

# Guide: Progressive Outline

## 1 Function documentation

This section details all the parameters available for the progressive-outline function.

Option	Type	Effect & Expected Values
level-X-mode	string	Defines the visibility of level X (1, 2, or 3). Values: "all", "current", "current-parent", "none".
text-styles	dict	Styles passed to #text (fill, weight, etc.). You can also use a float (e.g., 0.5) as a shortcut to inherit the active style with that opacity.
spacing	dict	Controls vertical space (v-between-X-Y) and horizontal indentation (indent-X) between elements.
show-numbering	bool	Enables or disables the display of heading numbering.
numbering-format	str   func	Typst numbering format (e.g., "1.1") or custom function (...n) => ....
match-page-only	bool	If true, considers a heading active if it is on the same page, regardless of its Y position. Useful for sidebars.
filter	func	A callback function (heading) => bool to programmatically include or exclude headings.
clickable	bool	Enables clickable links on headings. Defaults to true.

## 2 Navigation & Interactivity

By default, the outline is interactive: clicking on a section title navigates directly to the corresponding slide in the PDF.

progressive-outline()

### Non-clickable Outline

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In some print-focused or strict layout scenarios, you might want to disable this interactivity.

```
progressive-outline(  
  clickable: false  
)
```

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## 3 Visibility

This section covers the level-X-mode parameters.

### 3.1 The 'current-parent' mode

The current-parent mode is the most powerful: it only displays the “siblings” of the current element. This allows you to see the plan of the current section without being distracted by other chapters.

```
progressive-outline(  
  level-1-mode: 'all',  
  level-2-mode: 'current-parent'  
)
```

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### 3.2 Isolation via 'current' mode

If you want an ultra-minimalist rendering, the current mode hides everything except the exact entry where you are located.

```
progressive-outline(  
  level-1-mode: 'current',  
  level-2-mode: 'none'  
)
```

## Isolated Visibility Demonstration

- [Visibility](#)

### 3.3 Deep nesting (Level 3)

For complex structures, you can enable Level 3. Using current-parent will show siblings at the current depth.

### 3.3.1 Deep Component A

### 3.3.2 Deep navigation test

```
progressive-outline(  
  level-2-mode: 'all',  
  level-3-mode: 'current-parent'  
)
```

#### Level 3 Siblings

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## 4 Style Customization

The function allows you to modify the appearance of headings based on their state (**completed**, **active**, or **inactive**).

### 4.1 The 3-state system

By default, headings can be in one of three states:

- **completed**: The heading has already been passed.
- **active**: This is the current heading.
- **inactive**: The heading is yet to come.

```
text-styles: (
  level-1: (
    active: (fill: eastern, weight: 'bold'),
    completed: (fill: gray.lighten(50%)),
    inactive: (fill: black)
  )
)
```

## Past, Present, Future

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## 4.2 Advanced Opacity & Inheritance

Instead of redefining the full style for `inactive` or `completed` states, you can use smart inheritance to adapt the `active` style.

### 4.2.1 The Float Shortcut (Clone & Fade)

Pass a number (0.0 to 1.0) to automatically clone the active style and apply transparency. 0.2 means 20% opacity (very faint), 1.0 means fully opaque.

```
text-styles: (
  level-1: (
    active: (fill: red, weight: 'black'),
    inactive: 0.2, // Future: very faint
    (20%)
    completed: 0.5 // Past: semi-
    transparent (50%)
  )
)
```

## Auto-Fade Shortcut

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### 4.2.2 Partial Inheritance (Mix & Match)

You can also use a dictionary with an `opacity` key. This allows you to inherit the active color (faded) while overriding other properties (like `weight`).

```
text-styles: (
  level-1: (
    active: (fill: blue, weight: 'black'),
    inactive: (
      opacity: 0.5,      // 50% of active
    )
  )
)
```

## Fade + Weight Change

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## 4.3 The anti-jitter mechanism

Anti-jitter ensures that switching from a thin font to a bold one doesn't move the text. We use a ghost box to reserve the maximum space required.

```
text-styles: (
  level-1: (
    active: (weight: 'black', fill:
      eastern, size: 1.2em),
    inactive: (weight: 'light', fill:
      gray, size: 1.2em)
  )
)
```

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## 4.4 Colors and decorations

Each level can have its own rules for colors, italics, or bold.

```
text-styles: (  
  level-2: (  
    active: (style: 'italic', fill: blue,  
    weight: 'bold'),  
    inactive: (fill: luma(200))  
  )  
)
```

## Creative Style H2

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## 5 Fine-grained spacing management

The spacing dictionary sculpts the rhythm.

### 5.1 Inter-level spacing

You can define the exact space between an H1 heading and an H2 heading, or between two headings of the same level.

```
spacing: (  
  v-between-1-1: 2em,  
  v-between-1-2: 1.2em,  
  v-between-2-2: 0.8em,  
  v-between-2-1: 1.5em  
)
```

## Airy Vertical Rhythm

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## 5.2 Horizontal indentation

Indentation defines the offset to the right for each depth level.

```
spacing: (  
  indent-2: 3em,  
  indent-3: 6em  
)
```

## Marked Indentation

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## 6 Numbering system

The function relies on Typst's native engine.

### 6.1 Complex hierarchical formats

The numbering-format parameter accepts all standard Typst models (1, a, i, I, A).

```
show-numbering: true,  
numbering-format: 'I.a.1. '
```

## Legal Format

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## 6.2 Advanced textual prefixes

To use long words like "Chapter" without errors, pass a function. This prevents Typst from interpreting letters like 'a' or 'i' as numbering models.

```
show-numbering: true,  
numbering-format: (...n) => 'Chapter ' +  
numbering('1', ...n) + ' : '
```

## Secure 'Chapter' Prefix

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## 7 Filtering Content

The filter parameter allows you to programmatically include or exclude headings from the outline. It expects a callback function (heading) => boolean.

The heading object passed to the filter contains standard properties (level, body, label, counter) as well as context properties: parent-h1 and parent-h2.

### 7.1 Label-based filtering

In this document, the current section “Filtering Content” has been tagged with the label <hidden>.

```
progressive-outline(level-2-mode: 'none')
```

#### Standard Outline (No Filter)

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```
progressive-outline(  
  level-2-mode: 'none',  
  filter: h => h.label != <hidden>  
)
```

#### Filtered Outline (Label)

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### 7.2 Logic-based filtering

You can also filter based on any heading property. Here, we filter the list to **keep only** the section named “Visibility”.

```
progressive-outline(  
  level-2-mode: 'none',  
  // Keep only the heading named  
  'Visibility'  
  filter: h => h.body == [Visibility]  
)
```

#### Filtered Outline (Content)

Visibility

Here, we create a custom rule: show all Level 1 headings, but show Level 2 headings **only** if they belong to the “Visibility” section.

```
progressive-outline(
  level-2-mode: 'all',
  filter: h => h.level == 1 or
    (h.level == 2 and h.parent-h1.body ==
  [Visibility])
)
```

## Conditional Depth

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## 7.3 Recursive filtering

The filtering logic is recursive: if a parent heading (e.g., a Section) is excluded by the filter, all its children (Subsections and Sub-subsections) are automatically hidden as well, even if they would have passed the filter individually.

```
// Hiding a parent automatically hides its
children
progressive-outline(
  level-2-mode: 'all',
  filter: h => h.label != <hidden>
)
```

## Recursive Hiding

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## 8 Advanced Behavior

### 8.1 Page-based matching

In contexts like sidebars, the outline is rendered in the page margin or background before the slide content. This can cause the active heading detection to fail because the content is technically “after” the sidebar in the document flow.

Setting `match-page-only: true` solves this by considering any heading on the current page as “active”, ignoring precise vertical positioning.

match-page-only: true

## Sidebar Logic

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## 9 Additional information

It is optimized to work within presentation themes (like progressive-outline), but can be used in any standard Typst document.