Rules

Rules

- Limit player action
- Explicit and unambiguous
- Shared by all players
- Fixed
- Binding
- Repeatable

Rules

- **Limit** player action
- Explicit and unambiguous
- Shared by all players
- Fixed
- Binding
- Repeatable

What Rules Are Not

- Rules that govern real life, such as laws and manners. Games are artificial.

- Play—that is, not the experience of playing a game or its aesthetic trappings.

- Strategic rules of thumb meant for playing a game well.

Rules on Three Levels

- **Constituative rules** are the abstract mathematical logic of how the game is played.

- **Operational rules** are directions for how to play given the specific components of the game.

- **Implicit rules** are the unwritten rules of etiquette that do not need to be explicitly stated but are still followed.

Game: 3 to 15

- Two players alternate turns.
- On your turn, pick a number from 1 to 9 that has not yet been chosen by any player.
- The first player to have a set of numbers which adds to exactly 15 wins.

3 to 15 = Tic Tac Toe?

2	9	4
7	5	3
6	1	8

Identity of a Game

The identity of a game is recognized by:

- the relationship between constituative and operational rules

- a set of rules specific enough to be unambiguous

Legal Identity of a Game

Copyright protects the expression of an idea, not the idea itself.

In general, you can copyright a game's materials and possibly its operational rules, but never its constitutive rules.

Sources of Creativity

- **Constituative**: Usually hard for a human to understand a game as constituative rules, but these can help in the design of AI agents.

- **Operational**: An elegant operationalization of the rules makes a complex system seem transparent.

- **Implicit**: Knowing these rules and breaking them can provide interesting new game mechanics.

Challenge: Elegant Rules

Design a game that lets players focus on play and not rules. In other words, rules should be as transparent as possible, and players should not get bogged down in them.

This can be accomplished by cleverly matching the logic of the game (constituative rules) to the materials and procedure used to play the game (operational rules).

Chutes and Ladders
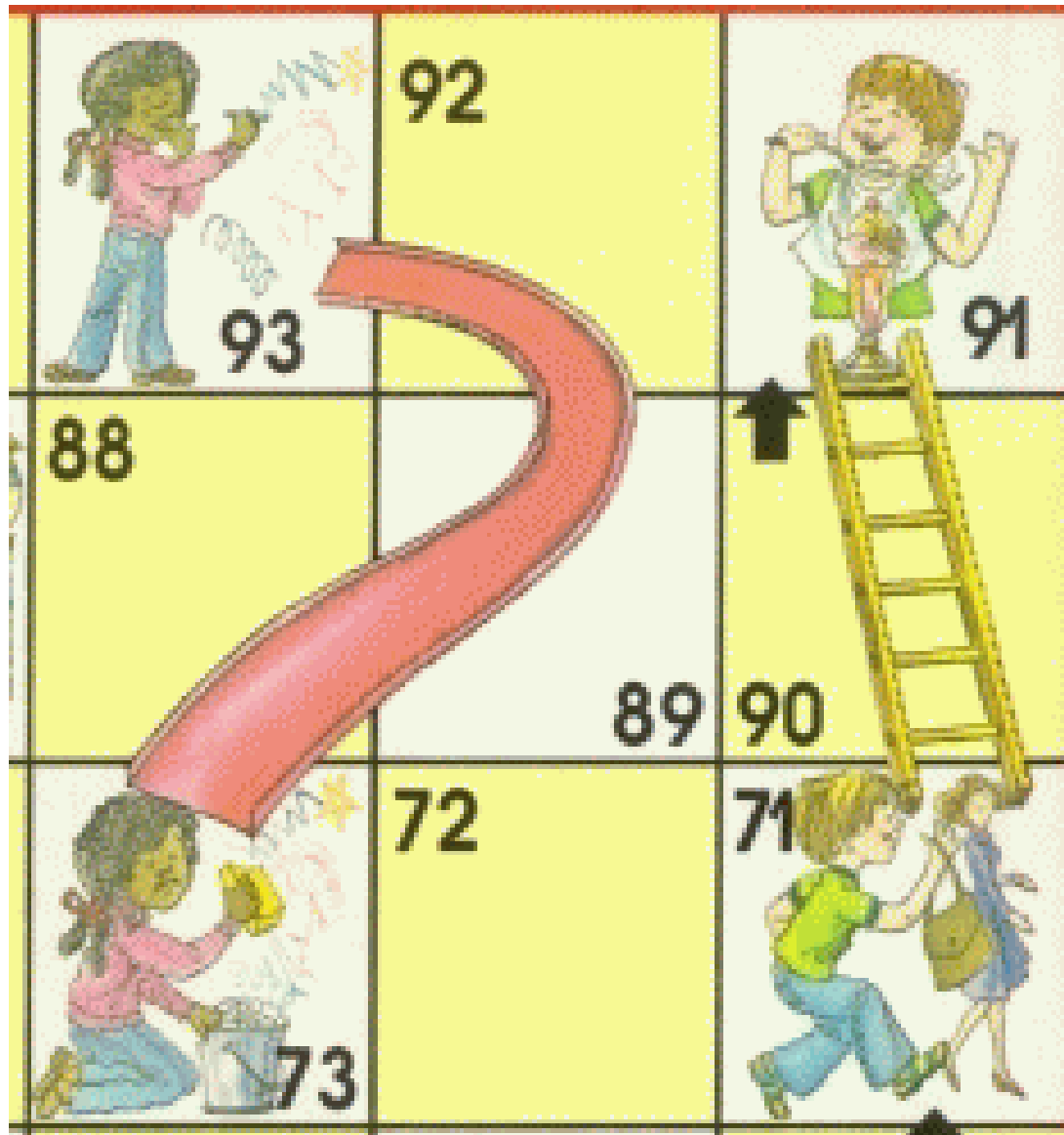
Chutes and Ladders (Constituative)

- On your turn, generate a random number between 1 and 6. Add that to your score, unless it would increase your score over 100.

- The first player to reach exactly 100 wins.

- At certain numbers, your score changes:
  - At 71 your score is increased to 91.
  - At 93, your score is reduced to 73.
  - Etc.

Chutes and Ladders (Audience)

- Designed for small children with limited attention spans, memory, and arithmetic capabilities.

- Activity should appeal to children using a vocabulary they understand.

Chutes and Ladders (Operational)

- On your turn, spin the spinner and move that number of spaces. If you would move past the blue ribbon, don't move.

- The first player to reach the blue ribbon wins.

- If you land on the bottom of ladder, move up to the top of the ladder.

- If you land on the top of a chute, move down to the bottom of the chute.

Chutes and Ladders: Relationship b/w Constituative and Operational

- Children may not understand addition and subtraction, but they do understand climbing up a ladder to slide down a slide.

- The spinner makes generating a random number easy and is harder to lose or eat.

- The board makes keeping score easy.

- The board also makes it easy to visualize how close to one another the players are in score.

- Chutes and ladders avoid the need for a chart of how scores increase or decrease.

Features of Digital Games

- Placeholder graphics and sound can be used for early testing of rules and play.

- It is easier to make rules transparent when they are applied by a computer.

- It is harder to cheat, but when someone cheats, it is harder to detect cheating.

Aura
The Elf
STR-- 38   Charmed:
IQ -- 38   Dragon 323/372
WIS-- 29
DEX-- 38
END-- 38
LEVEL- 372

This Trip:
Magic-- 11+
Cleric- 11
On Level: 1
Hits-2598/3134
Gold-   866

$ 3 in gold!!

+3 +2
+3
of Fear
Warning
Sorcery
Heal

Overall DPS :: 76.76
Ceptorshock
Creeping Sludge   5:46 AM
Foulspore Cavern
Frostbite
Janie
Darkzed
Lestrange

You are too far away!
You are too far away!
You are too far away!

Lestrange
<Enclave of Twelve>

Windfury 3 (3 min)

Frostbite receives loot: [Bruiseweed]
[Party] [Frostbite]: [Woodseed Hoop][Sagebrush Girdle][Branchclaw Gauntlets]
[Party] [Darkzed]: and if we get wiped at boss i ll %^&*ing unistall wow for a day :)
[Party] [Janie]: liar
[Party] [Lestrange]: lol
[Party] [Darkzed]: slowww

Lestrange's Prayer of Healing heals Janie for 517.
Lestrange's Prayer of Healing heals you for 513.
Your Frost Shock hits Creeping Sludge for 358.
You suffer 285 Nature damage from Creeping Sludge's Virulent Poison.
Creeping Sludge is afflicted by Frost Shock.

Challenge: Computers = Simulators

Remember that a computer is more than just a calculator.

The Turing machine was designed to demonstrate that a single machine is capable of simulating all possible machines.

When designing a digital game, first design it as a physical game. This will allow you to iterate faster and ensure that you are focusing on play and not rules. Then, once the game is designed, use the computer to remove some of the tedium.

Deconstruct and Rebuild a Game

1. Choose a simple game (digital or not).

2. Find a partner and describe your game only in terms of its constituative rules.

3. Ask your partner to operationalize the game, choosing mechanics and a vocabulary to make the game playable.

4. Tell your partner what your original game was and see how the two are alike or different.