11.2.1 In Gouraud shading, we do color computation at each vertex and linearly interpolate color values to shade a polygon.

In Phong shading, we interpolate vertex normals and use them to do color computations at each pixel.

Phong shading is more computationally intensive when there are more than a few pixels per triangle, as the lighting computation must be done many times (vs. 3 times for Gouraud).

N2.2 Shadows

reflections

cuastics

subsurface scattering

color bleeding

ambient light levels for indoor scenes

fog of atmospheric effects

etc...
There is some diffuse reflection (green color) in all directions.

There is a lobe of focused specular reflection centered about the direction of perfect reflection (white color).

A constant BRDF means that the color perceived by the viewer does not vary either with view direction or with the direction of incident light. This is a little bit odd, as there should be an effect of increased brightness with more direct lighting that is not present here. So, the object must reflect glancing light more strongly than direct light.
For such a surface, it would be difficult to perceive its shape as it would simply appear exactly the same color everywhere. In other words, the object would look like a flat cutout.

One way to do this (that Debevec has in fact used), is to take many photographs of a reflective ball (enough that you can fill in the color of the pixels behind the photographer!) and stitch them together into a seamless spherical environment map concentric with the reflective ball. Fiducial markers on the reflective ball can help to correctly locate photographs on the environment map.

I really like the depth edge camera and am a fan of Amy & Bruce Crook's warm to cool coloring. Both help dramatically in drawing out important aspects of shape. Vicki Interrante's line drawing to bring out geometry of nearly transparent shapes is also very effective & original.
We are more sensitive to gradients because our photoreceptors in the eye are designed to do local differencing. As a result, it is difficult for us to detect slow, gradual changes in intensity but very easy to detect sharp edges. Combine this with our ability to unconsciously adjust our perception of color depending on context (so that black checkerboard squares may appear white of vice versa) and we get the Cornsweet illusion.

To merge photographs seamlessly or remove shadows, then, all we must do is eliminate unwanted gradients, and smoothly adjust colors to compensate (i.e. reintegrate the image from its gradients). Examples of unwanted gradients in this case are the shadow boundaries and the border between an original image and the inserted segment.