

Polylux: Easily creating slides in Typst

An overview over all the features

Andreas Kröpelin

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Introduction



About this presentation

This presentation is supposed to briefly showcase what you can do with this package.

For a full documentation, read the online book.



A title

Let's explore what we have here.

On the top of this slide, you can see the slide title.

We used the title argument of the #slide function for that:

```
#slide(title: "First slide")[
    ...
]
```

(This works because we utilise the clean theme; more on that later.)

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Titles are not mandatory, this slide doesn't have one.

But did you notice that the current section name is displayed above that top line?

We defined it using #new-section-slide("Introduction").

This helps our audience with not getting lost after a microsleep.

You can also spot a short title above that.

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The bottom of the slide

Now, look down!

There we have some general info for the audience about what talk they are actually attending right now.

You can also see the slide number there.

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Dynamic content



A dynamic slide with pauses

Sometimes we don't want to display everything at once.



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That's what the #pause function is there for!



A dynamic slide with pauses

Sometimes we don't want to display everything at once.

That's what the #pause function is there for!

It makes everything after it appear at the next subslide.

(Also note that the slide number does not change while we are here.)



Fine-grained control

When #pause does not suffice, you can use more advanced commands to show or hide content.

These are some of your options:

- #uncover
- #only
- #alternatives
- #one-by-one
- #line-by-line

Let's explore them in more detail!



#uncover: Reserving space

With #uncover, content still occupies space, even when it is not displayed.

For example, are only visible on the second "subslide".

In () behind #uncover, you specify when to show the content, and in [] you then say what to show:

#uncover(3)[Only visible on the third "subslide"]



#uncover: Reserving space

With #uncover, content still occupies space, even when it is not displayed.

For example, these words are only visible on the second "subslide".

In () behind #uncover, you specify when to show the content, and in [] you then say what to show:

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#uncover: Reserving space

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For example, are only visible on the second "subslide".

In () behind #uncover, you specify when to show the content, and in [] you then say what to show:

#uncover(3)[Only visible on the third "subslide"]
Only visible on the third "subslide"



So far, we only used single subslide indices to define when to show something.

We can also use arrays of numbers...

```
#uncover((1, 3, 4))[Visible on subslides 1, 3, and 4]
Visible on subslides 1, 3, and 4
```

...or a dictionary with beginning and/or until keys:

```
#uncover((beginning: 2, until: 4))[Visible on subslides 2, 3, and 4]
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```



As as short hand option, you can also specify rules as strings in a special syntax.

Comma separated, you can use rules of the form

- 1-3 from subslide 1 to 3 (inclusive)
 - -4 all the time until subslide 4 (inclusive)
 - 2- from subslide 2 onwards
 - 3 only on subslide 3

```
#uncover("-2, 4-6, 8-")[Visible on subslides 1, 2, 4, 5, 6, and from 8 onwards]
```

Visible on subslides 1, 2, 4, 5, 6, and from 8 onwards



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Everything that works with #uncover also works with #only.

However, content is completely gone when it is not displayed.

For example, the rest of this sentence moves.

Again, you can use complex string rules, if you want.

#only("2-4, 6")[Visible on subslides 2, 3, 4, and 6]



Everything that works with #uncover also works with #only.

However, content is completely gone when it is not displayed.

For example, see how the rest of this sentence moves.

Again, you can use complex string rules, if you want.

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However, content is completely gone when it is not displayed.

For example, the rest of this sentence moves.

Again, you can use complex string rules, if you want.

#only("2-4, 6")[Visible on subslides 2, 3, 4, and 6]

Visible on subslides 2, 3, 4, and 6



#alternatives: Substituting content

You might be tempted to try

```
#only(1)[Ann] #only(2)[Bob] #only(3)[Christopher] likes #only(1)[chocolate] #only(2)[strawberry]
#only(3)[vanilla] ice cream.
```

Ann likes chocolate ice cream.

But it is hard to see what piece of text actually changes because everything moves around. Better:

```
#alternatives[Ann][Bob][Christopher] likes #alternatives[chocolate][strawberry][vanilla] ice cream.
           likes chocolate ice cream.
```

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Ann



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You might be tempted to try

```
#only(1)[Ann] #only(2)[Bob] #only(3)[Christopher] likes #only(1)[chocolate] #only(2)[strawberry]
#only(3)[vanilla] ice cream.
```

Bob likes strawberry ice cream.

But it is hard to see what piece of text actually changes because everything moves around. Better:

```
#alternatives[Ann][Bob][Christopher] likes #alternatives[chocolate][strawberry][vanilla] ice cream.
```

Bob likes strawberry ice cream.



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You might be tempted to try

```
#only(1)[Ann] #only(2)[Bob] #only(3)[Christopher] likes #only(1)[chocolate] #only(2)[strawberry]
#only(3)[vanilla] ice cream.
```

Christopher likes vanilla ice cream.

But it is hard to see what piece of text actually changes because everything moves around. Better:

```
#alternatives[Ann][Bob][Christopher] likes #alternatives[chocolate][strawberry][vanilla] ice cream.
```

Christopher likes vanilla ice cream.



#one-by-one: An alternative for #pause

#alternatives is to #only what #one-by-one is to #uncover.

#one-by-one behaves similar to using #pause but you can additionally state when uncovering should start.

```
#one-by-one(start: 2)[one ][by ][one]
```

start can also be omitted, then it starts with the first subside:

```
#one-by-one[one ][by ][one]
one
```



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```

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one by
```



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one by one
```



Sometimes it is convenient to write the different contents to uncover one at a time in subsequent lines.

This comes in especially handy for bullet lists, enumerations, and term lists.

```
#line-by-line(start: 2)[
   - first
   - second
   - third
]
```

start is again optional and defaults to 1.



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```
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   - first
   - second
   - third
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start is again optional and defaults to 1.



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This comes in especially handy for bullet lists, enumerations, and term lists.

```
#line-by-line(start: 2)[
    - first
    - second
    - third
]

• first
• second
• second
• first
• second
```

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This comes in especially handy for bullet lists, enumerations, and term lists.

start is again optional and defaults to 1.



While #line-by-line is very convenient syntax-wise, it fails to produce more sophisticated bullet lists, enumerations or term lists. For example, non-tight lists are out of reach.

For that reason, there are #list-one-by-one, #enum-one-by-one, and #terms-one-by-one, respectively.

```
#enum-one-by-one(start: 2, tight: false,
numbering: "i)")[first][second][third]
ii)
iii)
```

Note that, for technical reasons, the bullet points, numbers, or terms are never covered. start is again optional and defaults to 1.



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ii) second
iii) third
```

Note that, for technical reasons, the bullet points, numbers, or terms are never covered. start is again optional and defaults to 1.

Themes



How a slide looks...

... is defined by the *theme* of the presentation.

This demo uses the clean theme.

Because of it, the title slide and the decoration on each slide (with section name, short title, slide number etc.) look the way they do.

Themes can also provide variants, for example ...

... this one!

It's very minimalist and helps the audience focus on an important point.



Your own theme?

If you want to create your own design for slides, you can define custom themes!

The book explains how to do so.

Utilities



The utils module

Polylux ships a utils module with solutions for common tasks in slide building.



Fit to height

You can scale content such that it has a certain height using #fit-to-height(height, content):

Height is 2.5cm



Fill remaining space

This function also allows you to fill the remaining space by using fractions as heights, i.e. fit-to-height(1fr)[...]:





Side by side content

Often you want to put different content next to each other. We have the function #side-by-side for that:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore.



Outline

Why not include an outline?

- 1 Introduction
- 2. Dynamic content
- 3. Themes
- 4. Utilities
- 5. Typst features
- 6 Conclusion

Typst features



Use Typst!

Typst gives us so many cool things¹. Use them!

¹For example footnotes!



Bibliography

Let us cite something so we can have a bibliography: [1] [2] [3]

```
[1] "A."
```

[2] "B."

[3] "C."

Conclusion



That's it!

Hopefully you now have some kind of idea what you can do with this template.

Consider giving it a GitHub star \Leftrightarrow or open an issue if you run into bugs or have feature requests.

Andreas Kröpelin, July 2023 32