

360

Why VR?



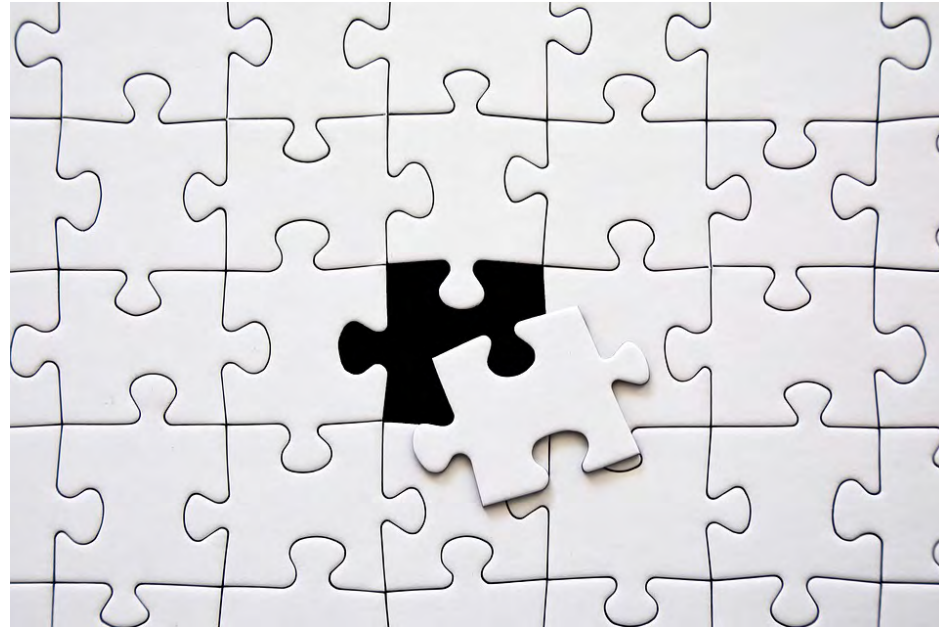
POV = Guest considerations

- Culture, context, understanding, mood, accessibility, connection, ...
- What you want and think vs. what your guest wants and thinks



POV = Guest considerations

- Relationship between things
 - Guest and intent, object to object, expectation to conclusion, sound to narrative, color to emotion, ...



Onboarding, The setup

Level of trust



Technical Approach

Camera Placement

- Consider where the camera placement will best capture your story
- What is happening in front, around and behind? (Needed?)
- What is compelling about seeing a 360 image in the world you are capturing? (Environment is a character)
- Viewer is camera/observer? Self? Other?



Explore or Direct

- Making the decision when to let your guest explore in advance will help you tell the story you want to tell
- Regain control – Narrative, visual or audio cue, pace ...



Active



Passive



Regain control

Time

- Orient – Title, logo, focus, audio, ...
- Make sure to give your viewer a moment to understand the scene
- More time consideration than in traditional media

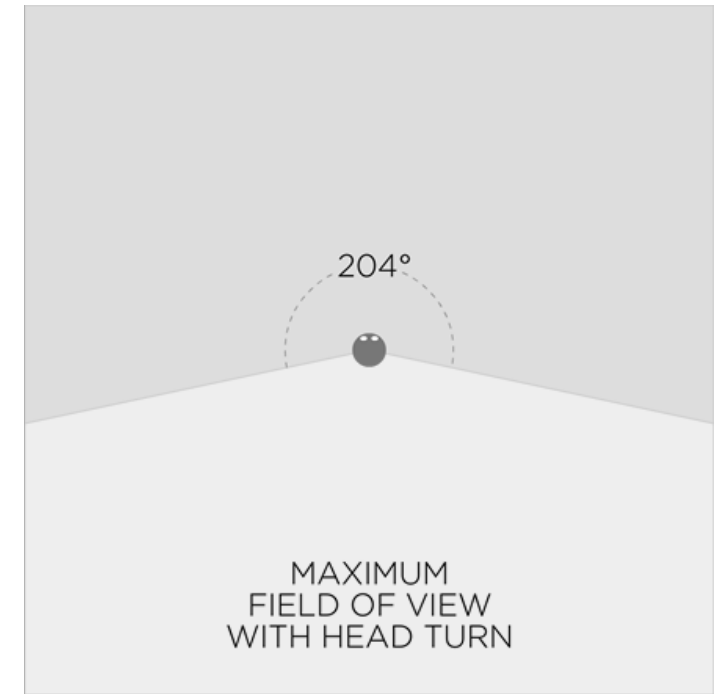
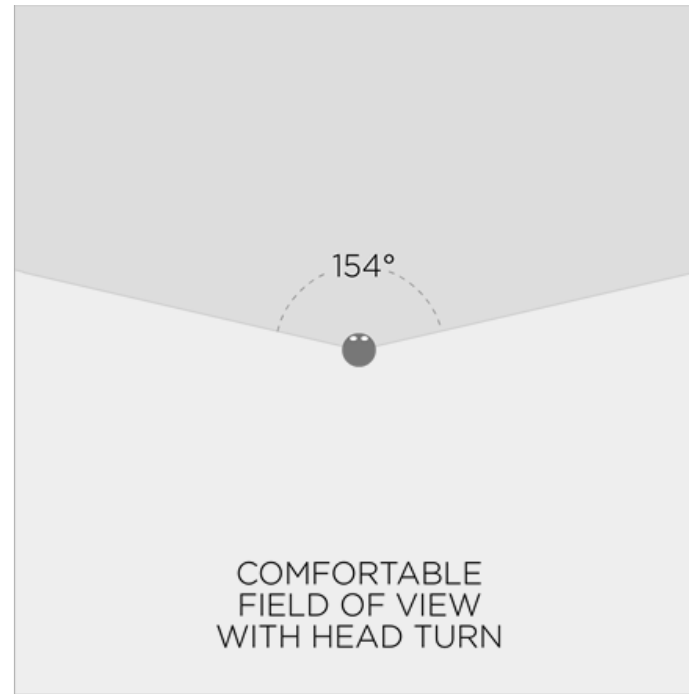
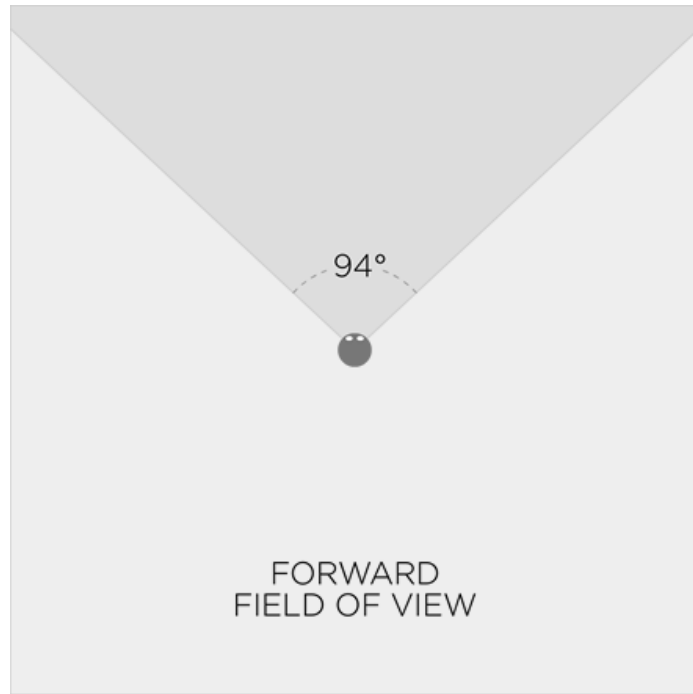


Look This Way

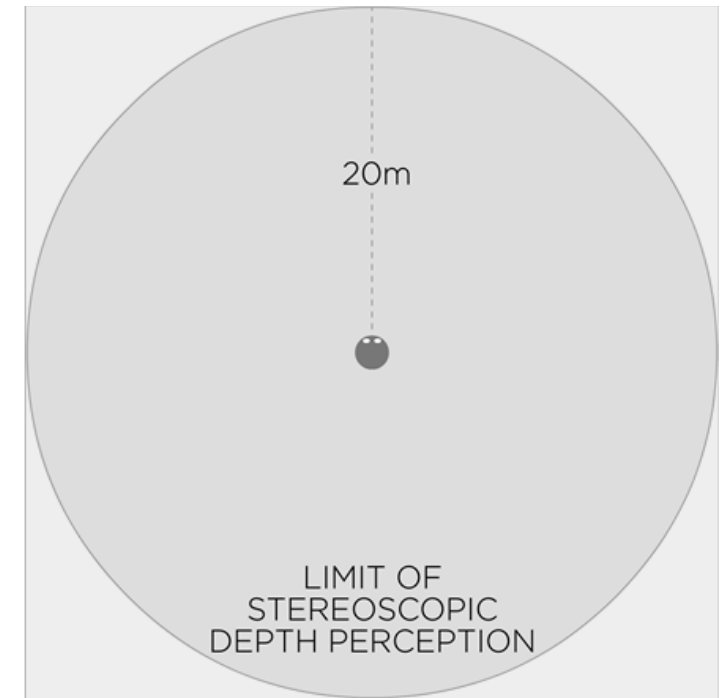
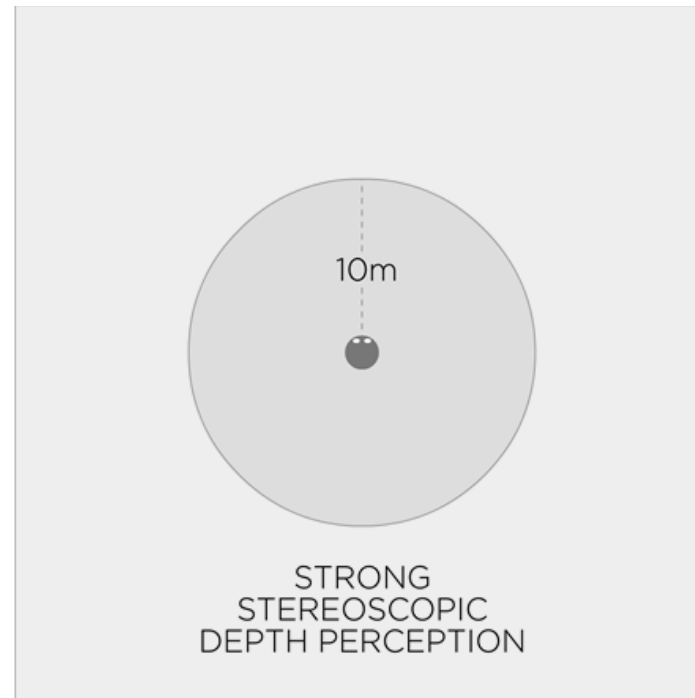
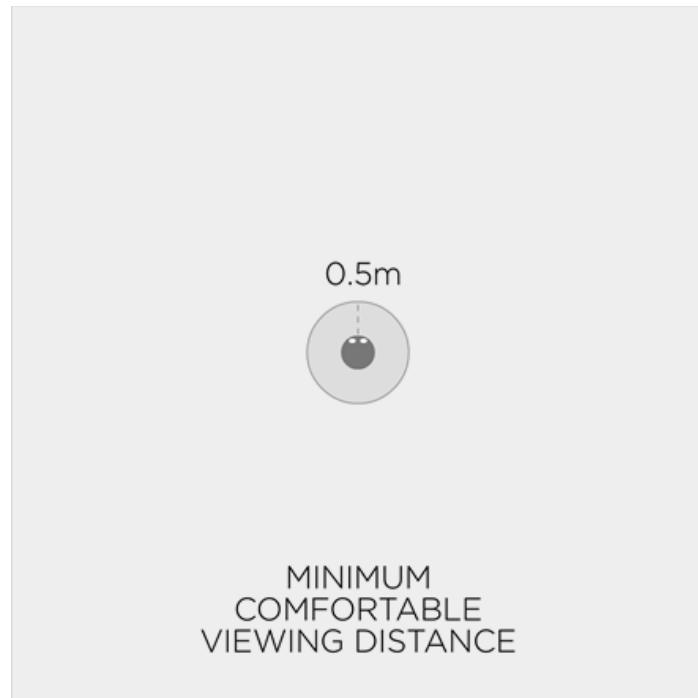
- Keep the canvas uncluttered
- Purposeful choreography/blocking will allow you to keep direction
- Mindset habits, subconscious filters
- Prove what is useful (traditional) vs. prove what is not (VR)
- Focus



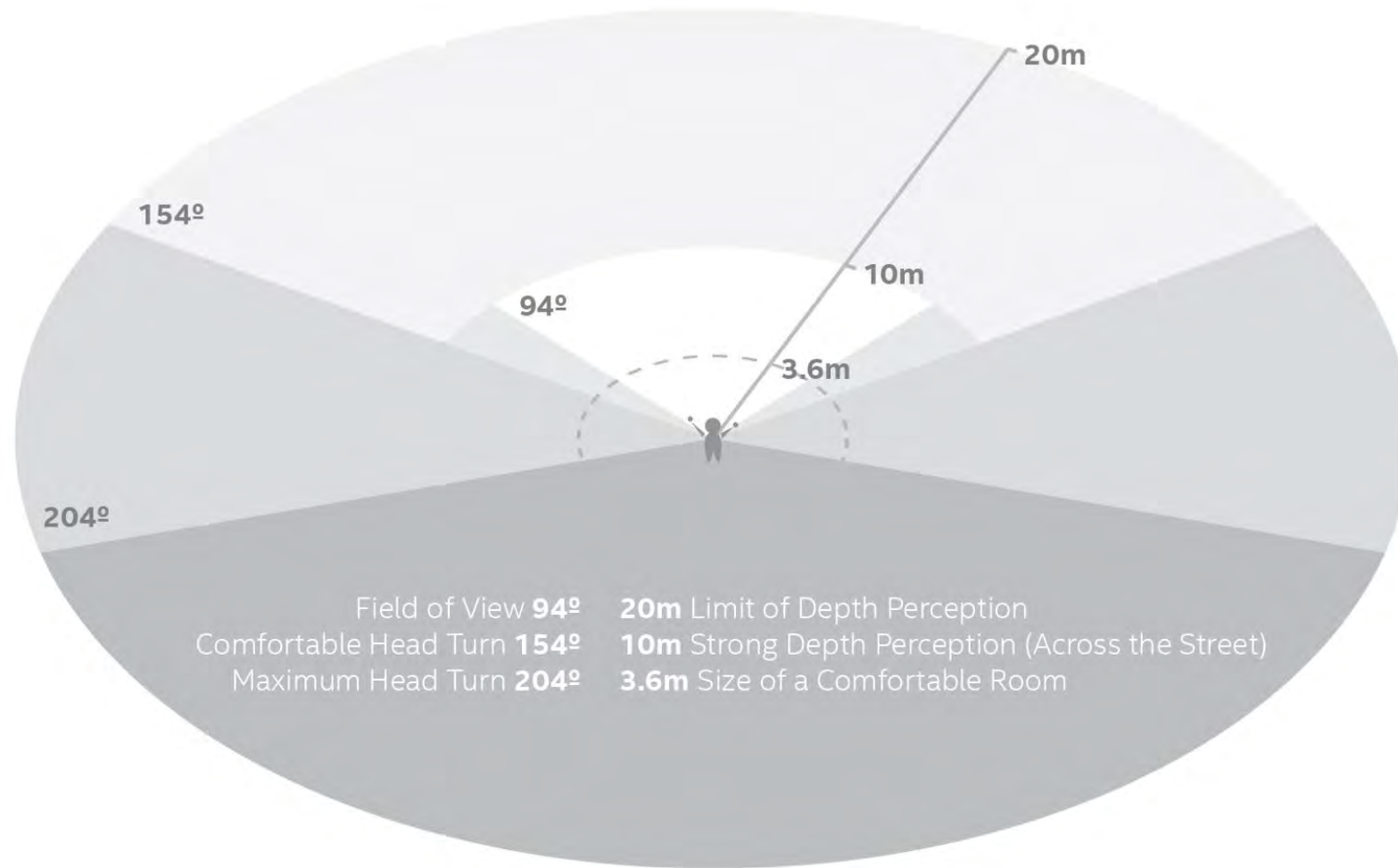




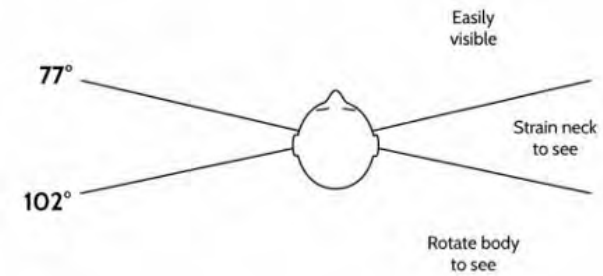
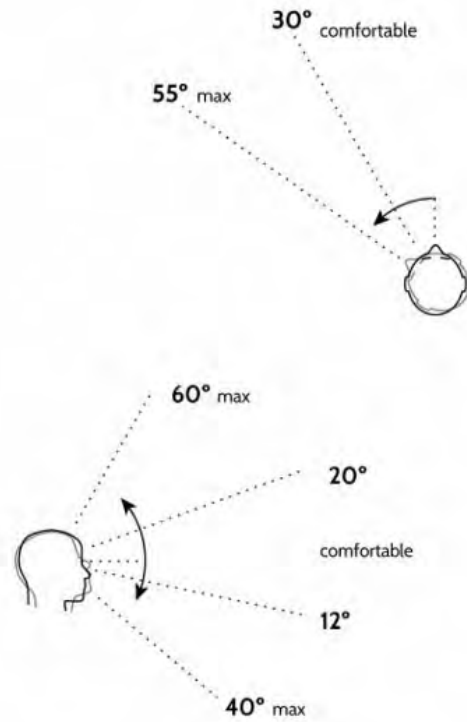
Field of view based on comfortable head rotation ranges.



Viewing distance based on comfort and strength of stereoscopic depth perception.



Probable areas of interest for a user wearing a virtual reality head-mounted display.

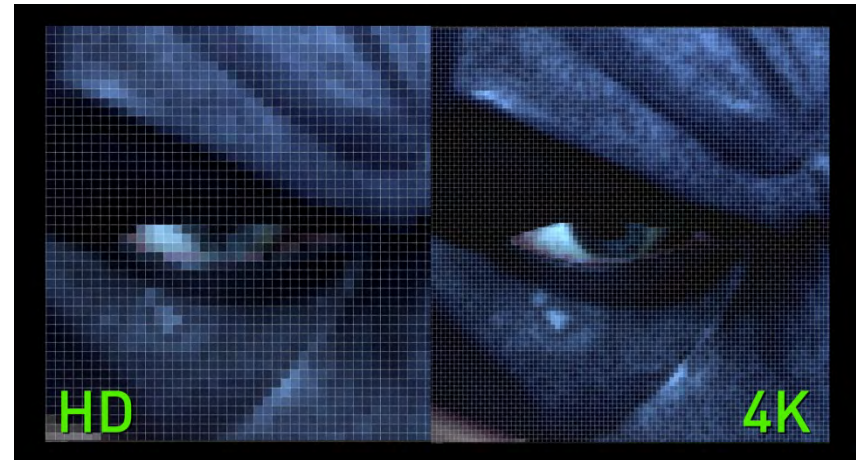


Left: Seated angles of neck rotation

Right: Combining rotation with FOV results in beginning zones for content

Resolution is a depth [eye] thing

Find the sweet spot of your camera and use the focal point for your main interactions



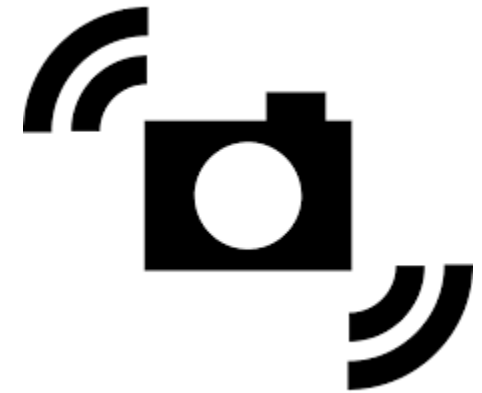


Stabilize the Camera

- Secure the camera so that it does not shake, drift or roll
- Minimize movement, establish anchor if needed (i.e. interior of a car)

Block Virtual Camera/s

- Emulate traditional, or reason why not



Honor the Horizon Line

- When there is a horizon line, keep it steady. This manages the viewer's equilibrium.



Minimize Cuts

- Abrupt and quick cuts are very jarring
- When the action is very close to camera, the abrupt cut can increase dizziness and story disorientation
- Eye blink – fade out, 6f black, fade in
- Wipes, ...



Bye Bye 4th Wall

- No such thing as “behind the camera”. Monitors, lighting and crew need to make other arrangements. (or not)
- Cleverly lighting your scene with real-life elements can help
- Diegetic light when possible

Virtual Lighting

- Emulate traditional, or reason why not



Capturing People

Right placement for the camera so that people (or objects) do not look warped. (Putting camera at mid chest height can minimize this)





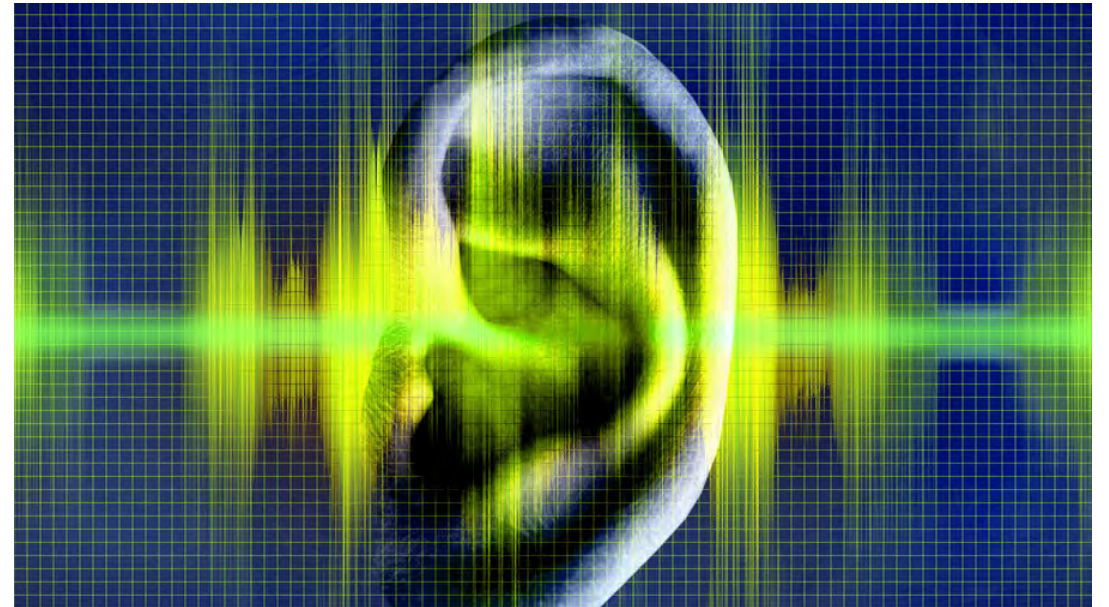
Looking Direct to Camera

Acknowledging the viewer this way can give the feeling of intimacy and closeness the way a close-up shot does in a 2D frame. Playing with this can be a powerful storytelling tool.



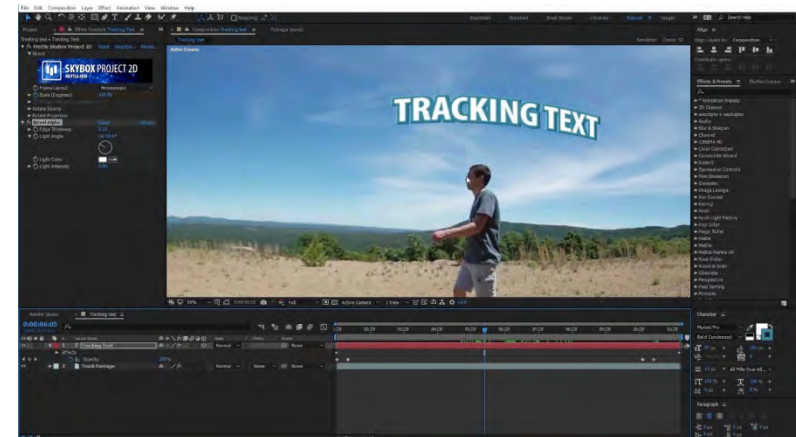
Incorporating Sound

- Sound cues the viewer to action happening or ... about to happen
- Help guide the viewer's gaze
- Emulate real, or reason why not



Graphics and Text

- Adding graphics and text can be helpful and add stabilizing orientation points.
- Add the text/graphic in the 4 quadrants of the sphere
- Too low or too high in the frame they may go unnoticed



Distance/Blocking (Stage)

- Use distance and blocking to your advantage
- When particular action needs attention, coming closer to the camera can get the attention of a viewer



Don't Forget the Ground

Think about what is at the feet of the viewer in the screen



Objects in 360 are not always as they seem

- Record extra footage and test often
- How are you going to test? Develop?

