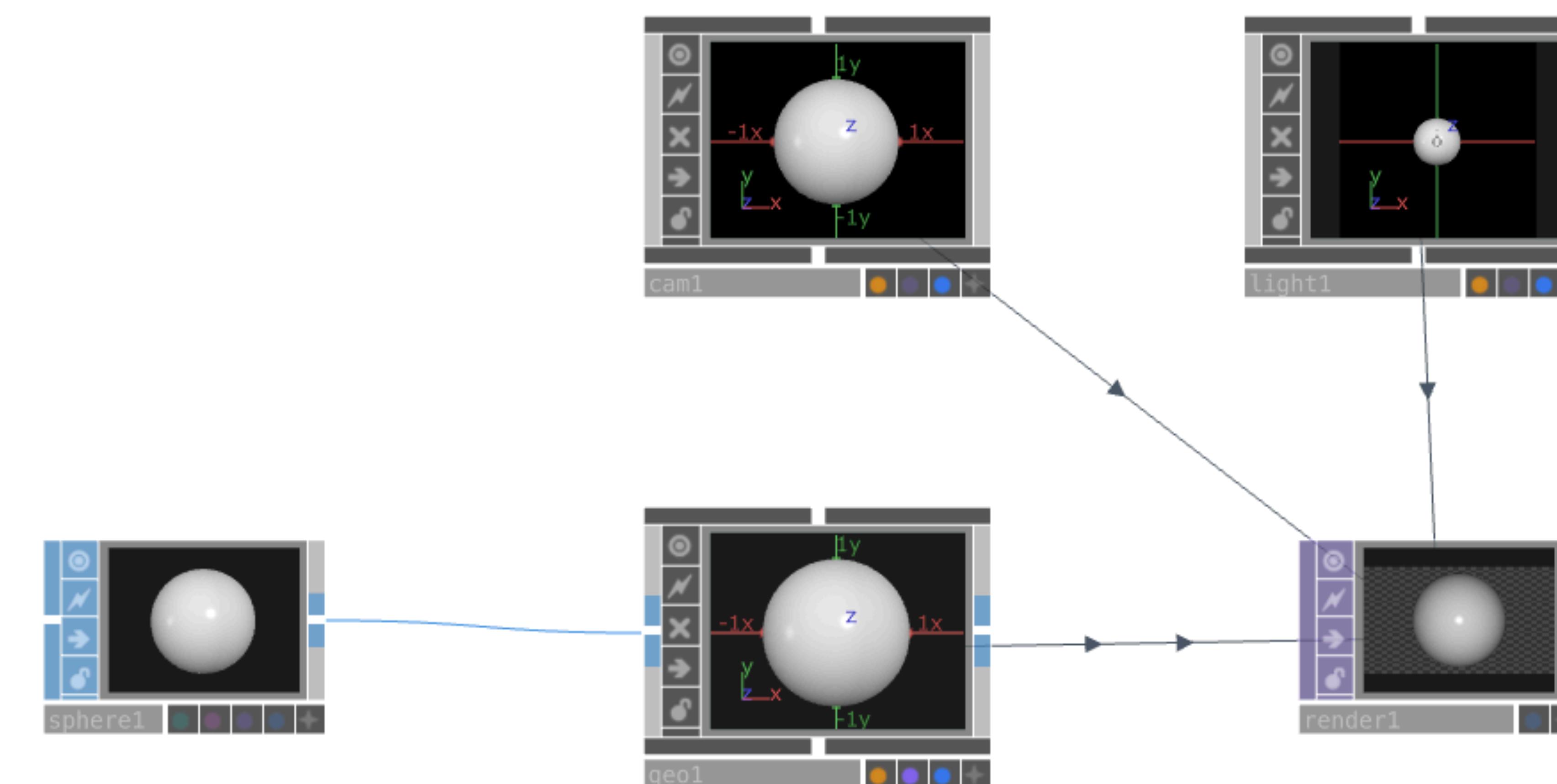

Lighting Technique in Computer Graphics

Camera, Light & Render

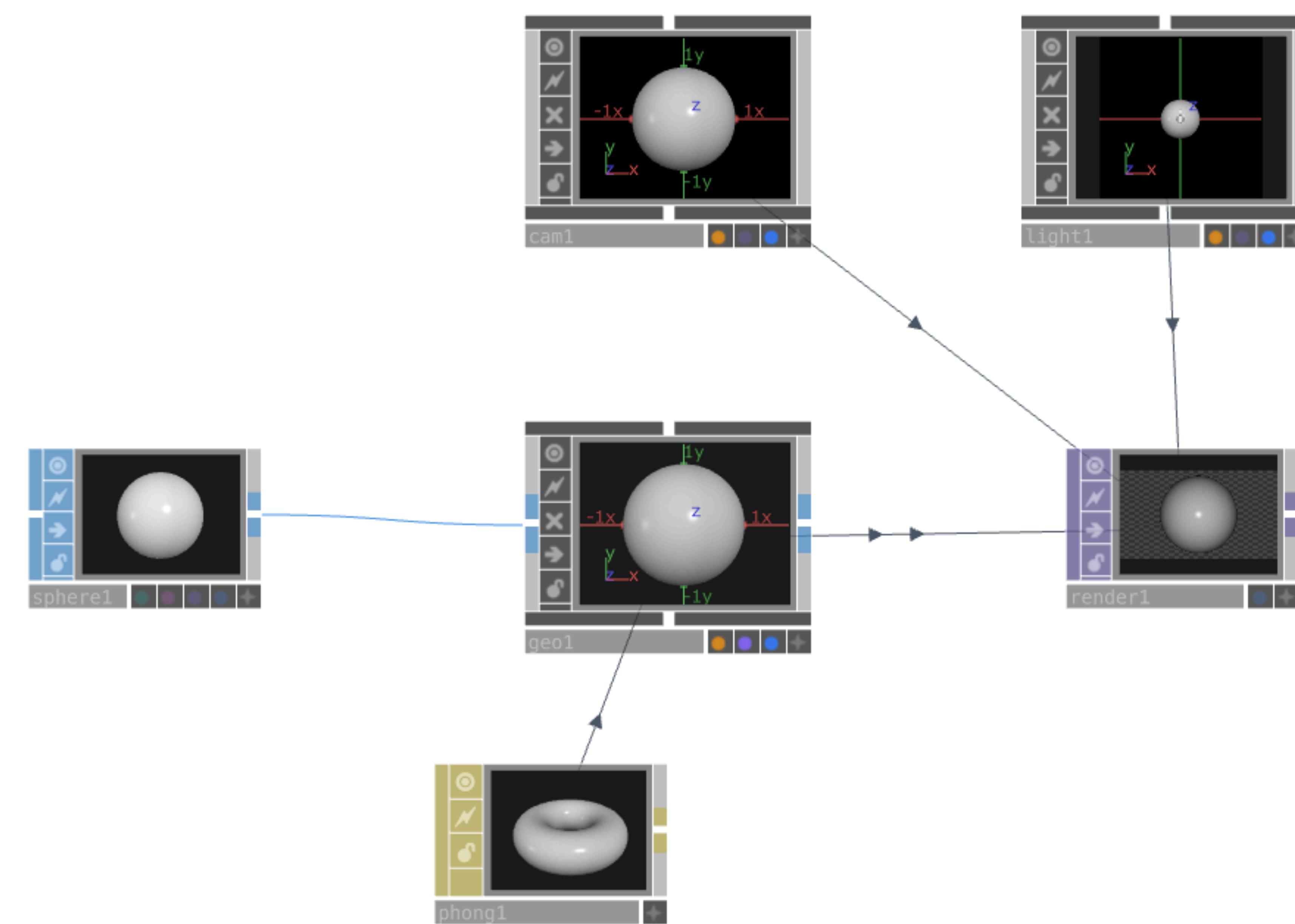
Gwangyu Lee

What is Render?

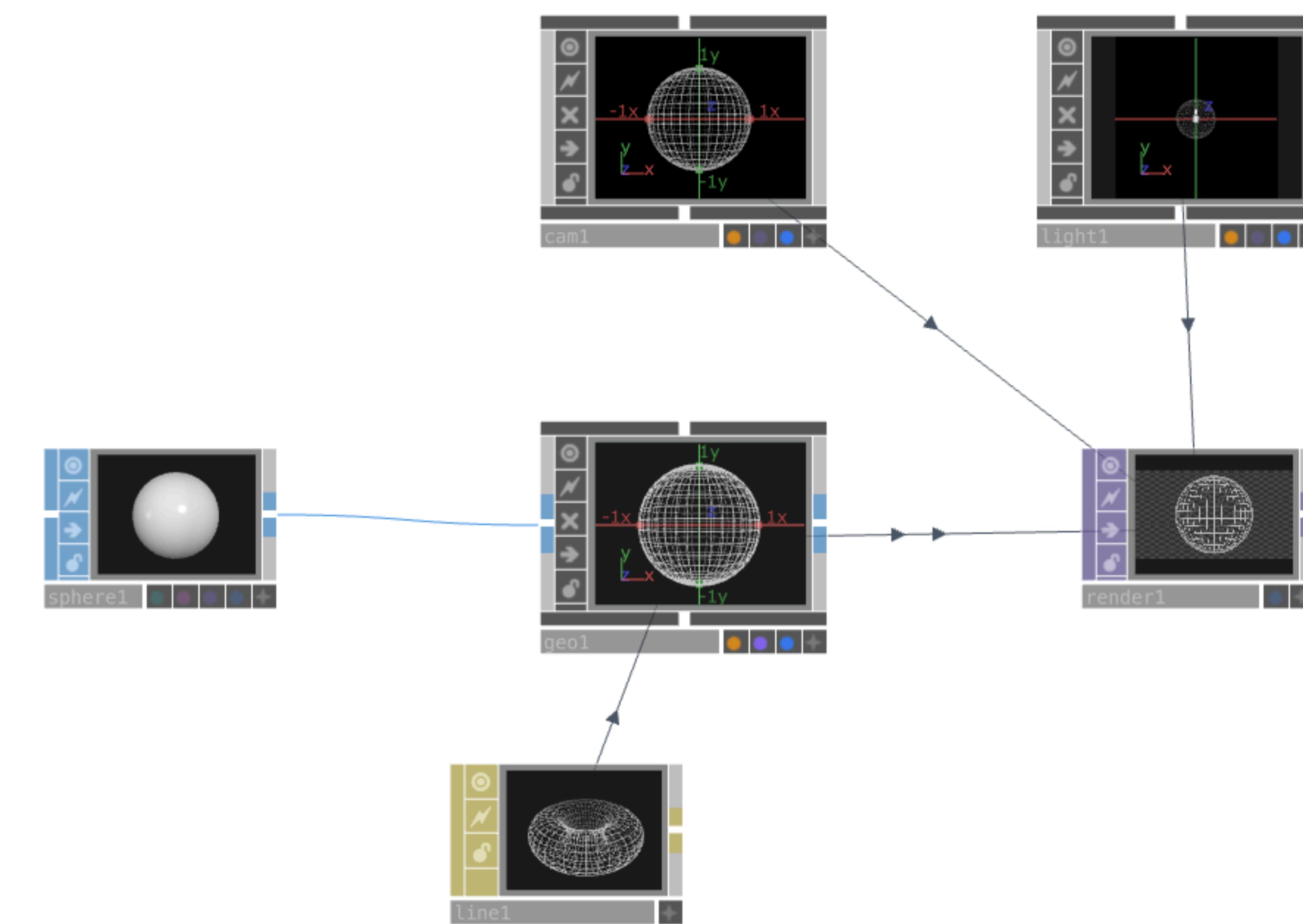
Render



Photorealistic



Non-photorealistic



Photorealistic

vs

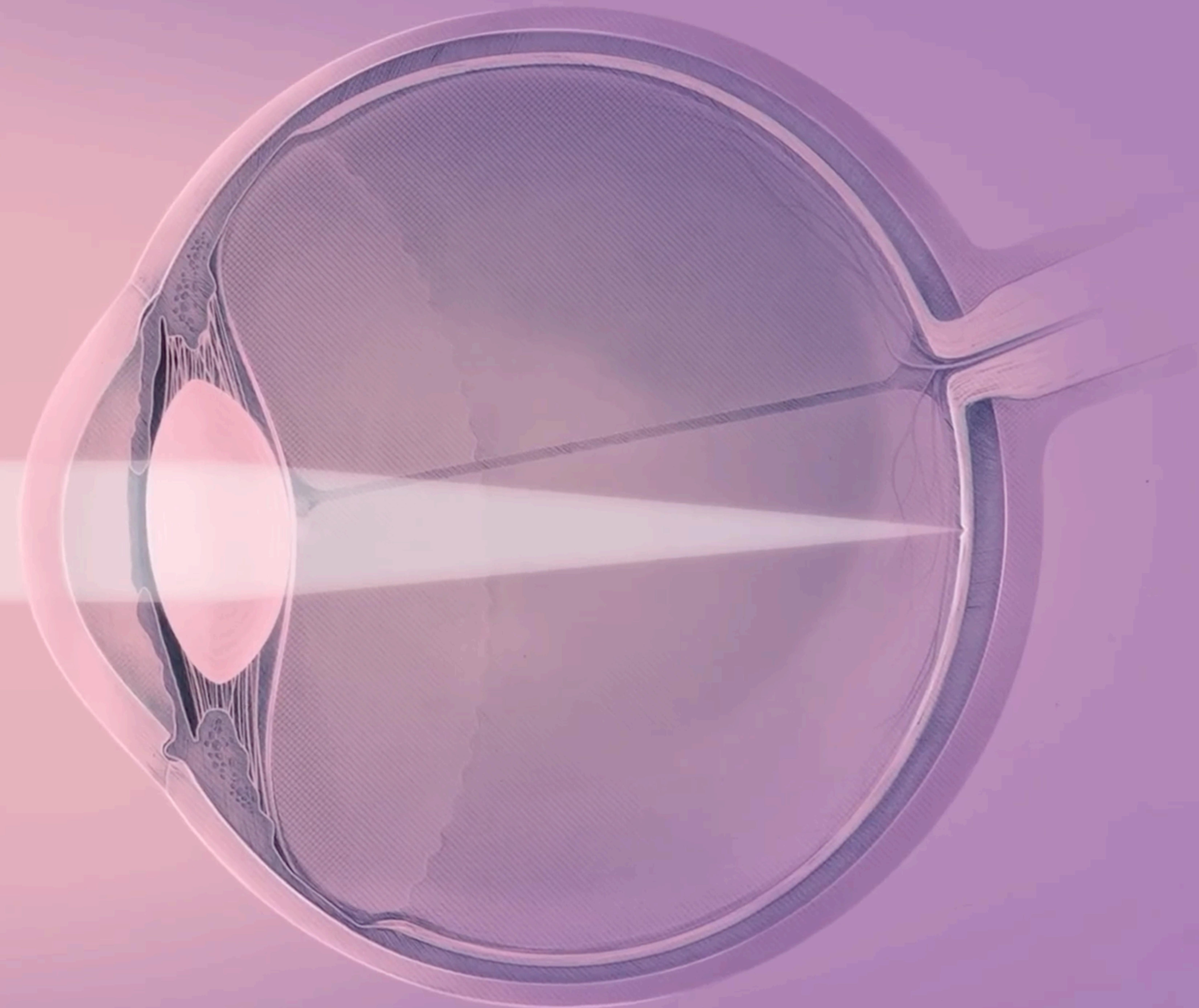
Non-photorealistic

Photorealistic vs Non-photorealistic

- Focus
- Distortion
- Motion Blur
- Color
- Ratio

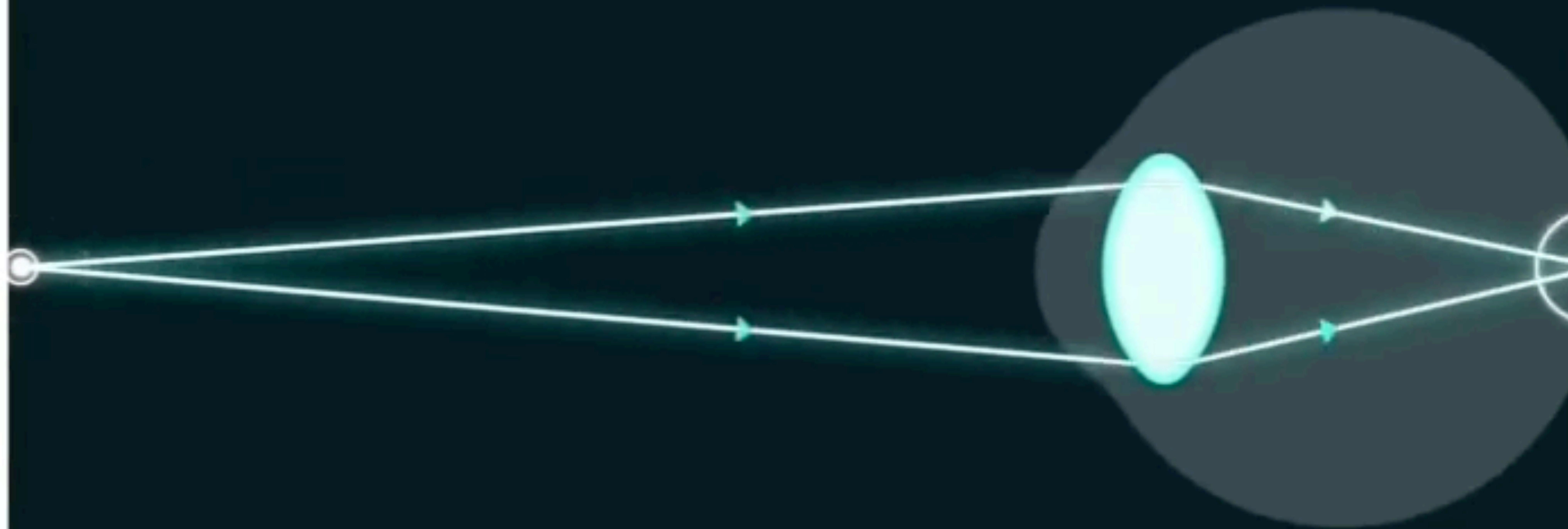
A close-up photograph of a person's face, focusing on their eyes and forehead. The person is wearing round, dark-rimmed glasses and a yellow baseball cap. They are looking slightly upwards and to the right. The background is a blurred landscape with rolling hills under a clear blue sky.

Focus



HUMAN EYE

RAY-DIAGRAM

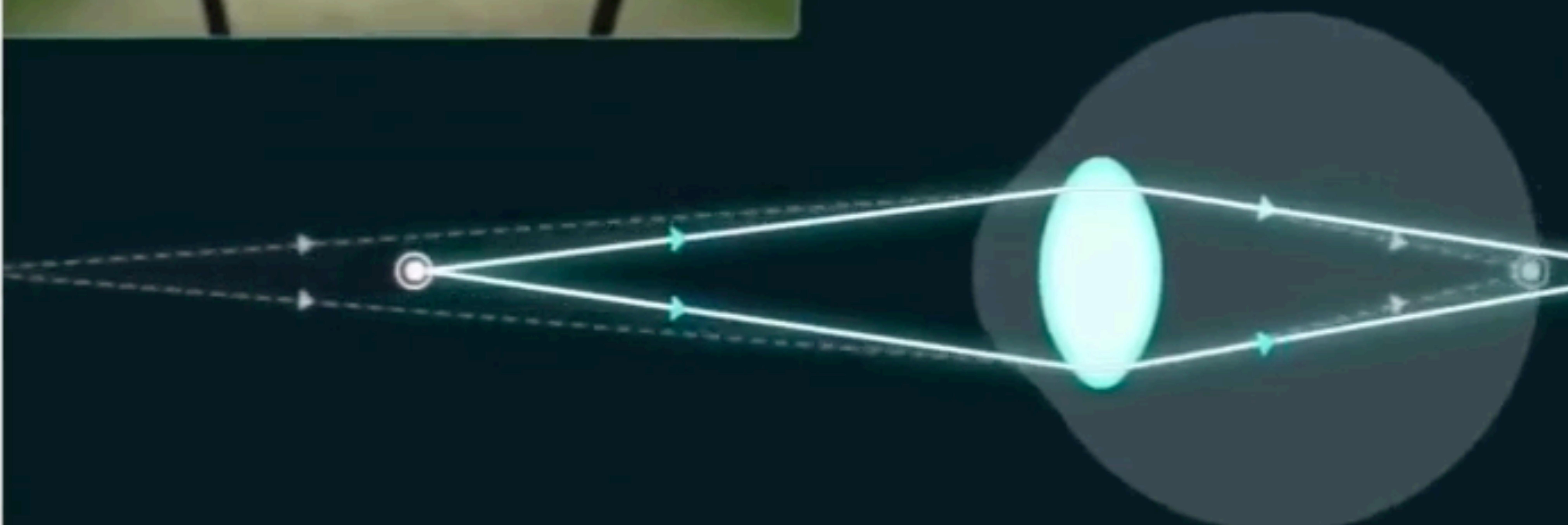








HUMAN EYE

RAY-DIAGRAM














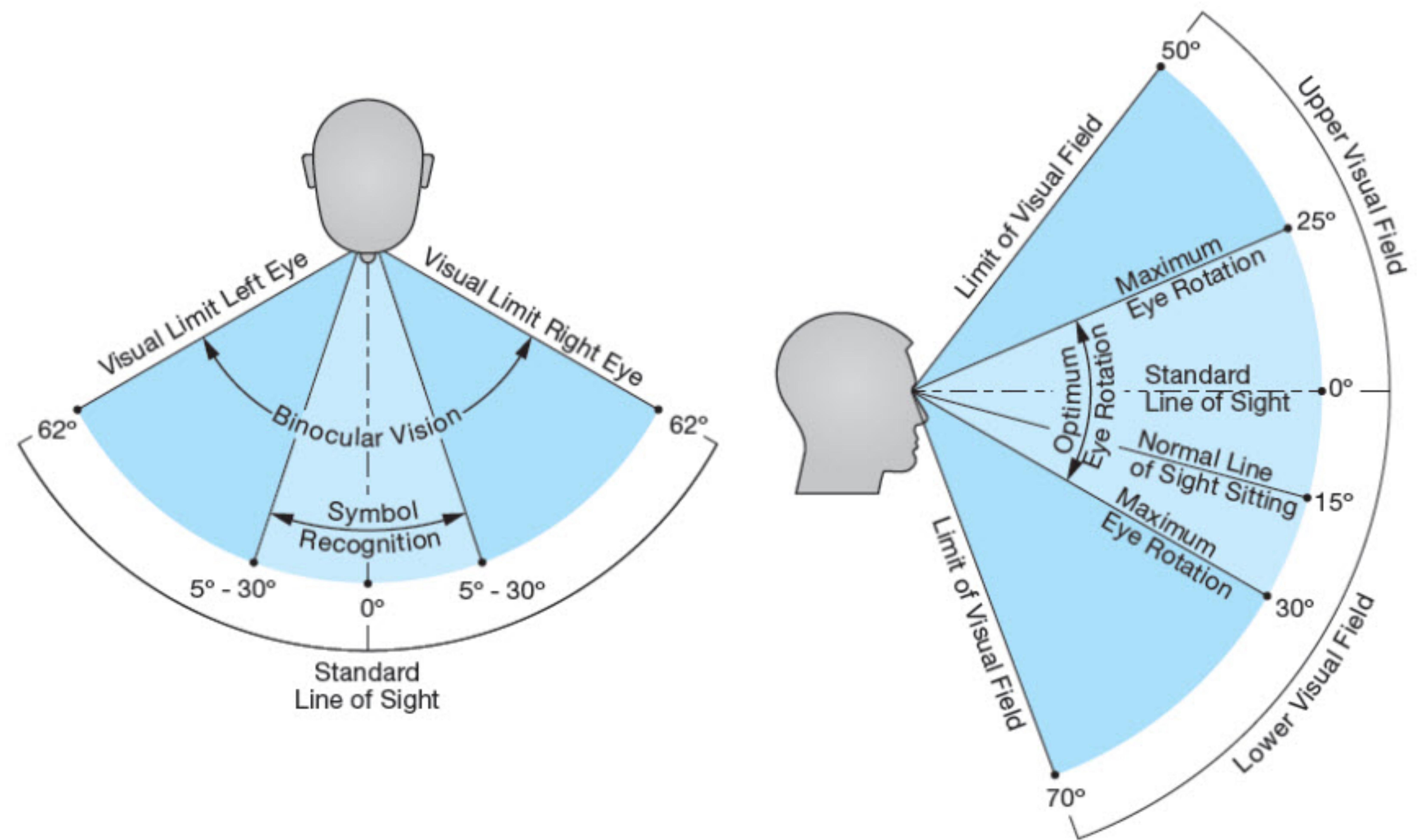


A photograph of a person sitting in the driver's seat of a car, looking forward with their mouth open as if shouting. The background is heavily distorted with horizontal rainbow-colored streaks, creating a Warhol-style effect. The word "Distortion" is overlaid in large, bold, black serif letters.

Distortion

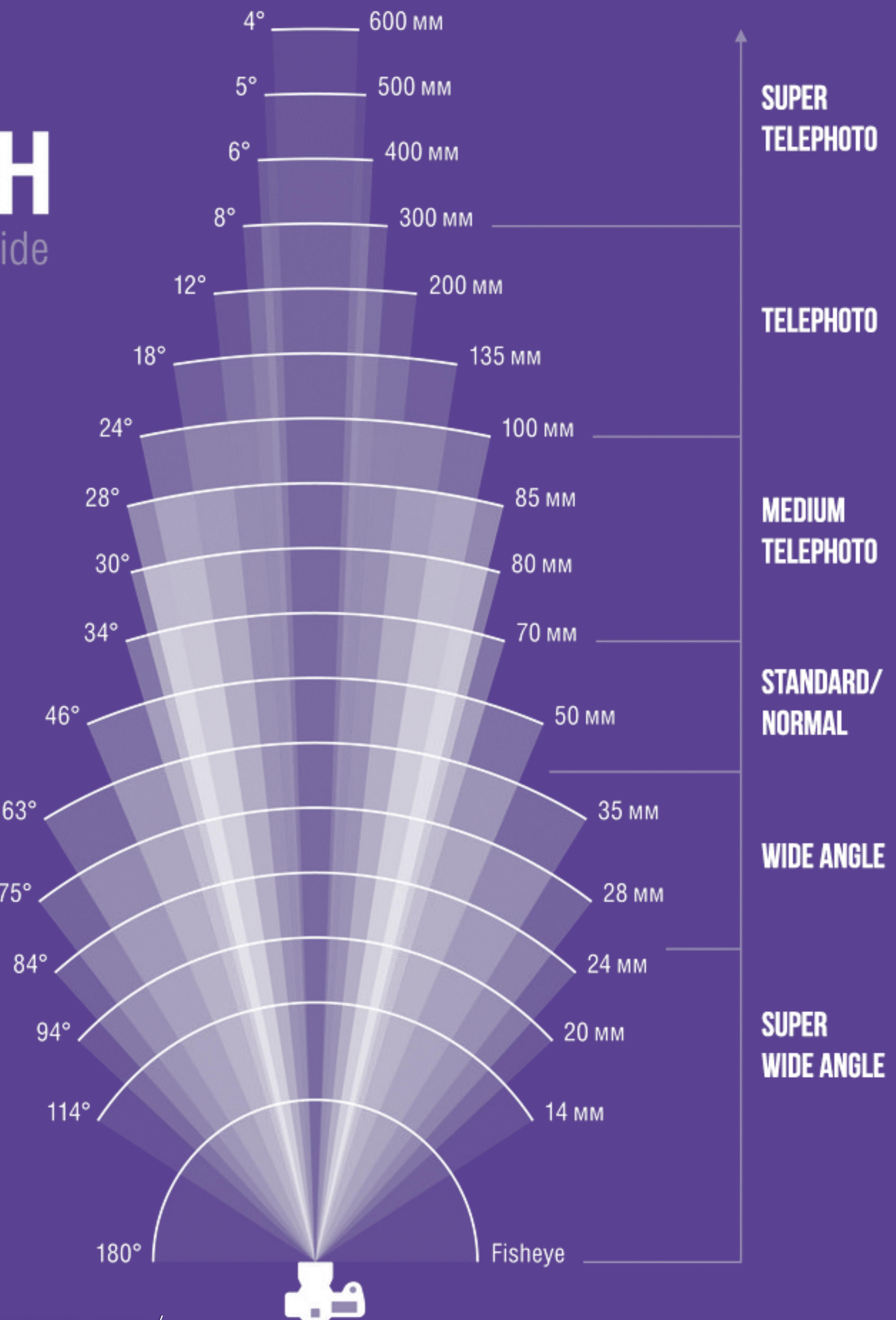






FOCAL LENGTH

& angle of view guide





Bokeh Level 7



Bokeh Level 1





Bokeh Level 1



Bokeh Level 1









Motion Blur



<https://www.youtube.com/watch?v=yr3ngmRuGUc>

A person's profile is shown from the side, facing right. The head is highlighted with a vibrant, multi-colored glow in shades of blue, green, and yellow, suggesting a active neural network or a "mind map". From the top of the head, several thin, wavy lines extend upwards and outwards, also colored with a similar gradient, representing the transmission of thoughts or information.

Color

Photorealistic

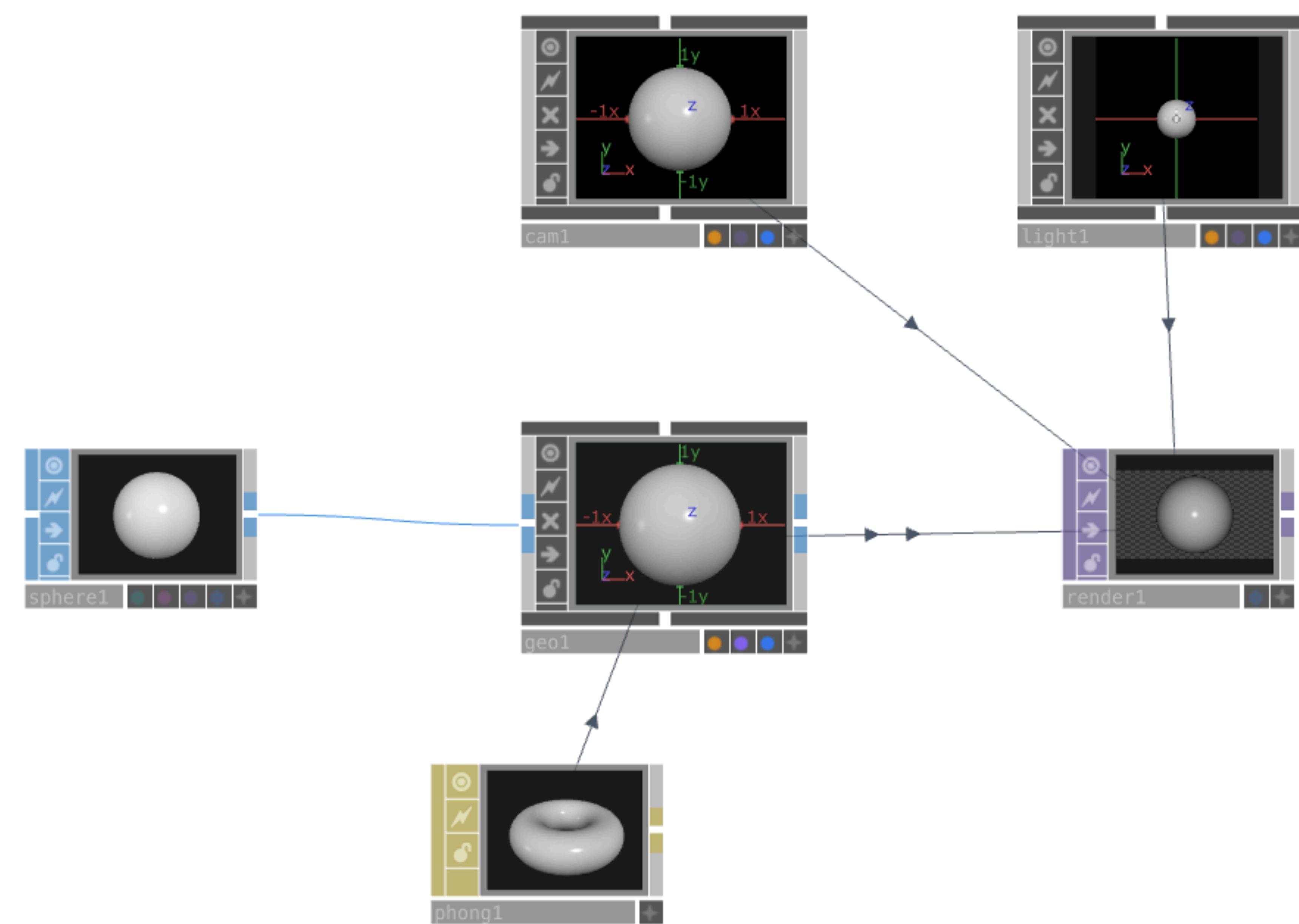


Non-photorealistic



https://www.youtube.com/watch?v=l-wUKu_V2Lk

Phong



Bùi Tường Phong



PBR(Physically Based Rendering)

