Appearance-Space Texture Synthesis:
Figure close-ups

Exemplar $E$  Transformed $E'$  Isometric synthesis  Anisometric synthesis

Synthesis in atlas  Textured surface  Radiance-transfer syn.
Using 3D $E$  
Using 3D $\tilde{E}'$  
Result of texture synthesis  
Using 8D $\tilde{E}'$
With feature distance

Texture synthesis with 8D $E'$
Using a height-field as exemplar results in inconsistent RTT shading

Shadings of RTT exemplar

Shadings of RTT synthesis (and close-up)
Levels 2-6 of the multiresolution synthesis pyramid.

Textured surface  No magnif.; 12.3 fps  With magnif.; 11.7 fps
\( \hat{E}' \) (4D)

PCA  isomaps  LLE