TREES:
Data Visualization in Genealogy

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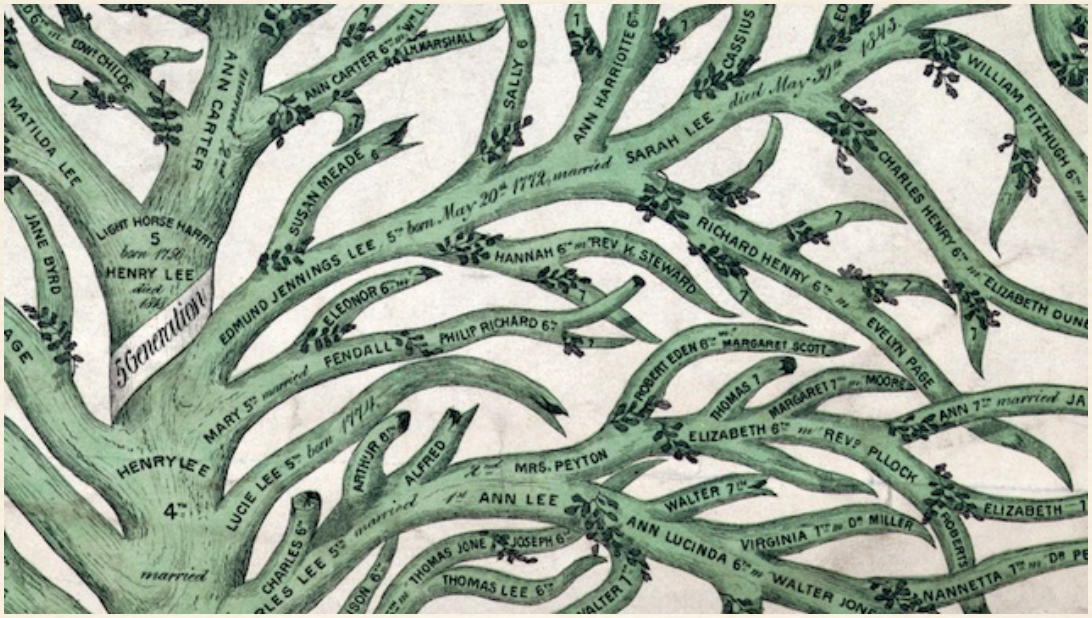


"It's tempting to think about visualization as this new discipline, rising to meet the demands of our century, but this is not a new problem. In the 12th century in Medieval Europe, we had all this information coming form the ancient world—Greece and Rome. We had to figure out ways to make sense of this huge flood of new knowledge. And that's exactly when the tree metaphor becomes so strong—because they realize that text isn't enough."

– Manuel Lima, *The Book of Trees: Visualizing Branches of Knowledge*

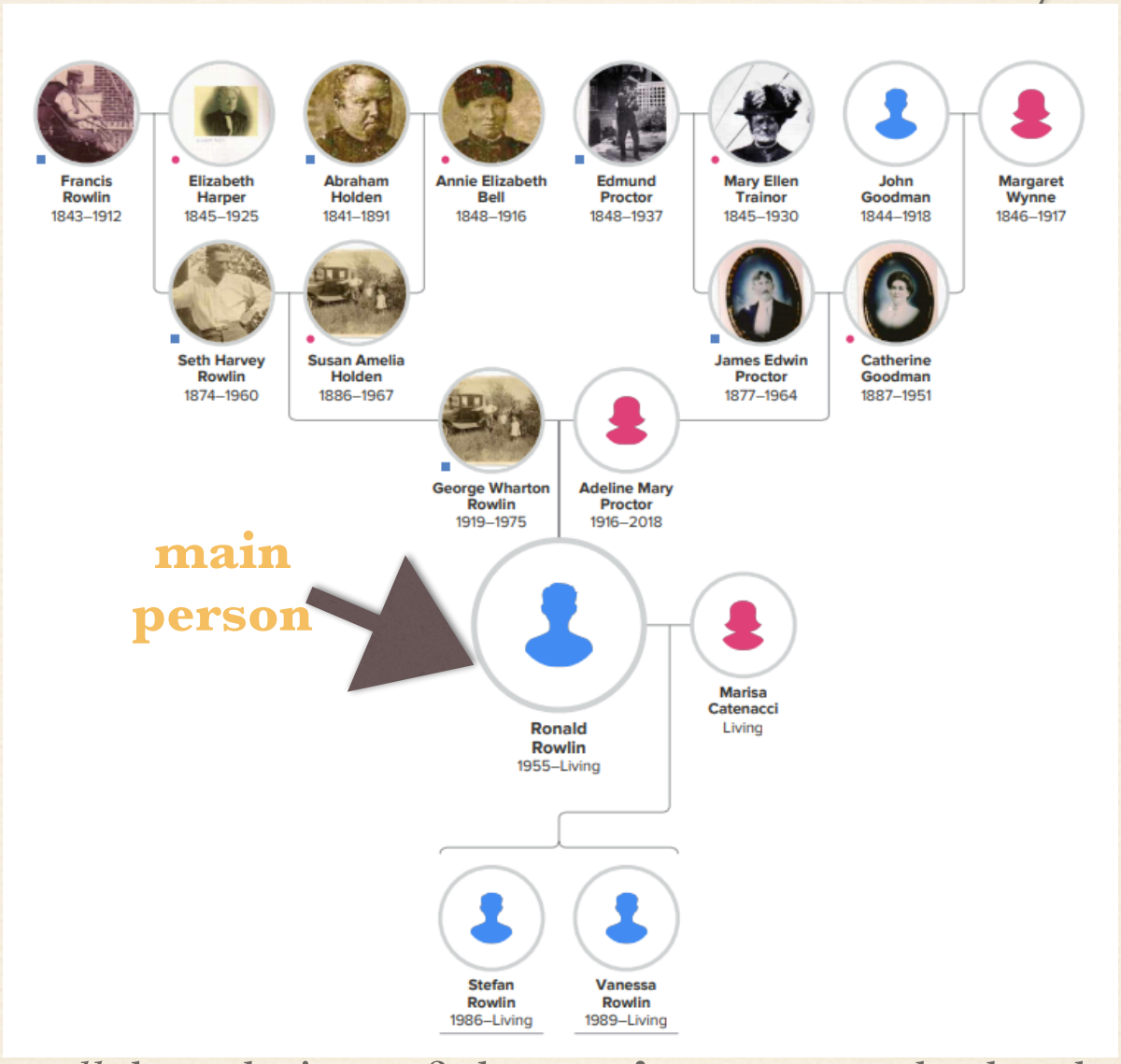
Types of Traditional Family Trees

- Hourglass Chart: combines an ancestor chart with a descendant chart on the same main person
- Bowtie Chart: shows the main person at the centre next to one spouse, their ancestors on either side, and their children below
- Ancestors Chart: shows all ancestors of the main person
- Descendants Chart: shows all descendants of the main person, from all spouses of that person
- Fan Chart: displays either all descendants of the main person or displays all ancestors of the main person

My Favourite- Fan Chart

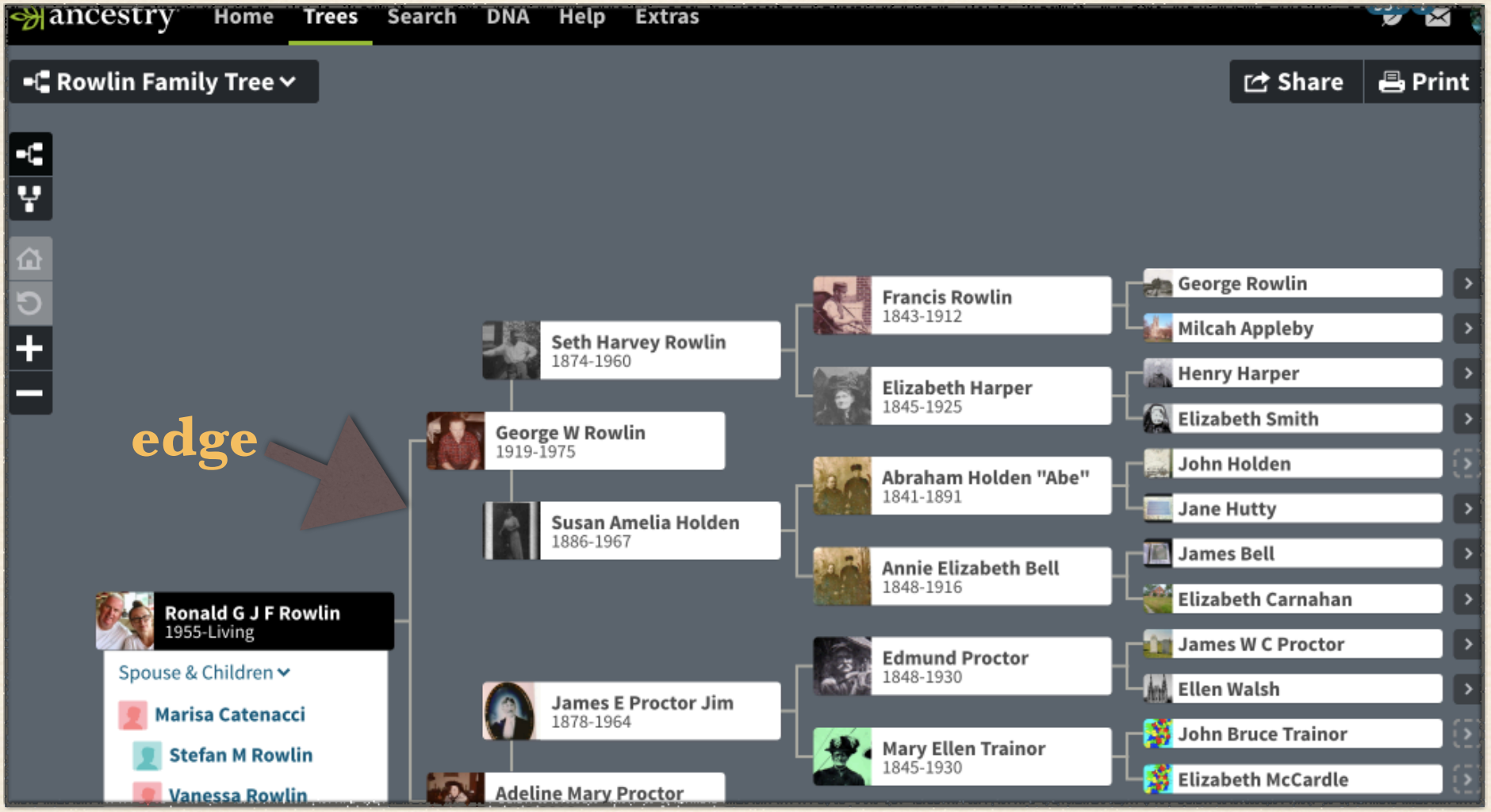
Some companies even print out on a 3D printer!

More Traditional Family Trees

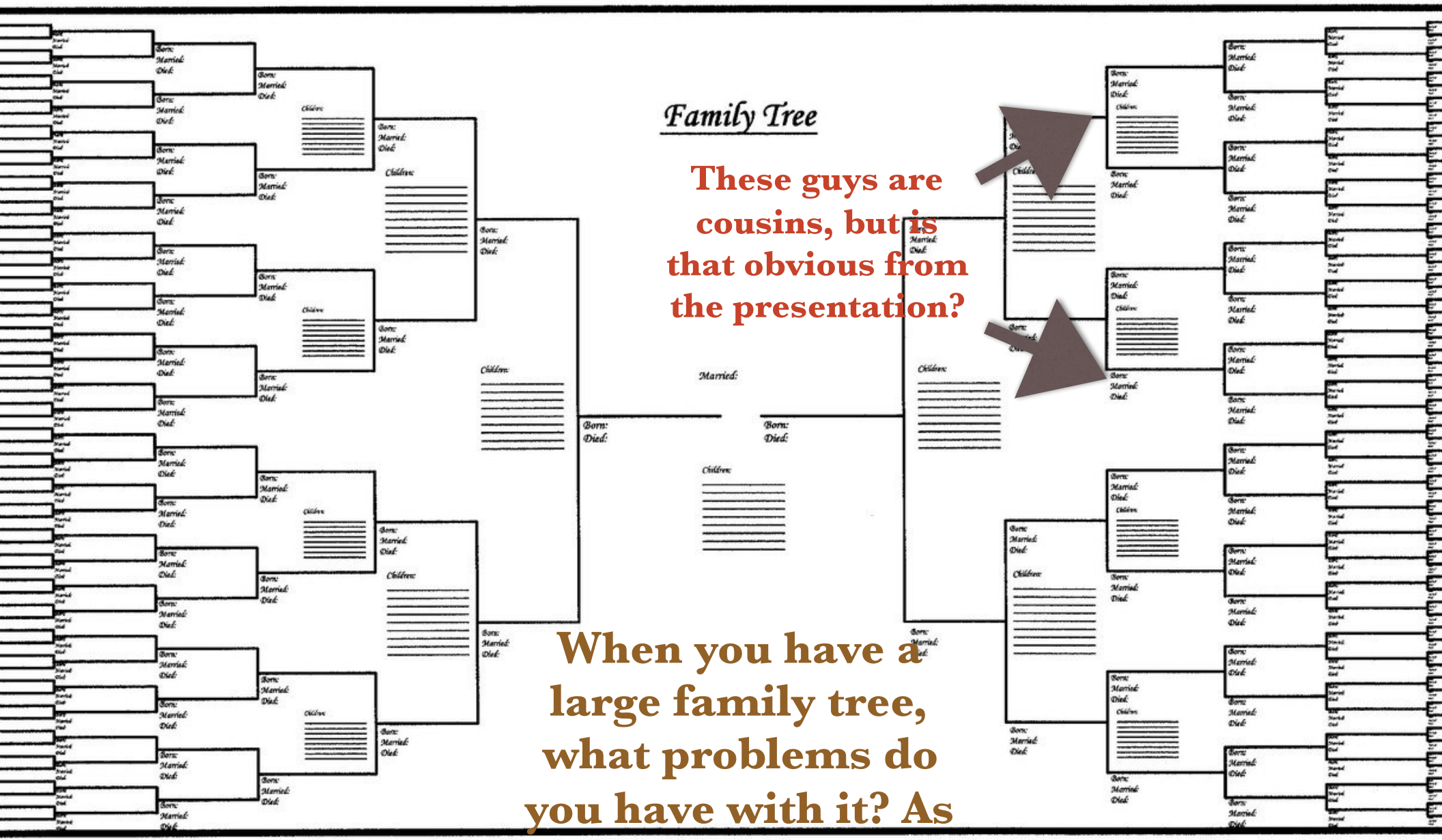


They show *all* the relatives of the **main** person, whether by blood or marriage

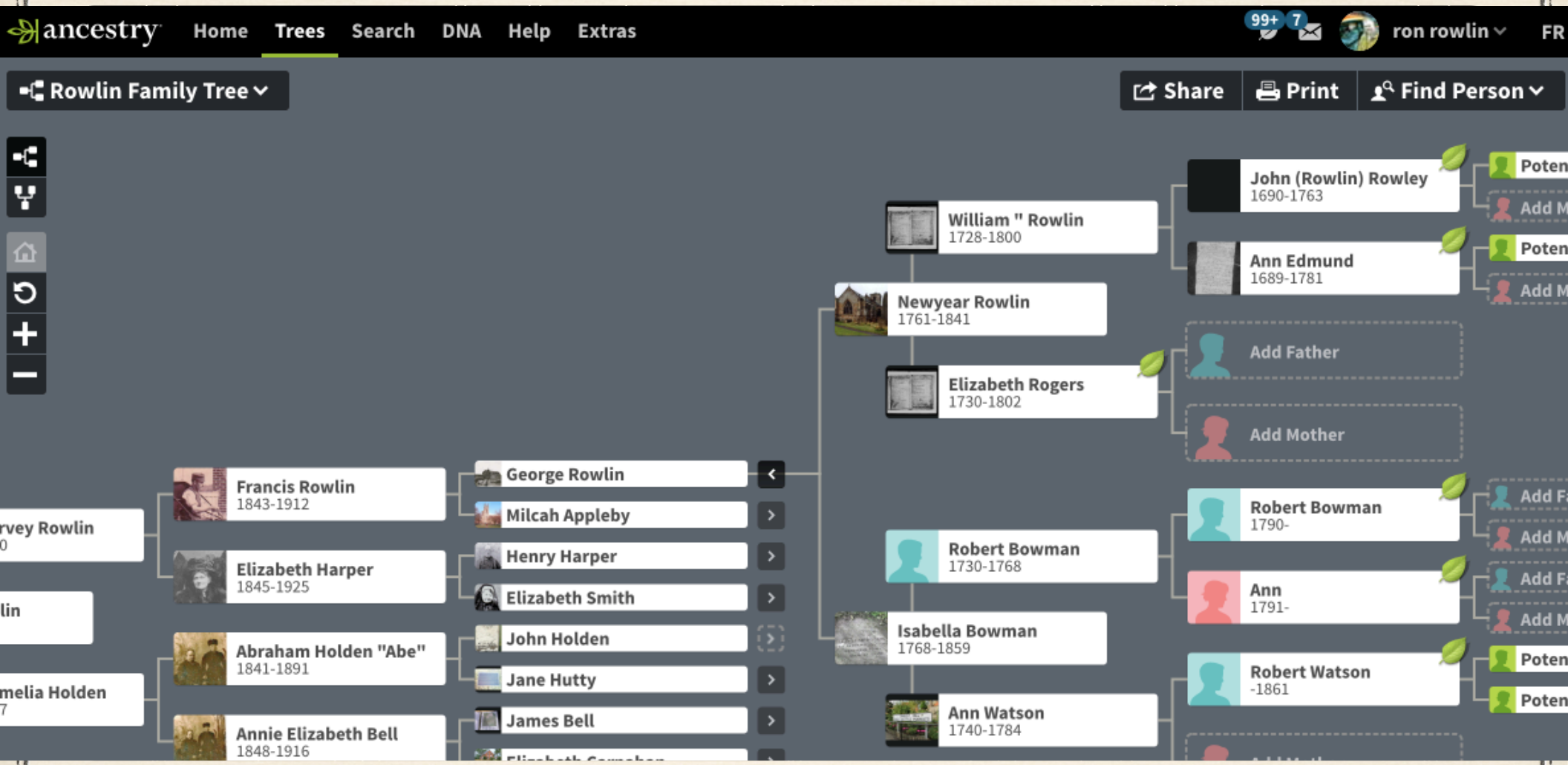
More Traditional Family Trees



Typically drawn in a node-link fashion and connected by **edges**


Family Tree
These guys are cousins, but is that obvious from the presentation?
When you have a large family tree, what problems do you have with it? As a researcher? As a visual representation?
Exponential Crowding
Generational Absence

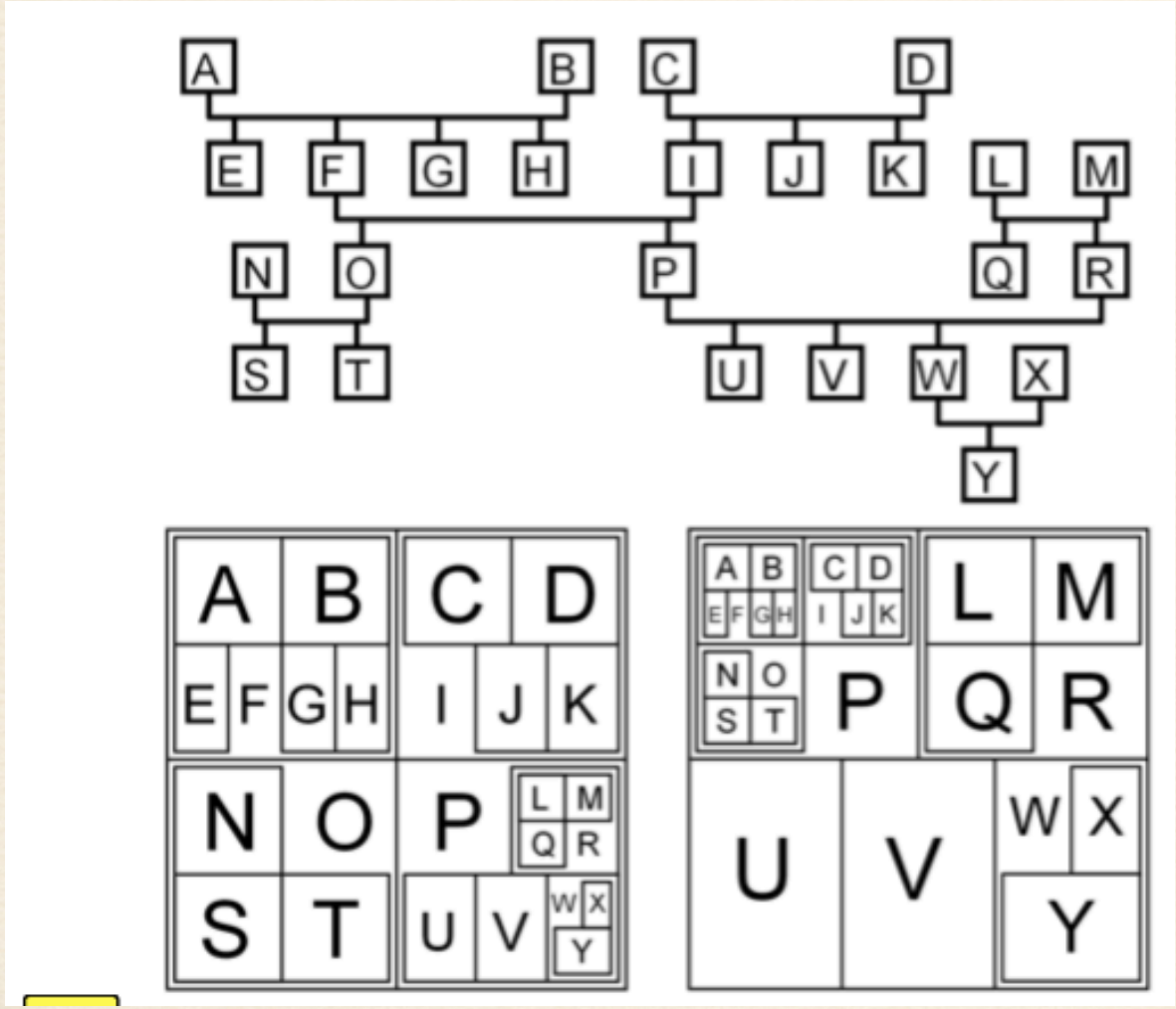
Commercial Solutions to Exponential Crowding



Display subgraphs automatically laid out and move between subgraphs

McGuffin & Balakrishnan (2005)

NEST CONTAINMENT STYLE

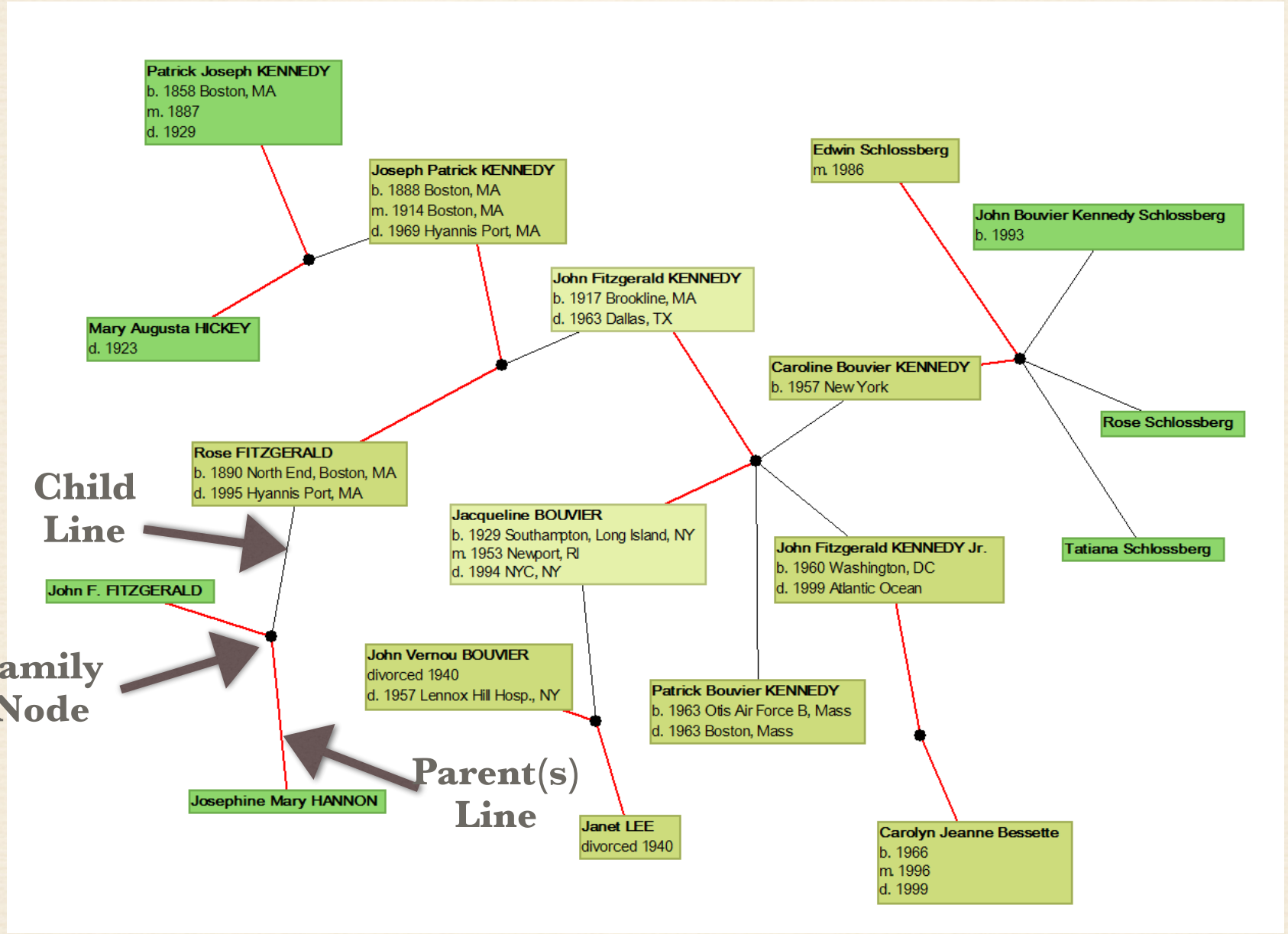


It works on the assumption that you are part of two nuclear families; one where you are a child and one where you are a parent and it can accommodate when there are more than 2 parents without overcrowding or long edges.

What potential issues do you see with this? Consider your population.

Unfamiliarity

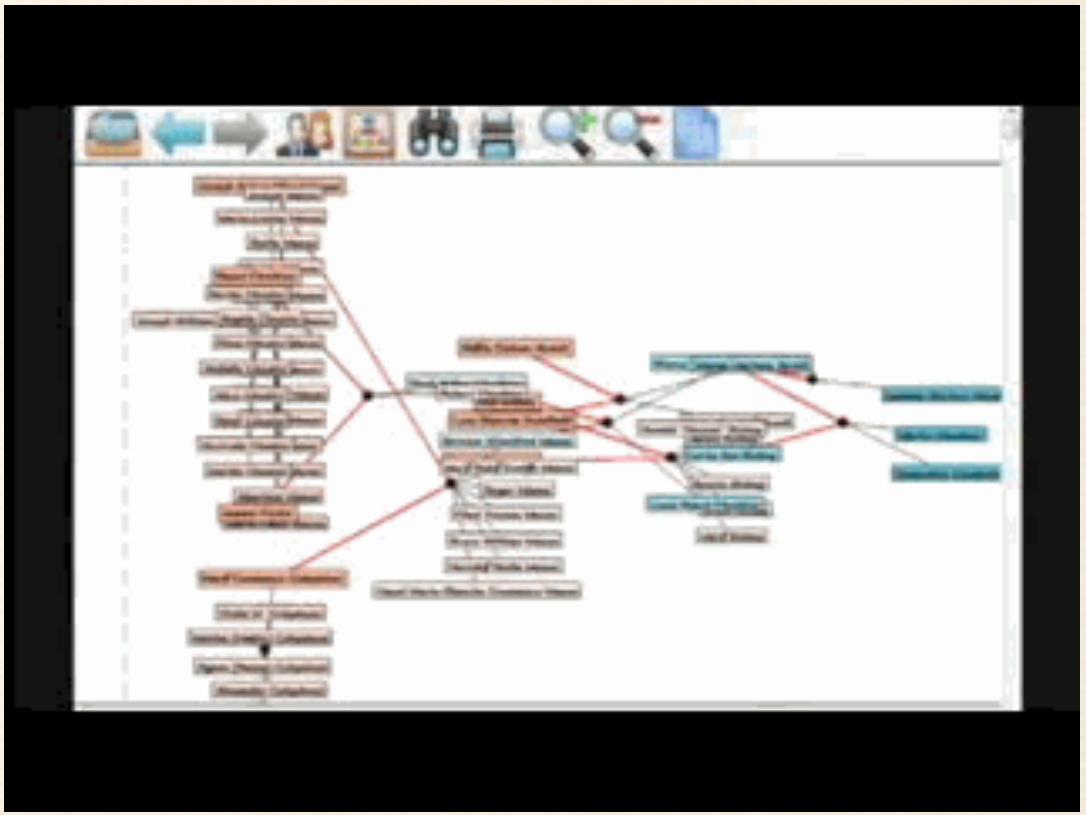
The Dandelion Chart



The Dandelion Chart

- the nodes (people) are scattered to minimize cross-over of lines.
- spreads out in all directions, and includes the ancestors of the spouses (not in the bloodline)
- You can move the boxes around by clicking on them with the mouse, and dragging them

What does this remind you of? Hmmm




Thank You