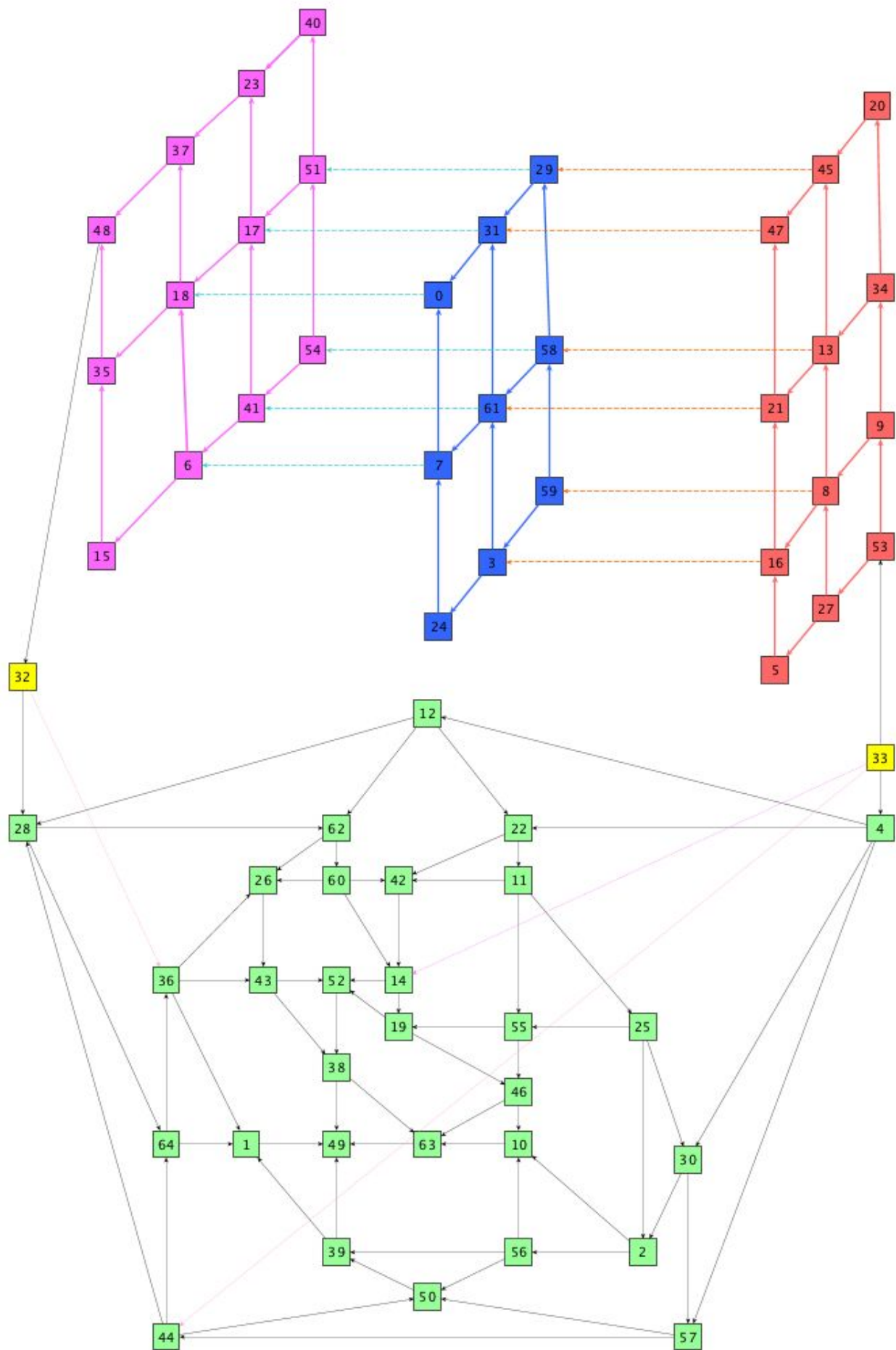


How graph was created (tools, layout)

- yED
- Radial layout
- Created configurations using the Properties Mapper.
 - E.g. Colour for family, marriage family, etc
- Manually changed shape of dead characters
- Manually increase size of node based on number of allegiance (additional 10pix per allegiance).
-

Strengths and weakness



Description Graph 2

How graph was created (tools, layout)

- The graph was constructed using the desktop program yEd Graph Editor.
- The starting graph was to intentionally challenge traditional graph-drawing algorithms.
- There was no layout in yEd that was able to display the graph in an easy to interpret style.
- Different layouts were applied to the graph. The organic layout resulted in the best starting point with less crossovers and more discernible structure compared to other layouts.
- From the organic layout it could be seen that the graph had two distinct sections, a top section and a bottom section. The top and bottom graphs possessed different structure. They were connected by two nodes.
- The top and bottom sections were analysed separately graphs so that they could have layouts applied individually.
- The top area formed a rough latticework structure when the organic layout was applied with default settings (see image x).
- The radial layout (Centre Allocation Policy: Weighted centrality, Circle Assignment Strategy: Distance From Centre, Routing Style: Straight) was applied to the bottom section. This layout showed a 2D collection of lines with a partially symmetrical. The radial layout significantly reduced crossovers (see image y).
- Returning to the complete graph (graph containing the top and bottom sections) nodes were manually moved into place.
- For the top section nodes were moved to clearly display the graphs latticework structure. Node colours, line colour and line texture were used to distinguish the latticework structure.
- For the bottom section nodes were moved to minimise cross over. Vertical and horizontal lines were used as much as possible to maximise graph readability.

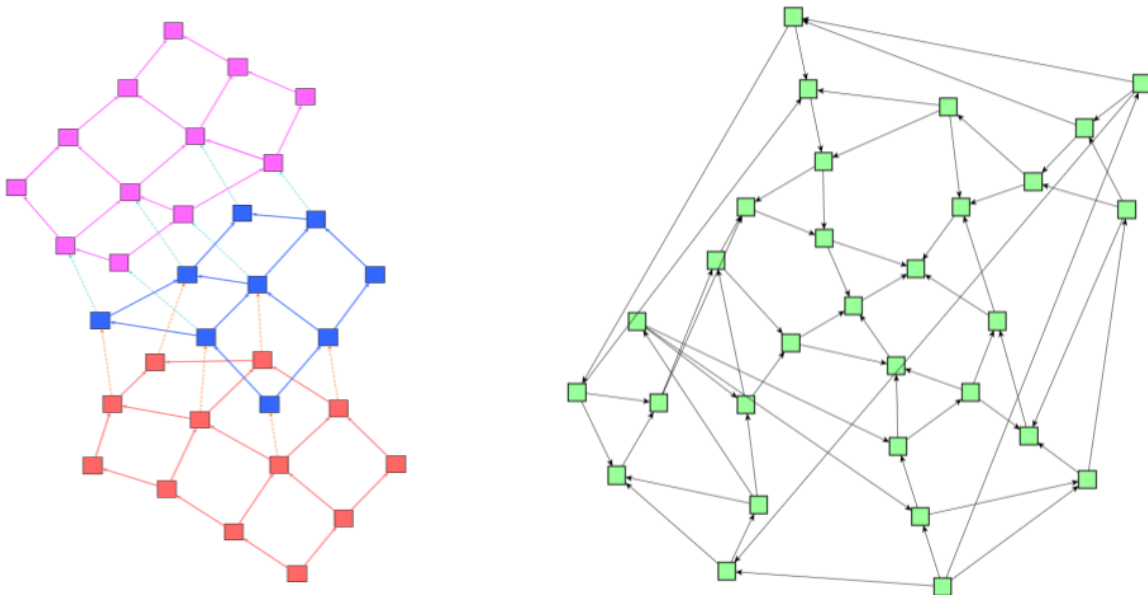


Figure x and y:

Strengths and weakness

- Clear visualisations of the graph.
- Colour and line texture used well to separate distinct graph sections.
- Dashed lines effectively used to prevent confusion when lines cross over each other.
- Vertical and horizontal lines maximised in 2D “bottom” section of graph.

Weakness

- Creation of the graph was very manual.
- Line crossover was unavoidable.