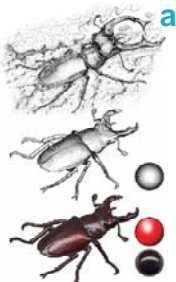


IllustraVis 2009
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Panel: Application of Illustrative Visualization in Medicine, Earth Science, and Oil&Gas Exploration and Production



David Laidlaw
 Odd Helge Gilja
 William Helland-Hansen
 Christopher Giertsen
 Eduard Gröller

Illustrative Visualization – Quo Vadis?

- What has happened so far?
- Blending of styles
- „Reconstruction“ in algorithm space \mathcal{A}

Eduard Gröller

Illustrative Visualization: What happened so far?

- Mimicking illustrators' styles and procedures
 - ◆ Cut-outs, cut-aways, ghosting

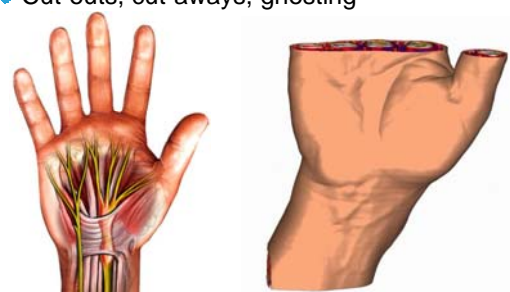



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<http://www.nucleusinc.com>

[Bruckner 2008]

Illustrative Visualization: What happened so far?

- Mimicking illustrators' styles and procedures
 - ◆ Exploded views



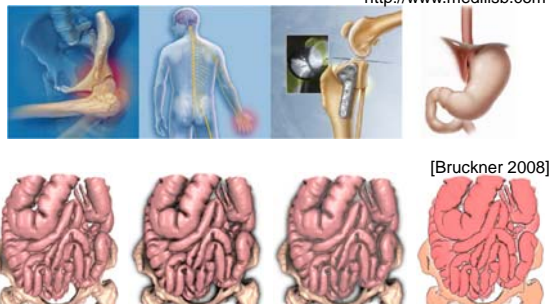
<http://www.bodyworlds.com> [Bruckner 2008]

Eduard Gröller

Illustrative Visualization: What happened so far?

- Mimicking illustrators' styles and procedures
 - ◆ Halos


<http://www.medillsb.com>



[Bruckner 2008]

Abstraction through Blending of Styles

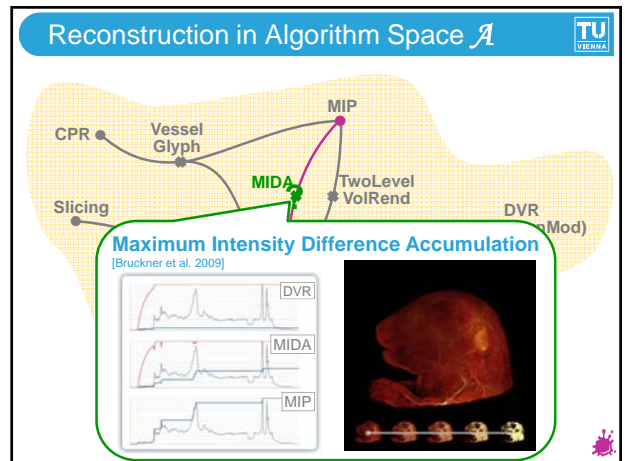
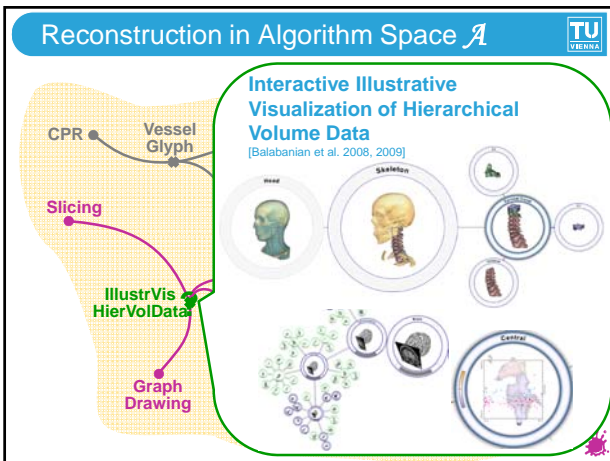
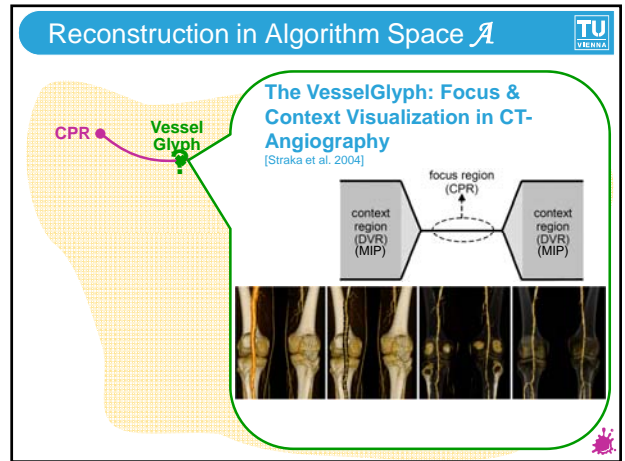
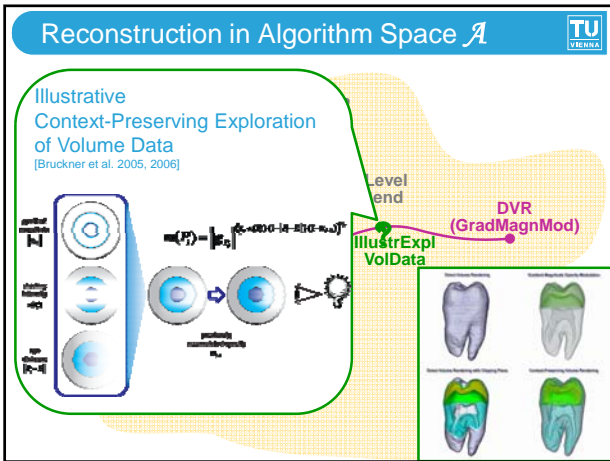
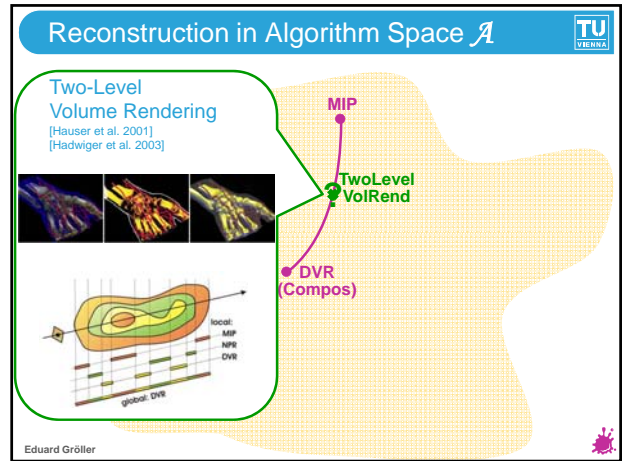
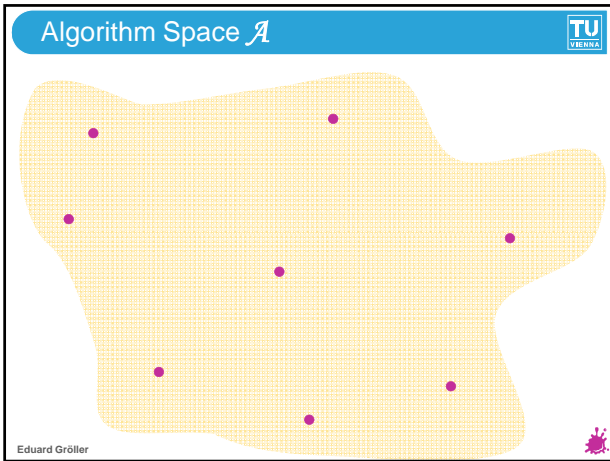
- Blending of styles




<http://auto.howstuffworks.com/1988-peugeot-oxia-concept-car1.htm>

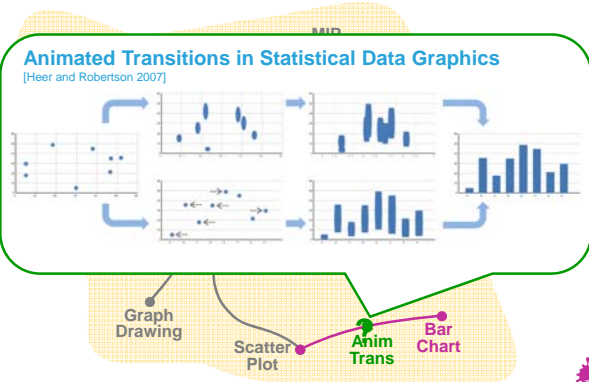
- Results of heterogeneous algorithms integrated

Design Principle „Algorithm Integration“
 generalizable ???




Reconstruction in Algorithm Space \mathcal{A} 

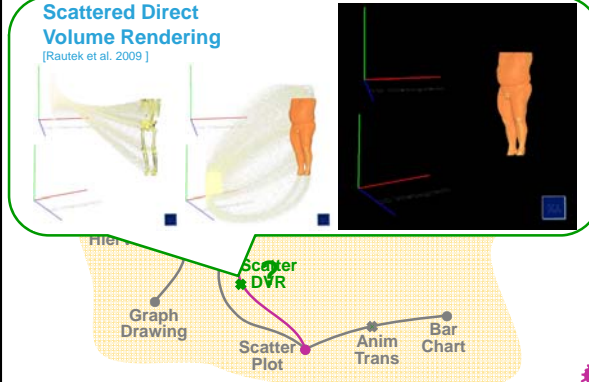
Animated Transitions in Statistical Data Graphics
[Heer and Robertson 2007]



Graph Drawing Scatter Plot **Anim Trans** Bar Chart

Reconstruction in Algorithm Space \mathcal{A} 

Scattered Direct Volume Rendering
[Rautek et al. 2009]



Graph Drawing **Scatter & DVR** Anim Trans Bar Chart

Fill in the Holes of \mathcal{A} !!

Thanks for your *A*ttention !

