

Worldbuilding in VR

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Agenda

- Introduction to my thesis
- What is worldbuilding?
- Worldbuilding in VR
- Softwares for VR worldbuilding
- Examples
- Failed Example
- Conclusion

Introduction to my thesis

Multiplayer City Building game in VR

Project with Criffin CEO

After people can join to the VR city via internet connection, we can really go to phase of implementing some games using the city.

- Zombie game
- Educational Game
- Exploring game

What is worldbuilding

A creation of an entirely new fictional world. Essential phase that connects the audience visually and emotionally.



What is worldbuilding

- Novels
- Movies
- Animes
- Mangas
- Games
- VR

Worldbuilding

- Histories
- Physics
- Cosmology
- Geography
- Cultures
- Races
- Languages
- Characters
- Narratives

Worldbuilding in VR

- Should be intuitive
- The level of interactivity
- The role of the user in VR.(Character or invisible observer)
- Audio
- The comfort of VR headsets.
- Deals with VR sickness such as nausea, eye strain, headache
- Make the user feel presence
- Narrative
- Core experience
- Focus on the story

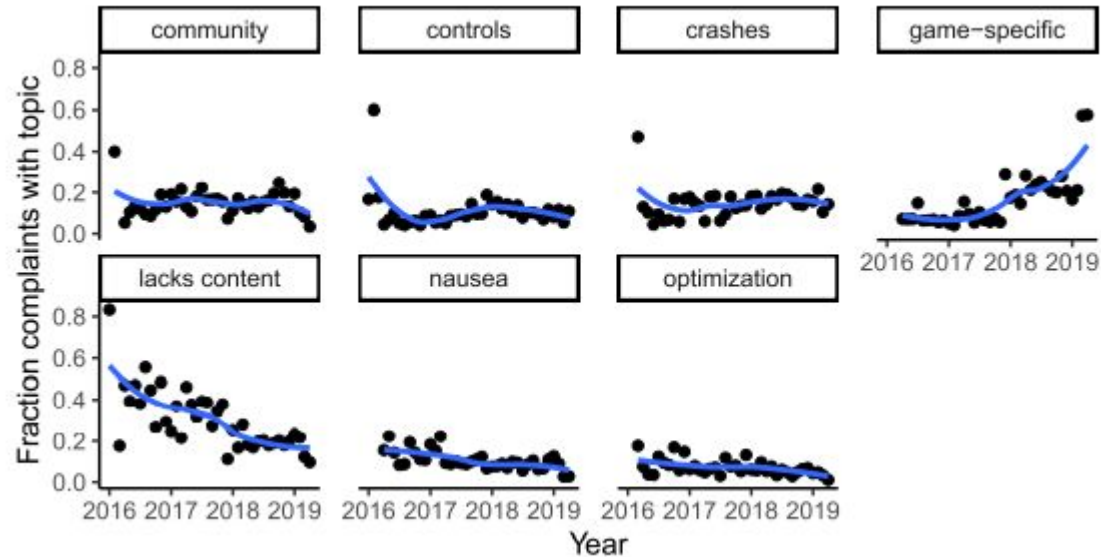
Dealing with VR sickness

In VR, your whole body is engaged in a way unlike traditional games. The player's eyes tell their brain they are walking, while their body tells them that they are still.

These days the technologies has developed and this problem is less likely to be complained from users.

World building in VR

User reviews of VR games.



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Feel presence in VR

- Personal presence
 - Social presence
 - Environmental presence
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- Minimizing breaks-in-presence(interpenetrating objects, character not responding)

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Narrative

- People might feel there is no freedom where to look or go from the linear narrative.
- With VR, the space, virtual characters, and the system become the story.

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Core experience

Even there are various experience in the VR world, the core experience of the game should be same.

The primary focus of developer is to make the core experience pleasurable.

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Focus on the story

Focus on conveying the key point of the story instead of the detail.

Focus on story emotions, deep engagement, massive stimulation, and an escape from the reality

Make the story simple

Useful software for VR

- Unity
- Unreal Engine 4
- CRYENGINE
- Blender
- 3ds MAX
- Amazon Sumerian
- Google VR for everyone

Unity vs Unreal Engine 4 vs CRYENGINE

Unity - Large number of assets for the game engine.

UE - Good graphical performance. Large number of available assets but smaller than unity.

CRYENGINE - Good graphical performance. Very small asset store and collection. But quality of assets are good.

Unity Carte Blanche VR creation

<https://www.youtube.com/watch?v=bKR0eEKTiBM>

VR-in-VR authoring tools for non technical users

Sister project of EditorVR

Unity EditorVR

<https://www.youtube.com/watch?v=5-NAjKPsx4A&t=72s>

Unity EditorVR is an experimental feature and does not have a formal version.

Tiny Town VR



https://www.youtube.com/watch?v=Sdj_Y1uQdio

Tiny Town VR

City building game in VR and you can control all the characters and building position. You can also enjoy by taking pictures of your built city.

- Very intuitive
- Less VR sickness
- The core gameplay is concrete and you can feel the immersion to the world.

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Beat Saber



<https://www.youtube.com/watch?v=vL39Sg2AqWg>

Beat Saber

Slash the beat heading against you by using you beam saber.

- Very intuitive
- Good music and very good interaction
- It is very simple and immerse you.

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ALTSpaceVR

AltspaceVR is the premier place to attend live shows, meetups, cool classes, and more people from around the world.

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



ALTSpaceVR

It is often used for virtual learning such as having a class online in virtual classroom.

It is useful for learning because students and educators participate in the virtual world rather than use it. Therefore, it allows students to interact each other and be involved more in the learning environment.

- Very well presence feature
- Good interactions

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Bike Rush VR (Failed Example)



<https://www.youtube.com/watch?v=jv2e-rcFiZY>

Bike Rush VR (Failed Example)

Bike driving game and while you are driving you can shoot down police cars and helicopters to run away from them.

- Cause you the VR sickness very hard

Conclusion

World building in VR is quite different from novels or traditional games. Since it is a 360 viewable world, it requires more immersion to the world.

The complains to the VR nowadays are more about gaming experience rather than a cybersickness. Therefore, worldbuilding phase in VR will be a essential phase in VR content development.

Reference

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