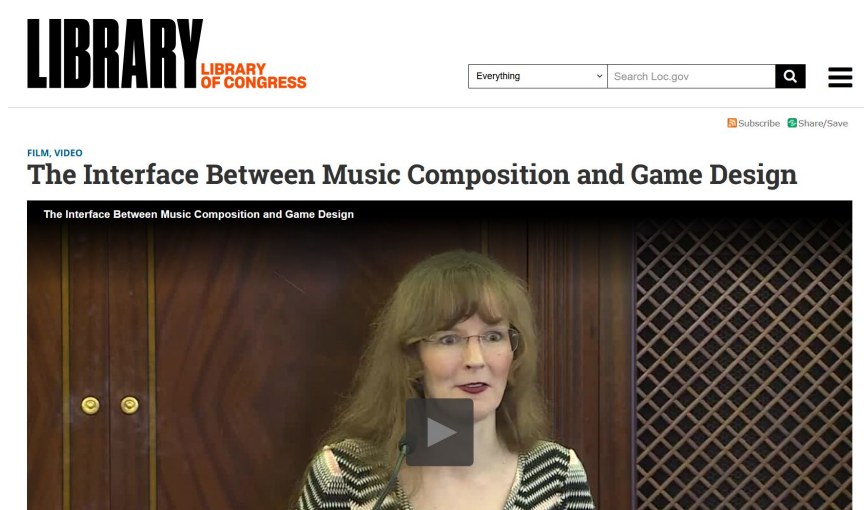




What's that  
sound?

# Brief Overview of this lecture



Phillips, Winifred. "The Interface Between Music Composition and Game Design." Lecture, Event from The Library of Congress, Washington, D.C., May 31, 2019.

# Interactive Music



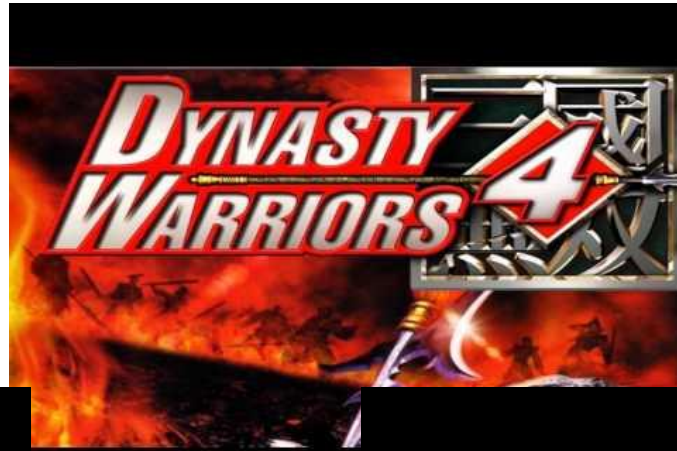
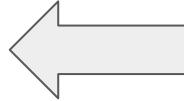
# VR Implications



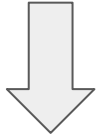
# The Main Menu?!



Main  
Menu



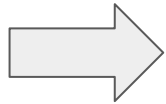
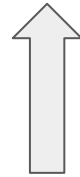
Encyclopedia



Edit  
Mode



Stage  
Select

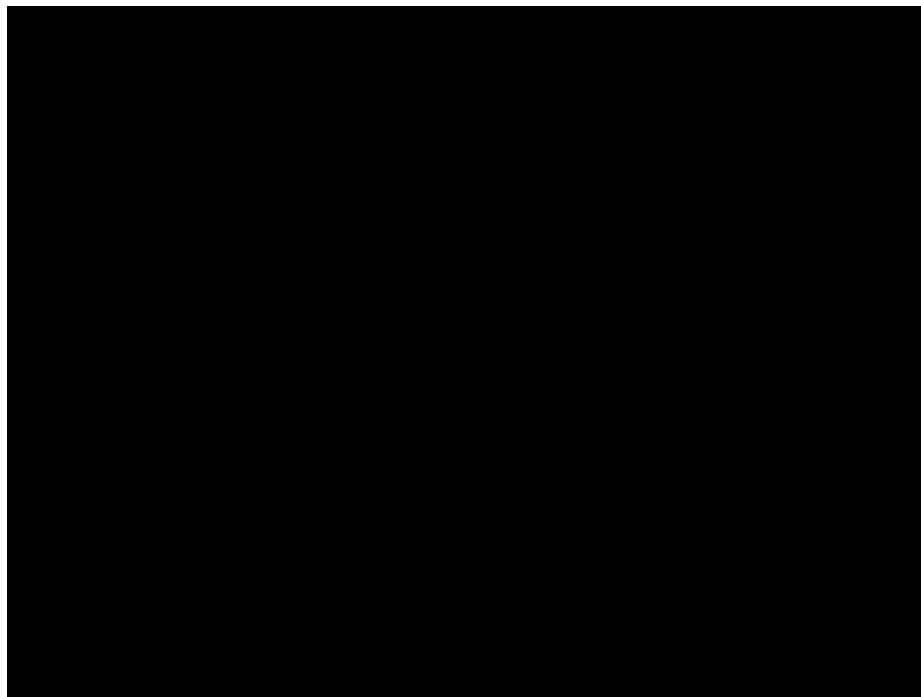


# Horizontal Sequencing



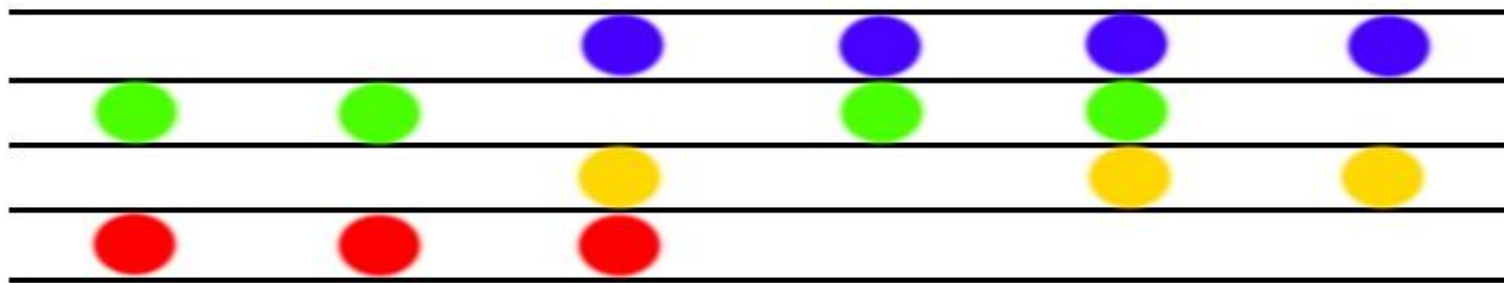
Music can be mixed and matched like notes in a measure

# Horizontal sequencing examples



Tron 2.0 soundtrack composed of 5 clips that could fade into each other interchangeably

# Vertical Layering

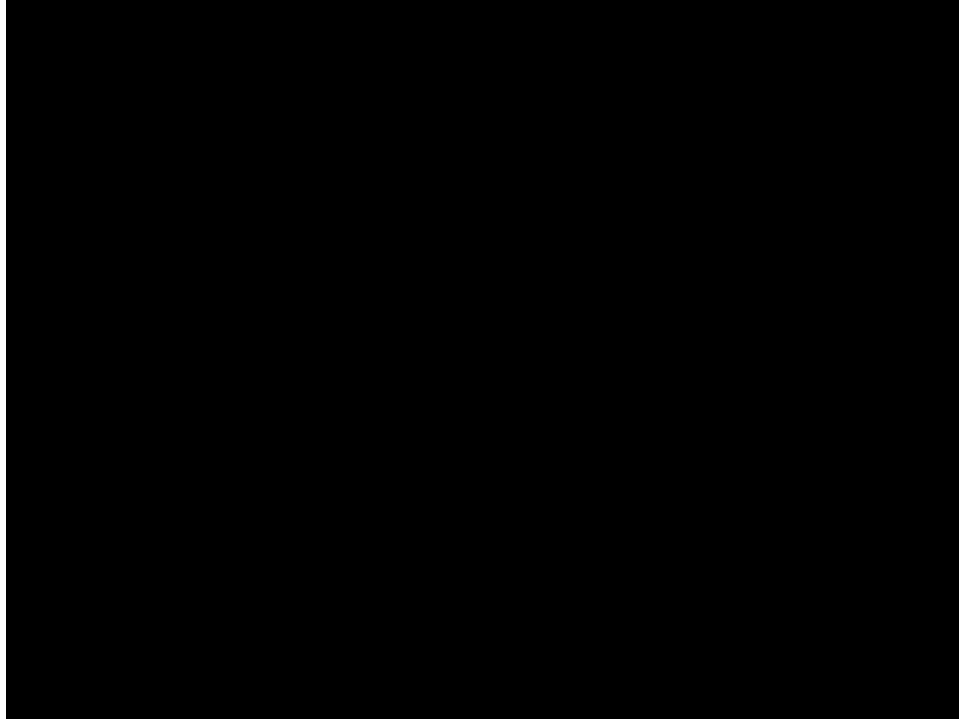


- Different tracks are layered on top of each other in any order or combination
- Often orchestrated to sound good regardless of what they're paired with





# Example of Vertical Layering



# MIDI (Musical Instrument Digital Interface) + MOD (Module Format)

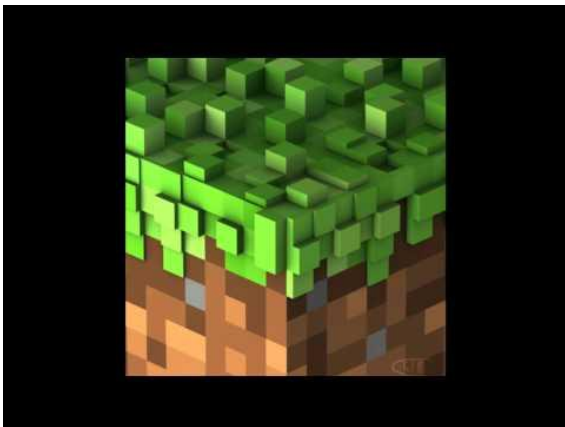


# MIDI/MOD Cont.



# Generative/Adaptive Music

- No Man's Sky
  - 18 quintillion planets, how do you generate music for that?
  - Using improvised generated music!
- Minecraft:
  - Random track depending on time of day



Nier Automata Amusement Park:  
Quiet -

[https://www.youtube.com/watch?v=k\\_YDwZ-9gaA](https://www.youtube.com/watch?v=k_YDwZ-9gaA)

Medium -

<https://www.youtube.com/watch?v=j4n5sx6qUVc>

Dynamic -

<https://www.youtube.com/watch?v=ijDO91gNiCU>

# Sound Design for Emotion & Open Worlds

- Music most commonly used to set the tone of a scene
- Often used to put players into a certain headspace to immerse or surprise them





# Music as a Cue

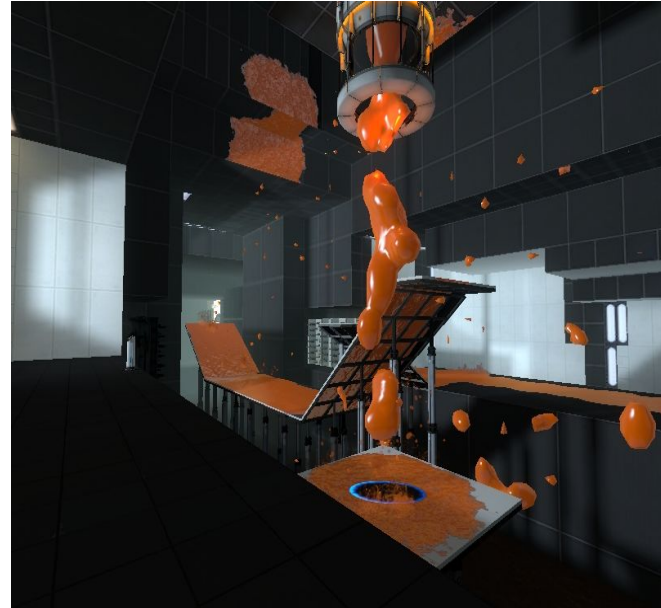
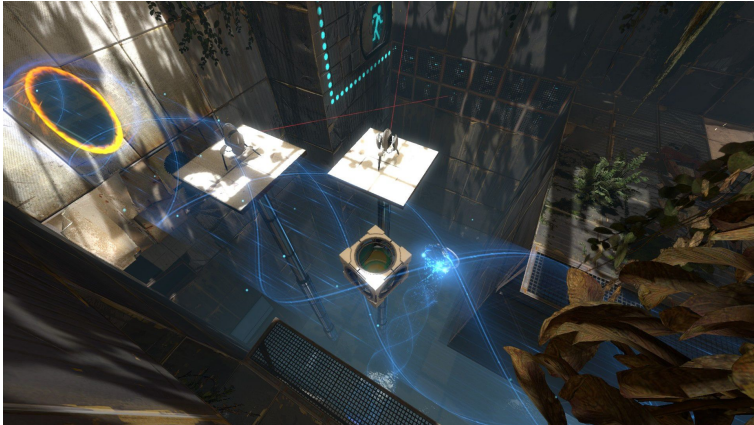
- Alerting an enemy
- Entering a special area



What are some game soundtracks that left an impact on you?

# Calculated Sound Design

- When to use a sound
- Sounds can be interactive with the player, should be distinct for interacting with different objects
- Example: Portal 2 (<https://www.youtube.com/watch?v=urslj59J6RU>, <https://www.youtube.com/watch?v=UJ1W4ypxhpl>)





# Calculated Sound Design Portal 2

Amazing sound design especially when it comes to player's distance from an object

Some interesting examples:

- Picking up a block with the portal gun - an electrical shock sound is emitted, which corresponds to the portal gun shooting out a stream of sparks when picking up a block
- When going over the orange gel (makes you faster) a sound effect plays when you run on the paint, the sound constantly increases in pitch
- When going on a jumping pad, a sound gets louder as you go higher, fades away once you land back on the ground

# Let's Fight!

- Combining musical immersion that loops
- Sound cues are important!
- When is it distracting?
- Music based on characters vs stage



# FighterZ + Tekken 7

Fighterz OST:

[https://www.youtube.com/watch?v=WiLkUMB\\_BsM&list=PL0OmCKrMKPWDsdOoDWam-yqwTmQOFN637](https://www.youtube.com/watch?v=WiLkUMB_BsM&list=PL0OmCKrMKPWDsdOoDWam-yqwTmQOFN637)

Tekken 7 OST:

<https://www.youtube.com/watch?v=YpZi4-IQaXM&list=PL4ayiJWhBF9IjLRSGVdvAFJuHShOeD87L&index=9>