Graph prototype examples

# Ancestor fan

Ancestor fan for Hebe, generated by Legacy 9

A close up of a sign

Description automatically generated

Quarter ancestor fan, generated by Legacy 9

A close up of a sign

Description automatically generated

# Booklet graph

Descendants of Chaos – factual – using Legacy 9

A screenshot of a cell phone

Description automatically generated

Descendants of Chaos – narrative – using Legacy 9

A screenshot of a social media post

Description automatically generated

# Force-directed graph layouts

D3JS

<https://d3-wiki.readthedocs.io/zh_CN/master/Force-Layout/>

Force-directed tree layouts: <https://bl.ocks.org/mbostock/1062288>

**Pros**: A standard method for visualising DAGs

**Cons**: Parents, children, siblings and spouses are indistinguishable

# Collapsible force-directed graph layouts

Each of the nodes collapse, and is a specifically hierarchical graph structure

**Pros:**

* Useful if have multiple-generations, as would make the graph visualisation more impactful, and there would be more data to collapse
* Collapsibility means ease of access to needed data, not overwhelming

**Cons:**

* Data structure doesn’t allow showing relationships between parents. Only single parent -> list of children
* Doesn’t allow for sibling connections
* Not as useful for small numbers of generations.
* Can’t do disputed relationships (have to enter the disputed parent twice)
* Even need to duplicate entire child list for each parent
  + For example, had to remove “Zeus” relation and “other parent” relations in order for the graph to even render and not duplicate nodes.
* In order to even show the other parent, had to put it inside the parent tag. But also nodes cannot be self-referential as it turns out.
* Would work for \*either\* ancestor \*or\* descendants list
* Turns out won’t work because it just duplicates the child for each other parent
* Can’t combine parents!!!

In retrospect, doesn’t actually work because would

# Force-directed trees

<https://observablehq.com/@d3/force-directed-tree>

Same issues as above with collapsible force-directed graph layouts

# Radial tree

Radial cluster dendrogram

<https://bl.ocks.org/mbostock/4339607>

<https://observablehq.com/@d3/radial-tidy-tree>

**Pros:**

* Quite intuitive
* Clear centre point, well-dispersed leaf nodes
* Good use of labels in leaves

**Cons:**

* Can’t really do siblings.
* Can’t distinguish between siblings, children and spouses.
* Can only do ancestors OR descendants.
* Multigenerational but only in one direction (like Legacy 9)

# Balloon tree

# Treemap layout

<https://d3-wiki.readthedocs.io/zh_CN/master/Treemap-Layout/>

# General hierarchical graphs

D3JS+D3JS and Graphlib

Prototype 1

A picture containing text

Description automatically generated

Prototype 2 & 3

Top half inclusive bordering

Bottom half angling

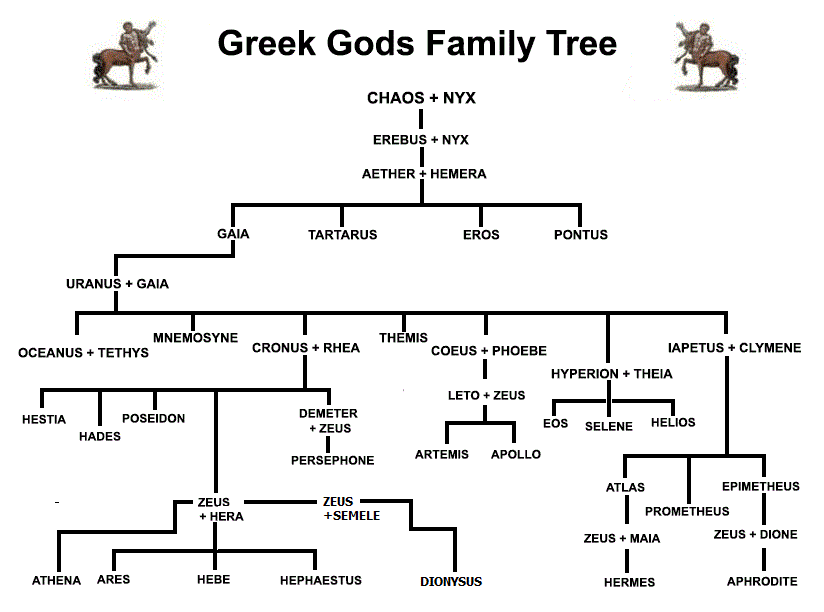
A picture containing screenshot

Description automatically generated

# General family tree structures

Repeating duplicate names

Not really able to highlight incestuous relationships.



Ancestor and descendant diagrams (separate) for entities – Legacy 9

Vertical genealogical graph

A close up of a computer

Description automatically generated

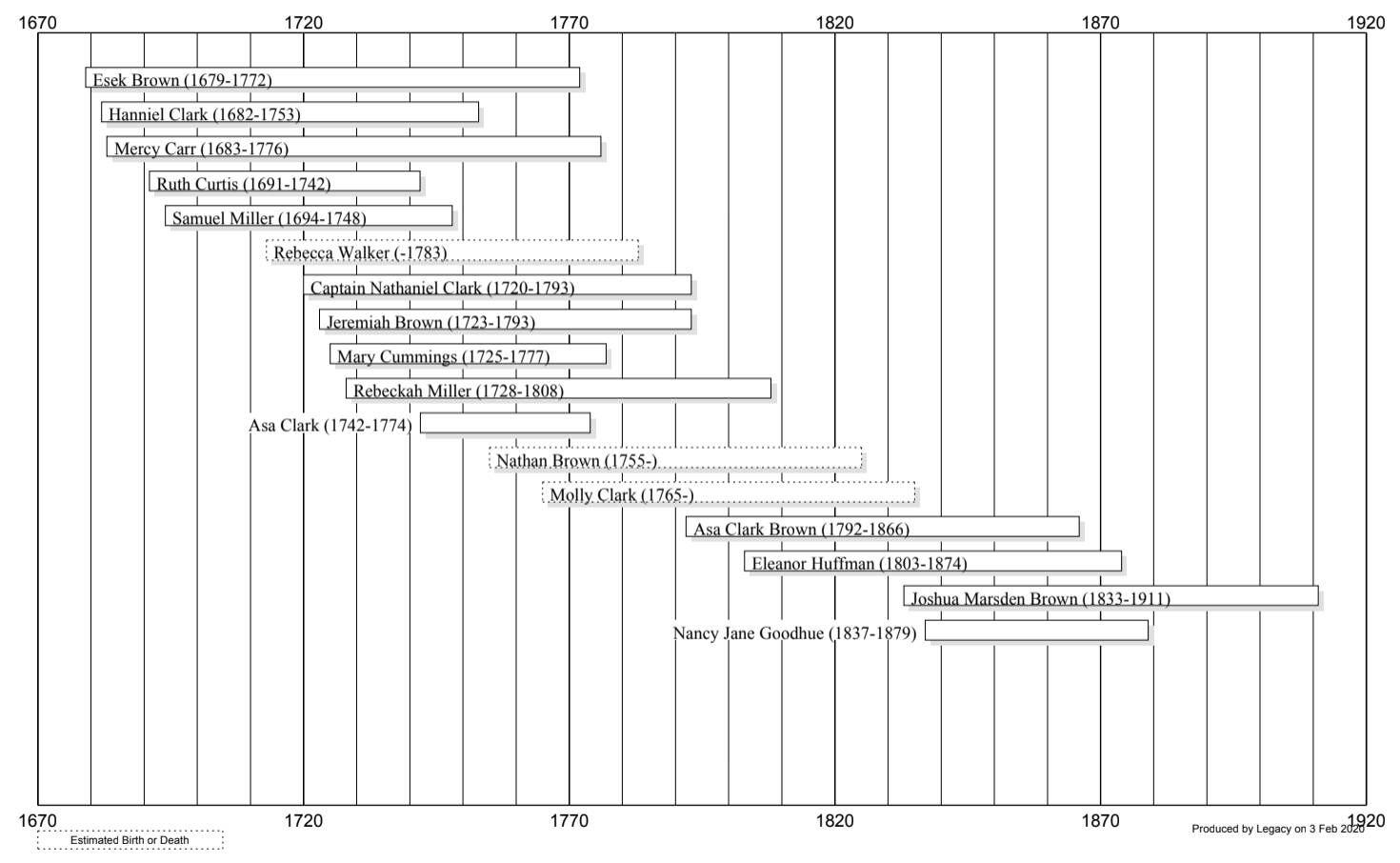
Horizontal genealogical graph

A picture containing screenshot

Description automatically generated

# Incompatible graph layout types

1. TimeNets
2. Timeline graph



1. Chordal diagrams

Based on Hott research paper as a respresentation of polygamy. Difficult to understand.

A screenshot of a cell phone

Description automatically generated