



Thank you for choosing **Effigos 3D Explorer**.

Before you familiarize yourself with its operation, please note the following information.

Requirements:

- For the interactive use of the 3D models a current web browser is needed, preferably Mozilla Firefox and Google Chrome. For iPads, iPadOS version 13.2 or higher is required.
- The software is optimized for larger screens. The screen should be at least 10 inches.
- To be able to use all functions easily, we recommend the use of mouse and keyboard. The notes in the help refer to these input devices. Nevertheless, most of the functions are also compatible with touch gestures.
- A powerful graphics card is a prerequisite for a high-quality display. Modern computers and tablets already fulfill this criterion in most cases. Whether your device meets the technical requirements can be checked at any time free of charge at anatomy.effigos.com.

Conventions:

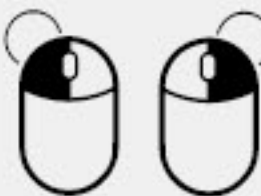
The following mouse symbols are used in the instruction manual:



Hold down left/right mouse button and move mouse



Rotate mouse wheel



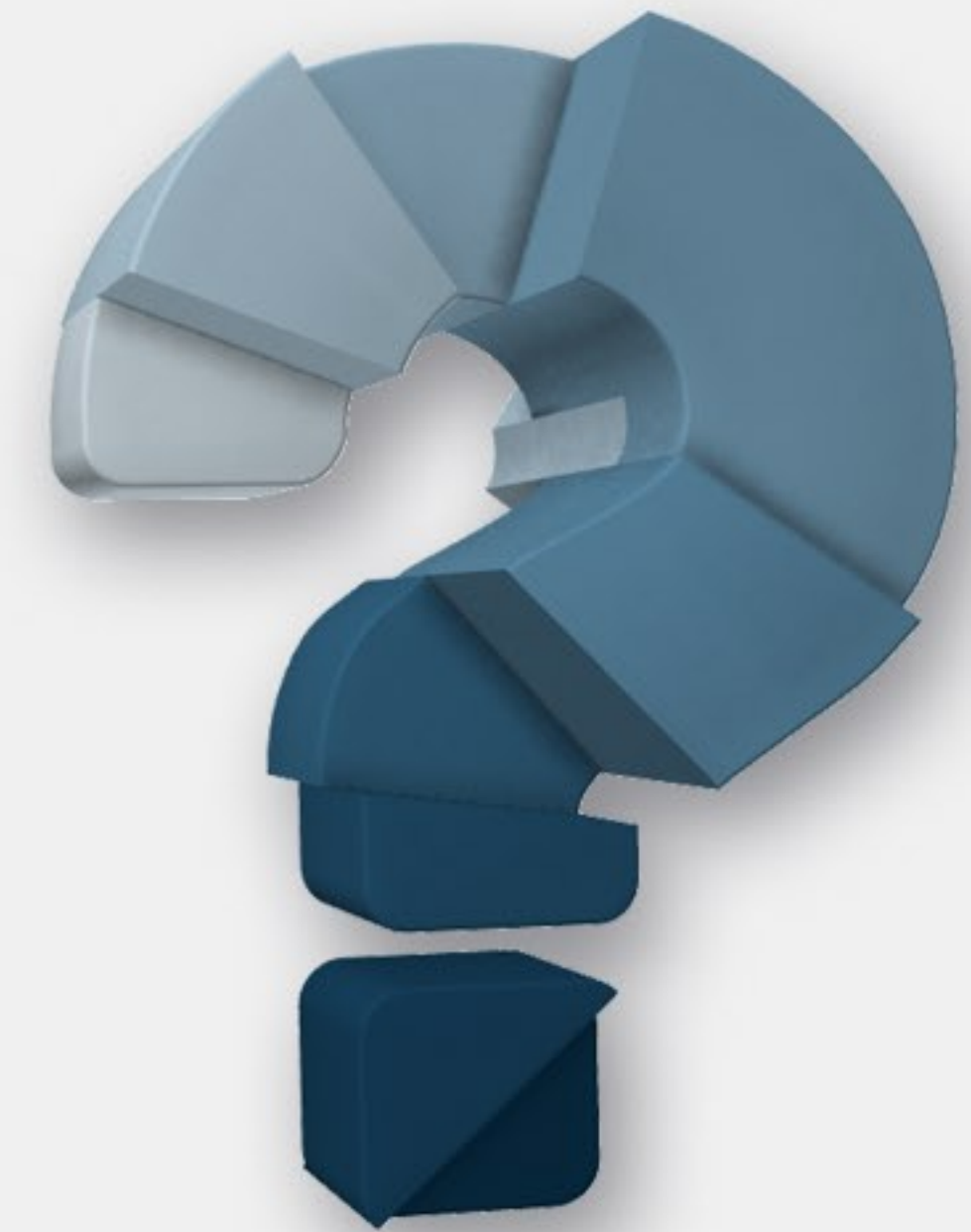
Press left/right mouse button once briefly



Double click left mouse button



Press left mouse button longer than 3 sec.



Attention: When you open a module for the first time models and textures are loaded into your browser's memory. Depending on the complexity of the anatomy, this may take some time. The next time you open a module in the same browser, the app can access the data and start immediately the initialization.

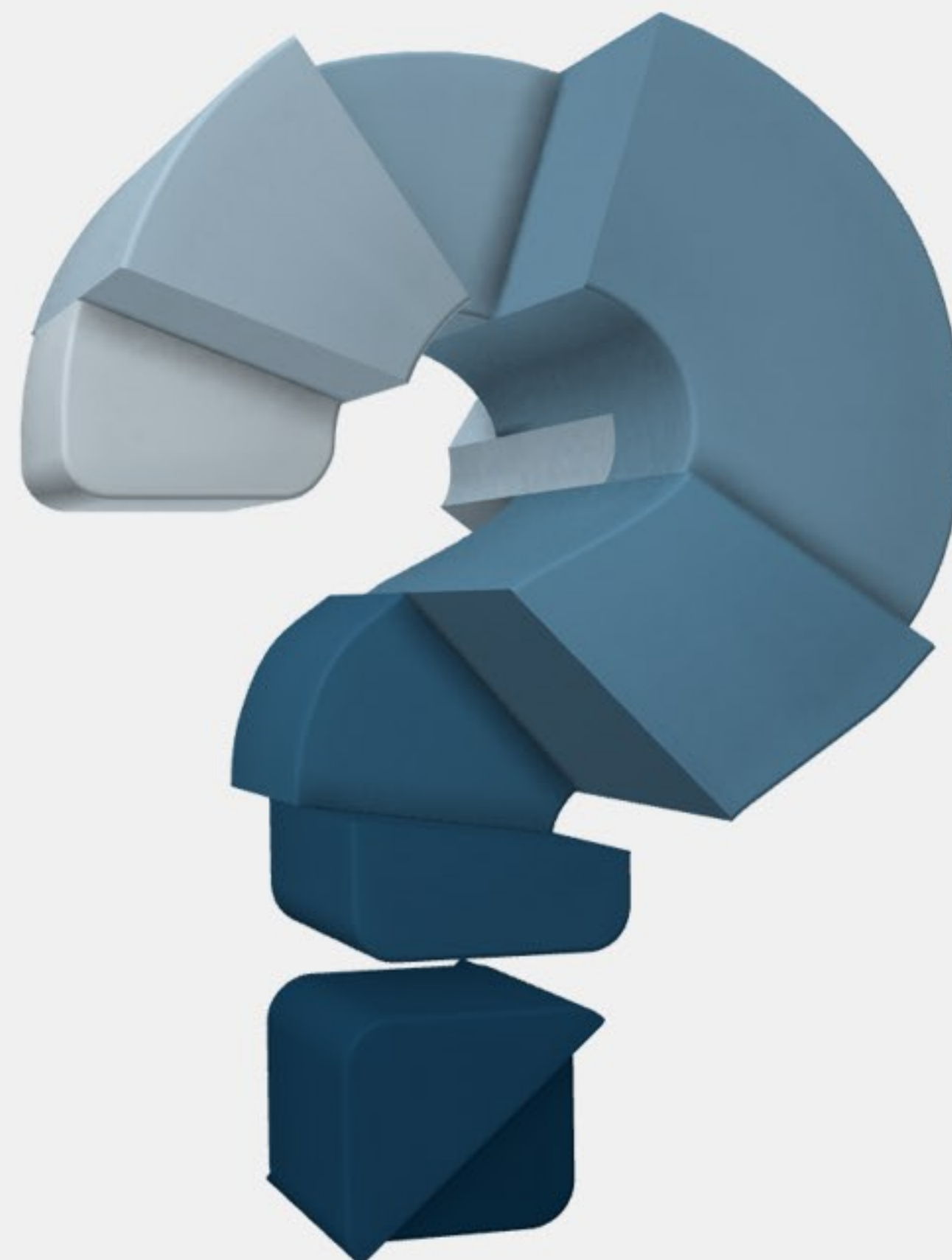
Important notes are highlighted with yellow boxes.

For action instructions, the font is blue.



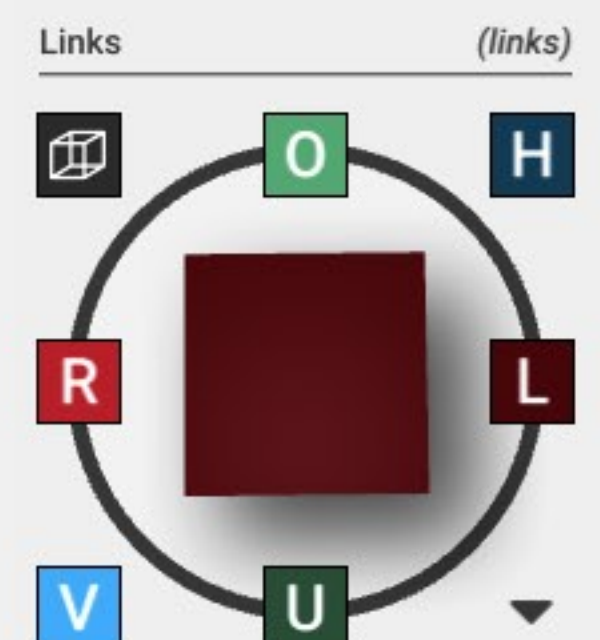
Touching structures or control elements with the mouse pointer is called a mouseover.












Licence manager — | |
Information |
Help |
Minimize/maximize view



3D model:
interaction page 1

Page12 **Camera Tool:** Quick access camera positions
(top, bottom, front, back, left, right)



-  Search Tool ➡ Finding structures in the model or in the structure list
-  Structure List ➡ Grouped overview of all structures displayed in the model, control of the visibility of structures
-  Label Tool ➡ Structures currently visible to the viewer are named in real time
-  Note Tool ➡ Notes mark selected structures or function as free text blocks with numerous design options
-  Arrow Tool ➡ Arrows are added to the scene as real 3D objects and move with the model; properties and position are changeable
-  Cut Tool ➡ All structures can be cut at any point in any angle; the cutting plane can be moved at any time
-  Color Tool ➡ An individual color can be set for all structures; the rendering simulates an illustration style
-  Exploded View ➡ Structures are automatically separated and rearranged
-  Presentation Tool ➡ Save individual views of the model incl. notes, labeling, coloring, sections; save single or series of views as presentations
-  Media Center ➡ Playback of presentations and of classical media types (texts, images, films), as soon as available
-  Screenshot ➡ The current screen content (with/without elements of the software) is saved as a png file



By clicking on the home button, the 3D object returns to its original position and all changes are reset.



By double-clicking in the free space, the 3D object returns to its original position without resetting.



Rotate/Tilt

hold down left mouse button and move



Zoom

rotate mouse wheel



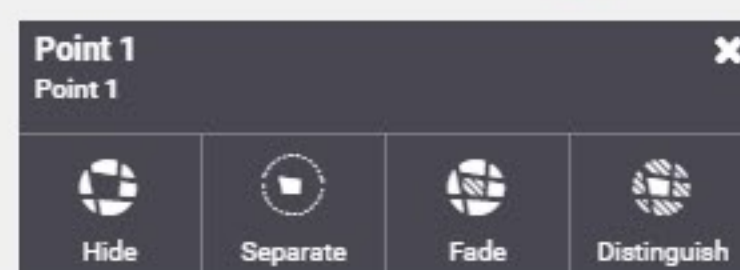
Pan

hold down right mouse button and move



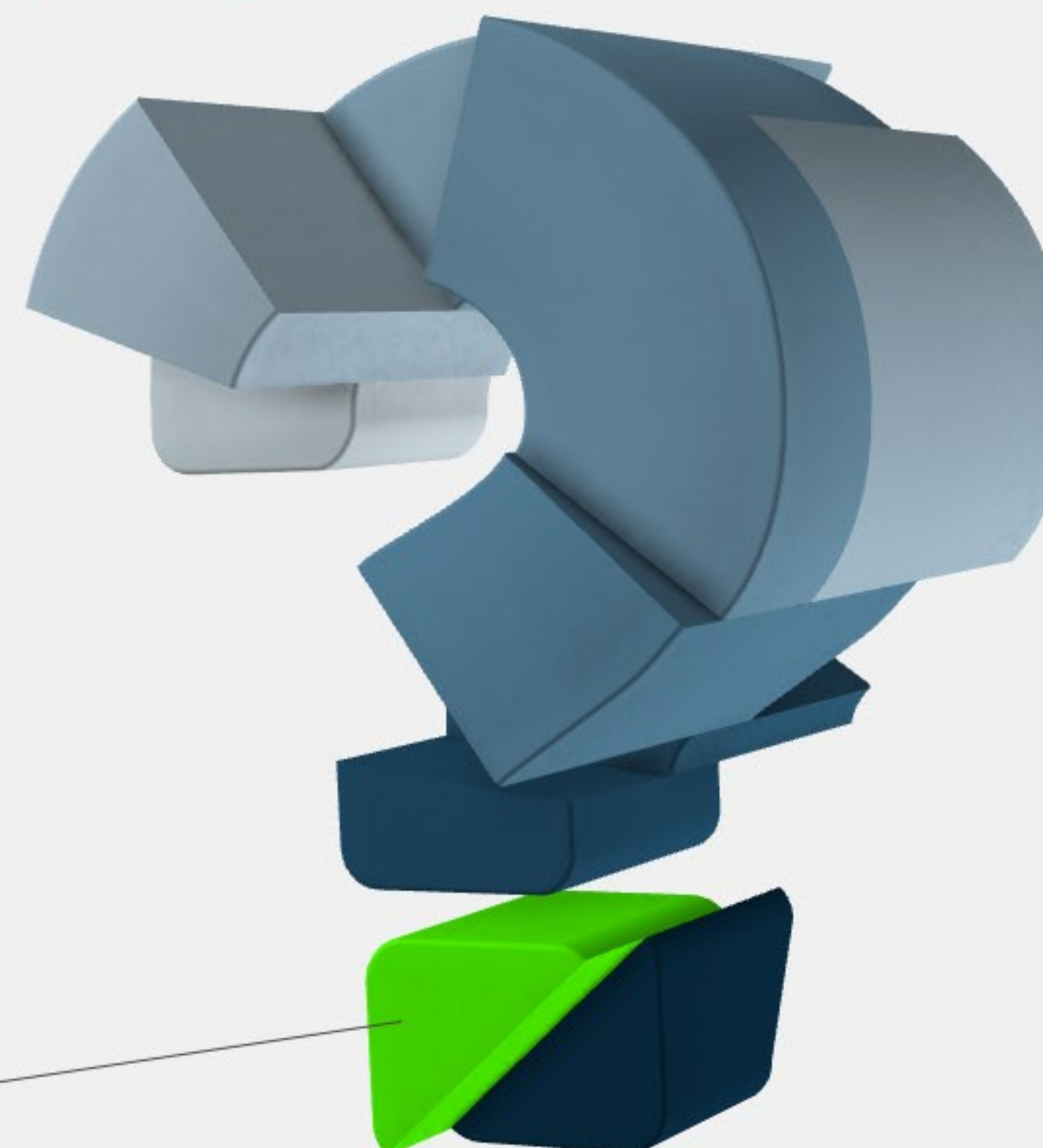
Context menu

hold left mouse button longer on a structure



Quick access to the visibility of structures

You can open the context menu only on opaque structures. After selecting the „Hide“ or „Fade“ options and closing the menu, visibility can be changed in the **Structure List** or by „Undo“



rotate



tilt

Whether you **rotate** or **tilt** the object is automatically determined by your position on the screen.



Structure List ? x

▼ Help

▼ Question mark point

• Point 1

• Point 2

▼ Question Mark Arch

• Segment 1

• Segment 2

• Segment 3

▼ Segment 4

• Shell

• Core

• Segment 5

• Segment 6

• Segment 7

• Segment 8



Search Tool ? x

po

Point 1

Point 1

Point 2

Point 2

Question mark point

Question mark point

Enter search term

The **Search Tool** lists all structures containing the search term for the selected language, as well as in Latin.

Clicking on a list symbol opens the **Structure List** and marks the name (3 seconds flashing)

Clicking on a magnifier symbol frees the searched structure in the model and opens the context menu

Point 2

Point 2

Hide

Separate

Fade

Distinguish

The search result is initially displayed in isolation. This makes it easier to find small structures in particular. Click on the option „Distinguish“ to add all other structures in a transparent mode.



Structure List

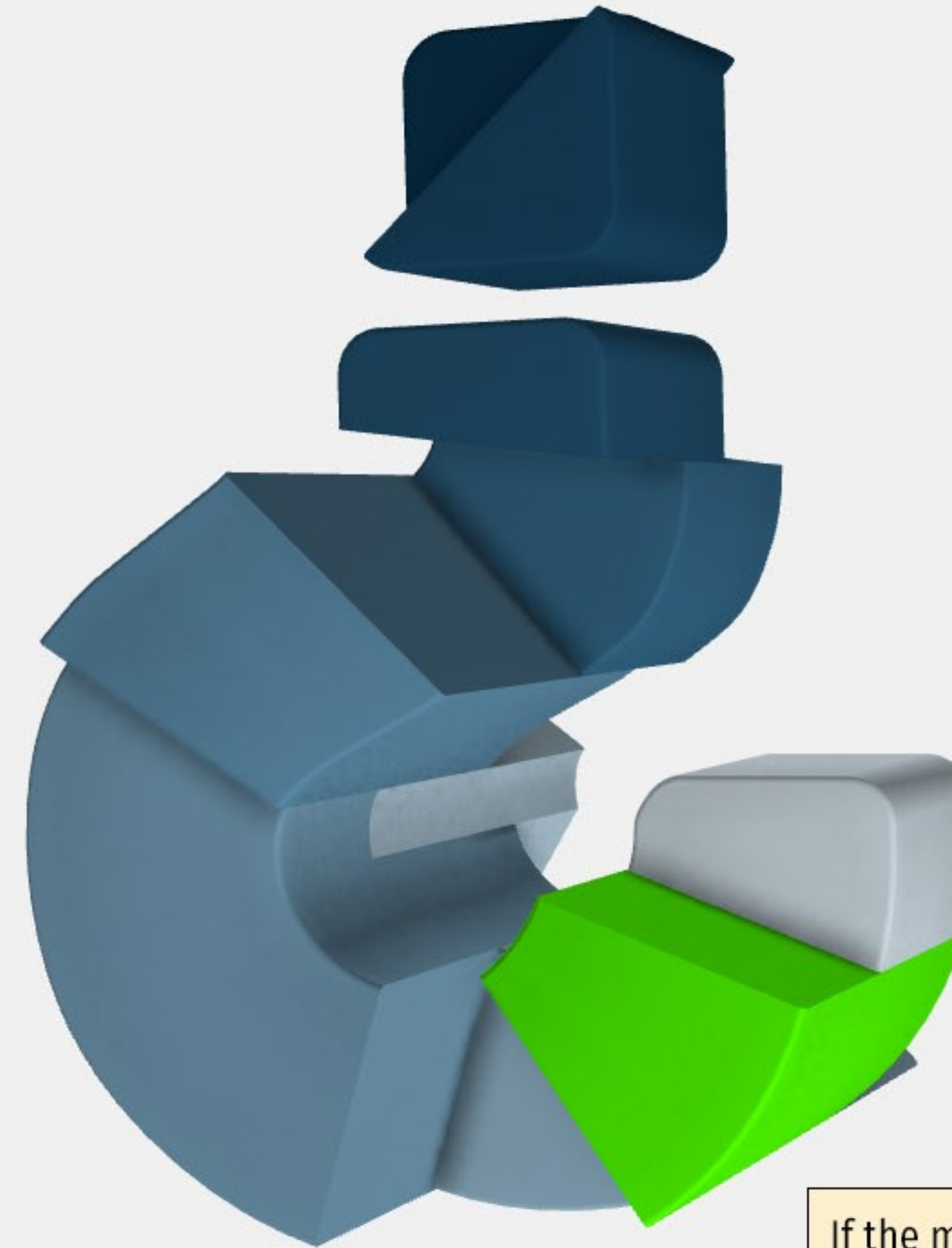
- ▼ Help
- ▼ Question mark point
 - Point 1
 - Point 2
- ▼ Question Mark Arch
 - Segment 1
 - Segment 2
 - Segment 3
 - ▼ Segment 4
 - Shell
 - Core
 - Segment 5
 - Segment 6
 - Segment 7
 - Segment 8

◀ open/close **Structure List**

The **Structure List** contains all structures and substructures. Here, the visibility can be controlled individually. The **Substructure Tool** (page 8) and the **Color Tool** (page 9) open further setting options within the list.

Set visibility:

- ▶ fold in/out group
- fully visible
- transparent
- not visible



If the mouse touches a name in the **Structure List**, the corresponding structure is highlighted in green. If this structure is hidden by others, the highlighting is not visible.

Label Tool

Enable

On

Maximal Number

Font Size

Latin

Off

Only Cut Surfaces

Off

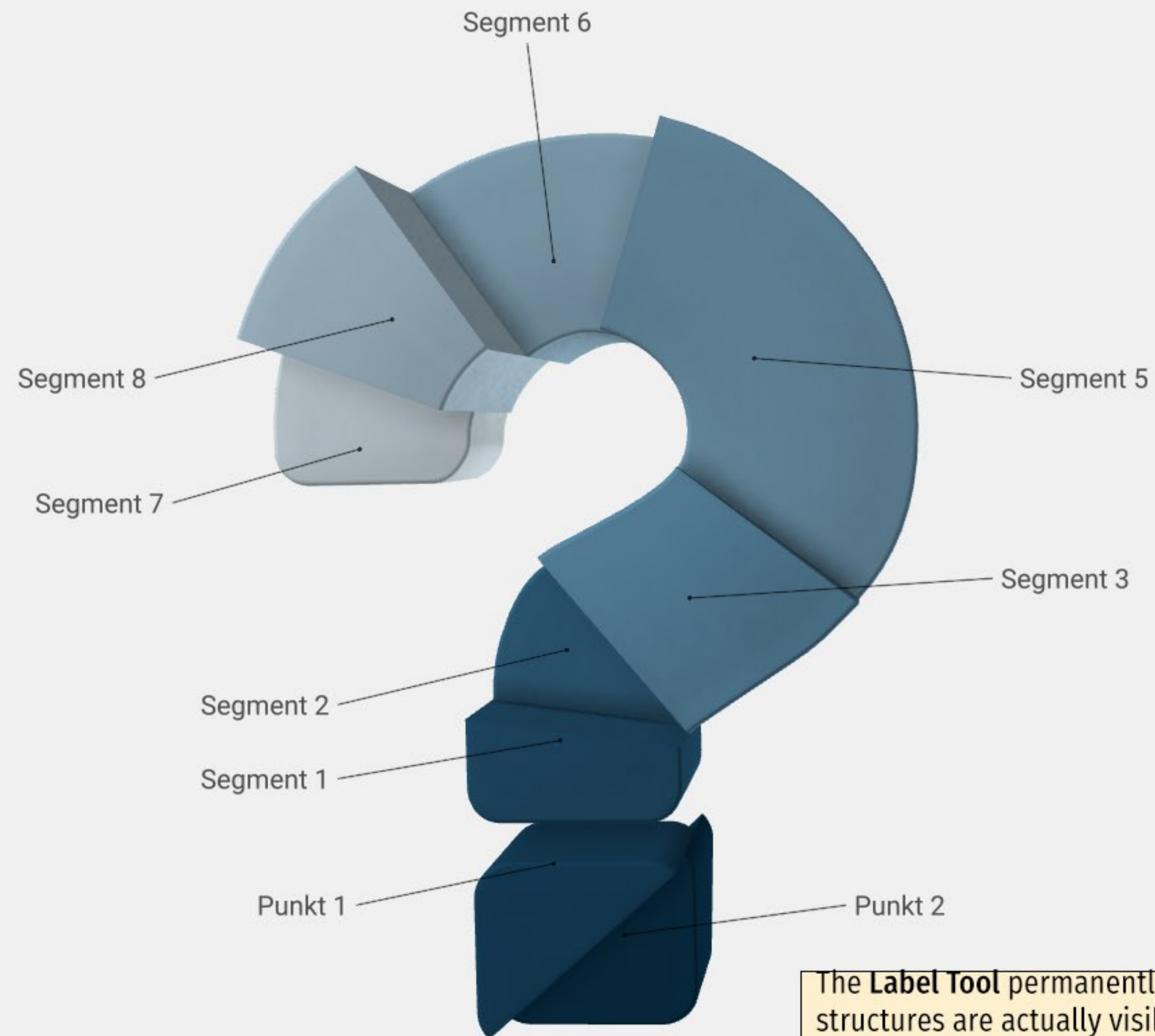
Activate live labeling

Sensitivity of structure recognition

Font size

Show label in Latin

Label only cut faces (**Cut Tool**, page 7)



The **Label Tool** permanently analyses, which structures are actually visible and tries to arrange the labels. This requires intensive computing power. If the display is greatly delayed, please lower the „Maximal Number“ within the **Label Tool**.



Das Fragezeichen

Clicking in the free space creates a note without text and connecting lines. You can add your own text with the text editor.

Note Tool ? x

Enable

On

Edit

On

Add/Remove

On

View notes
Edit notes
Create or delete notes

Notes and anchor points can be set with one click or deleted by double click. To do this, "Add/Remove" must be enabled.

A long click in the note opens the text editing window.

Text-Editor Shell

Shell

A

A

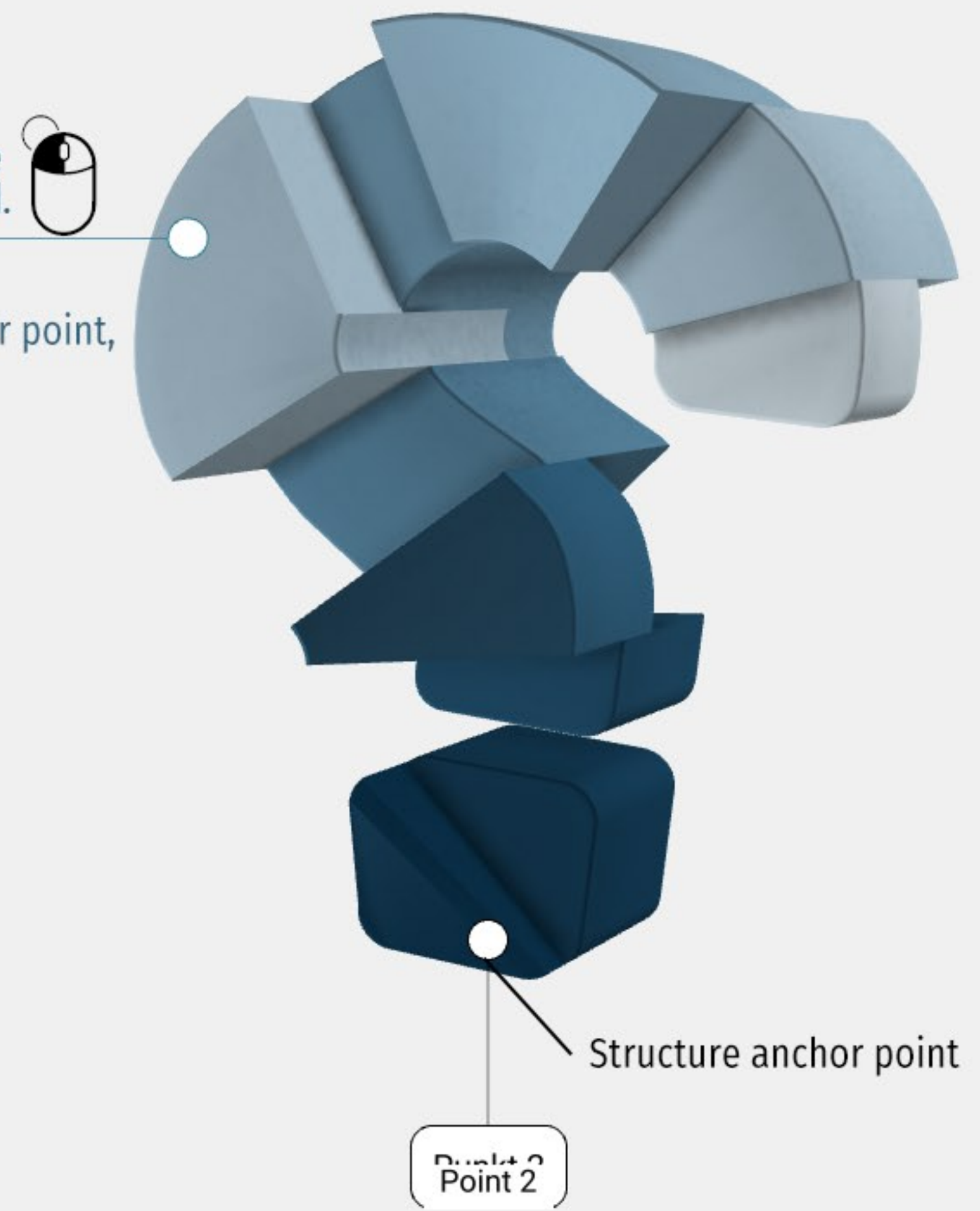
A

- Frame on/off
- Background colour
- Border colour
- Font colour
- Font larger
- Font smaller

Click with the left mouse button on the anchor point, hold down and move to relocate.

When you click on a structure, a note with the structure name and two connecting lines is created.

Delete note



Notes that have a connection to a structure are only permanently visible during editing. If "Edit" is switched off, the note only appears when the structure anchor point is visible.



Arrow Tool

Enable

On

Show arrows

Size

Preset arrow size

Edit

On

Edit arrows

Add/Remove

On

Create or delete arrows

Arrows can be set with one click or deleted with a double click. For this purpose "Add/Remove" must be activated.

Click on the ends of the arrow in the editor to change their shape



↶

↷

↶

↷

↶

↷

Change arrow shape
Change length
Change thickness

rgb(97, 255, 1)

A long click on an arrow opens the arrow editing window.

Apply current settings to all arrows

Delete arrow

Arrows can initially only be created on structures. These can then be freely relocated by rotation and shifting.

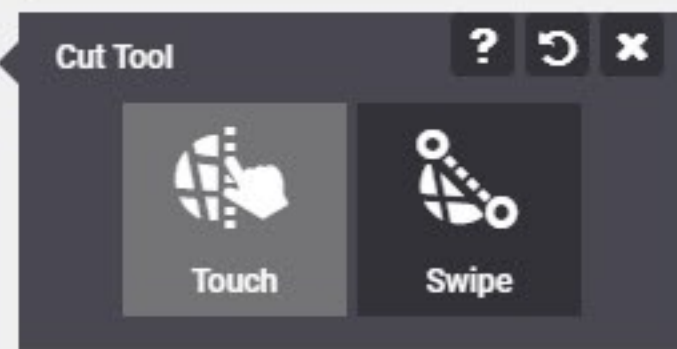
When clicking on a structure, an arrow is placed vertically on the surface.

Click on the arrow with the left mouse button, hold down and move it. The arrow rotates around its tip.

Click on the arrow with the right mouse button, hold down and move it to relocate the arrow.



Different cutting options are possible for each selection



Define your own cutting plane

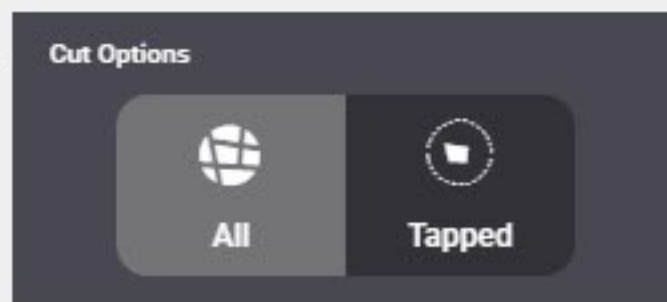
Draw a line with the left mouse button, this defines the cutting plane.

With a double click the cut is triggered on the desired side.



The cutting plane can be readjusted via the 2 nodal points.

The 3D model can be moved with the usual mouse control.

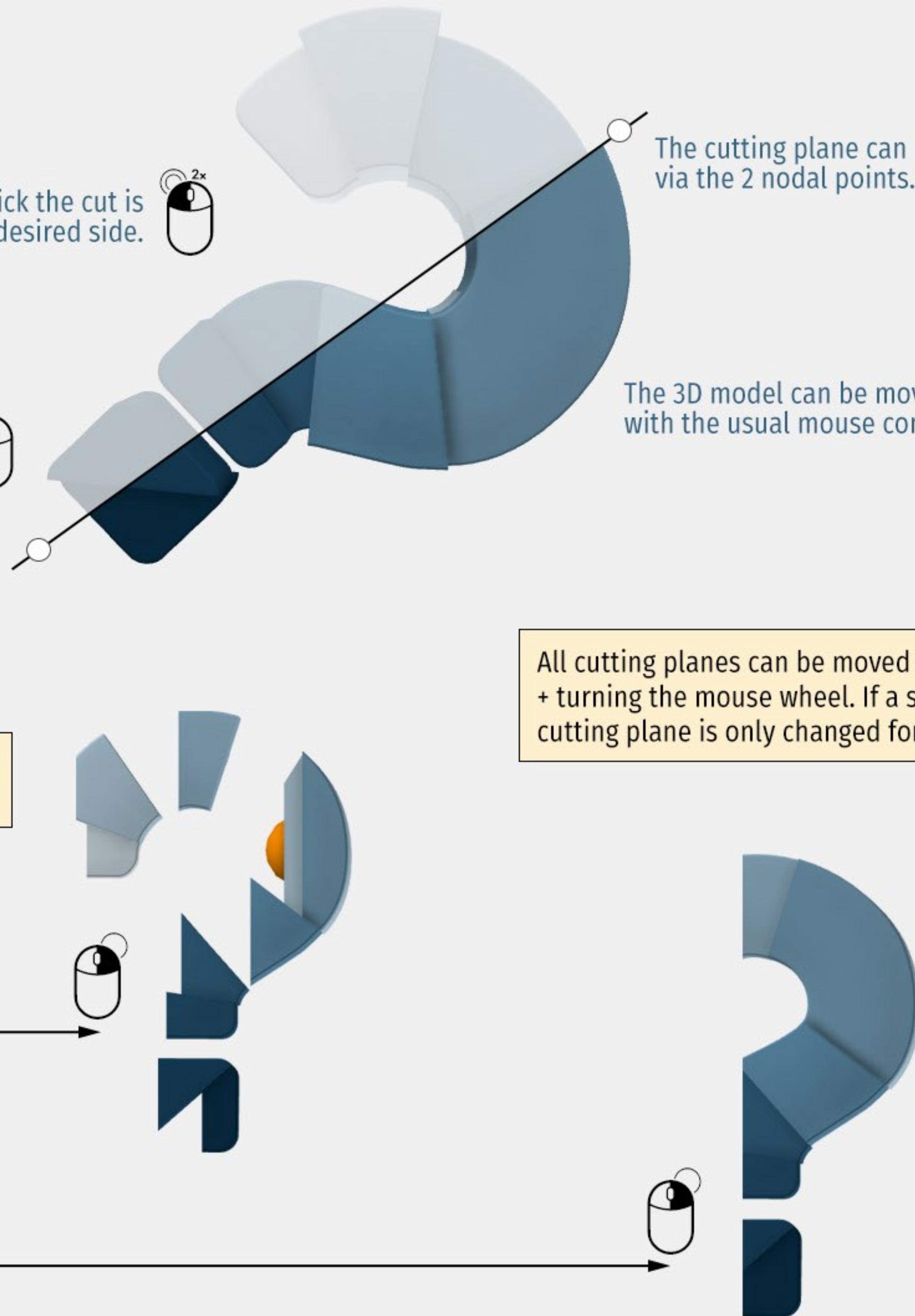


With the right mouse button a vertical cut through the touched structure is created.

One cut is possible per structure.

With the right mouse button a vertical cut through all structures is created.

All cutting planes can be moved continuously with **Ctrl** + turning the mouse wheel. If a structure is touched, the cutting plane is only changed for this structure.





? x

-

- 

-




-

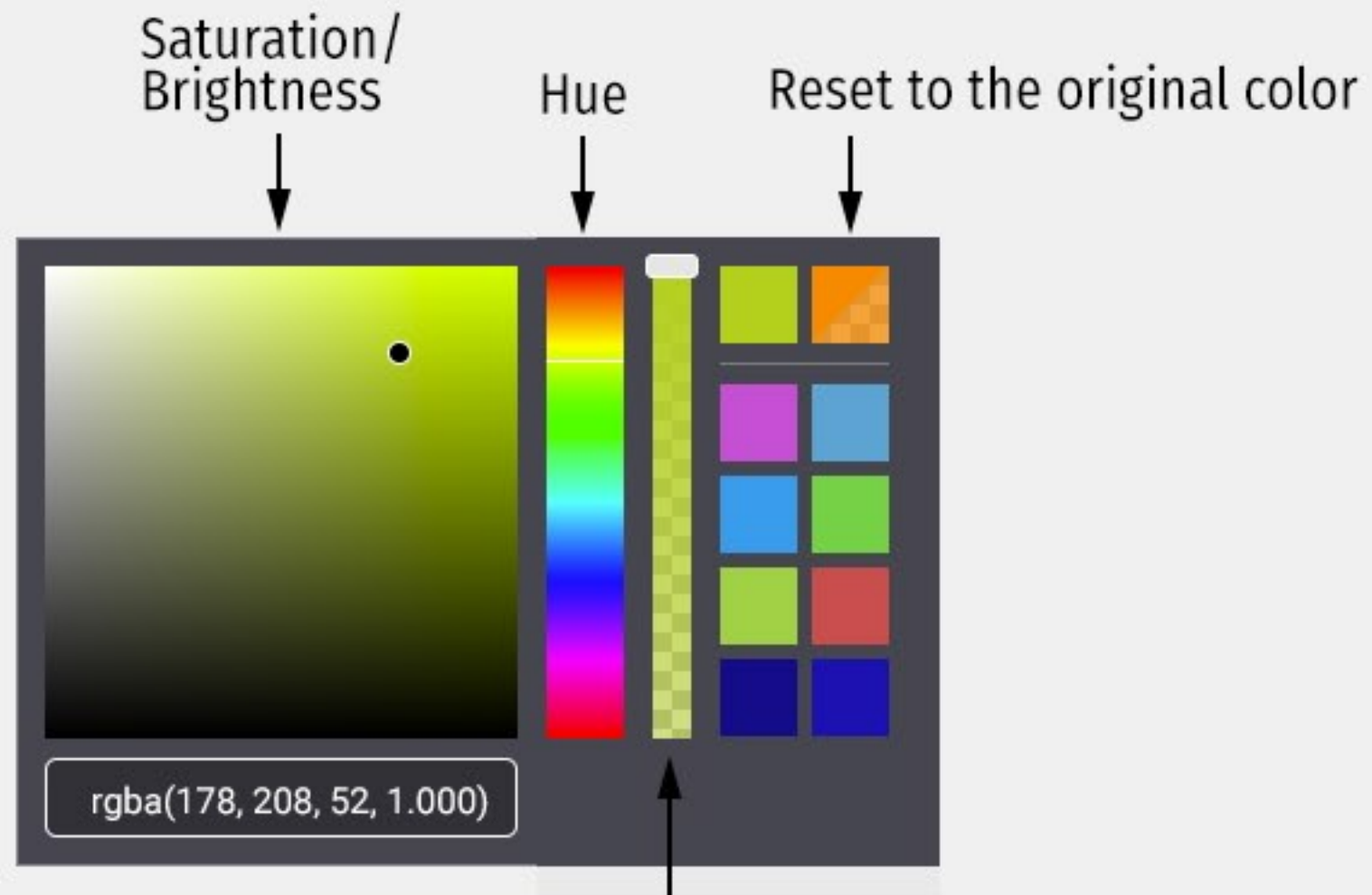
- 

-
- 

-

- 

Only when the **Color Tool** is enabled will the color icons be displayed in the **Structure List**.

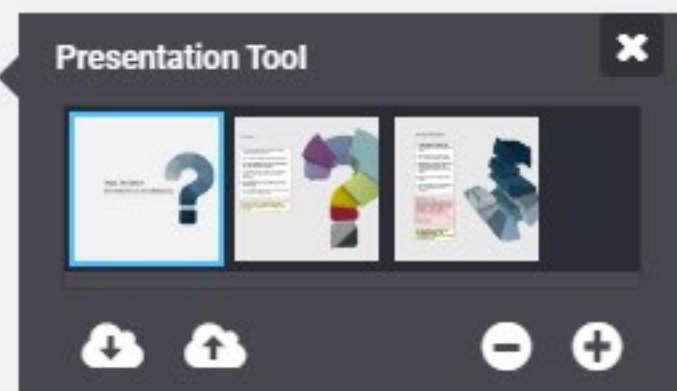
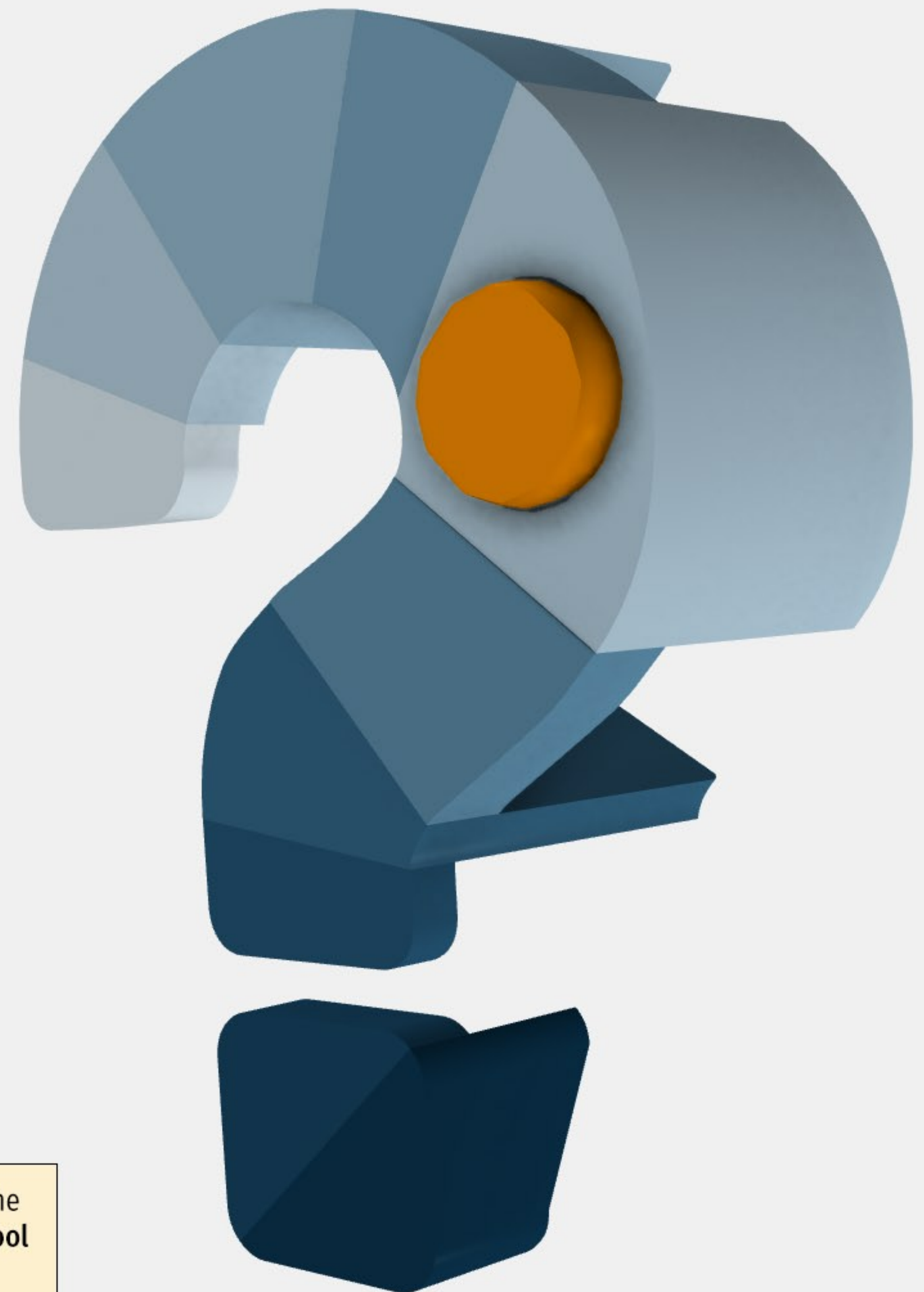


Mix original texture and new color





From a browser application, data is often loaded into the download folder. Therefore, the presentations may also be saved there (presentation**.xbin). Later on, they can be renamed and moved to other folders. When a presentation is loaded, the system-specific file dialogue is used.



Presentations (current framed in blue)

- Create new presentation with current view
- Delete presentation
- Save presentation
- Load presentation



Slides (current framed in blue)

- Create a new slide with current view
- Delete slide
- Overwrite selected slide with current view

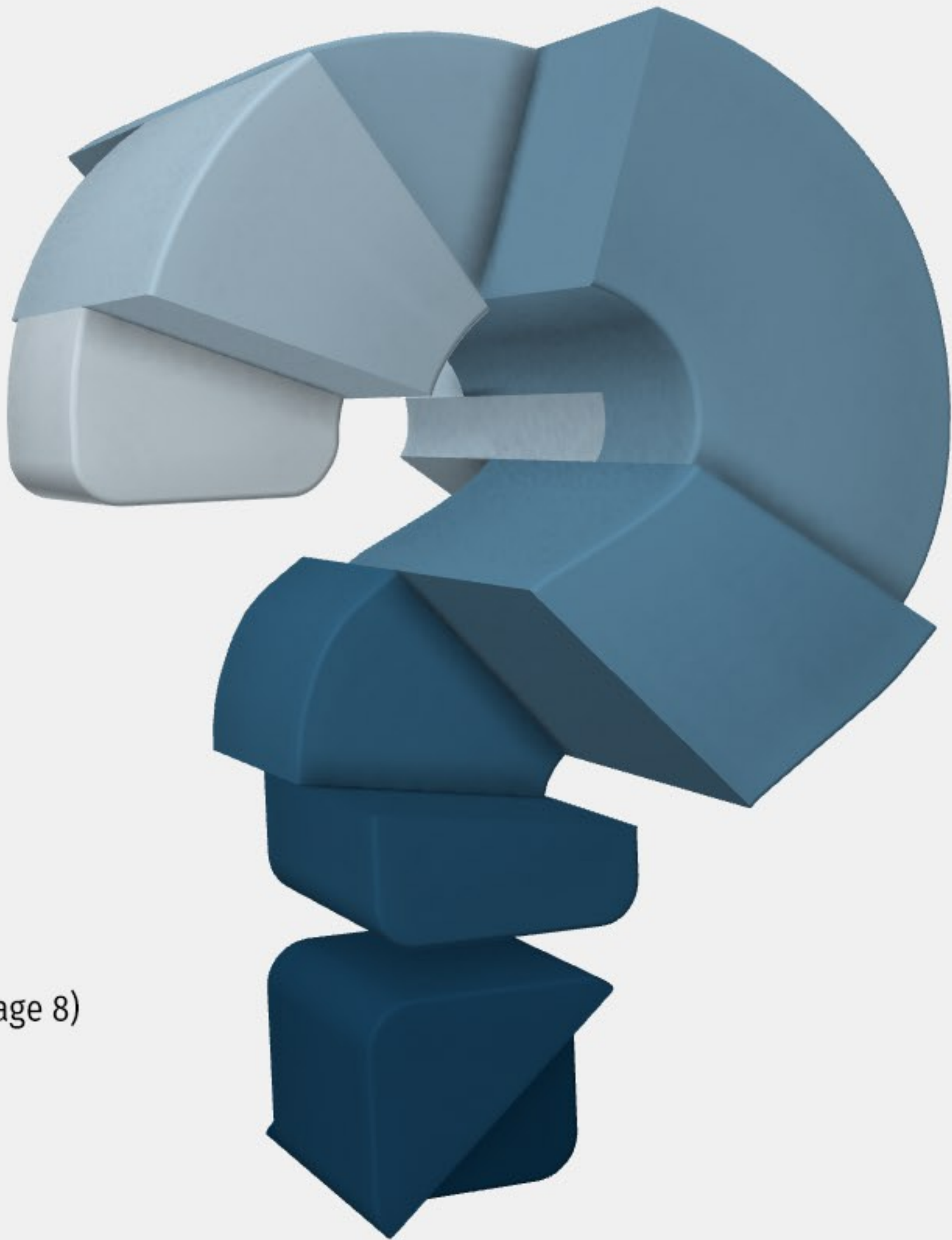


Preview

Fast forward
Start preview
Stop preview

For playback the presentation please use the **Media Center** (page 11). The **Presentation Tool** does not need to be open for this.

All changes in the settings are saved in the browser (if allowed) and are automatically applied the next time you start the explorer.



Settings

Language

English

Latin as primary Language Off

Background

Vignetting

Color

Camera Gizmo Off

Touch Sensitivity

Graphics Settings

Shadows On

Highlight Structures On

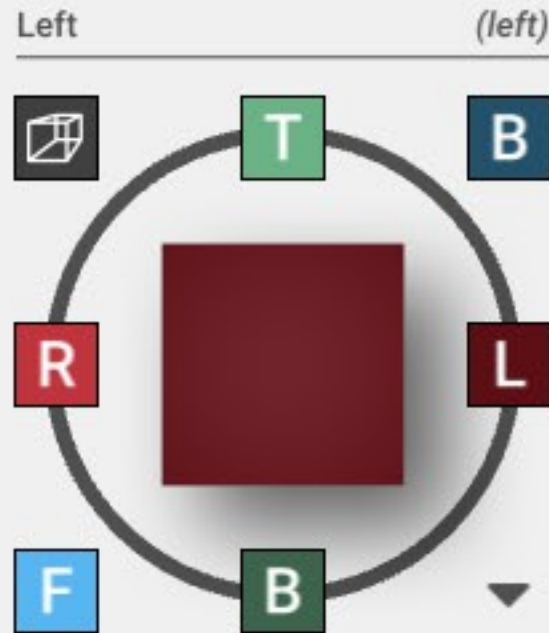
Highlight Color

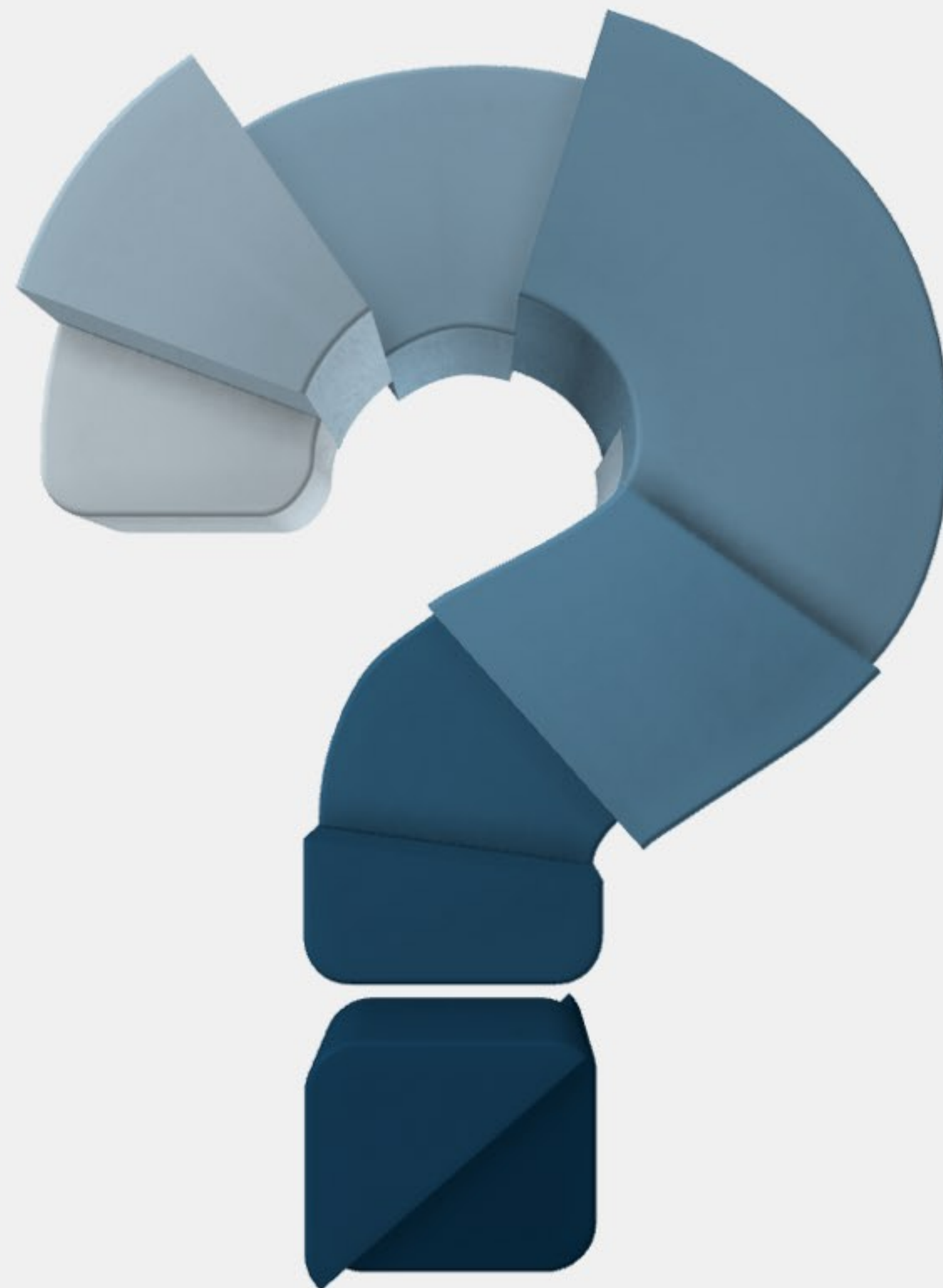
Label highlighted Structures On

- Setting the language (user interface and anatomical terms)
- Force Latin for anatomical terms (except live labels)
- Shade edges
- Set background colour (for the operation of the color editor see page 8)
- Show/hide quick access for the camera positions (page 13)
- Adjust the sensitivity of the 3D model interaction
- Shadows on/off
- Highlighting and labelling of structures on mouseover on/off
- Set the HighLight color here
- Show the names of the touched structures

The display of shadows is recommended. If this causes the performance of the graphics card to drop (delayed reaction of the display), the shadow can be switched off again.

Camera Tool



 Central projection

The central projection (corresponds to a light wide-angle lens with a focal length of 35mm) provides an enhanced 3D impression. Close structures are displayed magnified. Use this perspective for normal navigation.

 Parallel projection

In parallel projection, all rays are aligned in parallel. This means that objects are always the same size regardless of the distance. Choose this perspective especially if you want to compare model views with real data (X-ray or MRI).

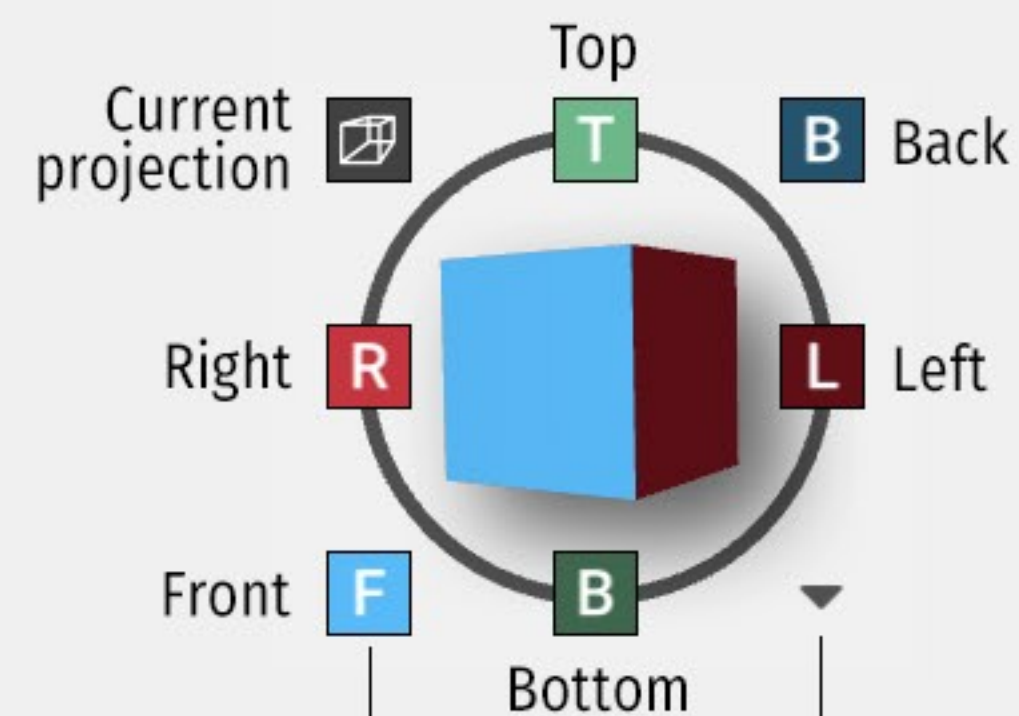


Click on the button
to change the projection

Standard position description Medical position description

Front-Left

(left-rostral)



Click on the color area
to quickly rotate the model
in the desired direction

Click on the triangle,
to expand or collapse
the menu