Lecture6 Beyond Intuition: Metrics for Game Feel

1. Why Measure Game Feel

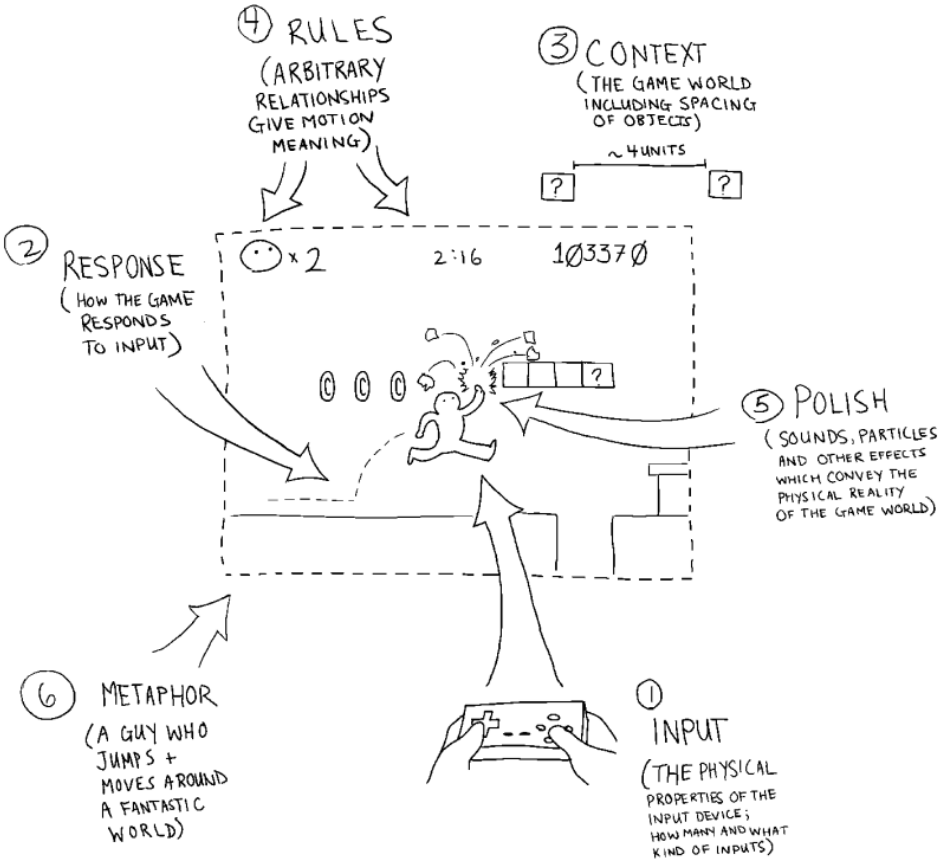
- If we can identify and measure these pieces of game feel, we can avoid constant reinvention
- This requires us to wrap our brains around the game feel system as a whole—including the player, the input device, the programmed reaction from the game system and all the pieces (i.e., the Game Feel Model of Interactivity described in Chapter 3)—and identify which elements enable us to make a meaningful comparison between the feel of two games

2. Soft Metrics vs. Hard Metrics

- **Hard Metrics**
  - quantifiable, finite measurements
  - provide specific, measurable data that can be compared across playtests
- **Soft Metrics**
  - combine to form a sense, nebulous but always evolving, about what the experience of playing the game is for all players everywhere
  - examining soft metrics is part of the game designer’s intuition, which gets honed as he or she completes more and more designs
  - to have an intuitive grasp of what system dynamics will create enjoyable, meaningful experience is to be keenly attuned to soft metrics.

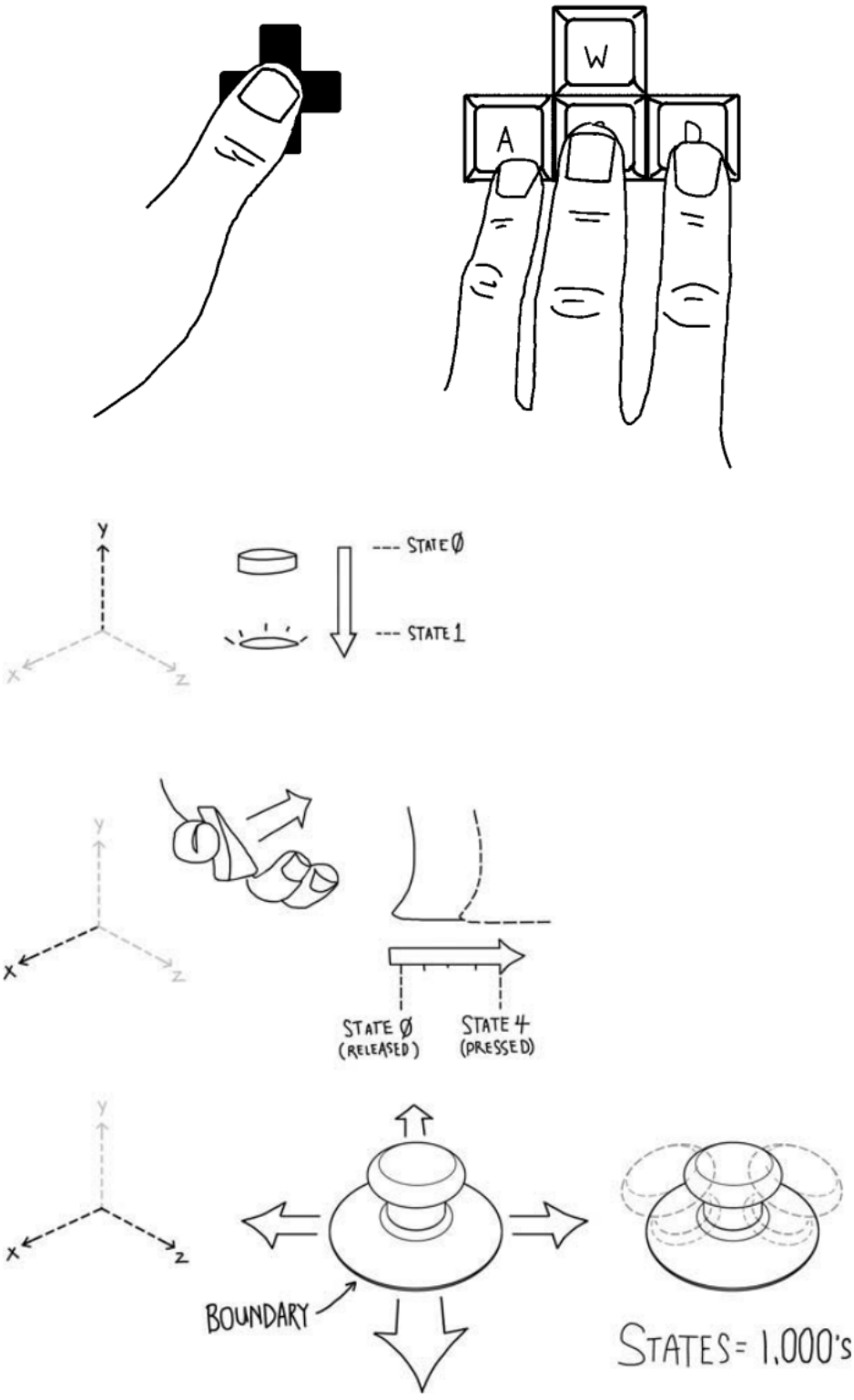
3. What's Important to Measure

Six Useful Aspects



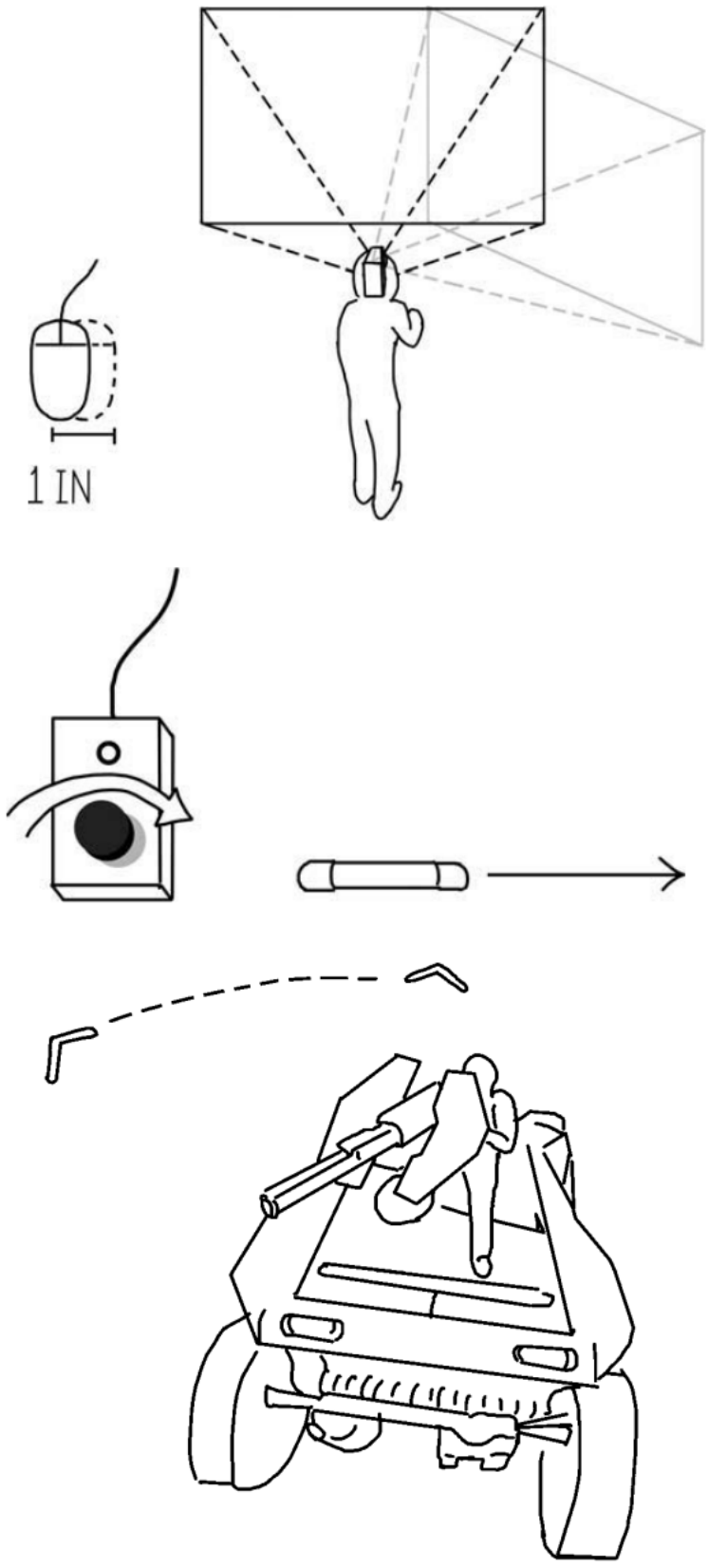
- **Input**: The physical construction of the device through which player intent is expressed to the system and how this changes game feel
- **Response**: How the system processes, modulates and responds to player input in real time
- **Context**: The effect of simulated space on game feel. How collision code and level design give meaning to real-time control
- **Polish**: Effects that artificially enhance impression of a unique physical reality in the game
- **Metaphor**: How the game's representation and treatment change player expectations about the behavior, movement and interactions of game objects
- **Rules**: How arbitrary relationships between abstracted variables in the game change player perception of game objects, define challenges and modify sensations of control.

Input



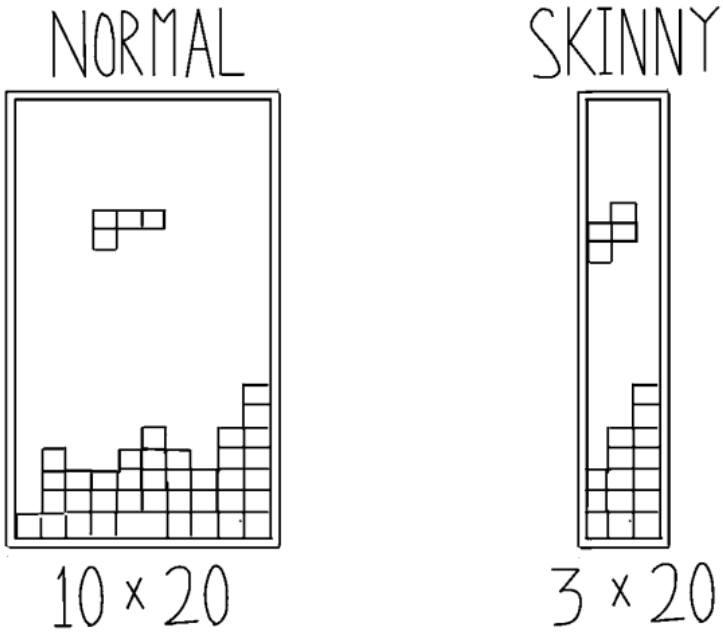
- choices about **which parts of the input device** to use and how to use them affect the feel of control over virtual objects
- choice about the **sensitivity** of their input space
- for each individual input, it's useful to examine how many **possible states the input has**, the degrees of freedom and types of movement it permits, and how, if at all, it's bounded
- this physical feel of interaction is very difficult to quantify, but has some effect on the feel of control over virtual objects

Response



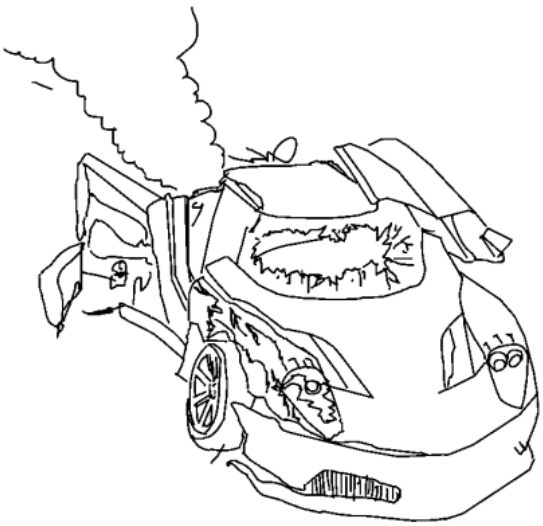
- game receives signals from the input device
- signals **modify some parameter** in the game in some way, which is defined by the game designer
- an input signal can modulate any parameter in a game and can do it over time in many different ways
- examine the **relationships** between the various parameters

Context



- context includes **simulated space** and **level design**
- context is the unique physical reality of the game world—the simulated space—including the way that objects interact and the layout of space
- most games have some kind of designed context against the mechanics ' functions. In most cases, this is called **level design**
- context will vary depending on the type of game, but almost every game includes some kind of level design
- context is a **soft metric**
- the best way to measure these effects is to examine the feel of control in different contexts within the same game

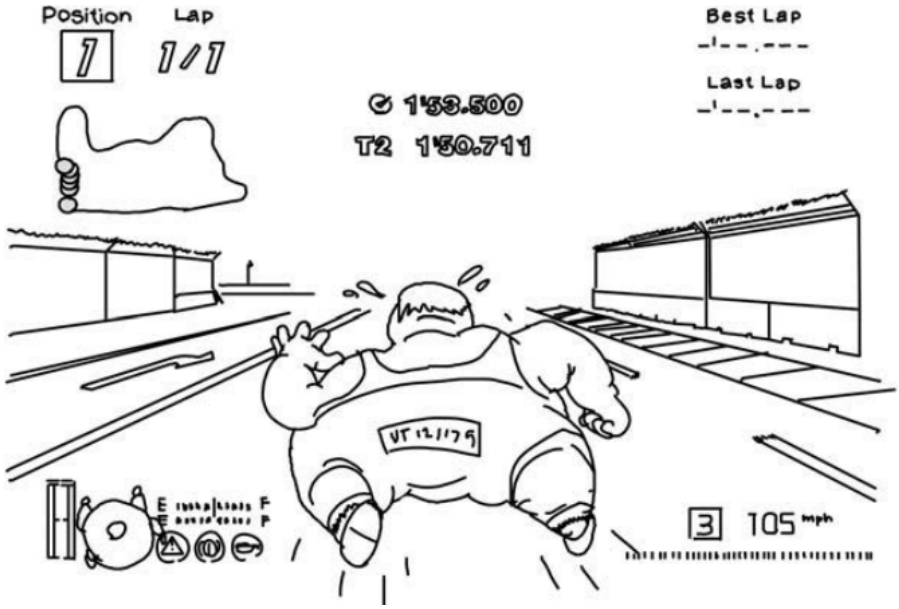
Polish



- any effect that enhances the interactions between objects in the game world, giving clues about the **physical properties** of objects

- if all polish effects were removed, the functionality of the game would be the same, but the player's perception of the physical properties of the objects in the game would change
- polish is a **soft metric**
- what we can measure is the resulting impression of **physicality**

Metaphor



- metaphor is where a player's **past experiences**, ideas, feelings and generalizations come into play
- not only from playing games, but from their total **life experience**
- players carry with them preconceived notions about the way certain things move and, by extension, how it should feel to control them
- the best designers use metaphor and treatment to set up expectations in the player that can then be exceeded by the game's interactions

Rules

- abstract variables whose arbitrary relationships give them value within the cohesive whole of the game system
- it's a system that gives itself meaning
- in the context of game feel, rules as we've defined them provide motivation, challenge and meaning for motion. Context provides the immediate, spatial meaning while rules provide the long-term, sustainable meaning that games are built out of
- rule is **soft metrics**