

Summary:

Tone reproduction is the technique of creating an image that depicts the real world as close as it possibly can. The task described would be extremely hard to do, and many measurements of the scene prior to an image being taken would need to be taken before the tone reproduction image could be produced. Tone reproduction works with trying to imitate the correct brightness of a scene where the medium taking the scene may have lacked.

The night time is where tone reproduction would shine (ha). A scene could be shot in the day, but then taken back and the tone could be reproduces of that for the night. Since cameras at the time were awful at creating an image with low light, this technique would be extremely helpful.

Since this is computer graphics, there needs to be some sort of heuristic approach, and tone reproduction does not disobey. The final equation needs to approximate the screen luminance in order to get by the chicken and the egg problem with either figuring out the display luminance given functions of adapting luminance or just fudge the value of the display luminance (what they did).

Activity:

From what i absorbed from the article, it seemed that tone reproduction was useful for creating nighttime images that were shot in the daytime. If that was the only thing tone reproduction did, no it would not be useful to use, because we could just change the lighting parameters around and produce a night looking image. The interesting thing that the article did bring up about producing nighttime images is that it would slightly blur the image in order to reproduce what the eye would see. The blurring effect would make the image better, but i am not sure how much due to the images in the paper were of bad quality.