

Lecture 21: Visual Realism – Review Questions

- Describe the differences between physical realism, photo-realism, and functional realism. Give examples of each.
- Does our visual system act like a photometer? That is, can we perceive absolute brightness in the scene? Can we perceive relative brightness between different (not necessarily adjacent) regions in the scene?
- What does the Campbell-Robson contrast sensitivity curve tell us about human vision?
- How is that being used for lossy image compression, e.g. JPEG?
- Which step of the JPEG compression is lossy? That is, at which stage is information being lost when compressing an image.
- Which of the following depiction errors are likely to be noticed by a casual human observer:
 - Shadow direction in one part of the picture is different for shadow direction in another part of the picture
 - The shape of the shadow is somewhat simplified compared to the shape of the object that is casting it.
 - The shadow is lighter than the surrounding area.
 - An object's shadow has a dark-greenish tint
- A good portion of what we “see” is actually made up by our brain. Give an example of this from your own experience.