

# Creation of new structures

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## Slice details improvement

### Individual substructures singled out

...by simple line drawing and new regions labeling. Unrecognized areas can be attributed to the structures from the upper hierarchy level. Splitting given structure into smaller substructures comes down to drawing dividing lines or new contour and placing corresponding labels. Redefining the shape is equivalent to editing its contour.

#### FIGURE 5.

**Left:** New lines and appropriate labels (blinking) were added to the *contour slide 1*) to show primary somatosensory representation of big facial whiskers ("barrel field", S1BF) in the cerebral cortex (Cx); and 2) to divide ventrobasal complex (VB) into ventral posteromedial (VPM) and ventral posterolateral (VPL) nuclei. Unrecognized thalamic nuclei, which were not labeled with their specific names, are labeled with "Th" so they all will be included in the final reconstruction of the thalamus. **Right:** Updated CAF slide.

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### Additional elements apart anatomical data included in CAF slide

In our example we include in the slide an outline of the electrode. Spaces occupied by lesions or injected dyes can be also added to atlas elements.

#### FIGURE 6.

## List of used abbreviations

- 3V - 3rd ventricle
- Amy - nuclei of amygdala
- Ce - central amygdaloid nucleus
- CPu - caudate putamen
- Cx - cerebral cortex
- D3V - dorsal 3rd ventricle
- ec - external capsule
- f - fornix
- fi - fimbria of the hippocampus
- GP - globus pallidus
- Hb - habenula
- Hipp - hippocampal formation

- ic - internal capsule
- LD - laterodorsal thalamic nucleus
- LV - lateral ventricle
- ml - medial lemniscus
- mt - mammillothalamic tract
- ot - optical tract
- PoM - posteromedial thalamic nucleus
- Rt - reticular thalamic nucleus
- S1BF - primary somatosensory cortex, barrel field
- st - stria terminalis
- VB - ventrobasal complex
- vBrain - compliment of the whole brain outline
- ZI - zona incerta