VizShapes Reference Implementation and Qualification

Design Language

Shape Definitions and Variations

Name	Base	Rotated	Sizes			Notes
Story Arrow						They do not have labels
Angular Bend		none				none
Bus						There are only 3 types
Leading Arrow						Arrow shape is limited by PowerPoint but should be different than illustrated
Bended Arrow			none			Arrow shape is different.

NOTE: Also talk about what types of transformations are valid… e.g. they can change colors, can be rotated or not, if they become large or smaller does the arrow size change, ….

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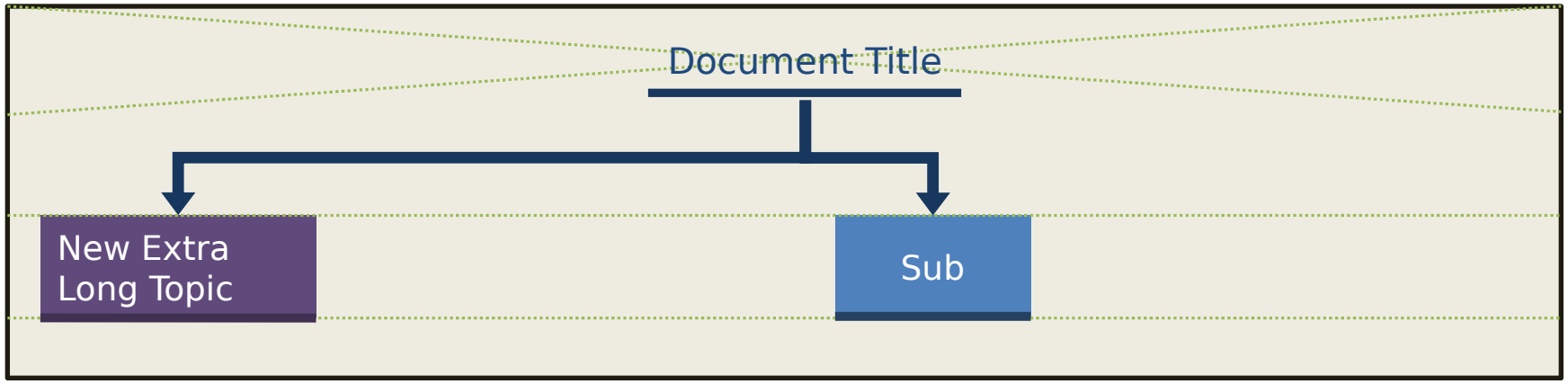
Category (Horizontal)

Reference Diagram



Implementation Details:

1. Edge and arrow thickness is adjustable.
2. Nodes may have borders and backgrounds or be transparent.
3. If one line, content is vertically and horizontally centered in their respective containers.
4. If content overflows to two lines the alignment changes from center to left.
5. The font-size of the content is adjustable.
6. Title is horizontally centered in the viewport.
7. The horizontal bus can assume various lengths.
8. The parent position is not necessarily centered with respect to children.
9. Containers can automatically grow and shrink based on content both vertically and horizontally.
10. All categories of a single depth should be the same height.
11. There is a maximum and minimum width.
12. Colors can be inherited and overridden.
13. Document Title is always one line in height

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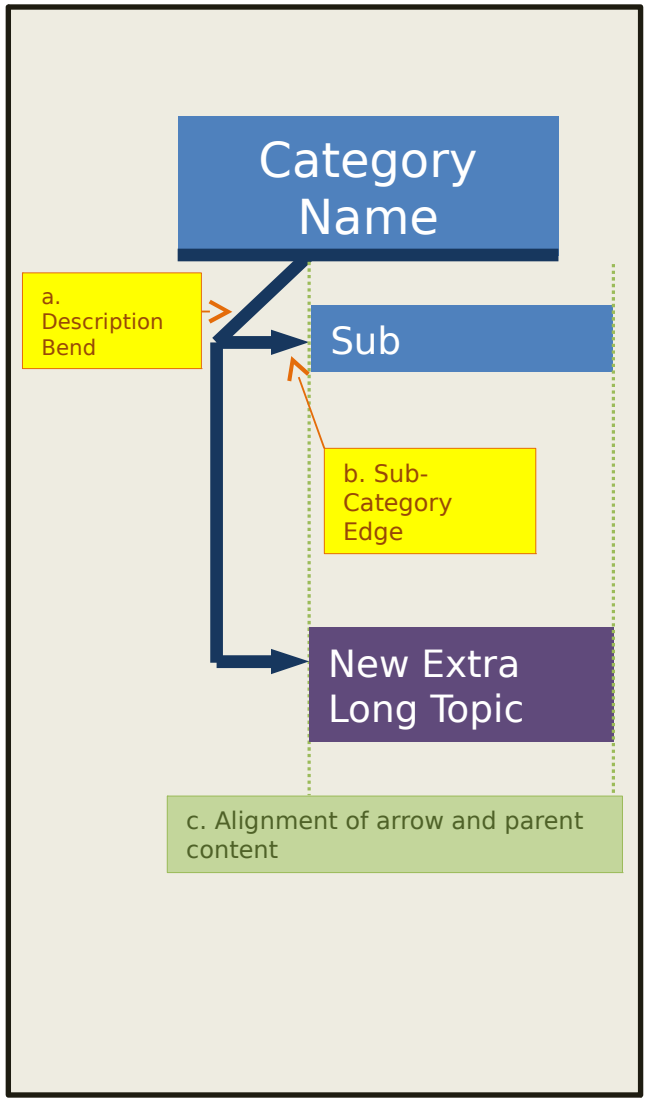
Category (Vertical)

Reference Diagram

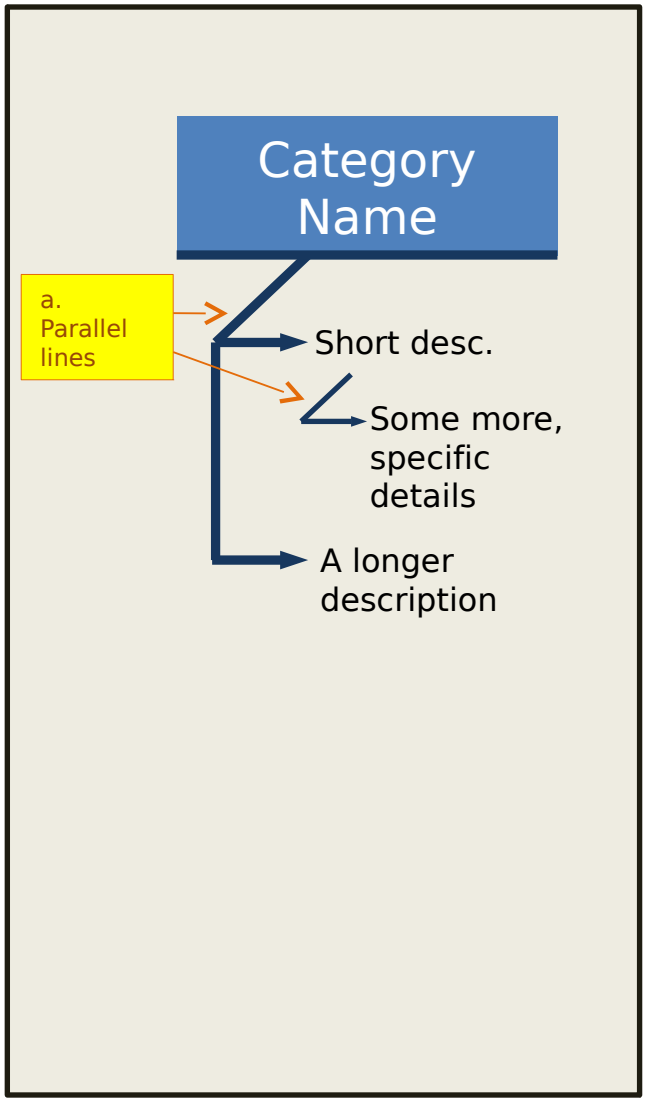


Implementation Details:

1. Content is left aligned.
2. Parent node edge begins on the left, in the vertical middle of the last content line.
3. The edge bends downward and leftward.
4. The edge that comes to each category (B) is equal to the horizontal distance of the leftward bend.
5. The edge is aligned to the vertical middle of the first line of the content of the child categories.
6. The Description Bend (A) should be a static and constant angle (TBD)

Description

Reference Diagram

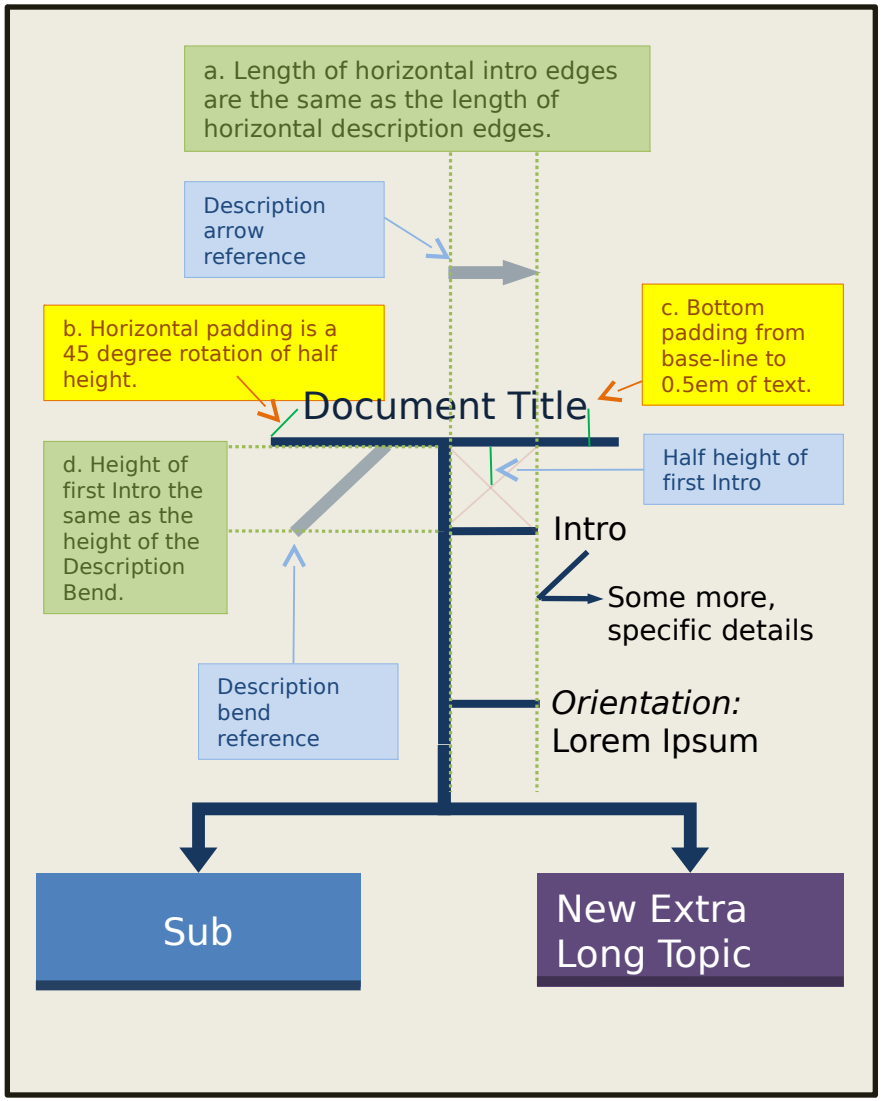


Implementation Details:

1. Identical to Category (Vertical)
2. Bus lines are thinner.
3. TODO:
    1. Define vertical distance between paragraphs
    2. Define difference in bend length

Intro

Reference Diagram



Implementation Details:

1. Vertical bus is center aligned.
2. Children take on same rules as descriptions.
3. There are no arrows to the first depth content.
4. The width and height of the edges map strongly to those of the Description.

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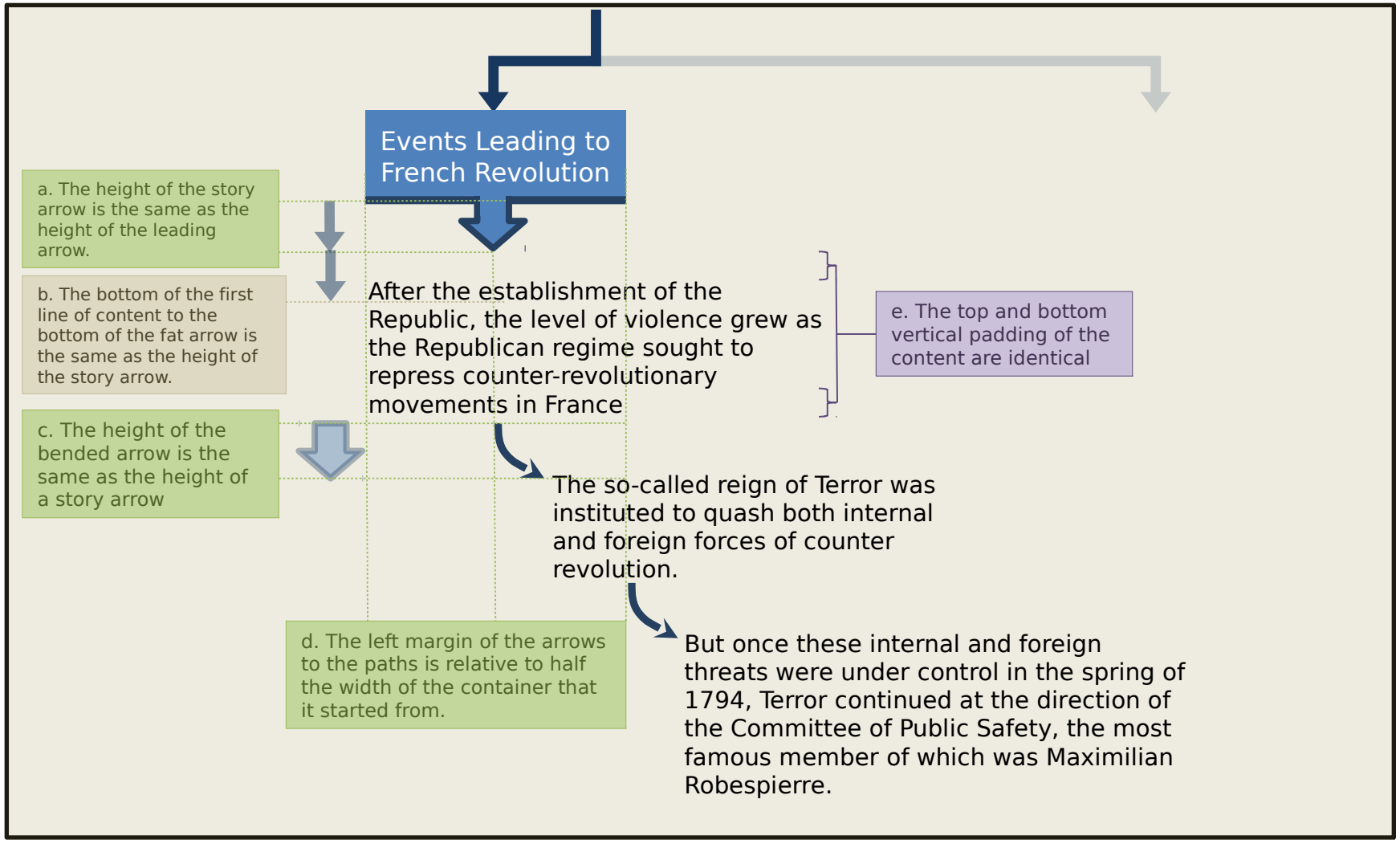
Path (Vertical) Diagram

Reference Diagram



Implementation Details on next page.

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Path (Vertical) Implementation

Implementation Details:

1. As the width of the category increases, the horizontal distance between the Path's description nodes increase.
2. The width of the Path's description nodes are consistent with the width of other description nodes.
3. Note that the arrow end-points of the bended arrow have a curvature

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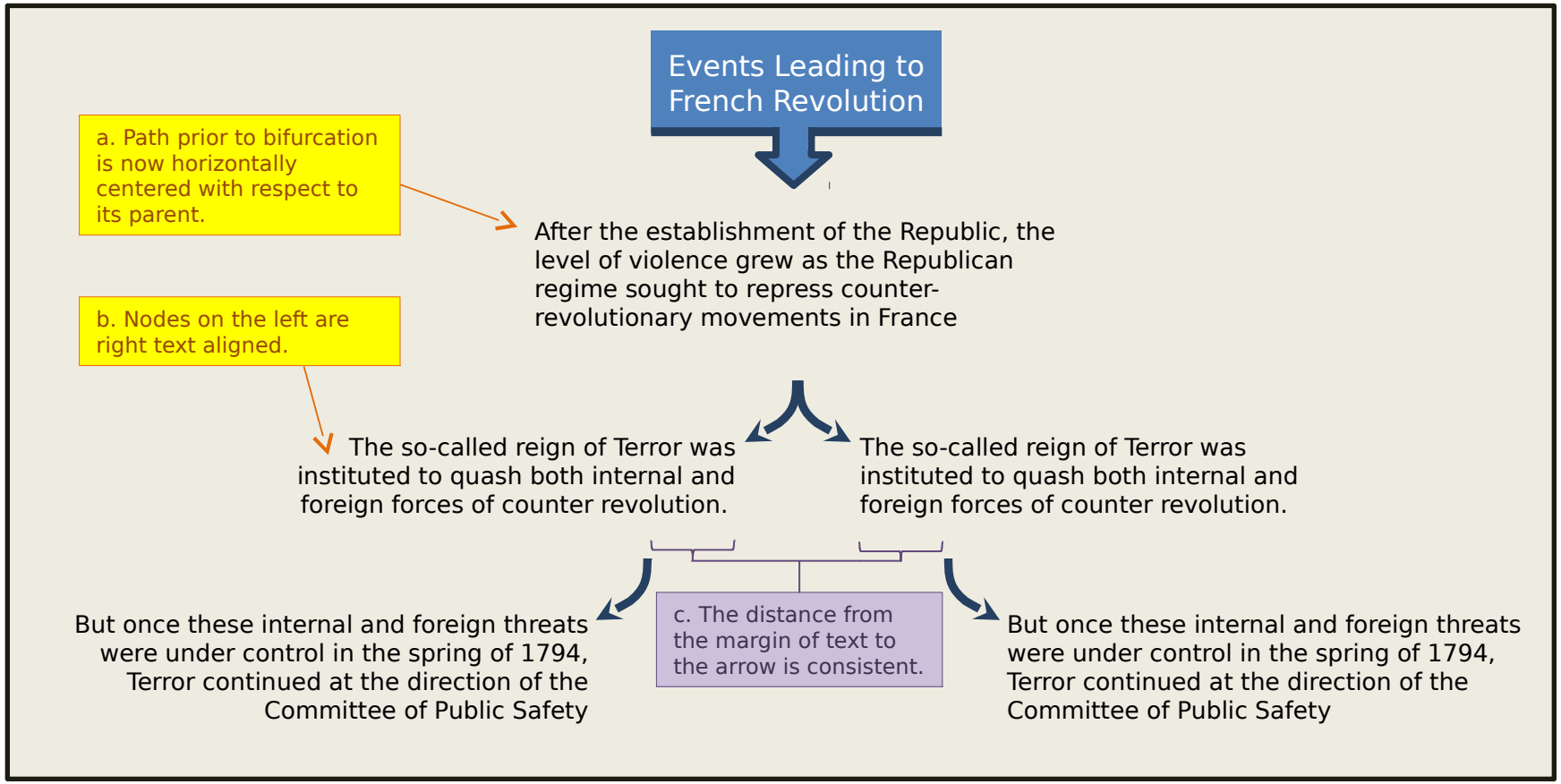
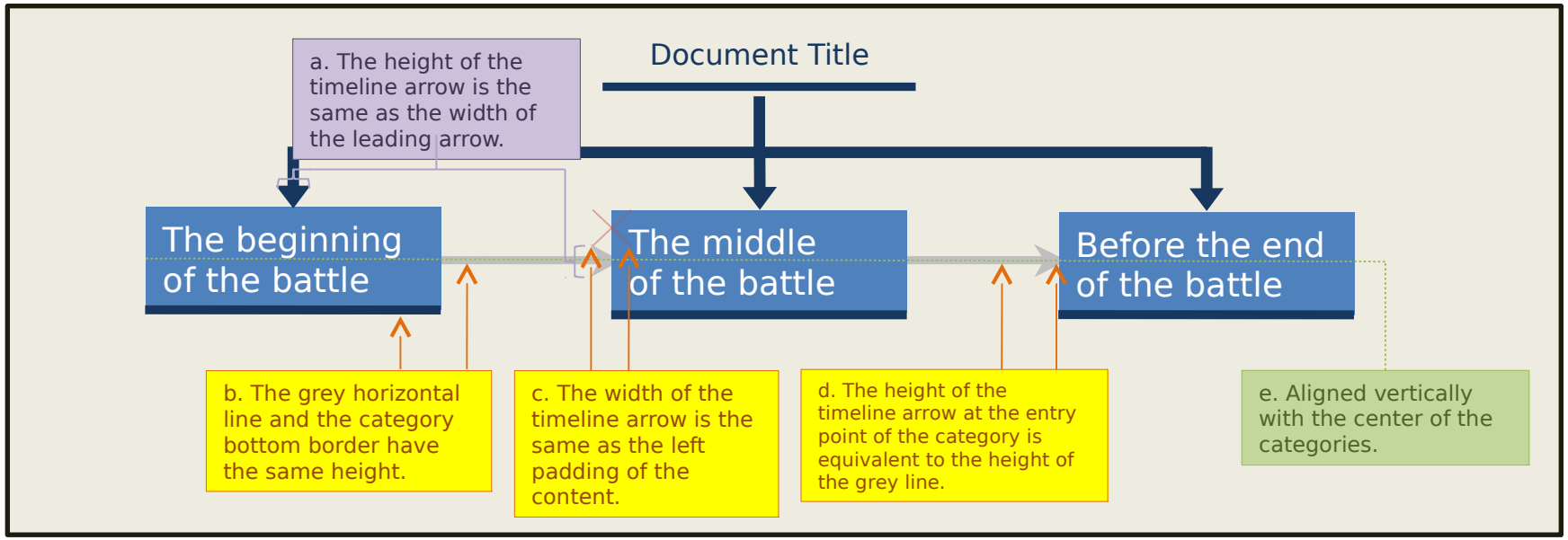
Path (Vertical) Bifurcation

Reference Diagram



Path (Horizontal)

Reference Diagram

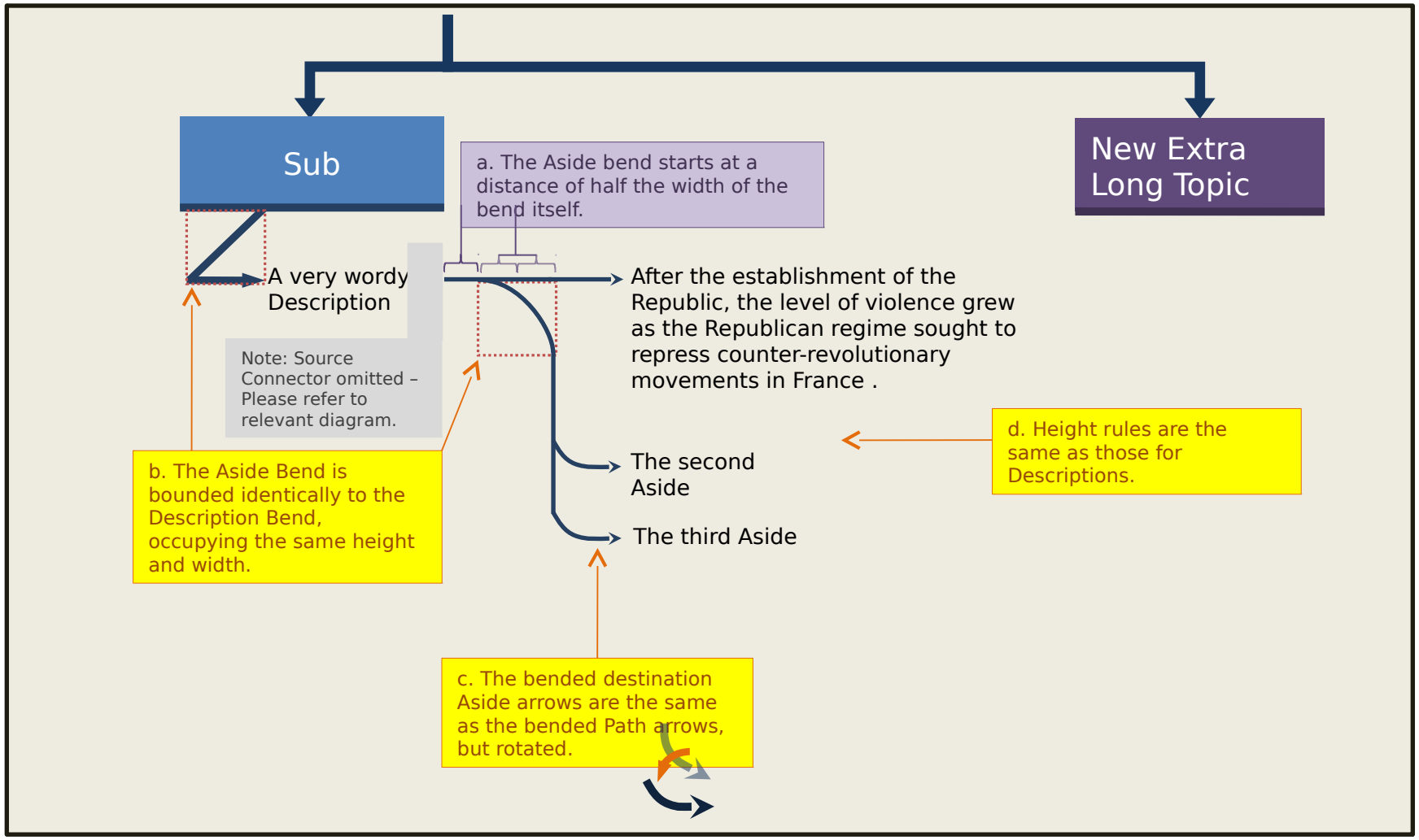


Implementation Details:

1. There is no special rule for the spacing in between the categories under horizontal paths.
2. The “timeline” line is a consistent color regardless of group coloring rules.
3. Since Horizontal paths appear only at the first depth level of the document, there is only one line and arrow height.
4. The arrow heads for horizontal paths are globally unique amongst arrows.
5. The arrows do not have labels or any textual content.
6. They are always visible (so long as the things they connect to are).

Aside

Reference Diagram



Implementation Detail: Asides act as a second column of Descriptions.

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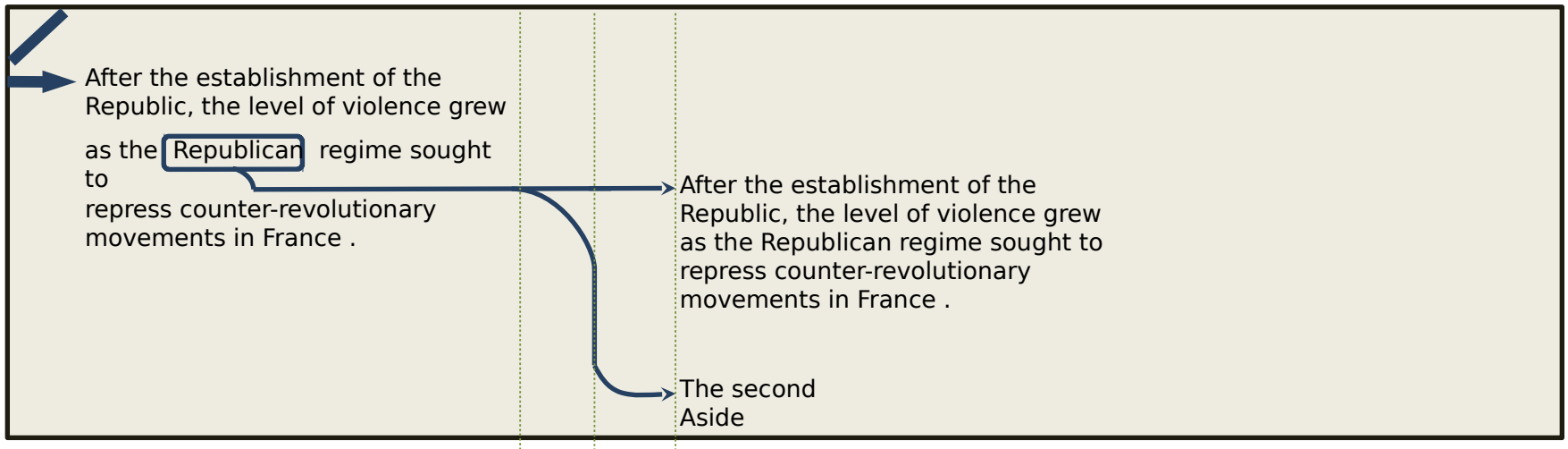
Source Connector Diagrams

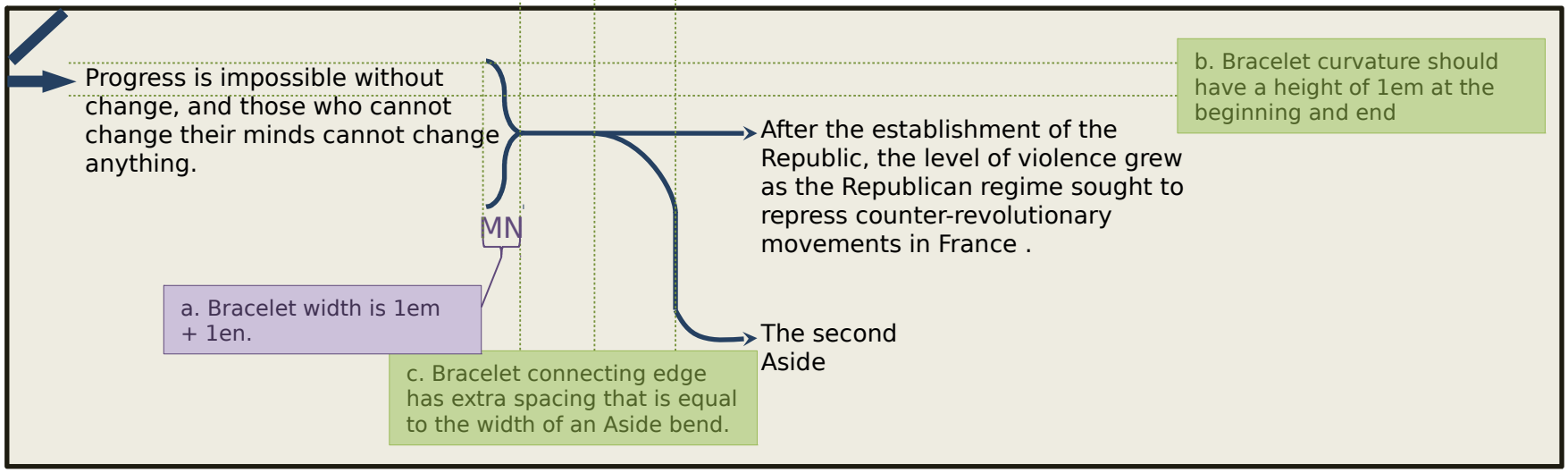
Circle Diagram

Reference Diagram



Bracelet Diagram

Reference Diagram



Implementation Details on next page.

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Source Connector Implementations

Circle Details:

1. Due to the limitations of PowerPoint, the following CSS definition for circles may be more suitable:

```
.circle {
  whitespace: pre;
  display: inline-block;
  border-radius: 9px;
  border-width: 2pt;
  margin: 0.15em 0 1em 0;
  padding: 0 0.25em 0
0.25em;
}
```

Circles are preferably inline, and should never wrap.

There should be “breathing room” around the circle so that the other content isn’t too tightly paired and a line can be drawn from the bottom of the circle.

Bracelet Details:

1. TODO

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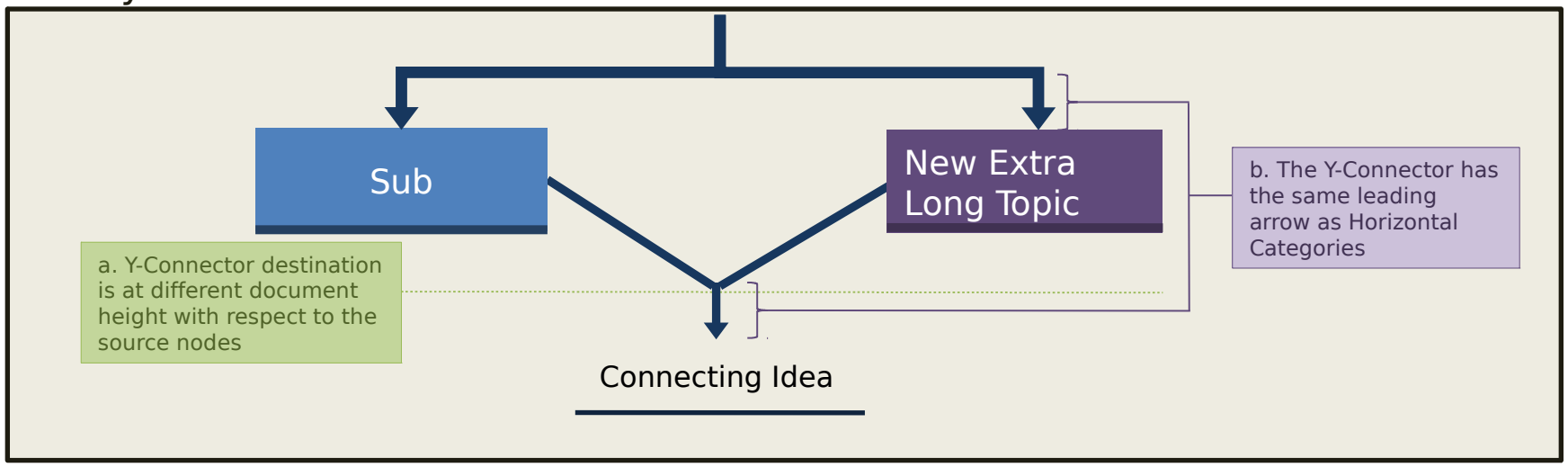
Y-Connector Diagrams

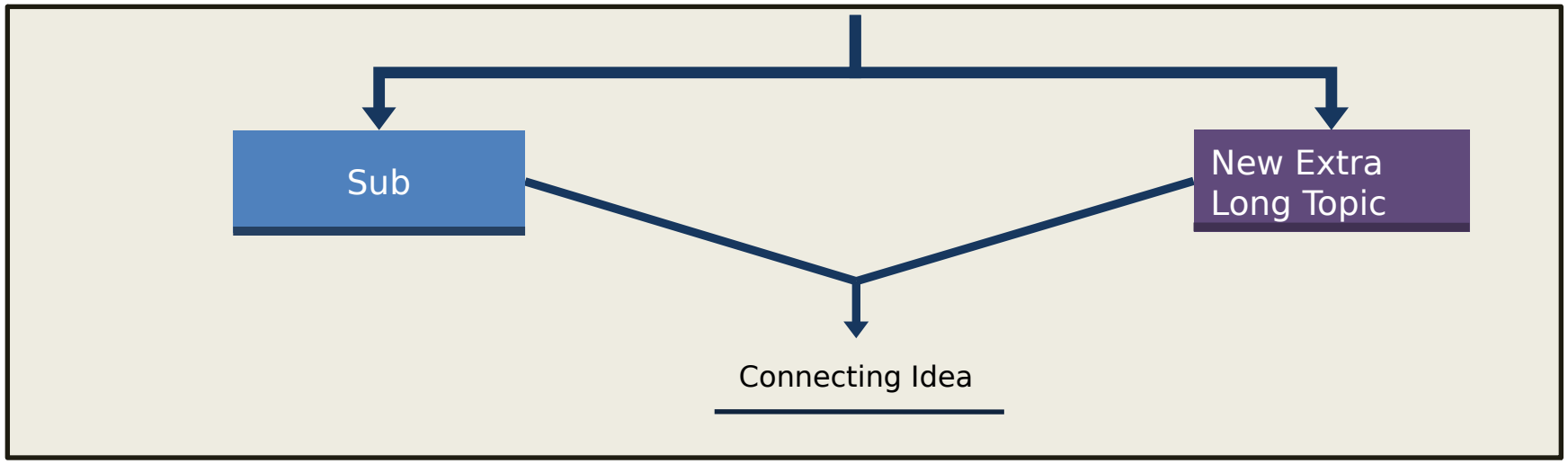
Nearby Sources

Reference



Distant Sources

Reference Diagram



Implementation Details on next page.

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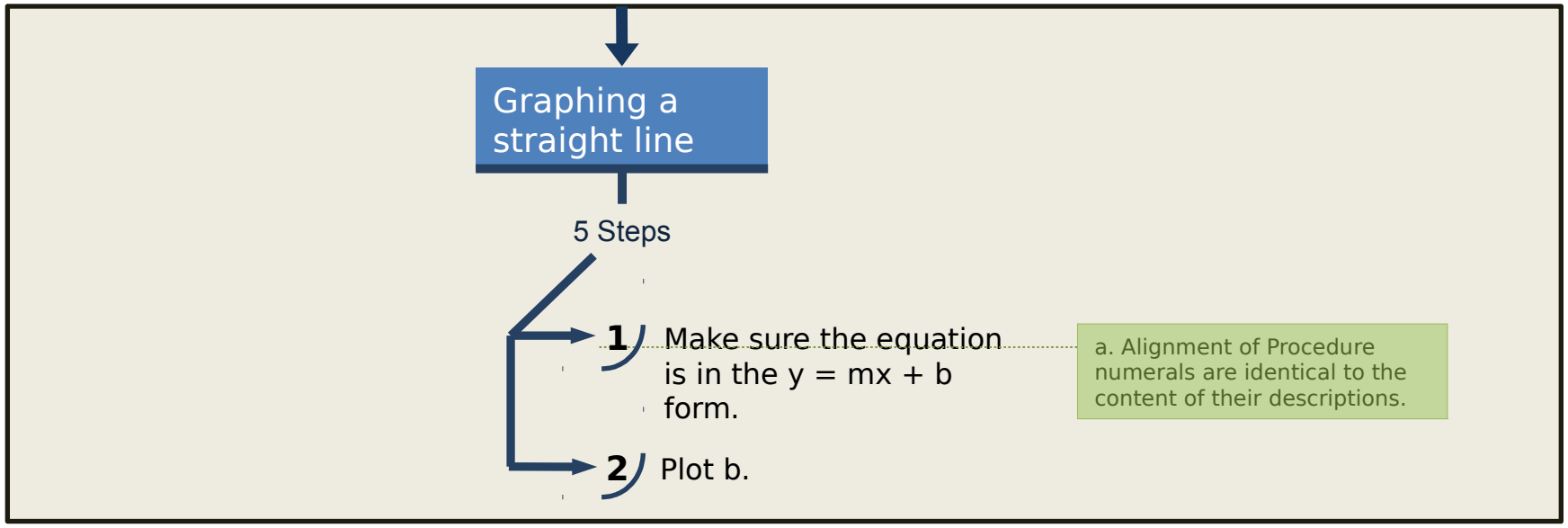
Y-Connector Implementation

Implementation Details:

1. The vertical position of the destination remains consistent.
2. If the source connectors horizontal distance increase, the bend increases.

Procedure

Reference Diagram



Implementation Details:

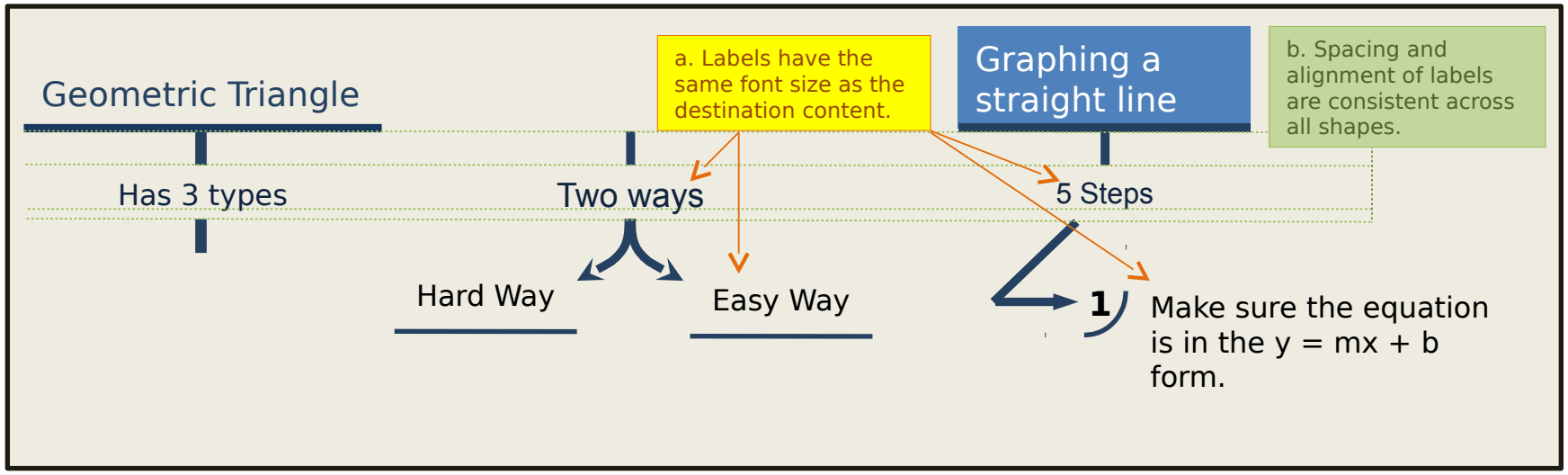
1. The curvature of Procedural numerals can be represented by this CSS definition:

```
font-size: 1.75em;
margin: 0;
padding: 0.10em 0.65em 0.35em 0.35em;
border-width: 0 3pt 3pt 0;
border-radius: 0 0 999px 0;
```

2. The Procedural numerals may assume a background color similar to the Categories.

Label

Reference Diagram

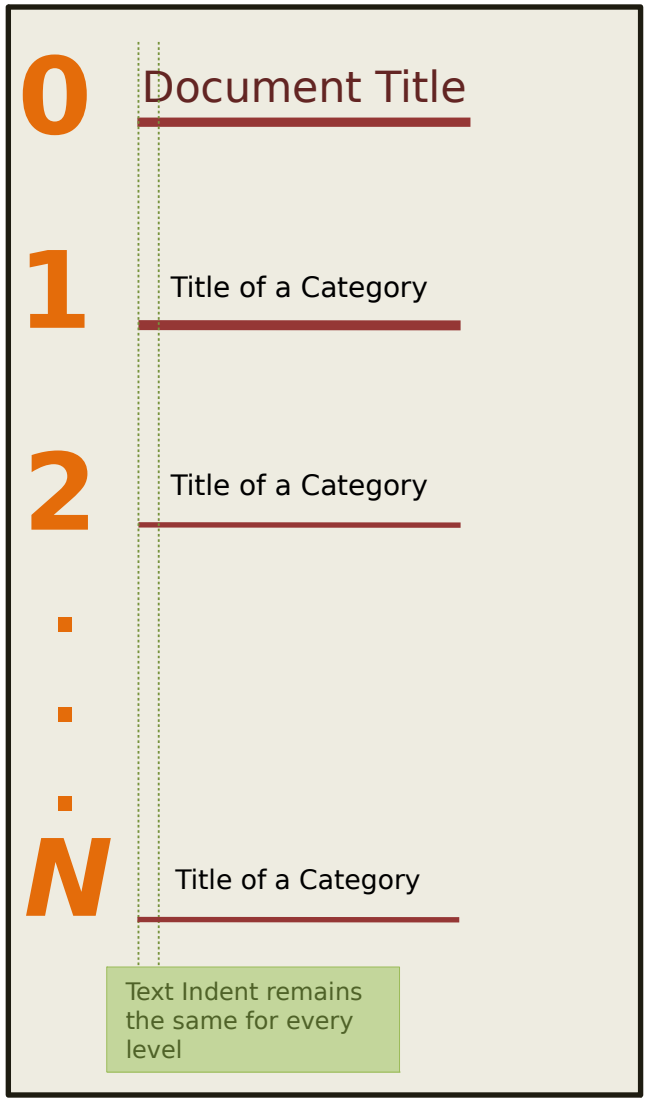


Implementation Details:

1. Labels add a consistent height underneath their source.
2. They are always one line.
3. Their color should match the line color.

Document Height Style

Reference Diagram



Implementation Details:

1. TODO

Viewport

Reference Diagram

Implementation Details:

Document Flow

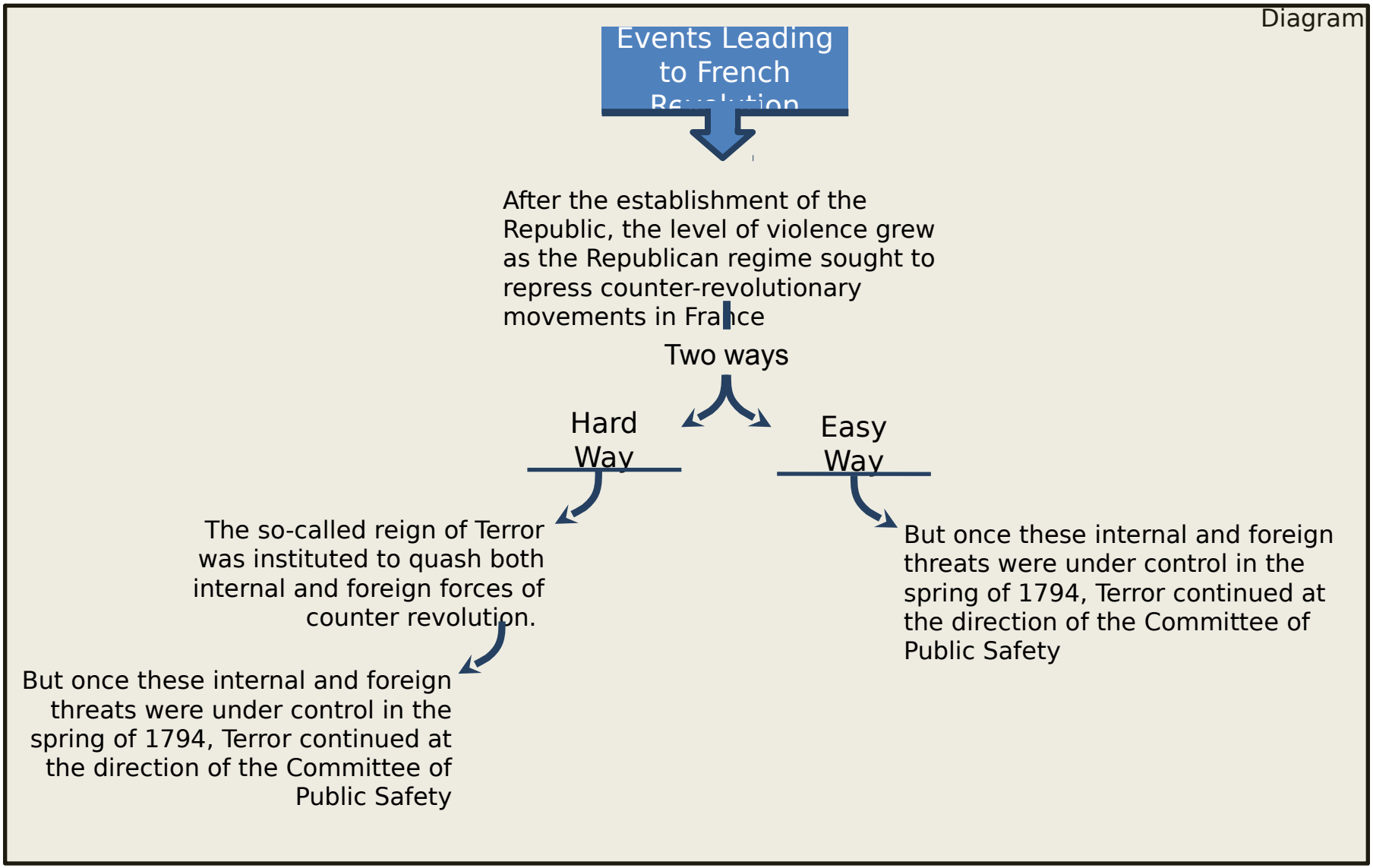
Reference Diagram

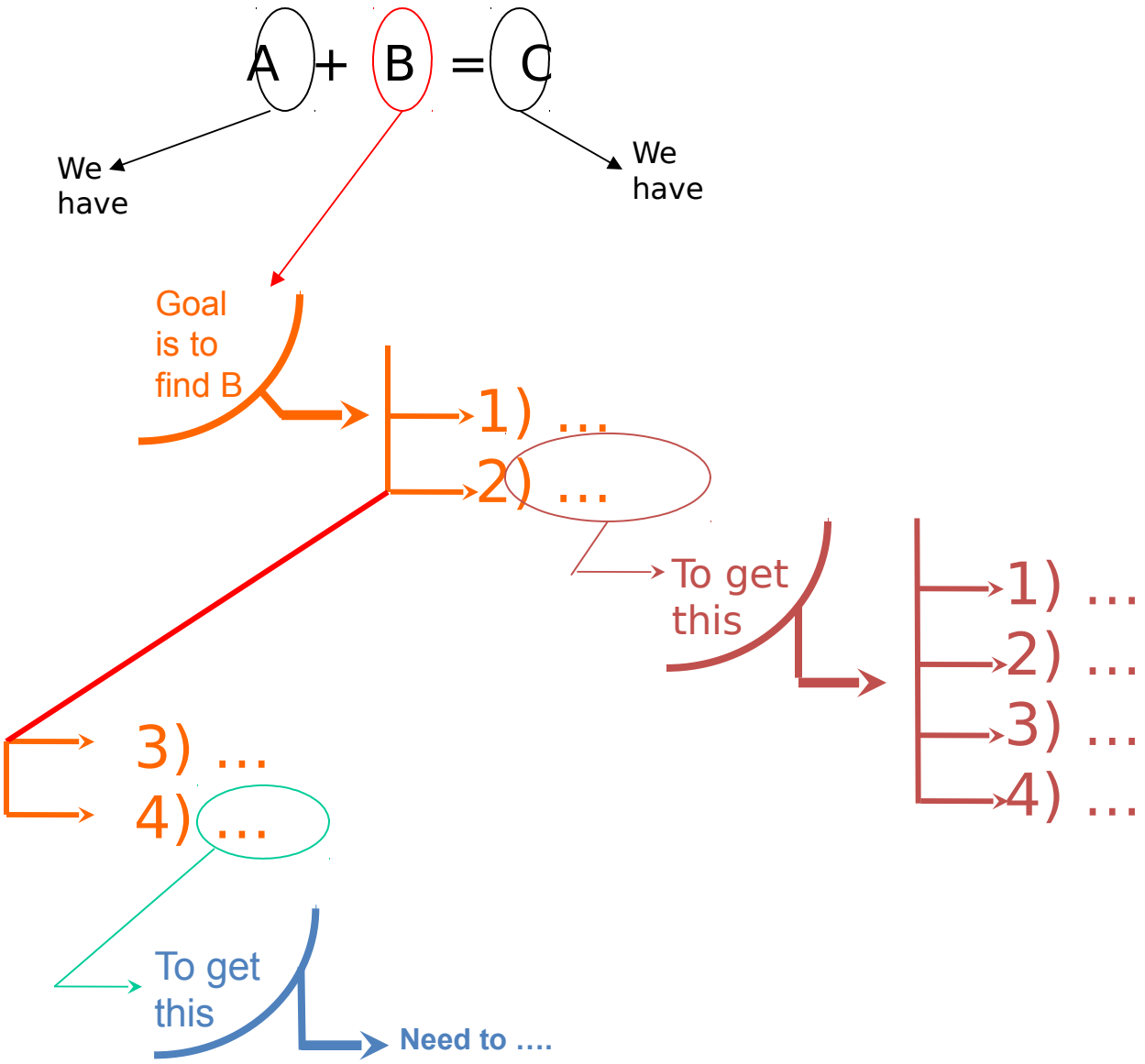
Implementation Details:

Archive

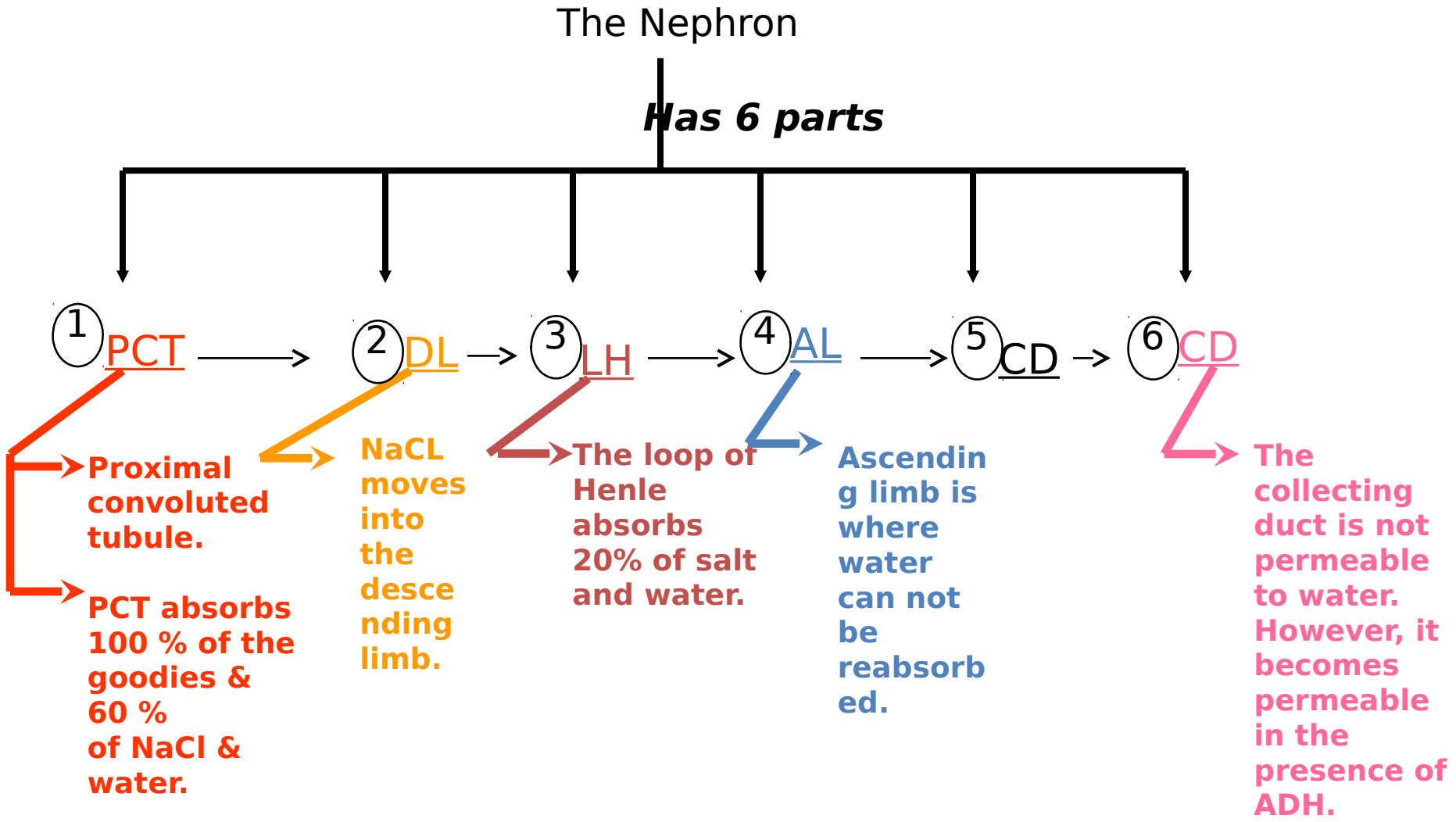
Path (Vertical) Bifurcation

Reference Diagram



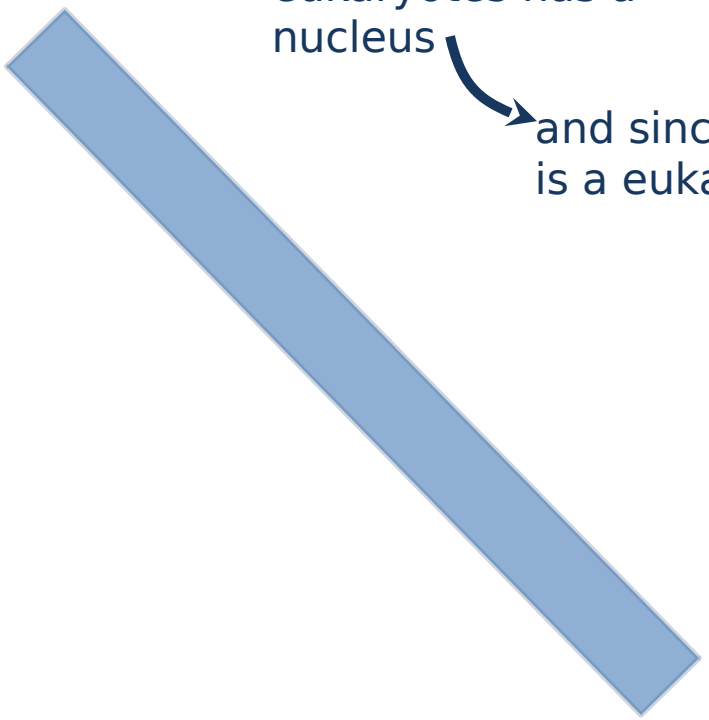

A + B = C
We have
We have
Goal is to find B
1) …
2) …
To get this
1) …
2) …
3) …
4) …
3) …
4) …
To get this
Need to ….

Procedure (Horizontal)



Path

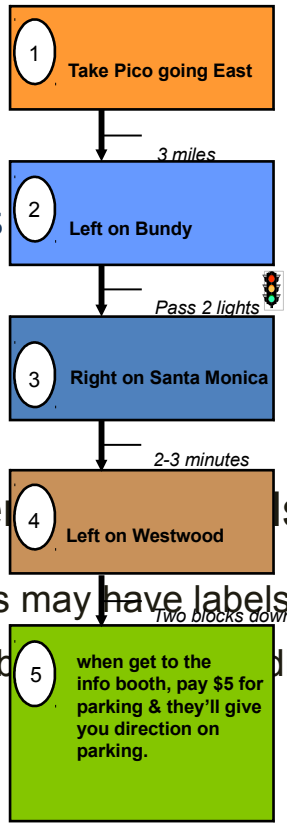
Reference Diagram



Since the cells of eukaryotes has a nucleus

and since man is a eukaryote

then the cells man have a nucleus



Implemen ls:

1. Paths may have labels.
2. May b diagonal

Path (Events)

After the establishment of the Republic, the level of violence grew as the Republican regime sought to repress counter-revolutionary movements in France

The so-called reign of Terror was instituted to quash both internal and foreign forces of counter revolution.

But once these internal and foreign threats were under control in the spring of 1794, Terror continued at the direction of the Committee of Public Safety, the most famous member of which was Maximiliean Robespierre.

Chris, may have circle or aside… where is circle defined here with rules of the prototype & may have bifrication

Path (Logic)

Since the cells of eukaryotes has a nucleus

and since man is a eukaryote

therefore the cells of man have a nucleus