

The Immersive Gaze

VR With and Without Eye Tracking

VR **WITHOUT** EYE TRACKING

1. Characters can't establish eye contact. Avatars stare straight ahead in a non-immersive way, stiff as dolls.

2. Interaction is a 3-step process

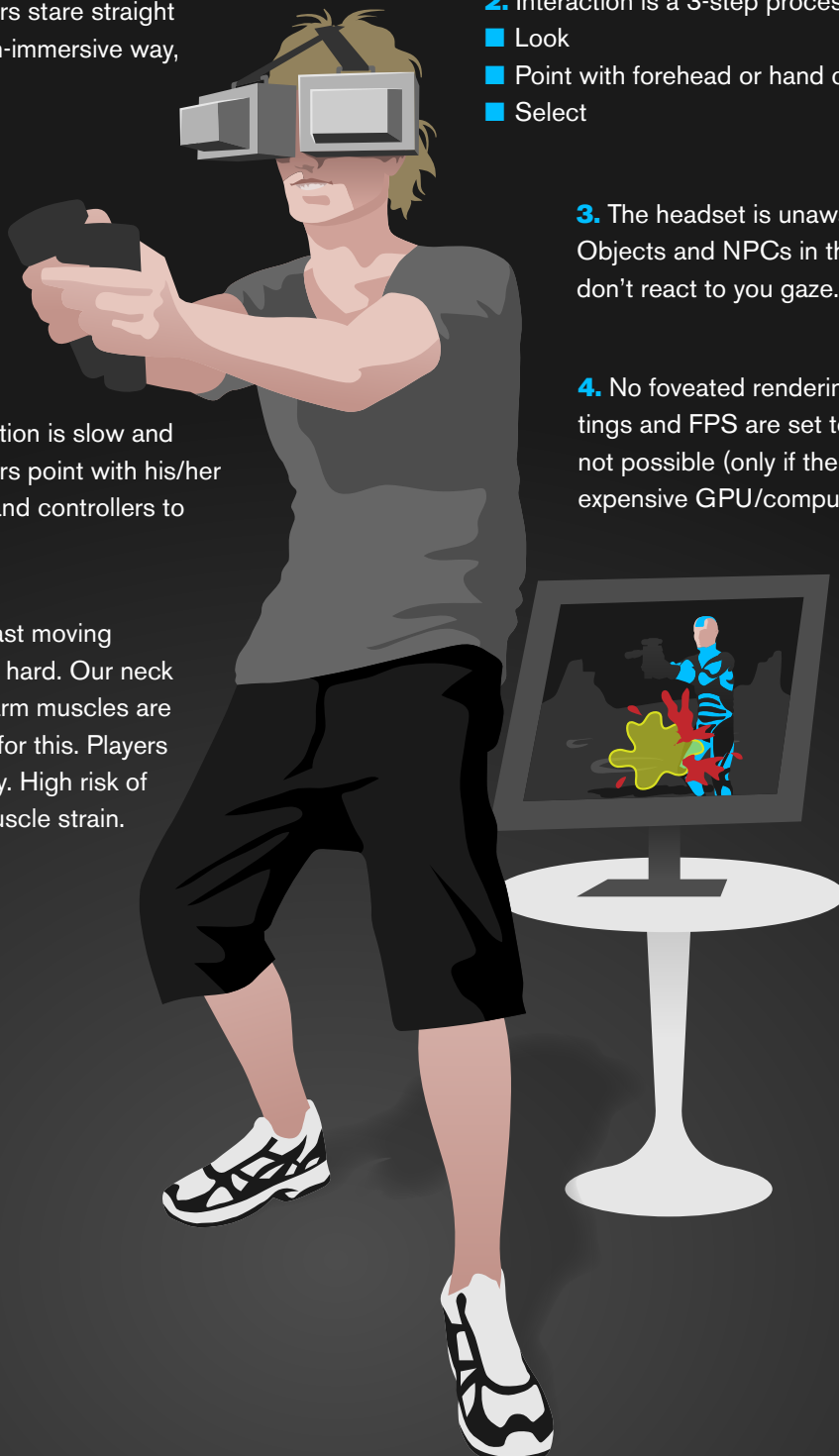
- Look
- Point with forehead or hand controller
- Select

3. The headset is unaware of user intent. Objects and NPCs in the VR environment don't react to your gaze.

5. Menu selection is slow and unnatural. Users point with his/her forehead or hand controllers to menu items.

4. No foveated rendering. The resolution settings and FPS are set to low. 4k resolution not possible (only if the user buys a more expensive GPU/computer).

6. Following fast moving objects is very hard. Our neck muscles and arm muscles are not optimized for this. Players miss frequently. High risk of fatigue and muscle strain.



VR WITH EYE TRACKING

1. Characters establish natural eye contact. Avatars become human and immersive.

2. Interaction is a 2-step process

- Look
- Select

3. The headset is 100% aware of user intent. Objects and NPCs in the VR environment react naturally to you gaze.

4. Foveated rendering. Resolution can be set to max, even in 4k games, while still maintaining high FPS and running on a moderately priced processor/computer.

5. Menu selection is fast and natural. The headset understands what item the user wants to select since the user is already looking at it. Every selection is done with one single button.

6. Following moving objects natural and easy. Our eyes are optimized for this type of interaction. Players hit moving objects easily. No fatigue, no muscle strain.

