Title: Understanding Tree Diagrams

[Closeread Section Begins]

A tree diagram is a tool used in mathematics, probability, and statistics to calculate the number of possible outcomes of an event or problem and to systematically list those potential outcomes. **[Insert image of a tree diagram]**

In data visualization, this technique is also used to visualize hierarchical relationships within data.

They can also be referred to as `organizational charts` or `linkage trees`.

Tree diagrams can have different layouts, such as `radial`, `vertical`, or `horizontal`, but the underlying concept remains the same.

[Display the images of different layouts]:

- Radial layout **[insert tree_radial.jpg]**
- Horizontal layout **[insert tree_hor.jpg]**
- Vertical layout **[insert tree_vert.jpg]**

[Story continues]

Now, let's examine the structure in more detail.

Tree diagrams comprise two major components:

1. Nodes
2. Branches

Nodes:

Nodes represent the different elements or entities within a hierarchy. Each node typically signifies a decision, category, or outcome, depending on the context. In this chart, each node is represented by a point marker. **[Insert tree_radial.jpg Image and apply focus effects]**

1. **Root Node**: Root nodes are the topmost elements and have no parent.
2. **Internal Nodes**: Internal nodes represent intermediary elements that have both parent and child nodes.
3. **Leaf Nodes (End Nodes):** Leaf nodes are the endpoints, representing the final or terminal elements in the hierarchy.

Tree diagrams are very useful in various fields, such as organizational management, decision analysis, and data classification, as they clearly depict the structure and relationships within a system.

And, of course, they are also used in many creative and visually appealing ways to achieve these purposes. Now, let's look at a few examples!

Like this one by Andreea Scintei [Andreea Scintei](#)**[Cite]**, where it was used to visualize the relationships in **The Expanse [Insert trigger for image and apply focus effects]**

And check this one out, also by Tristan Guillevin, the mastermind behind one of the most intuitive tree diagram generators **[Cite]** you'll find anywhere on the internet (and did I mention it's free? 😊). **[Insert trigger for image and apply focus effect]**

Okay, the last one (I promise 😆): Here is another tree diagram by Patrick Sarsfield **[Insert trigger for image]**

[Here, list all the stickies referenced in the story in chronological order]

[Here, insert all references]

[1]: _Image Credit [Andreea Scintei](https://public.tableau.com/app/profile/andreea.scintei/viz/TheExpanseDataPlusTV/DataPlusTV TheExpanse) via Tableau Public._

[2]: _[LaDataViz](https://www.ladataviz.com/tools/advviz/tree) develops a range of tools designed to simplify and enhance the data visualization process, particularly for Tableau users._

[3]: Image Credit: [Patrick Sarsfield](https://public.tableau.com/app/profile/patrick.sarsfield/vizzes)

[Footnote]

Follow me on LinkedIn for more data visualization and storytelling tips! [Kenneth Odoh](https://linkedin.com/in/kenneth-odoh)

[End of Closeread section]