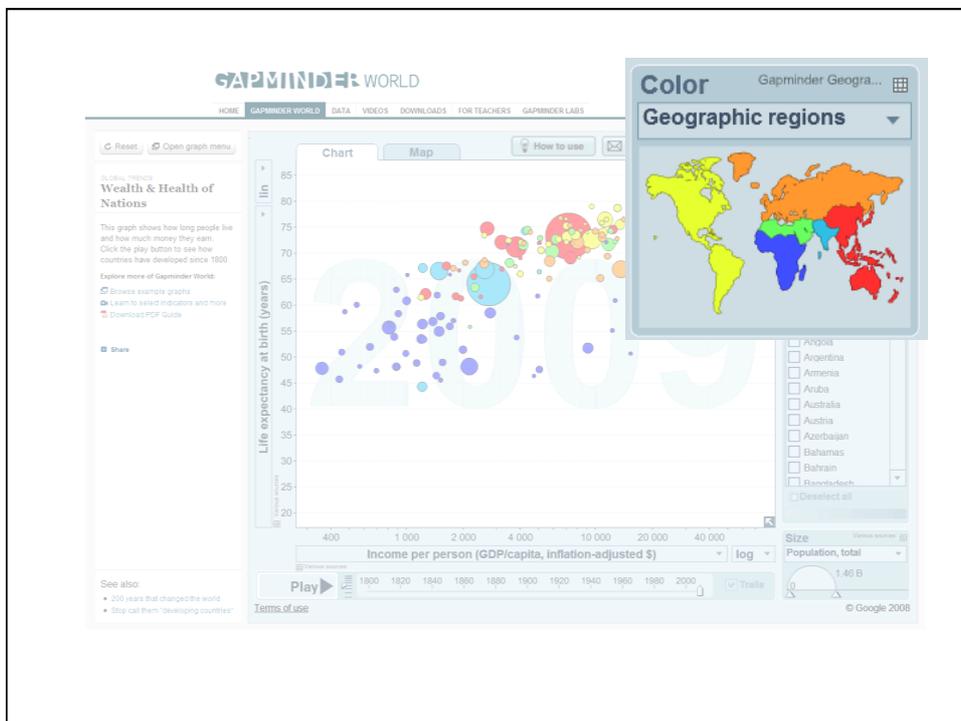
- SOPRANO 1:** Ky - ri - e, Ky - ri - e - - le - - i - son, e - le - - i - son.
- SOPRANO 2:** Ky - ri - e - - le - - i - son, e - - le - - i - son, e - - le - - i - son.
- ALTO:** Ky - ri - e e - le - i - son, Ky - ri - e - - le - - i - son.
- TENORE:** Ky - ri - e, Ky - ri - e, Ky - ri - e c - le - i - son.
- BASSO:** Ky - ri - e, Ky - ri - e, Ky - ri - e c - lei - - son.

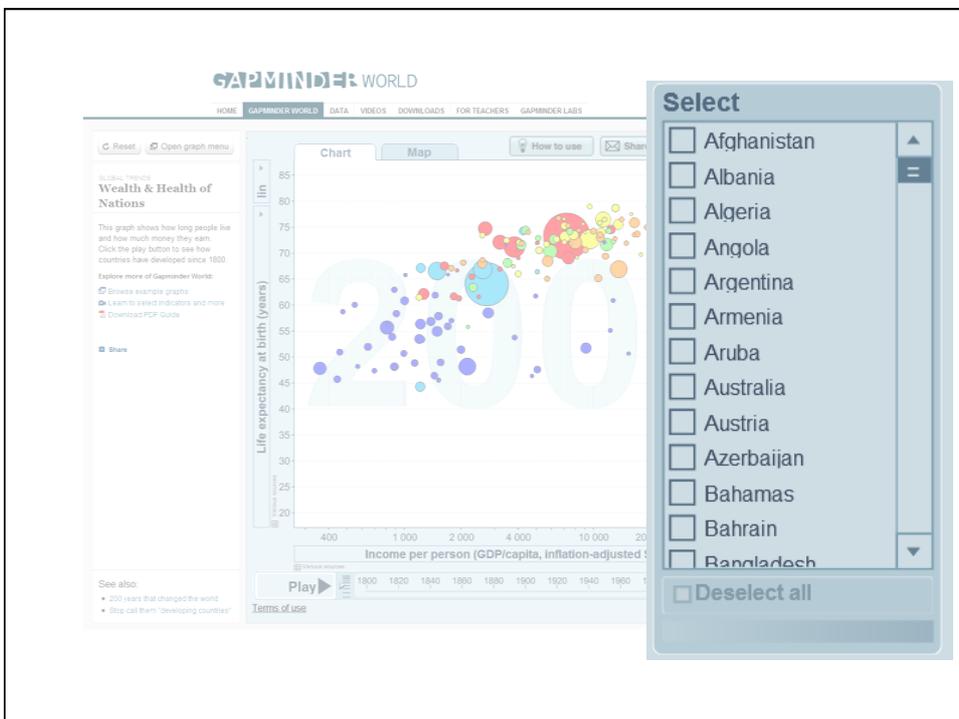
The Continuo part includes figured bass notation: 7 6, 5, 6 9 8, 5 6 5, 6 7 6, 5.

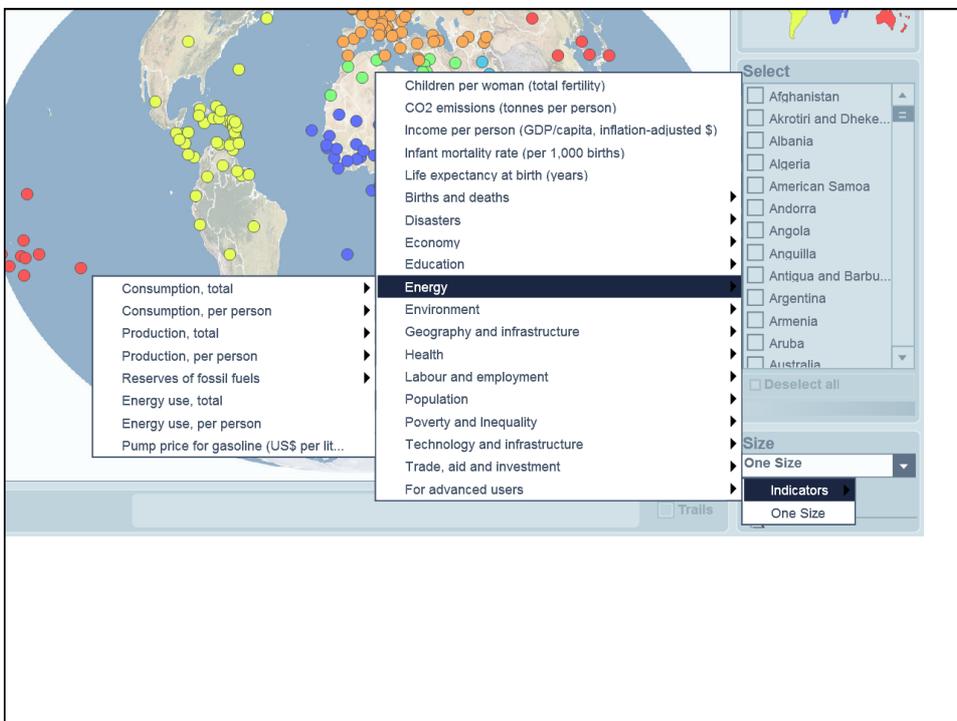
BASSO

Ky - ri - e, Ky - - ri - e,

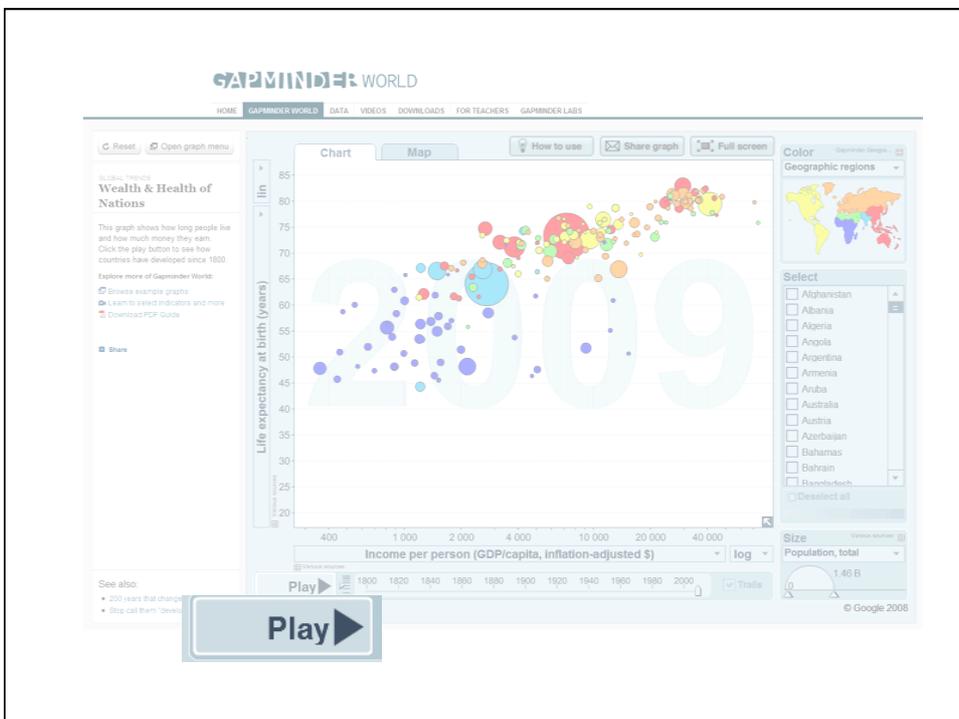
	Graphic Resources	Correspondence	Design Uses
Marks	Shape	Conventional (arbitrary)	Mark position identify category (shape)
Symbols	Geometric elements Letter forms Connective elements	Topological (linking) Acquired (specialist literacies)	Texts Definition of regions
Regions	Alignment grids White space	Containment Separation	Segregating and nesting multiple surface conventions in panels Accommodating labels
Surfaces	Material object on which the marks are imposed (paper)	Metrical (quantitative axes) Juxtaposed and ordered (regions)	Musical score

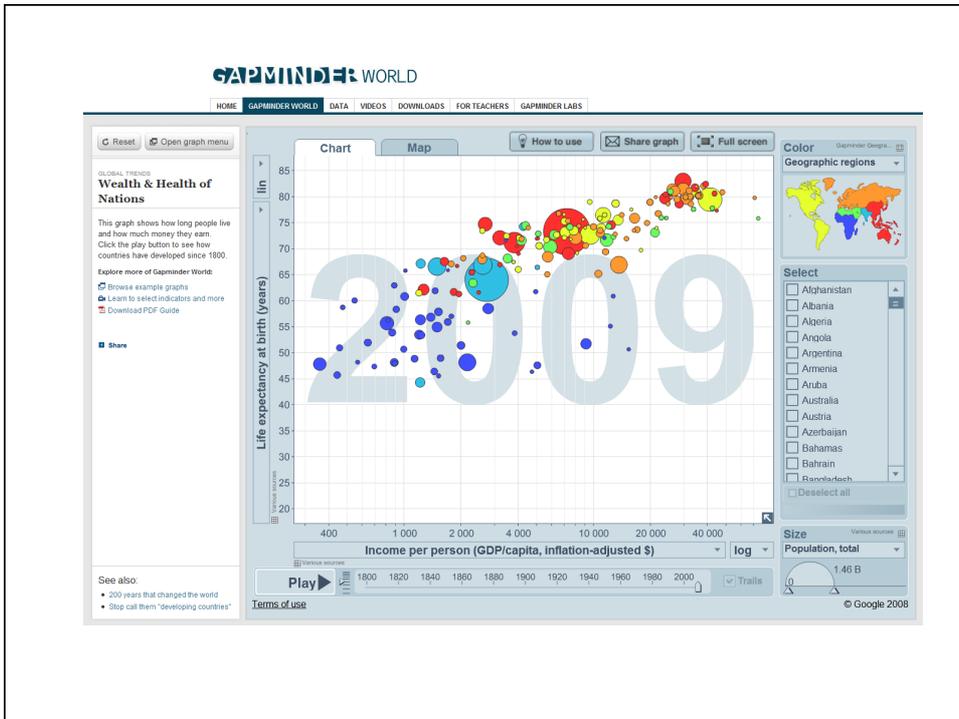


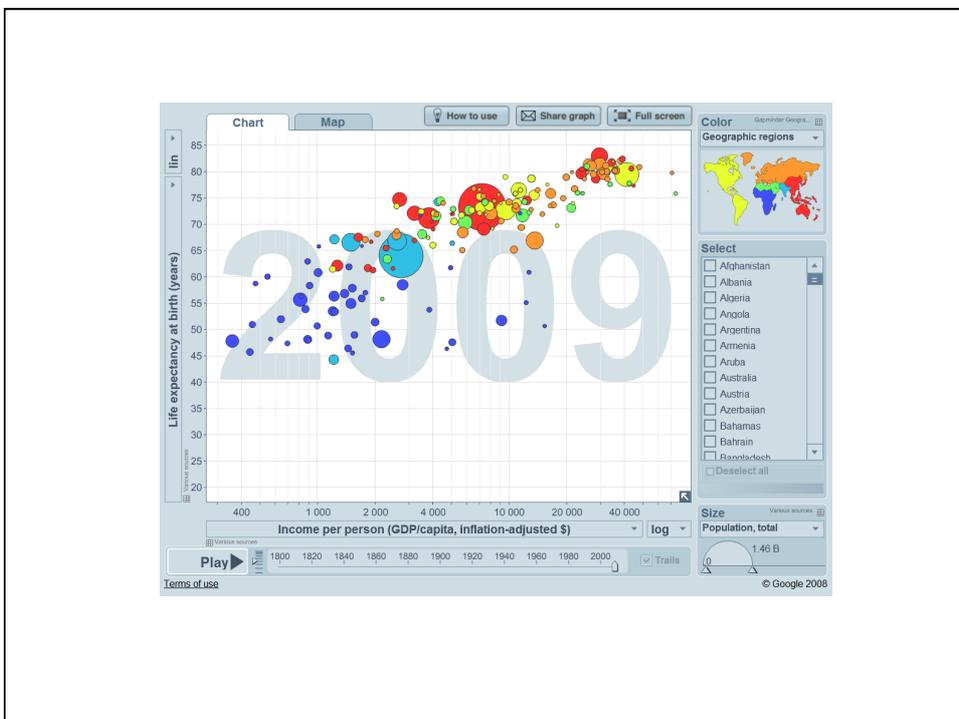
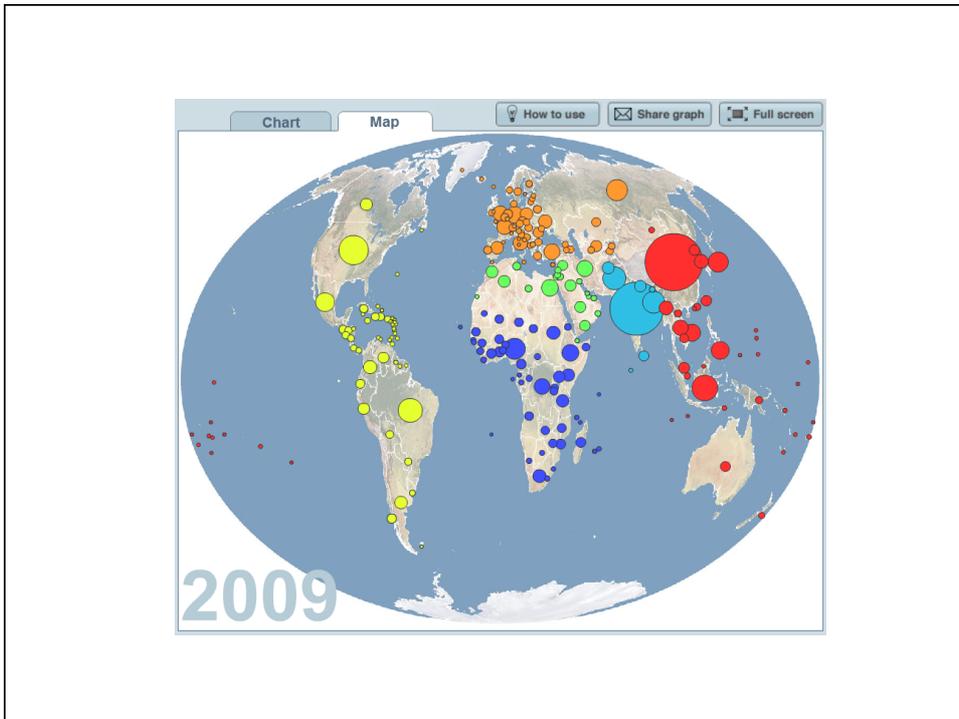


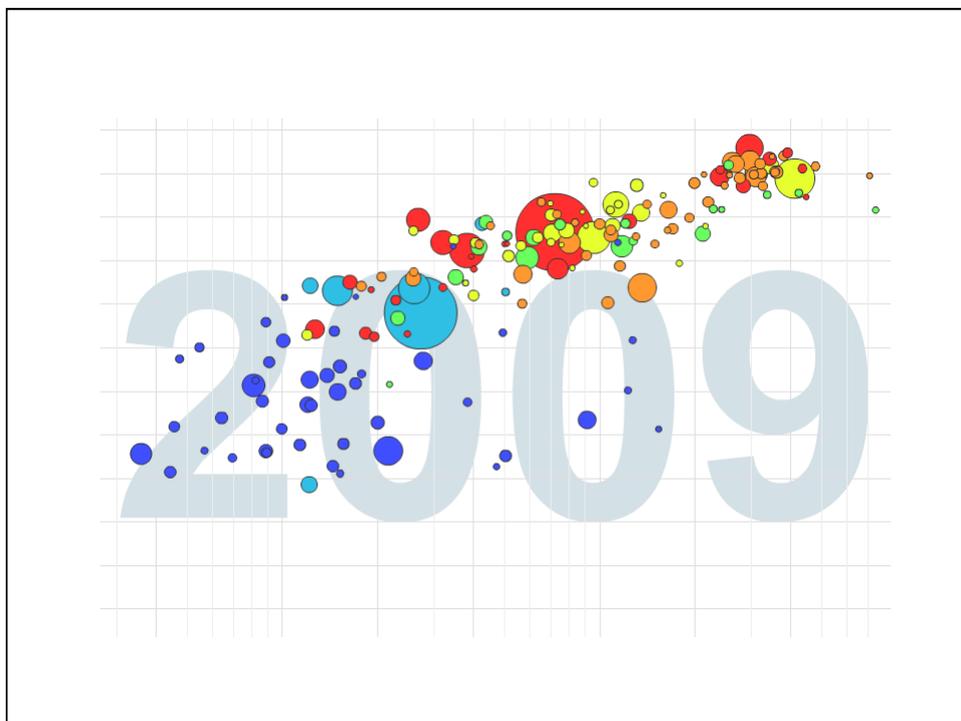












	Graphic Resources	Correspondence	Design Uses
Marks	Size Colour	Mapping (quantity, relative scale)	Mark position identify category (colour) Express magnitude (size)
Symbols	Geometric elements Connective elements	Topological (linking)	Diagram elements Visual rhetoric
Regions	Alignment grids	Containment Separation Framing (composition)	Segregating or nesting multiple surface conventions in panels Accommodating labels, captions or legends
Surfaces	Display medium (web browser)	Metrical (quantitative axes) Image-schematic?	Graphs and charts