Multilingual production saves printing plates in illustrated books published in several languages. When all language-specific graphics are defined as black, the cyan, magenta and yellow printing plates can be reused, while the black plates are replaced with each new language.

Narayana Press recommends that multilingual documents be structured as described here. If a printing press has other wishes, they must of course be followed.

Changing documents and illustrations that are not prepared for multiple languages can be very time-consuming. You can save a lot of time by planning the production from the beginning in collaboration with both graphic designer, illustrator and translator.

It is important that the design takes into account the special requirements and limitations of multilingual production. The same applies to graphics where the language must be changed – see more on page 4.

- The design must be sufficiently »airy« to make room for other languages, which may take up a third more than the original.
- The graphics must be distributed on layers.
- Text on illustrations should be created in InDesign.
- Text wrap should be avoided.
- White text on a colored background is only possible with texts which are common to all languages.
- The fonts should work on both Mac and PC. Try to avoid very special or outdated fonts for which it may be impossible for the other language editions to obtain a license, and prefer versions from Adobe Creative Cloud.

There are two main ways to make the translations:

- In Word, which means the translated text must be copied over manually, one text chain at a time.
- Directly in InDesign, or via InCopy or IDML. This means the translator can see the finished result, change formatting, reformulate if there is a lack of space, and check hyphenation. The result is a fully formatted InDesign document, where the designer only has to adjust the size of the text frames.

Regardless of how the translator works, it is a great advantage to adhere to the guidelines for text formatting and structure listed on page 2.

Be aware of languages such as Faroese and Greenlandic where there are no hyphenation dictionaries, and discuss in advance with the translator how to resolve this. It may be necessary for the translator to correct all hyphenation manually, in either InDesign or InCopy.

■ Documents

It is preferred that all languages are gathered in one document. In this way, you can ensure that the color part is identical in all versions, and you will not have to apply the same changes in many documents, with the risk of mistakes that do not show up until the blueprint.

> **TIP** If you have received a document for each language, the layers can be easily and quickly copied into the basic document using the free script »Layer Cloner« from Redokun. The image layer can usually be copied without problems, but the text may change due to different document settings. Parent pages and paragraph and object styles with identical names will be overwritten. It is therefore recommended to rename all Styles before copying a text layer.
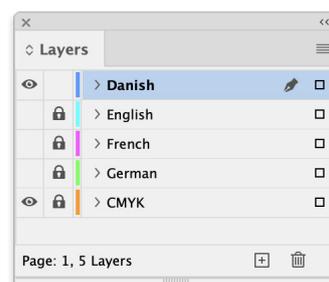
■ Layers

The graphics are distributed on different layers: A layer for the color part with images, backgrounds, etc., and a layer for each language.

If more layers are needed, the layers must be sorted logically and named clearly, so that there is no doubt about which layers should be visible for each version.

Layers that are never to be printed should be defined as non-printing.

The layers can be hidden and locked depending on which part you are working with.

If possible, complete the first language version before the starting on the next ones. Then you can simply copy the first language layer and replace the text.

> **TIP** If a document has not been prepared for multiple languages, there are several free scripts that can move text and/or images to the correct layers. Before running such a script, it is recommended to group collages and the like in order to maintain the relative position of the images. After the script, check all layers, with particular attention to locked text and text on parent pages.

The language layers should always be placed at the top. This is where you place black text and graphics unique to the various languages.

Always place as much as possible in the language layers. This provides the greatest flexibility, and makes it easier for other language versions to adapt their layout and typography.

- Text on drawings, tables, logos, arrows and lines etc. as well as black-and-white photos should also be placed here. This makes it easier to apply corrections, and translations via IDML can be transferred automatically. See more about language change in illustrations on page 4.
- It will often be advantageous to place page numbers in the language layer – but make sure to do it consistently, and be careful to avoid duplicates like placing the same page number in both the language and image layers.
- Colors other than black (or shades of gray) must never be used in the language layers.
- Generally, the color white or »Paper« should not be used in the language layers. Remember that white is not a printing color, but a »hole« through which the paper shows, and that graphics in the language layers can never remove anything from the CMYK layer, only add different percentages of the color black. White text in the language layers is only possible on a background of pure black – see how on pages 6-7.
- As a general rule, all frames in the language layers should be transparent.

The CMYK layer should always be placed at the bottom. This is where you place images, backgrounds and colored texts which are common to all versions.

- Any white page numbers must be placed in the CMYK layer.
- Never use text wrap. Firstly, errors can occur because elements in hidden layers push the text, secondly, it makes it difficult to adjust the other language versions, which rarely occupy the same space as the original language.
  Instead, distances to images can be kept consistent by using a top inset spacing in the caption text frames, and text can be wrapped around objects by using hand-drawn text frames.
- If you want to cover a part of an image in order to place text, the covering frame must be placed in the CMYK layer, and the text itself in the language layer – otherwise the image will shine through. See details on page 6.

■ Text formatting and structure

Good practices especially for consistent text formatting and chaining of text frames will greatly facilitate the work of translation and the subsequent replacement of one language with another. When translating via IDML, the procedures describes here will often be mandatory.

Use typography

- Use styles consistently at both character and paragraph levels, and avoid local formatting except for tracking and lines that need to be kept together. In this way, the formatting is preserved in the translations, and will not have to be recreated in the layout programme.
- It is recommended to activate the »Style Override Highlighter« to check style overrides:
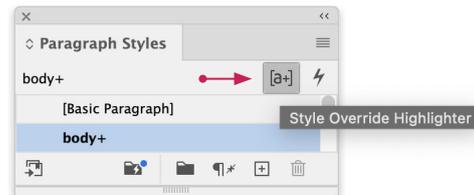
- In order for hyphenation and spell checking to work, it is important that all typographies are defined with the correct languages, which can be found under »Advanced Character Formats«. For the same reason, there should be a set of styles for each language.
- Create underlining and frames by using Paragraph Rules/Underline and Paragraph Borders – never use separate lines or text frames.

Avoid tabs, extra line breaks etc

- Add space above and below headings in the paragraph styles – never use extra line breaks.
- Define indents in the styles – never use tabs.
- Never use hard line breaks or tabs in the middle of a paragraph or heading to achieve a specific line break. Soft line breaks are OK, but use them as little as possible, as they may need to be placed elsewhere in other languages. The best way to control line division is by using »No Break« and discretionary hyphens.

Use live tables

- Create real tables using cells with adjustable height and width – never use separate frames and lines.

Use live lists

- Format lists using InDesign's automatic list functions and styles with hanging indents – never use spaces, tabs or the like to position the text. Let InDesign generate bullets and numbering automatically, rather than inserting symbols and numbers manually.
- Numbered headings should also be created using automatic numbering.
- Lists using special icons are best made by anchoring the icons as Inline Objects.

Text frames and text chains

- Use as few text frames as possible.
- Define space above and below headings in the paragraph styles – never by using multiple text frames.
- Keep the text in as few text chains as possible, and do not break text chains unless absolutely necessary. The exception is captions which should never be linked, and breaking text at new chapters is also OK.
- Use styles with built-in Start Next Page/Frame to position headings etc. correctly. This will ensure that the text is always correcty placed, even in languages you do not understand. Column breaks are also OK.
- Create highlights, tinted backgrounds and frames using Paragraph Borders and Shading – never use separate text frames.

Symbols and small images

- If you need to place a lot of smaller black and white images in the same position relative to the text, the best way will be to anchor them in the text, using Object Styles to ensure that the position remains exactly the same.

Text in illustrations

- Text in illustrations to be translated should be recreated in InDesign as far as possible. To prevent displacements during translation, it is recommended to make the frames large enough to accommodate longer texts, and to group all text frames.
- Some illustrations may be too complex to be texted in InDesign. Learn how to prepare them for multi language production in Adobe Illustrator on page 4.

■ How to submit text for translation

IDML is created by selecting File ► Export ► Format: InDesign Markup (IDML).

A Word file is created by selecting the text and selecting File ► Export ► Rich Text Format. This preserves all text styles, and the translated text can be formatted automatically by turning on Style Mapping when importing it back into InDesign.

If there are many short text chains, you can use the script »ExportAllStories.jsx«, which comes with InDesign. This results in a text file for each text string, which can be rather impractical. The files can be merged in Word, but this will often mess up the formatting. The best solution is a professional PlugIn which can also collect and sort the text as desired, for example »TextExporter« from the company Rorohiko.

■ How to submit files for other language versions

Vector graphics should always be included.

InDesign's image preview is usually sufficient both for placing the text and for exporting PDF for proofreading. In cases of complex text wrapping, it may be necessary to include lores versions of images.

Fonts should only be included if the license allows it.

■ Ready to print?

1. Browse the document once for each layer, with all other layers hidden. Check that there are no images in the text layers, or vice versa, and that texted black and white images are placed in the language layers.
2. Review each language layer along with the CMYK layer. Check that there is no double text, page numbers on top of images or the like, and that text on illustrations is correctly positioned.
3. Check that there are no colors in the language layers. This is best done using InDesign's built-in Preflight. Ready-made settings can be downloaded here.
4. Check that there is no white text or graphics in the language layers. This is best done by using *Find this colour ...* from the Swatches Panel.
5. Export print-ready PDFs of each language layer separately, as well as of the CMYK layer.
6. Export lores PDFs of the CMYK layer along with each language, so the printing house can check against the print-ready RIP version.

■ Change of language in illustrations

As far as possible, language-specific texts in illustrations should be placed directly in the InDesign document, in the langauage layers.

If an illustration is very complex, it must be created in Illustrator, following the same principles as the InDesign document, and with the same layering.

It is important that CMYK and language versions are placed precisely in relation to each other, and in such a way that text and image layers do not risk being swapped or misplaced when updating. To avoid this, the size of the Artboard in Illustrator should be defined to match the final size of the illustration exactly, and the illustrations should be imported as described below.

1. First, place the common part in the CMYK layer in InDesign.
   Select *Show Import Options*.
   Under the General tab, select *Crop to: Trim*, which corresponds to Illustrator's Artboard.
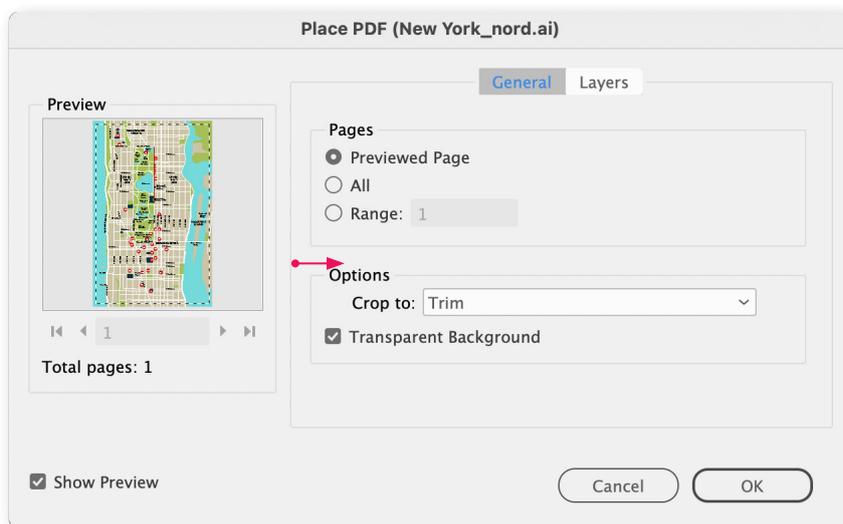
Under the Layers tab, switch off all language layers and select *When Updating Link: Keep Layer Visibility Overrides*. This will prevent unwanted layers from showing after corrections.
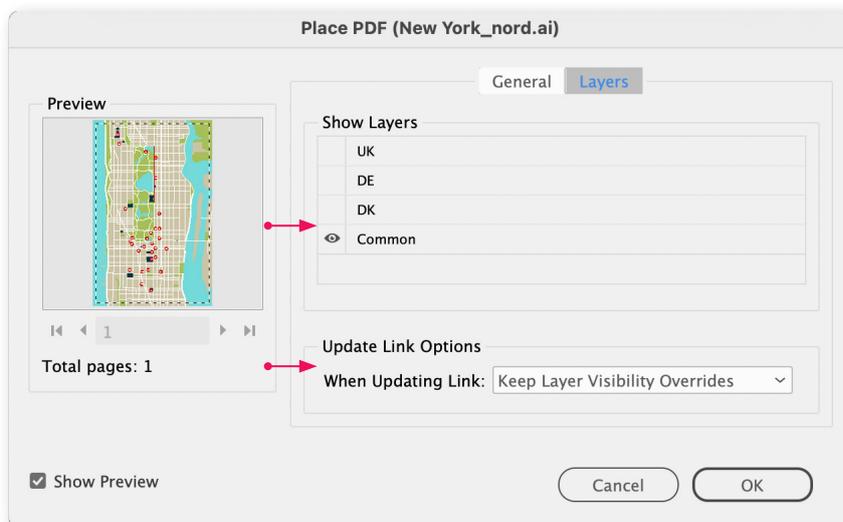
2. Then create a copy of the artwork in the language layer.
It is important that all versions are positioned exactly the same.
This can be easily ensured by clicking on the illustration, selecting the colored square in the CMYK layer, and holding down the Alt key while dragging the square to the desired language layer (which must not be locked).
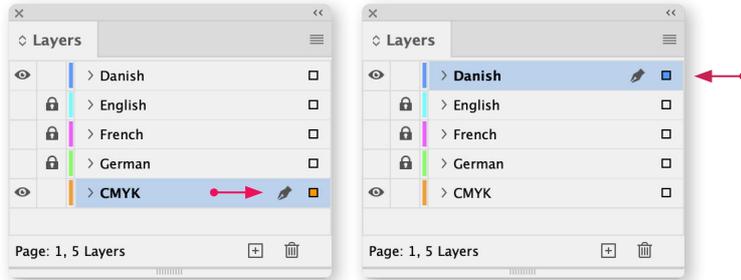
3. Select the copy in the language layer, right-click, select Object Layer Options, turn off the common layer, and turn on the desired language layer.
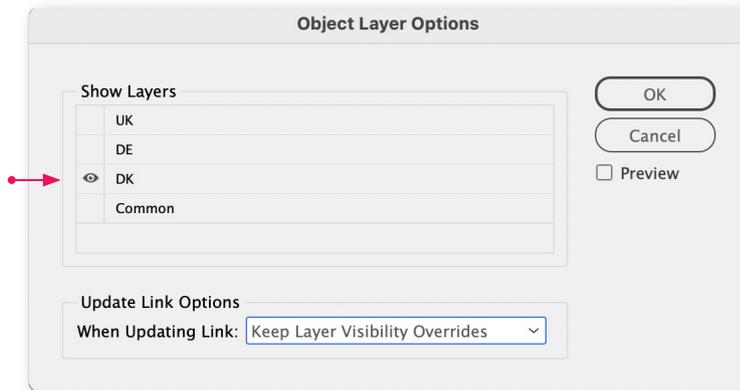
4. Check by viewing language and image layers together as well as separately.

Use these import settings throughout the book. Fortunately, InDesign remembers them, even after a restart, but it will be wise to check anyway.
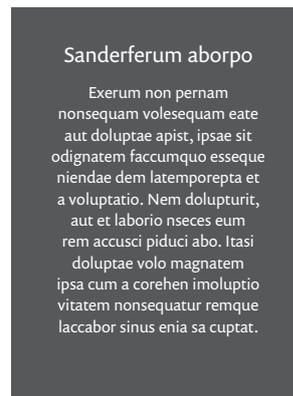
TIP When an illustration needs to be updated after corrections, it is better to choose *Relink* rather than *Place*, and to switch off *Show Import Options* – then the illustration will be automatically imported with the same settings as last time.

■ Language change in white text

As a general rule, there should be no white text in the language layers.
However, it is possible to change the language in white text, but it requires

- that the white text is placed over a black or dark gray background, or a black and white image
- that both parts are located in the language layer
- that there is no color underneath in the common layer (unless you want it to shine through)

Example 1. White text on black and white images or backgrounds

Sanderferum aborpor mincill aborese quatur aut mincia Soleniae et nonsed.

Sanderferum aborpo

Exerum non pernam nonsequam volesequam eate aut doluptae apist, ipsae sit odignatem faccumquo esseque niendae dem latemporepta et a voluptatio. Nem doluppturit, aut et laborio nseces eum rem accusci piduci abo. Itasi doluptae volo magnatem ipsa cum a corehen imoluptio vitatem nonsequatur remque laccabor sinus enia sa cuptat.

Example 2. White text in a black frame above a color image

Place a white frame in the common CMYK layer to prevent this part of the image from showing.

Make a copy of this frame in the language layer, with exactly the same location, change the fill to black, add a thin black stroke around it to prevent misalignment, and insert the text. If you prefer a white stroke around the black text frame, add a white stroke around the white frame in the CMYK layer.
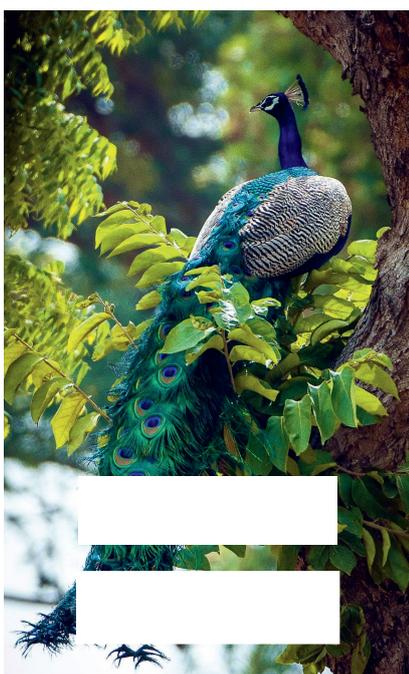
CMYK layer
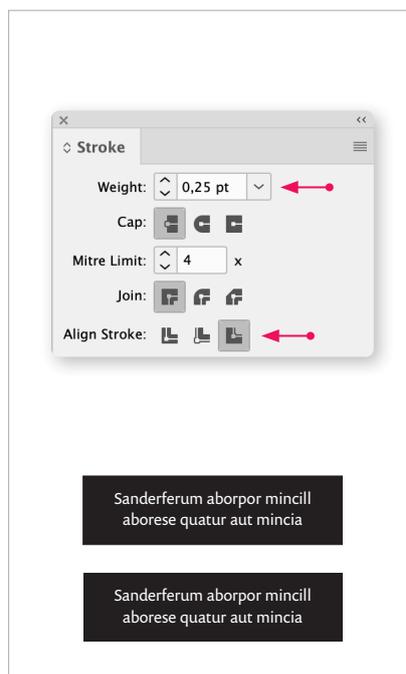
Text layer

Text + CMYK

**Example 3. Language change on color images**

This method is suitable for images with very dark areas. The principle is that the CMYK image is split into two, one with the colors cyan, magenta and yellow, and one with black, the latter being placed in the language layer.

1. Split the image into two, one containing only the black channel and one containing the other three colors. Optionally move as much color as possible into the black channel (GCR); this will blur the transition between deep black and pure black.

Example of an original image, and the CMY part before and after image processing.

2. Place the CMY part in the CMYK layer.
3. Place the black part in the exact same place in the language layer, and insert the white text. At this stage, the text frame must be transparent.
4. Group the text and the grayscale image, set Effects to Multiply, and select Knockout Group, in that order.
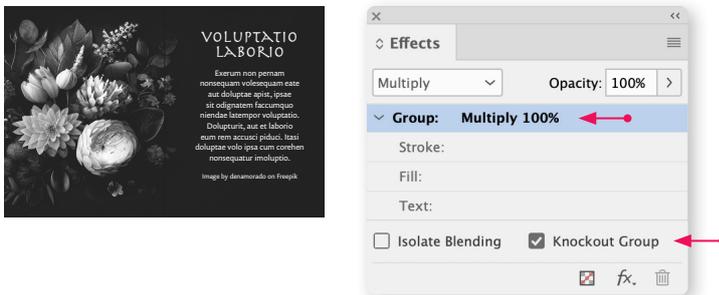

You can now see exactly how it will look when printed: The white text »punches a hole« in the black color, allowing the underlying CMY colors to shine through.

5. You can then either lighten or completely remove the colored background under the text in the CMY image part, and correspondingly place as much black as possible under the text. This can easily be done in InDesign using *Gradient Feather*. Otherwise, the transition between pure black and deep black may be too visible, if not on the screen, then in print. For the same reason, it can be advantageous to maintain a little color under the text rather than making it completely white.

The same can of course be done in Photoshop. The advantages of using InDesign are that you see the result immediately, and that the original image remains intact.
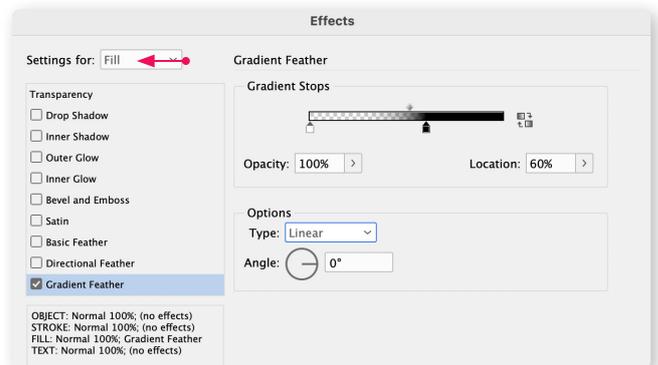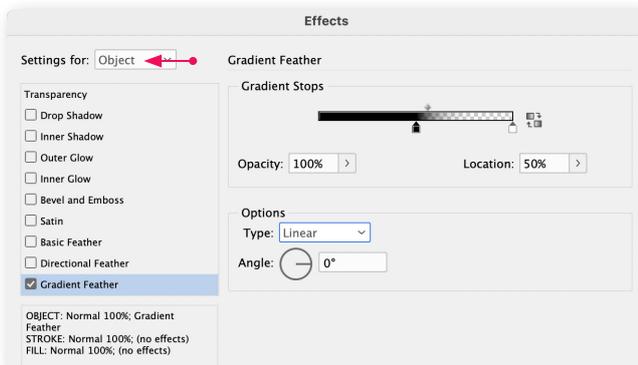
Example of gradient feather applied to the 3-color part of the image and the text frame, where the background is now 100% black.
Note that on the text frame, the gradient feather effect should only be applied to the fill.

The finished result with white text...

... and with colored text, created by adding a frame with a light golden color above the color image.