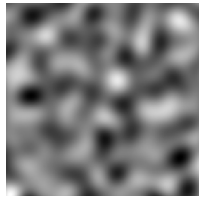
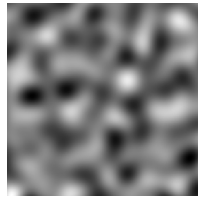


Multi-scale stereo processing



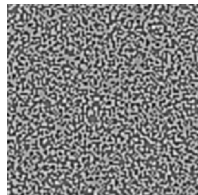
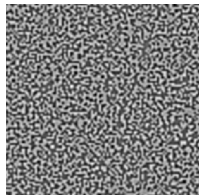
left



right

Add together:
(like a hybrid image)

- coarse scale images with coherent stereo disparities
- fine scale images with uncorrelated "noise"

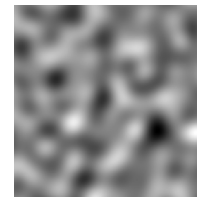


Outcome:

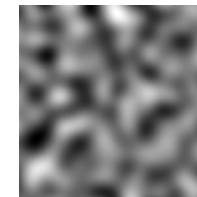
- can still fuse images
- tolerate large range of stereo disparity
- get a rough sense of depth

1

Multi-scale stereo processing



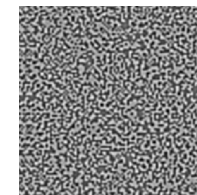
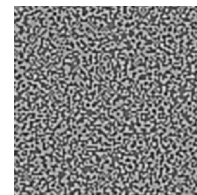
left



right

Add together:
(like a hybrid image)

- coarse scale images with uncorrelated "noise"
- fine scale images with coherent stereo disparities

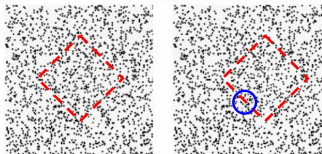


Outcome:

- can still fuse images
- only tolerate small range of stereo disparity
- more vergence eye movements

2

Selectivity for stereo boundaries in V2



Von der Heydt & colleagues:
Some V2 cells are selective for the orientation, contrast, and *side of border ownership* of an edge ... for edges defined by luminance or stereo disparity

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