Lecture9 Context Metrics

Context is a catchall term for the **effect of simulated space** on game feel

Simulated space is defined by

- collision code: how objects interact physically
- level design: physical layout of space

Together, they give meaning to real-time control, providing a physical space for the player to perceive actively via the avatar

1. High-Level Context

Impression of Space

- **Spatial Learning**: when a player begins exploring a game space with an avatar
    - When the space is large and expansive, it warrants pondering and exploration, encouraging players to look outside the self and think about things like how small and insignificant they are. When it's tight and constrained, it causes more introspection
- In terms of measurement, we can say, as a **soft metric**, that a space feels mostly open, like a seashore or a large city, or closed and claustrophobic like a subway tunnel or a cave, and to roughly chart the effect of that overarching structure on the feel of a game.

Impressions of Speed and Motion

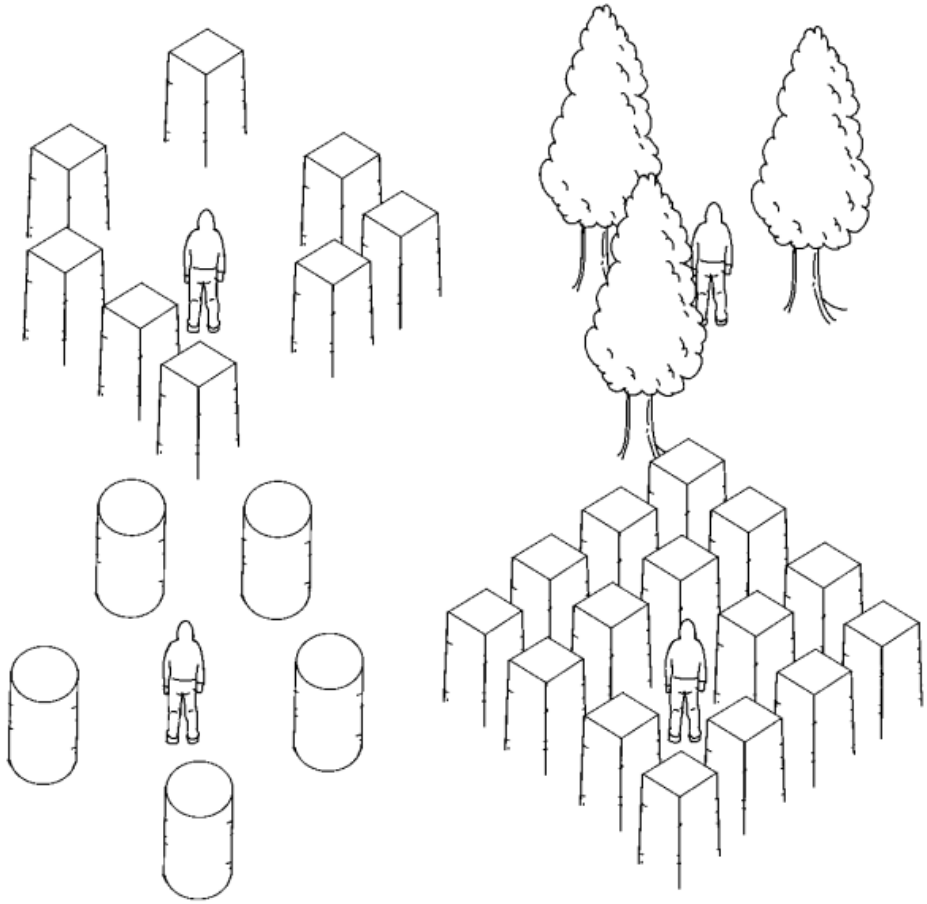
- **Game's feel** is affected by context is in the impression of speed of moving objects
- Every game uses fundamentally **different units** to measure (and tune) the speed of objects
- Speed in a video game only has meaning **relative to the number, placement and nature of the objects around it**. Without at least one object to compare it to, the speed at which something moves in a game has **no meaning**
- Effectively tuning a game's feel means **tweaking a bunch of numbers** which govern the resulting movement of the avatar, but it is the **placement of the objects around**, over and near which that motion that takes place that gives those numbers **meaning**. To tune, you must have some context to tune against
- **Perspective**: We can easily change the distance from which objects are viewed, the size of objects and the speeds at which they move relative to one another

Impression of Size

- The size of an object and its motion have a relationship which can be used reciprocally to create **an impression of slow speed or of massive size**
- The sounds and particles and screen shake also speak to those properties, but in this instance the sensation was really sold by the context of one moving object relative to another

2. Medium-Level Context

- The medium level of context refers to the feeling of **immediate space** and **object avoidance**
- It's the layer where, with respect to game feel, **context** is the "second set of knobs " for game feel tuning



- Mid-level of context is about steering and object avoidance, about navigating an interesting spatial topology with enjoyable precision and deftness
    - The number of objects
    - The size of objects
    - The nature of objects
    - The layout of objects
    - The distance between objects

3. Low-Level Context

- Context affects game feel at the low level of intimate, **personal space**, at the level of **tactile interaction between objects**
- **Collision**: what we can do is look at the feel of collisions between objects in a game and compare them to the feel of everyday things and so to one another

4. Summary

Context metrics can be categorized into three different levels

- **High-level context**: The impression of **space, speed and motion** inherent in the overall conception of the game world
    - general sense of space, speed and motion as it relates to the player and the effectiveness of the game world
- **Medium-level context**: The immediate **space around a character** and **how the character interacts with objects** moving through that space, for example, object avoidance
    - spacing of objects
- **Low-level context**: The **intimate, tactile, personal interaction** between **objects**
    - how objects collide, how these collision feel compared to everyday object in the real world