Assignment on Graph Decoding, Critique and Re-design

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Graph Decoding

The data items represent UK Treasury major categories Money spending amount in each category and budget deficit

The marks used for the data items are: areas, tree maps; every rectangle here represents one element in the data

The data attributes are: categorical, quantitative

The visual channels used are: Position, Size of area, Color, Shape and texture

Encoding strategy:
- categorical is encoded with area, shapes, and texture
- quantitative is encoded with different size of areas, color, positions

Graph Critique

Issue 1. The whole graph data set does not convey the intention or main message of the visualization.
Why – it is mind boggling, no meaningful order of significance, not help to convey the graph main message for easy understanding.

Issue 2. The color of the encoding does not help easy understanding the graph.
Why – for normal person the color choice seems random and bear no significant for categorical information, nor would help to simplify the decoding for easy understanding.
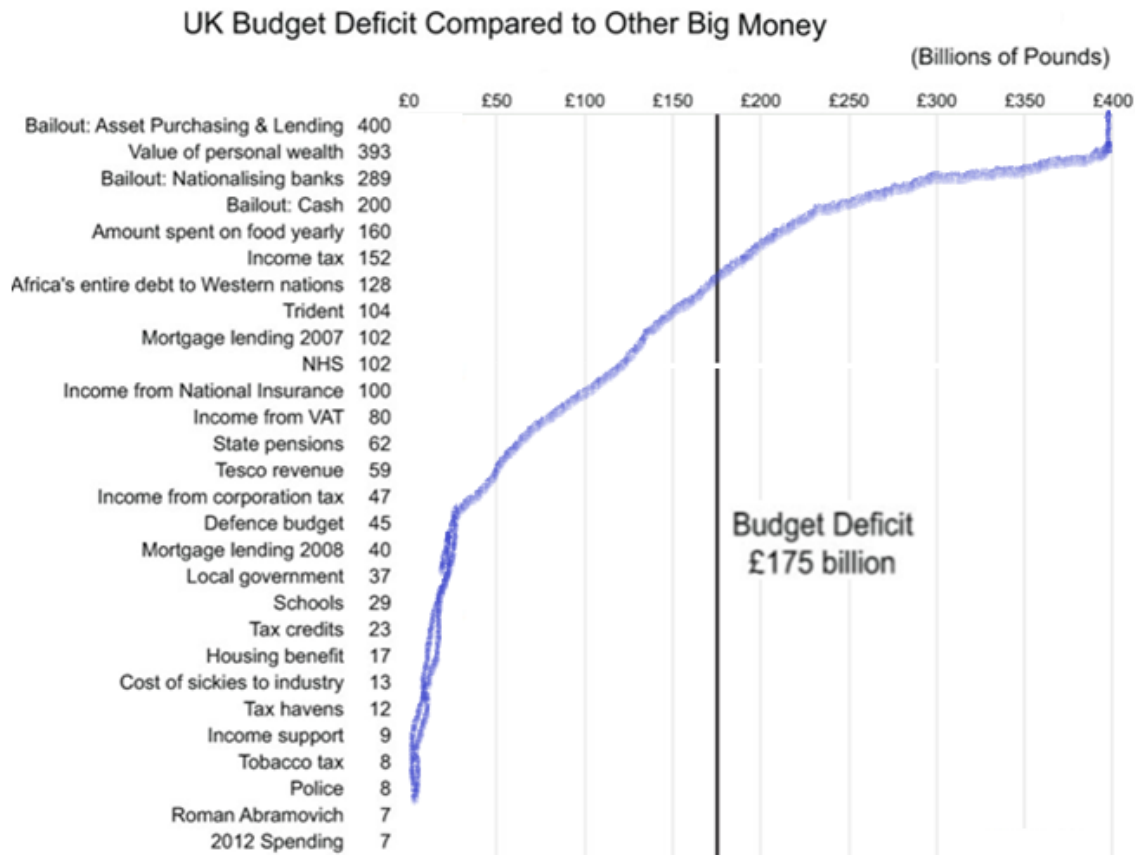
Issue 3. The location/position of the categorical data does not help easy understanding the graph, nor indicate the importance of the data.
Why – the location/position choice seems random and bear no significant for categorical information, nor would help to simplify the decoding for easy understanding.

Issue 4. The texture / font size is not effective
Why – The texture / font size is difficult to read and had to zoom in to understand the intention of categorical data, nor would help to simplify the decoding for easy understanding.

Graph Redesign

UK Budget Deficit Compared to Other Big Money

(Billions of Pounds)

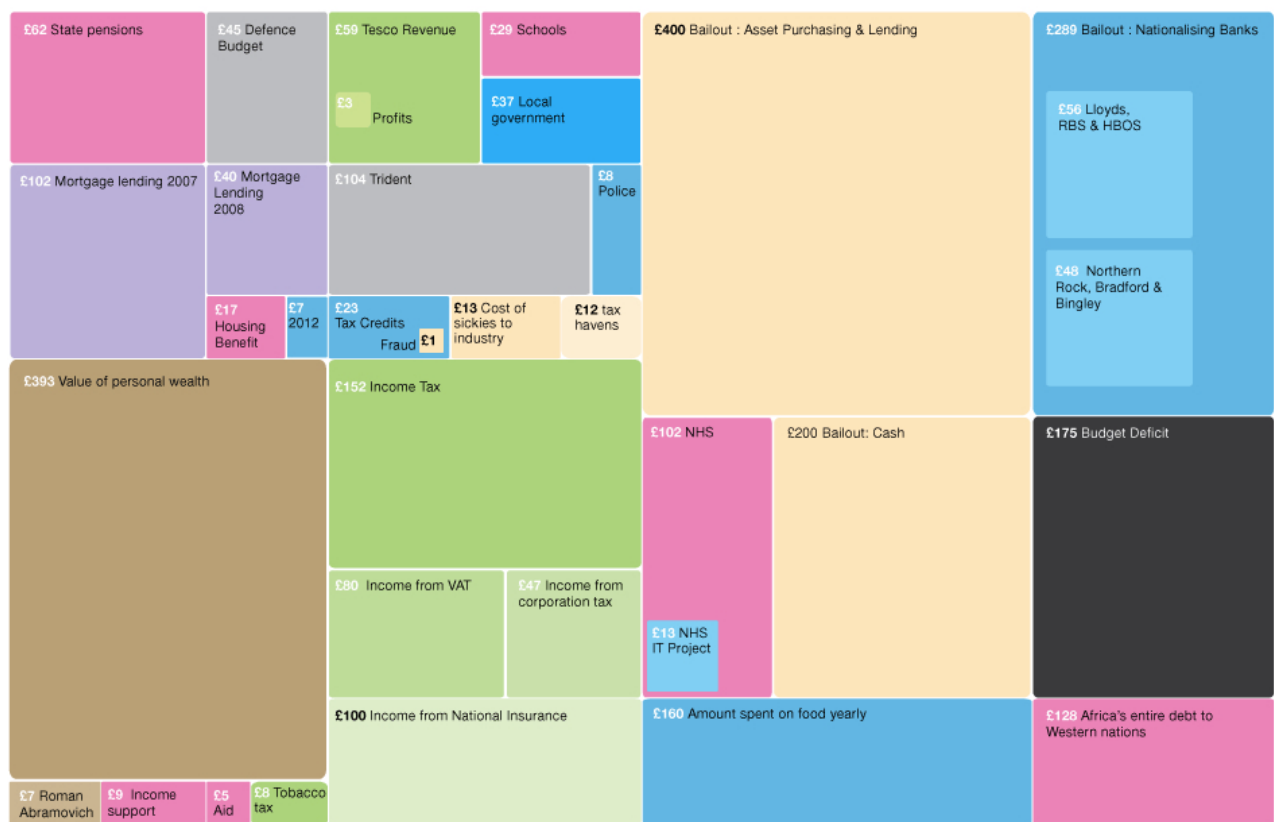| Category	Value
Bailout: Asset Purchasing & Lending	400
Value of personal wealth	393
Bailout: Nationalising banks	289
Bailout: Cash	200
Amount spent on food yearly	160
Income tax	152
Africa's entire debt to Western nations	128
Trident	104
Mortgage lending 2007	102
NHS	102
Income from National Insurance	100
Income from VAT	80
State pensions	62
Tesco revenue	59
Income from corporation tax	47
Defence budget	45
Mortgage lending 2008	40
Local government	37
Schools	29
Tax credits	23
Housing benefit	17
Cost of sickies to industry	13
Tax havens	12
Income support	9
Tobacco tax	8
Police	8
Roman Abramovich	7
2012 Spending	7

Budget Deficit £175 billion

<How to read your sketch>
1. Stated Clearly the re-designed Graph Title for main message of UK budget deficit compared to other big amounts of money
2. Budget deficit and its amount and black line re-draw in the center for effective and expressive representation of main message for quick comparison.
3. Use line char and sequential size from top to bottom to indicate the amount of money
4. Categorical on the left with clear text and quantitative number for easy understanding

<Summary>
        My re-design graph should be effective, expressive, and self-explanatory and clearly convey the main message of UK budget deficit significance comparison. Simple design servers easy understanding.

Original Graph: David McCandless' chart "The Billion Pound-O-Gram"

£62 State pensions

£45 Defence Budget

£59 Tesco Revenue

£3 Profits

£29 Schools

£37 Local government

£400 Bailout : Asset Purchasing & Lending

£289 Bailout : Nationalising Banks

£50 Lloyds, RBS & HBOS

£102 Mortgage lending 2007

£40 Mortgage Lending 2008

£104 Trident

£8 Police

£48 Northern Rock, Bradford & Bingley

£17 Housing Benefit

£7 2012

£23 Tax Credits

£1 Fraud

£13 Cost of sickies to industry

£12 tax havens

£393 Value of personal wealth

£152 Income Tax

£102 NHS

£200 Bailout: Cash

£175 Budget Deficit

£80 Income from VAT

£47 Income from corporation tax

£13 NHS IT Project

£100 Income from National Insurance

£160 Amount spent on food yearly

£128 Africa's entire debt to Western nations

£7 Roman Abramovich

£9 Income support

£5 Aid

£8 Tobacco tax

The Billion Pound-O-Gram

David McCandless / InformationIsBeautiful.net

Giving   Spending   Fighting   Hoarding   Lending   Bailing   Earning

Source: UK Treasury, Guardian