

Accessible PPT-Documents

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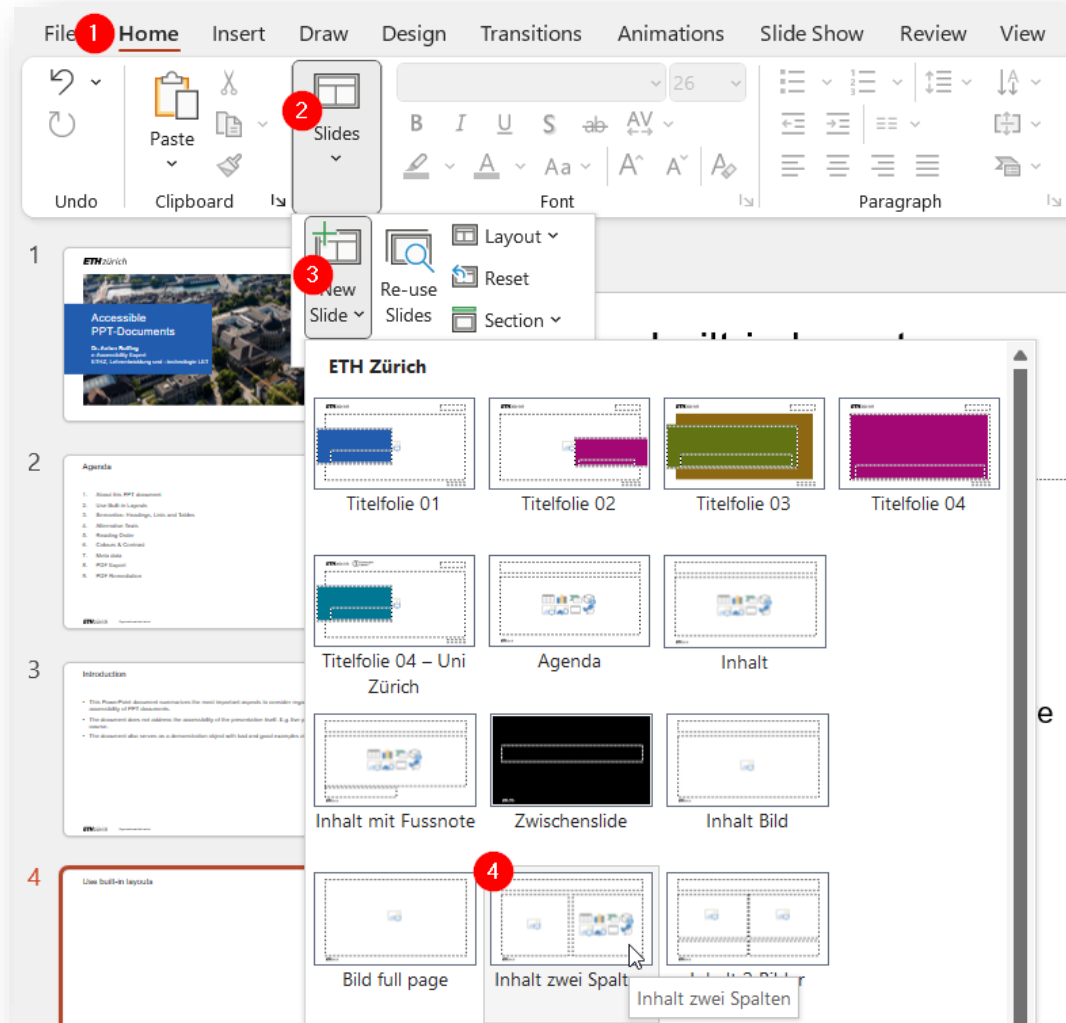
Agenda

1. About this PPT document
2. Use Built-in Layouts
3. Semantics: Headings, Lists and Tables
4. Alternative Texts
5. Reading Order
6. Colours & Contrast
7. Meta data
8. General MS Office Aspects
9. PDF Export
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11. Alternative presentation formats

Introduction

- This PowerPoint document summarizes the most important aspects to consider regarding the accessibility of PPT documents.
- The document does not address the accessibility of the presentation itself. E.g. live presentation in a course.
- The document also serves as a demonstration object with bad and good examples of accessibility.
- In order to benefit optimally from this document, the [e-Accessibility Basics on the ETHZ Info Platform](#) are required.
- Disclaimer:
 - Unfortunately, PowerPoint as a format is fundamentally ill-suited for digital accessibility. Neither rich semantics nor possibilities for flexible output are provided.
 - This document shows ways to avoid the worst in-accessibilities.
 - The last sections show how PDFs from PPT can be prepared accessibly afterwards.

Use built-in layouts

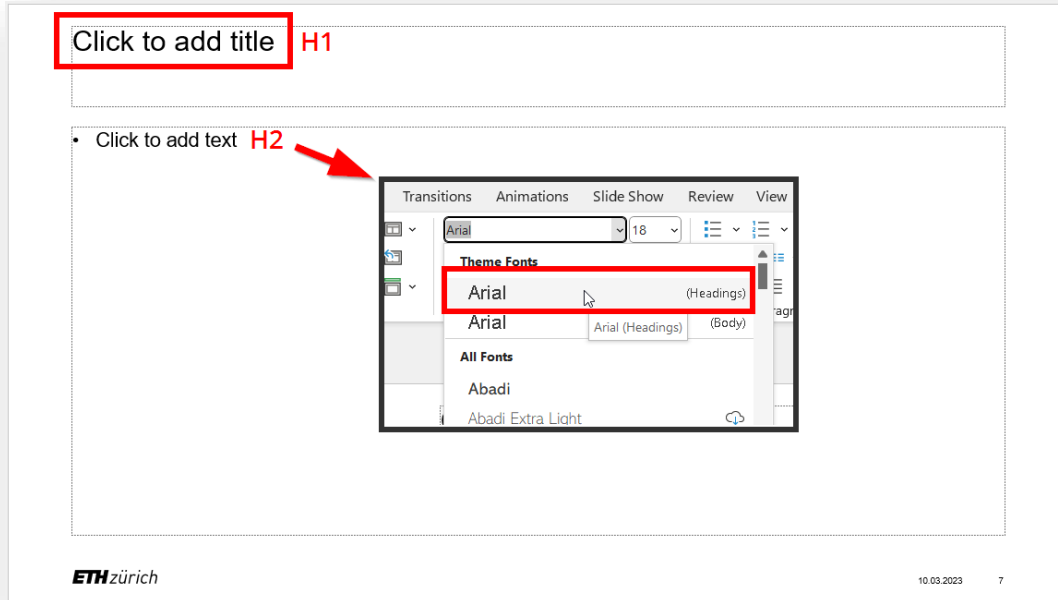


In MS Office, use built-in resources whenever possible. This will increase the chance that your content will find its way into a PDF handout. Z.B.

- Choose built-in slide layouts:
- Home > Slides > View Slide > choose

Especially avoid working with Text Boxes, SmartArt, WordArt and other «Floating Objects»

Semantics - Headings



The screenshot shows a PowerPoint slide with two text boxes. The top box contains the text "Click to add title" followed by "H1" in red. The bottom box contains a bullet point "Click to add text" followed by "H2" in red. A red arrow points from the "H2" text to a font menu overlay. The font menu is titled "Theme Fonts" and lists "Arial" as the selected font. Below "Arial" are two options: "Arial (Headings)" and "Arial (Body)". The "Arial (Headings)" option is highlighted with a red box. Below the "Theme Fonts" section is the "All Fonts" section, which lists "Abadi" and "Abadi Extra Light". The slide footer includes the "ETH zürich" logo, the date "10.03.2023", and the number "7".

- By default Powerpoint comes with no headings.
- Instead, the slides can be given titles.
- Make sure that each slide has a meaningful title that briefly and accurately describes the content that follows.
- Towards the end of this document you will hear about refining the heading structure of the document in the export PDF.

Headings structure

How can a blind person read and get orientation on digital content?



Blind people use screen reader software to read and navigate digitally.

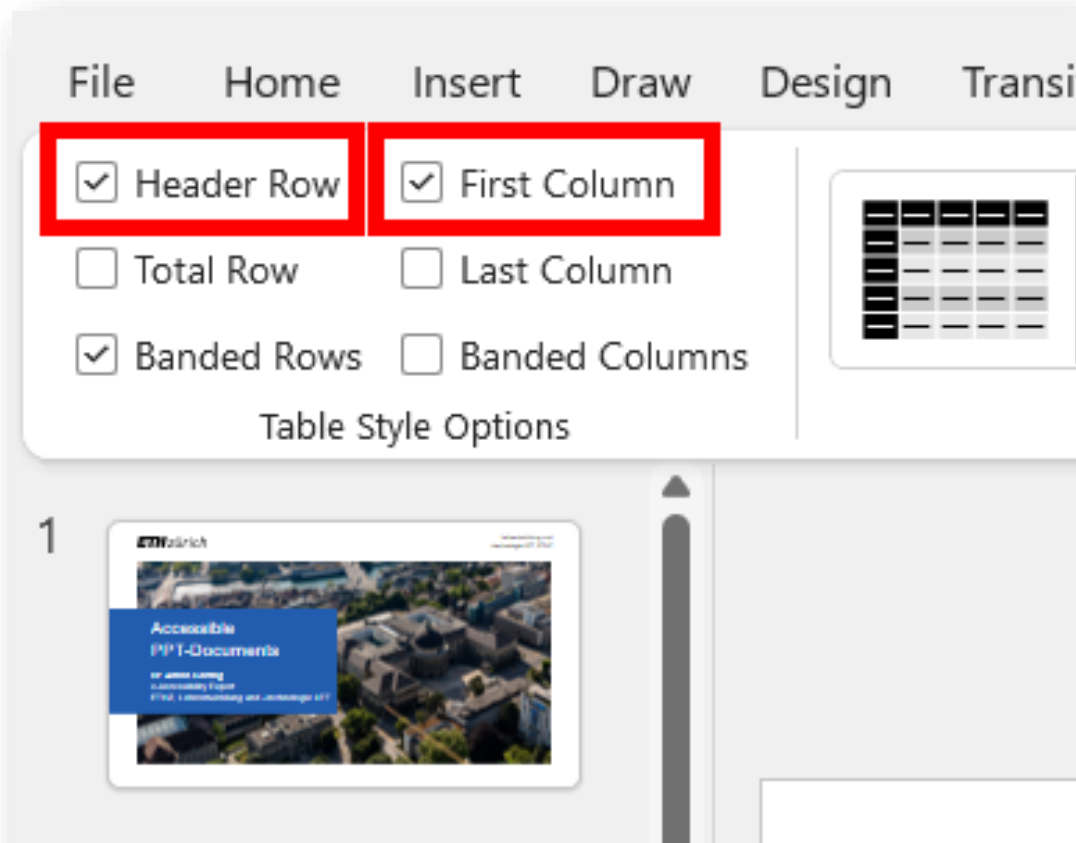
Screen readers can present text



either



Semantics – Tables

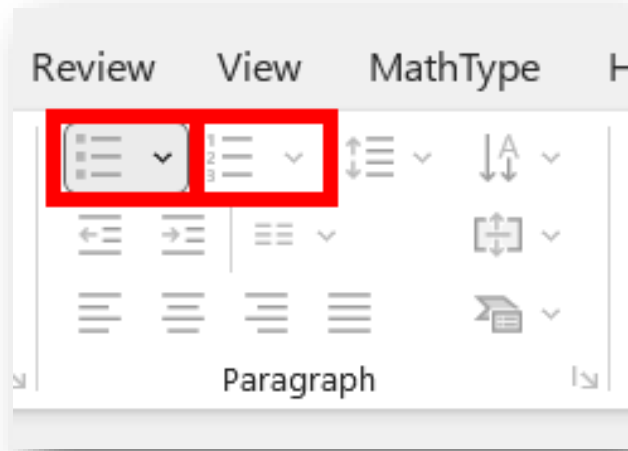


	-	2021	2020	2019	2018
Lorem ipsum dolor		1606	1678	2072	2196
Excepteur sint occaecat		373	281	381	410
Ut enim ad minim veniam		537	607	733	786
Nostrud exercitation		365	425	506	559
Consectetur adipiscing elit		318	349	355	359
Nim ad minim veniam		13	16	97	82

Make sure all data tables come with table headers. In most cases this means that the table has both column and row headers.

- Mark table > Table Design (tab) > check “Header Row” and “First Columns” checkboxes

Semantics - Lists



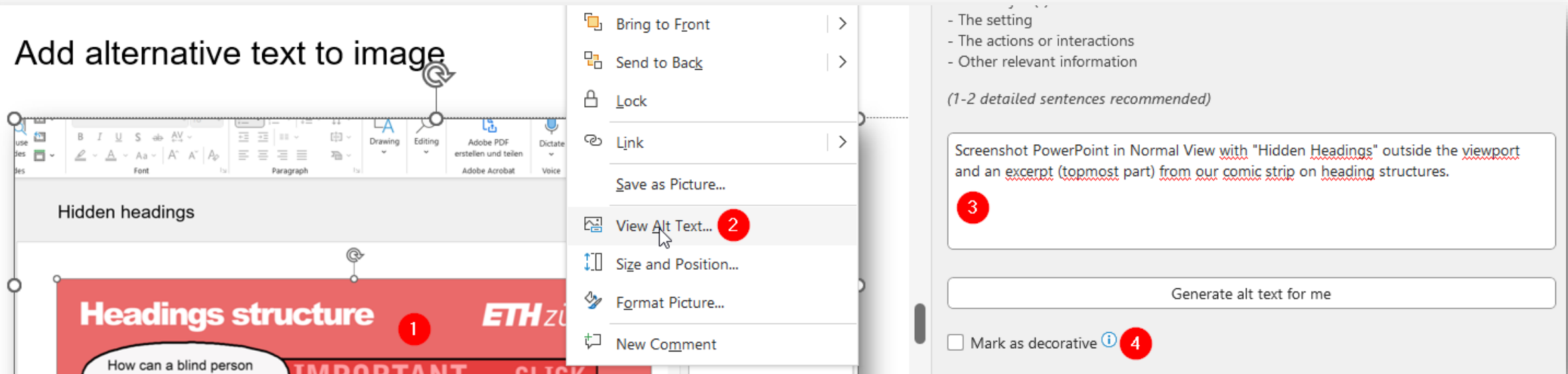
- Make sure all lists are marked as lists
 - Numbered or unnumbered
- Home (tab) > Paragraph

In PowerPoint it is almost more difficult to work without lists than with. This point should not really be a challenge.

Alternative Texts

- Alternative texts are primarily designed for illustrations of all kinds. For images, graphics, charts, icons and symbols.
- In PowerPoint it often makes sense to assign alternative texts for other contents and groupings of contents.
- For example, for complex diagrams, which consist of several objects.
- The basic requirements for handling images are not discussed here. Refer to [Alternative texts and text alternatives article](#) in the FAQs & Quick Wins section on the ETHZ info platform.

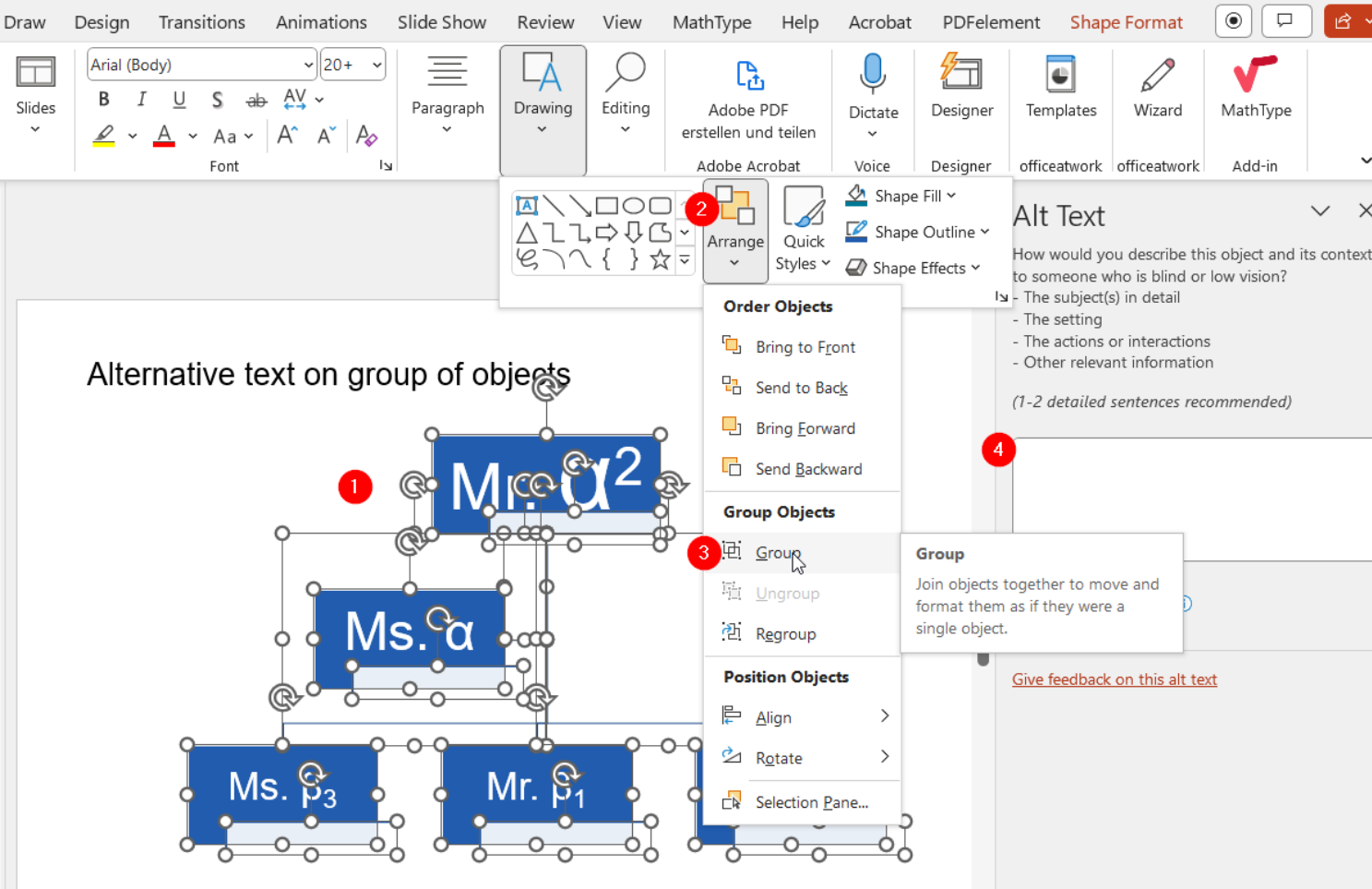
Add alternative text to image



Provide the images in your PPT documents with alternative texts, as follows:

1. Right mouse click on the image
2. Select "View Alt Text..." from overlay menu > side pane "Alt Text" appears (right)
3. Enter alternative text in text field or
4. Check "Mark as decorative" for purely decorative images

Alternative text on group of objects

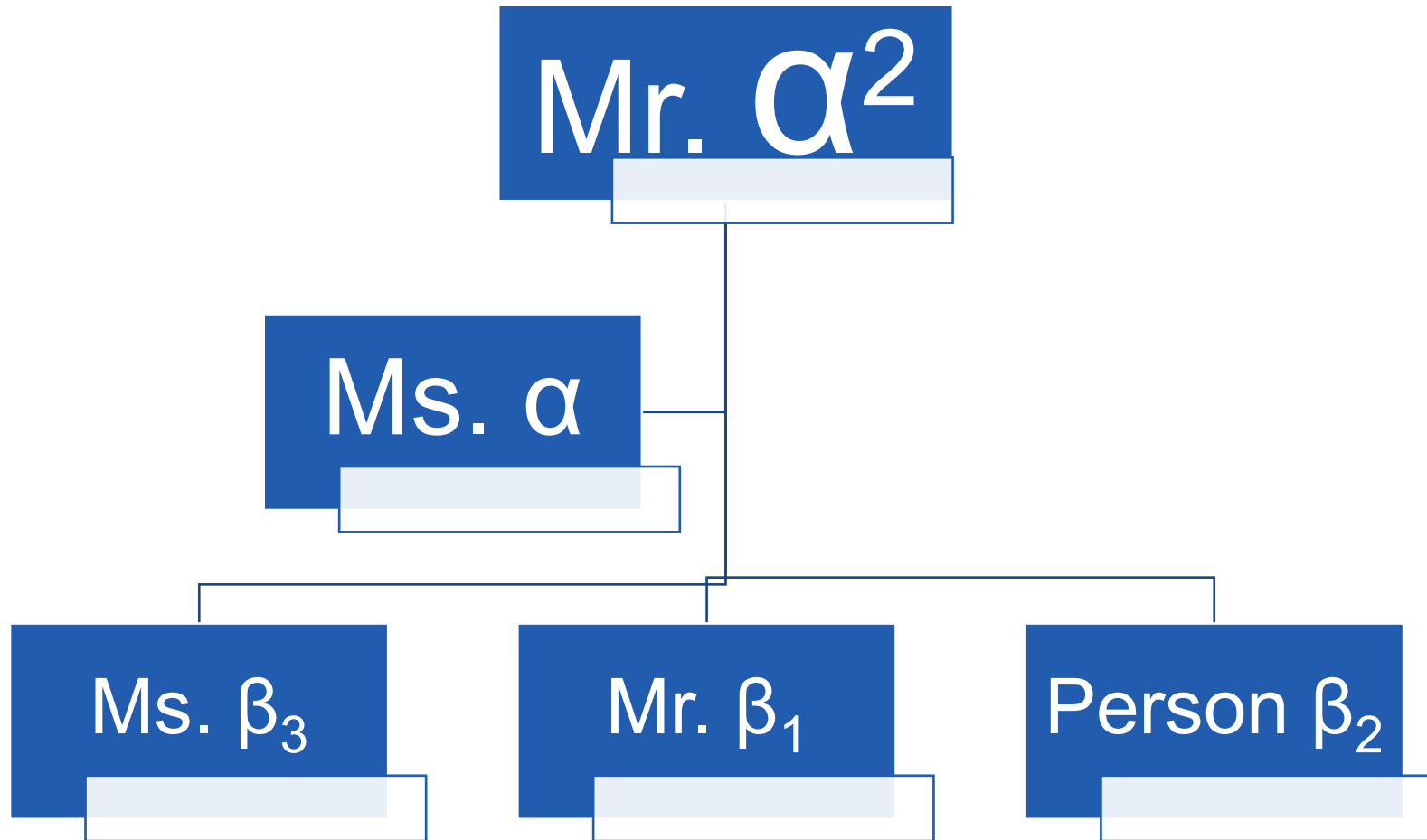


In a representation such as an organization chart, which consists of many individual components, an alternative text is usually sufficient for the overall picture:

For this purpose

1. All objects are selected
2. Open an overlay menu via Home (tab) > Drawing > Arrange
3. The elements are grouped to one object with "Group"
4. This resulting object is then assigned a meaningful alternative text...

Alternative text on group of objects - Exercise



Reading Order - Importantissimo

- For screen reader users, there is no "meaningful reading order" of the different elements and objects on a slide.
- There is only a more or less sensible sequential order (from the beginning to the end of the slide).
- This reading order must be consciously and actively defined. Powerpoint has no idea of a "sensible" reading order.
- Often a mixture of the layout and the order in which objects are added to the slide defines the resulting reading order.
- Actively define Reading Order using 1. the Reading Order Pane or 2. Selection Pane
- Both tools for defining the reading order are closely linked to the order of overlaying floating layers. Dealing with floating objects is therefore very delicate.

Reading Order - Tool 1: Reading Order Pane

1. Review (tab)

2. Check Accessibility

3. Reading Order Pane

4. Reading Order Pane

Display the Reading Order Pane
Adjust the order that your objects will be read in to improve accessibility.

Table Style Options

- Header Row
- First Column
- Total Row
- Last Column
- Banded Rows
- Banded Columns

	2021	2020	2019	2018
Lorem ipsum dolor	1606	1678	2072	2196
Excepteur sint occaecat	373	281	381	410
Ut enim ad minim veniam	537	607	733	786
Nostrud exercitation	365	425	506	559
Consectetur adipisicing elit	318	349	355	359
Nim ad minim veniam	13	16	97	82

Make sure all data tables come with table headers. In most cases this means that the table has both column and row headers.

- Mark table > Table Design (tab) > check "Header Row" and "First Columns" checkboxes

The Reading Order Pane tool

1. > Review (tab)
2. > Check Accessibility
3. > Reading Order Pane

allows you to actively define the reading order of all elements on a slide by drag n drop (4.) as well as to mark them as "decorative".

(first read element is top on list)

Reading Order – Tool 2: Selection Pane

The screenshot illustrates the steps to access the Selection Pane tool in PowerPoint:

1. Home tab
2. Drawing group
3. Arrange dropdown
4. Selection Pane...
5. Selection Pane (Tabelle 10 selected)

The Selection Pane shows the following objects:

- TextBox 11
- Tabelle 10 (selected)
- Picture 10
- Slide Number Placeholder 5
- Date Placeholder 3
- Title 1

The 'Table Style Options' dialog is also visible, showing the following settings:

- Header Row
- First Column
- Total Row
- Last Column
- Banded Rows
- Banded Columns

The table data is as follows:

	2020	2019	2018
	1678	2072	2196
	281	381	410
	607	733	786
	425	506	559
	349	355	359
	16	97	82

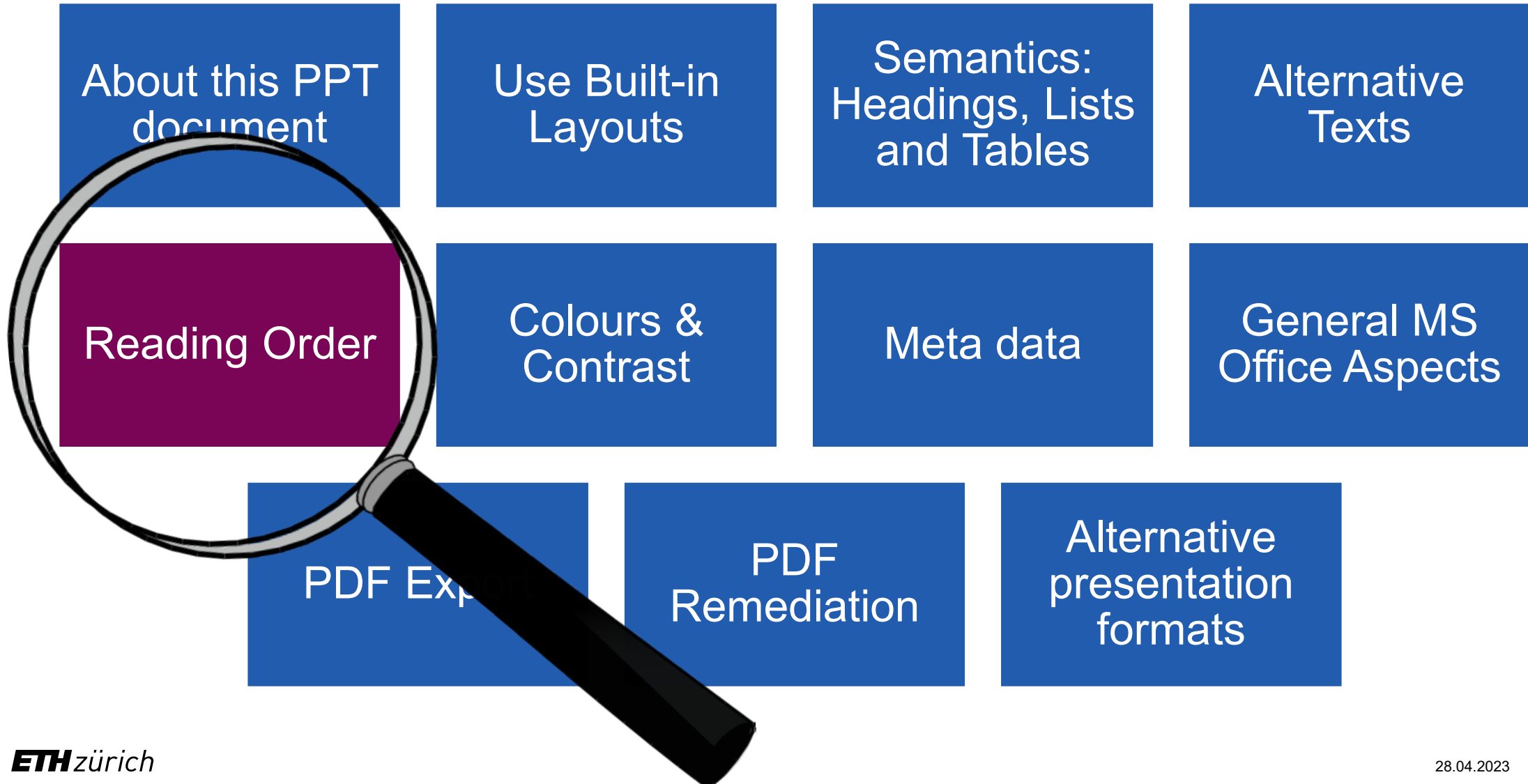
The Selection Pane tool

1. > Home (tab)
2. > Drawing
3. > Arrange
4. > Selection Pane...

allows you to actively define the reading order of all elements on a slide by drag n drop (5.).

(Warning: first read element is last on list)

Reading Order - Exercise



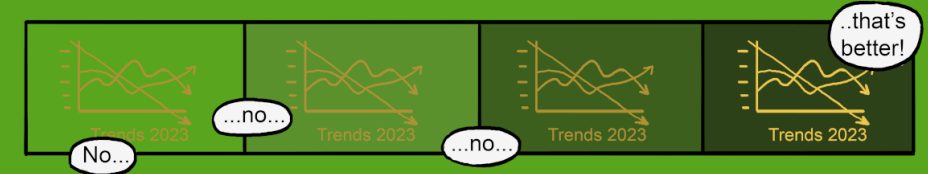
Colours & Contrasts

Not to forget:

- Make sure to have sufficient contrast between text (and other important info) and background
- Never use colour only to convey information

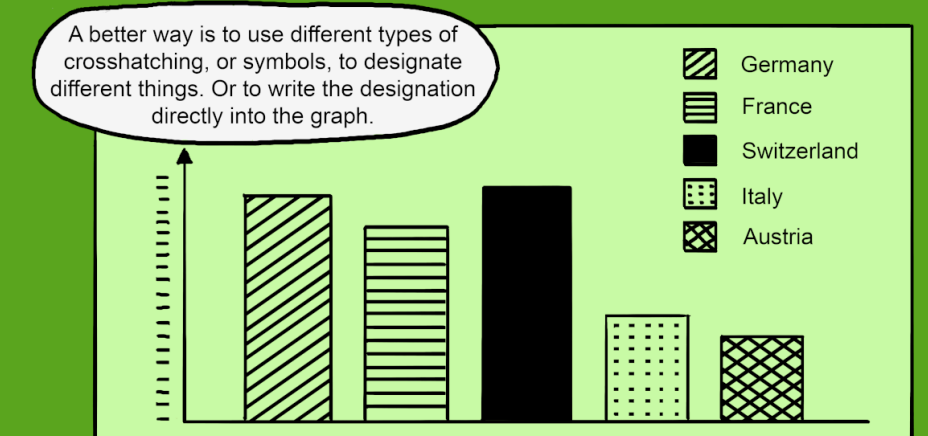
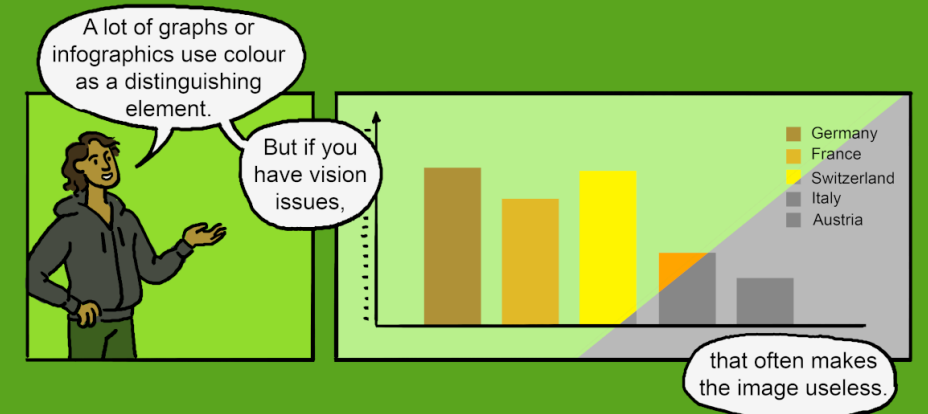
www.ethz.ch/e-accessibility

Colours and Contrast



Using good contrast is important to make sure your material is easily readable.

But what about colour?



Meta data – document language specification

Make sure your document is set to the correct language. For spell check, but also for correct speech synthesis by screen readers.

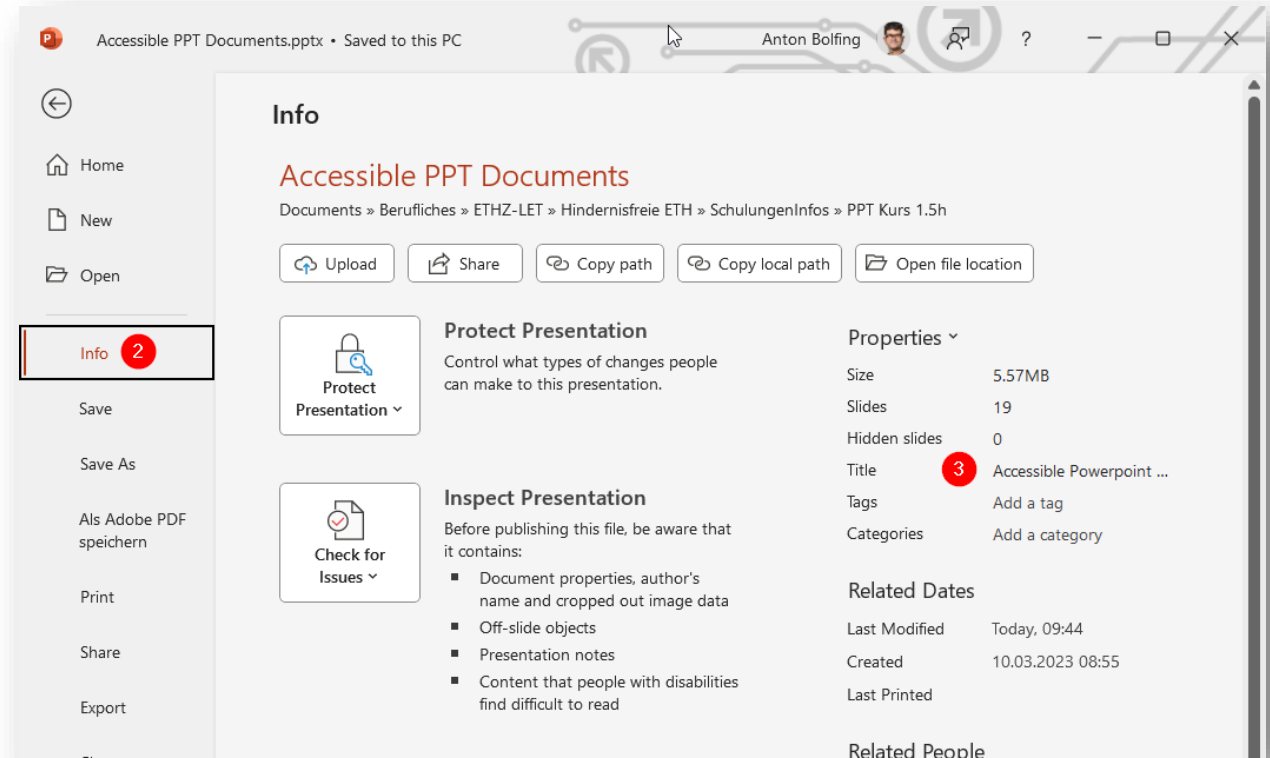
- Mark all slides in Outline View:
 1. > View (tab)
 2. > Outline View
 3. > [Ctrl] + [A] on slides pane
- Set Language:
 1. > Review (tab)
 2. > Language
 3. > Set Proofing Language
 4. > (e.g.) English (UK)
 5. > OK

The screenshot shows the Microsoft PowerPoint interface with the Review tab selected. The Language button in the ribbon is highlighted with a red circle 2. A tooltip for the Language button is visible, showing the 'Set Proofing Language' button highlighted with a red circle 3. A 'Set Proofing Language' dialog box is open, showing 'English (United Kingdom)' selected with a red circle 4. A 'Language' dialog box is also open, showing 'English (United Kingdom)' selected with a red circle 4. The 'OK' button in the Language dialog box is highlighted with a red circle 5. The background shows a slide with text: 'One important aspect of accessible documents is that come with a meaningful document title and a correct language specification.' and 'Dr. Anton Bolfing E-Accessibility Experte anton.bolfing@let.ethz.ch'.

Meta data – document title

Another important aspect of accessible documents is that they come with a meaningful document title.

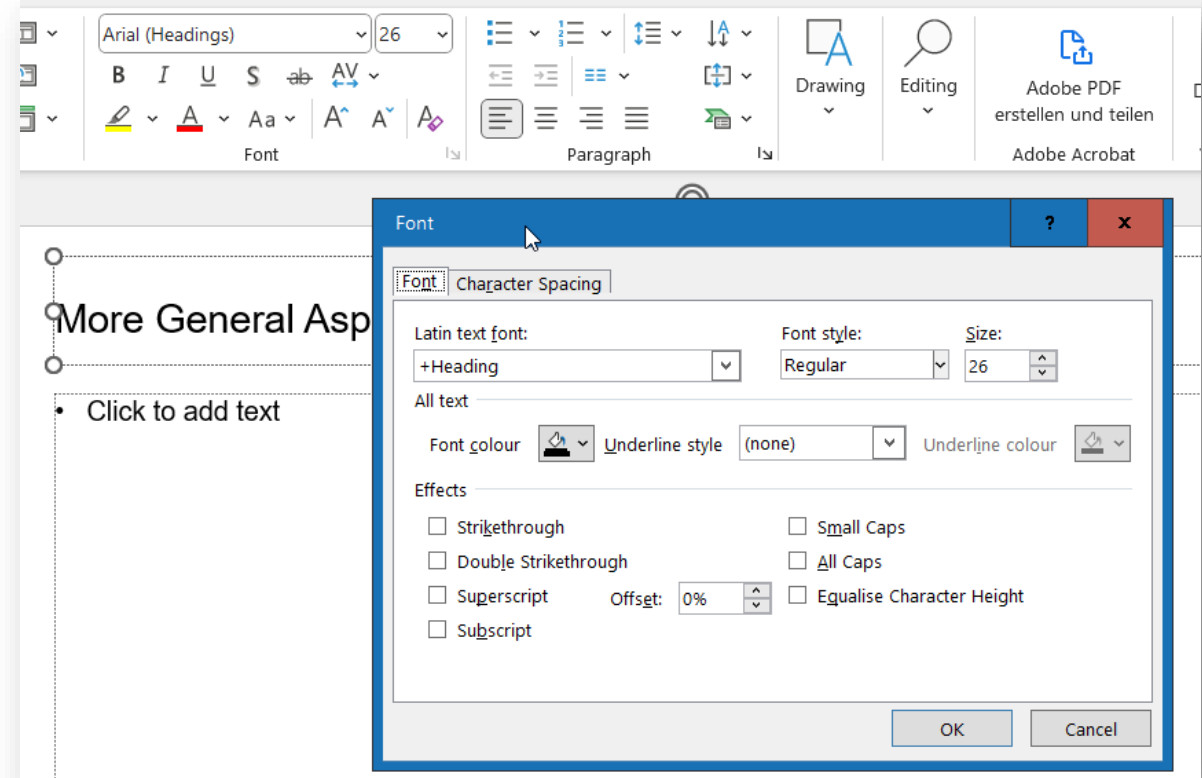
- Add document title:
 1. > Home (tab)
 2. > Info
 3. > Properties > Title



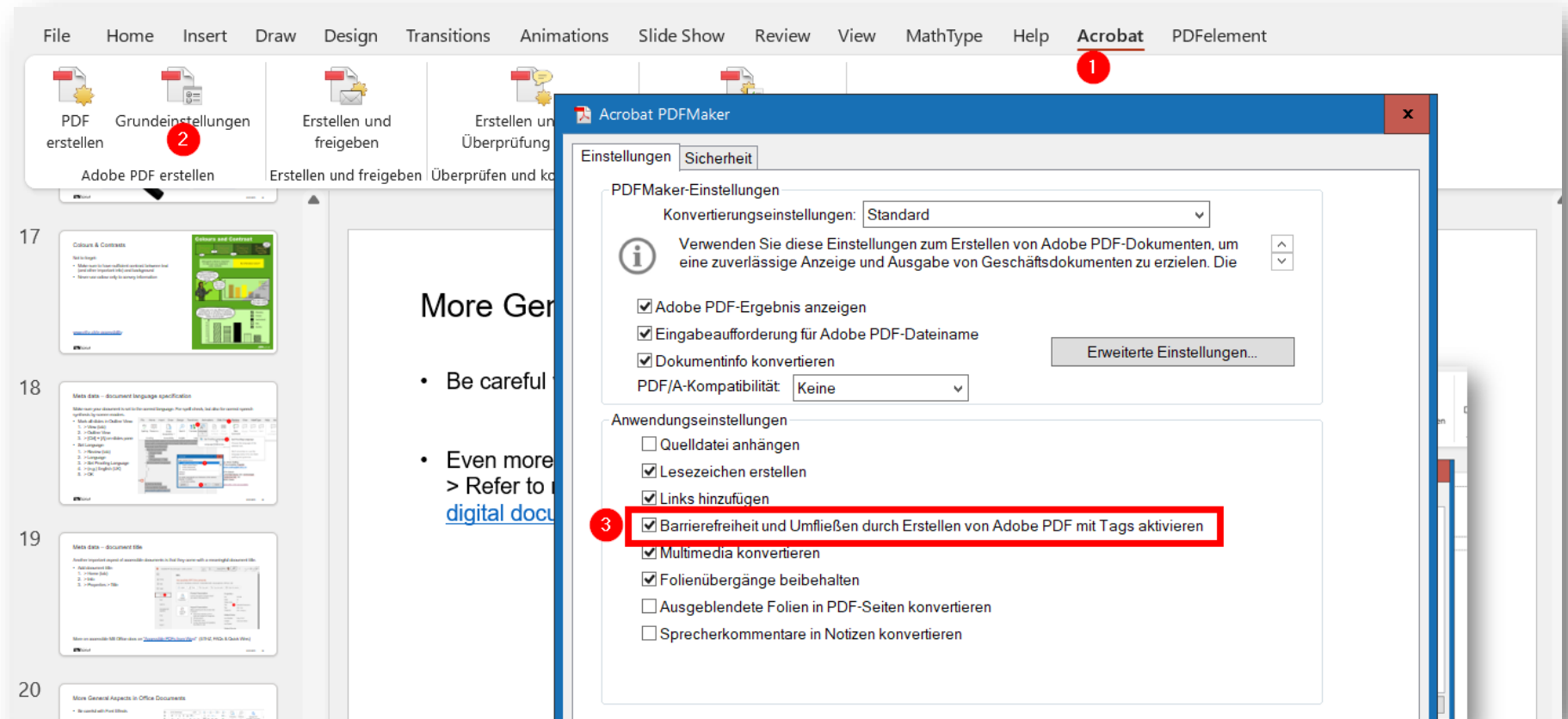
More on accessible MS Office docs on “[Accessible PDFs from Word](#)” (ETHZ, FAQs & Quick Wins)

More General Aspects in Office Documents

- Be careful with Font Effects
- Give meaningful link texts
- Even more aspects:
 - > Refer to my [general workshop on accessible digital documents](#)



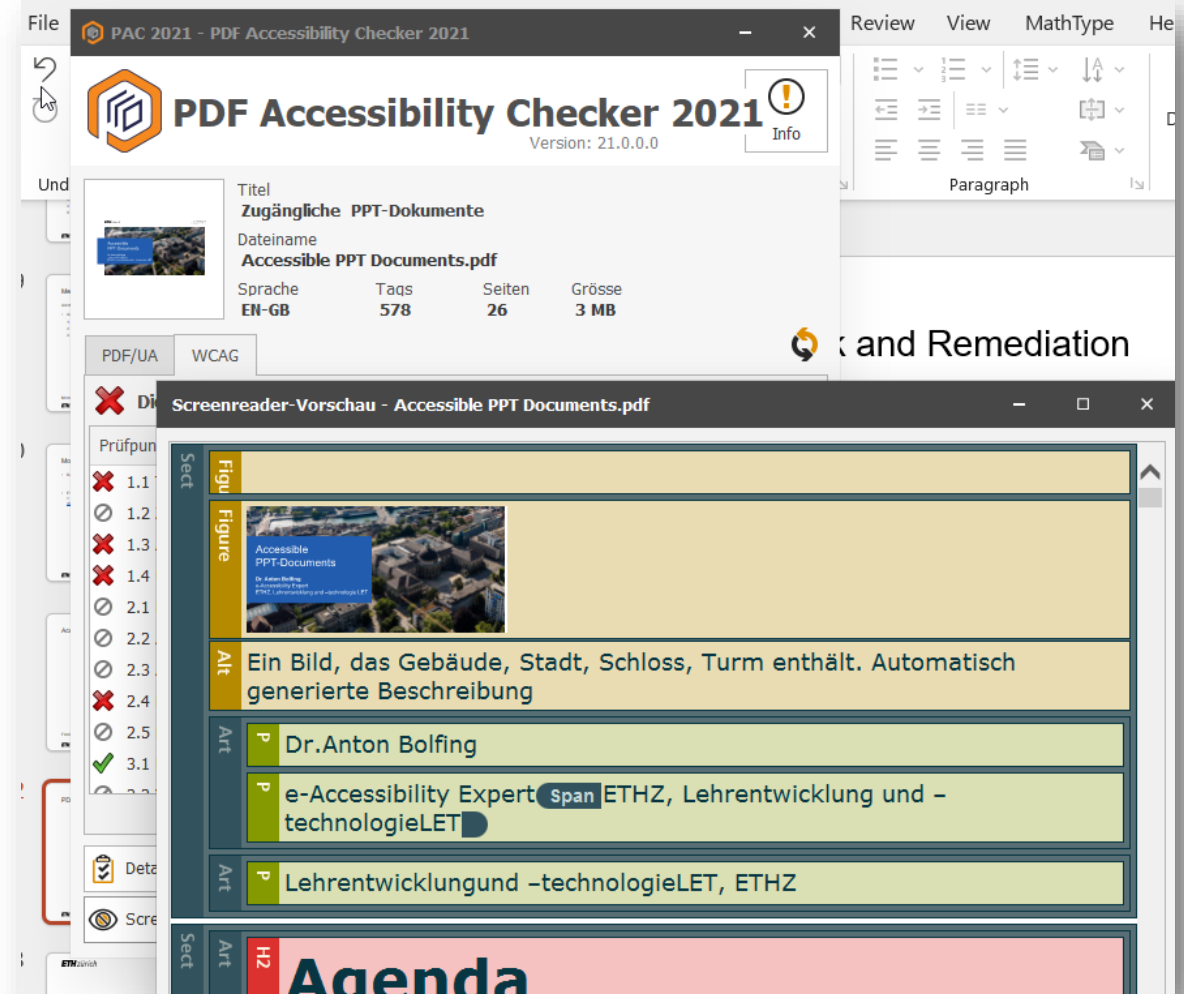
Accessible PDFs export



Find details on [Accessible Digital Documents Workshop](#) slides

PDF Accessibility Check and Remediation

- Check PDF accessibility using “PDF Accessibility Checker PAC” Screen reader preview
 - Download PAC
 - [More details on checking PDF accessibility \(accessible docs workshop\)](#)
- You can greatly improve the accessibility of your PDF document by directly edit it in Adobe Acrobat Pro
 - [Contact me for a workshop](#)
 - Get a [first impression on how to postprocess your PDF for accessibility](#)



Alternative presentation formats / General considerations

- The most important aspect of accessibility concerns in learning materials is the availability of all relevant learning content at a convenient location.
- That also means that:
 - Sometimes a lecture script, a text book, the lecture presentation slides, a learning video, the lecture recordings, all deliver redundant information on different channels.
 - In such cases, not every single learning channel or activity needs itself to be 100% accessible.
 - But make sure, that one of them is 100% accessible and that this one includes all relevant learning content. Lets call it the **fully accessible back bone** channel, usually the script.
- HTML over all
 - As we learnt, PPT is not particularly suitable for creating accessible content.
 - Therefore we recommend to check out other formats, such as HTML-slides to produce accessible presentation slides.
 - E.g. check out <https://slides.com/> or <https://revealjs.com/>. You might know it from [here](#).

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