components of the image
    - Openness, naturalness, ruggedness, roughness, expansion
- Memory for objects and scenes is extremely good and also extremely bad like lol wtf
    - Change blindness = the failure to notice a change between two scenes
        - We don't encode and remember as much of the world as we think we do
        - What we see is often driven by our expectations of what we should be seeing
    - Inattentional blindness = the failure to report/notice a stimulus that would be easily reportable if attended to
        - If we don't pay attention to something, it's as if we don't see it

Lecture 5 - Eye movements as an indicator of overt attention

- Types of eye movements
    - Saccade = a rapid movement of the eyes that changes fixation from one object or location to the other
        - 3 or 4 of these happens every second
    - Smooth pursuit = the eyes smoothly follow a target
    - Vergence= the two eyes move in opposite directions, as when both eyes turn towards the nose
    - Reflexive = automatic and involuntary eye movements
- Eye movements
    - 6 muscles are attached to each eye and are arranged in 3 pairs
        - Superior colliculus - a structure in the midbrain that is important in initiating and guiding eye movements…when this is electrically stimulated, eye movements result
    - Saccadic suppression = the reduction of visual sensitivity that occurs when we make saccadic eye movements
        - Eliminates any smear from fast eye movement
        - Visual system "shuts down" very briefly when this happens
        - Tend to get more horizontal saccades as if we are "reading" a scene
- Why do we have to move our eyes?
    - Visual acuity problems - must focus everything on the fovea
        - Acuity falls rapidly with distance from fixation
        - Fovea= central 2% of vision, parafovea = from foveal region to about 5% from fixation, peripheral = everything outside the parafovea
- Retinal Information Processing
    - Standard way to measure retinal size = "Degrees of visual angle"
        - The visual angle of an object is a function of both its actual size and distance from the observer
        - "rule of thumb"
- Eye tracking in the lab
    - Dual-Purkinje eye tracker - gold standard in terms of spatial precision, but very expensive
    - Modern video-based eye trackers - good precision, less expensive, chin rest to compensate for head movements
        - Eye movements are always a bit ahead of head movements
- Perceptual span (aka visual span) - denotes region around the current point of gaze from which viewers can take in information
    - Size of the span can be measured by varying the size of a gaze-contingent moving window
        - Logic = determine the smallest window size that does not significantly interfere with task performance
        - This is well investigated in reading, but not in scene or search
        - 8% means perception span in the scene is very large