

Illustration Corrigenda for Real-Time Rendering

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<http://www.acm.org/tog/resources/RTR/>

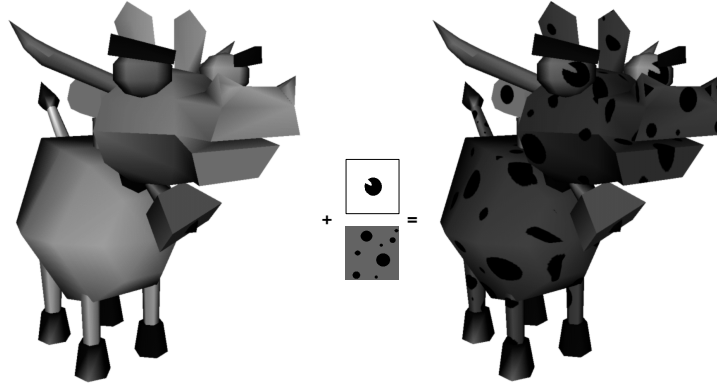


Figure 2.9: A cow model without textures is shown on the left. The two textures in the middle are “glued” onto the cow, and the result is shown on the right. The top texture is for the eyes, while the bottom texture is for the body of the cow. (Cow model is reprinted courtesy of Jens Larsson.)

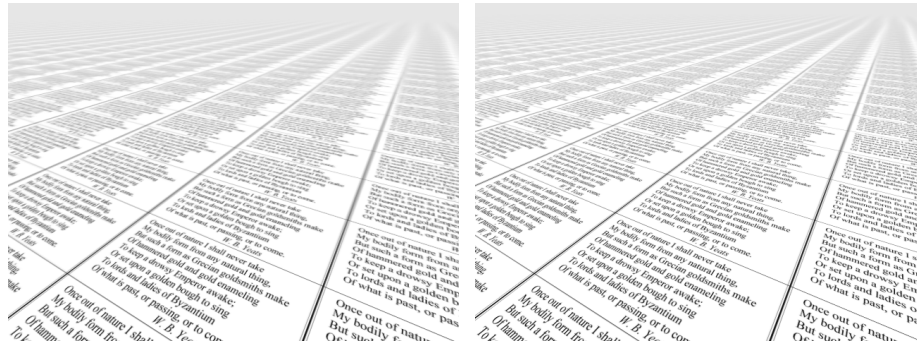


Figure 5.13: Mipmap versus anisotropic filtering of text. Trilinear mipmapping has been done on the left, 2:1 anisotropic filtering on the right, both at 640×480 resolution. (Example pictures generated by software. Courtesy of NVIDIA Inc.)

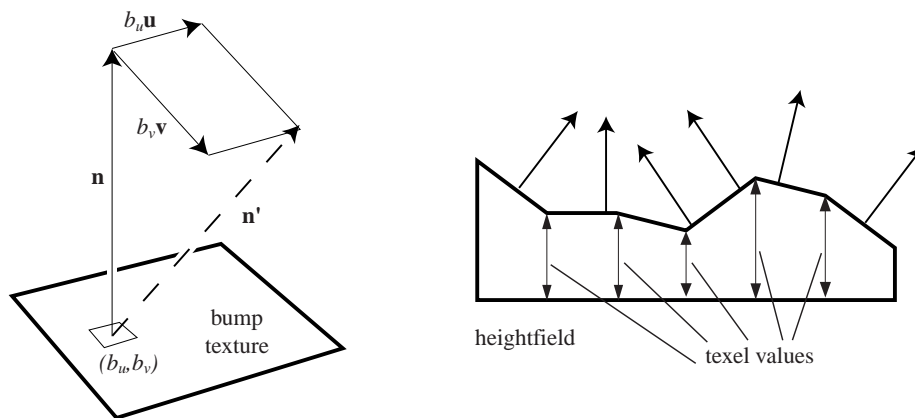


Figure 5.21: On the left, a normal vector \mathbf{n} is modified in the \mathbf{u} and \mathbf{v} directions by the (b_u, b_v) values taken from the bump texture, giving \mathbf{n}' (which is unnormalized). On the right, a height field and its effect on shading normals is shown.

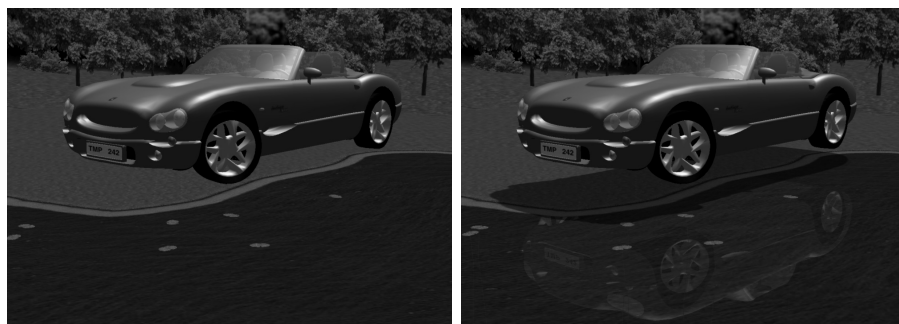


Figure 6.9: The left image was rendered without shadow and reflections, and so it is hard to see where the object is truly located. The right image was rendered with both shadow and reflections, and the spatial relationships are easier to estimate. (Car model is reprinted courtesy of Nya Perspektiv Design AB.)

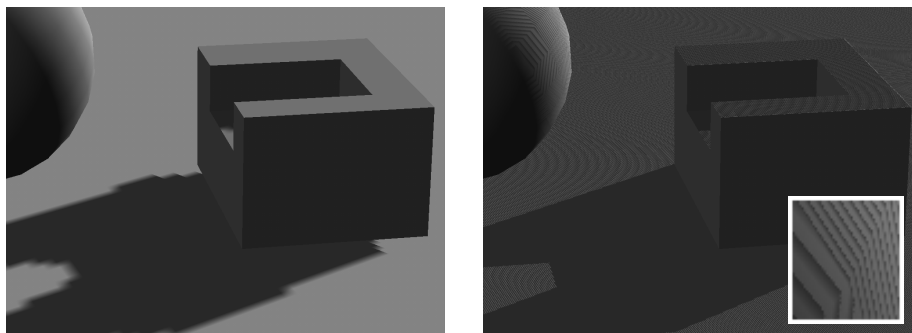


Figure 6.24: Shadow mapping problems. On the left, the bias is set too high, so the shadow creeps out from under the block object. The shadow map resolution is also too low, so the texels of the map appear in the shadow, giving it a blocky appearance. On the right there is no bias, so the surface erroneously shadows itself, in this case producing a Moiré pattern. The inset shows a zoom of part of the sphere's surface.

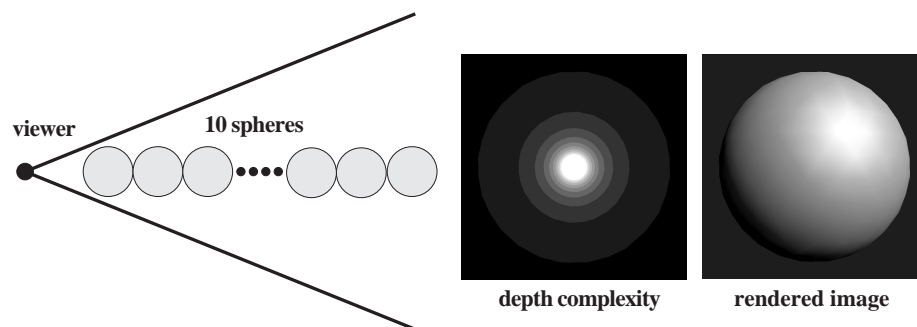


Figure 7.8: An illustration of how occlusion culling can be useful. Ten spheres are placed in a line, and the viewer is looking along this line (left). The depth complexity image in the middle shows that some pixels are written to several times, even though the final image on the right) only shows one sphere.