**Root Games Week 1**

The roots of games!

· **Key Game:** Knucklebones: ca. 5000BCE, Unknown Developer, Dice Game, Unknown Region

o Like Jacks, throwing dice into the air and trying to gather the dice on the ground.

o Made out of knuckle-bones, different sides were an early random generator.

o Very very old. As dice, they are some of the earliest game implements.

o ca 5000BCE are just the earliest FOUND, and we don’t quite know where they came from.

o Gets us to start thinking about the long history of games.

§ Helps us trace the histories and form a narrative of games.

§ Unlike music and dance, games and play are not ONLY human (though same with dance and music?)

§ We can play with other animals and they understand.

§ Doesn’t seem that amazing. Animals are smart as fuck.

· 1.8 Million years ago- Homo ergaster

o Use tools

· 300,000 years ago, evidence of burial rites.

o We can see evidence of a culture in this, the dead have rights.

· 200,000 years ago Homo sapiens

o Us!

· 150,000 years- clothing, jewelry, speech

o Material culture starts developing

· All of human culture happens after this!

o Before all this is games! Animals pre-date us and they play games!

o Games exist before humans!

o The joy of moving

· **Knucklebones** is interesting as a family of games, and also something very old and very primal and we’ve always figured out a way to play something.

· **Key Game: The Royal Game of Ur**

o Ca 3000BCE, Unknown Developer, Board Game, from Mesopotamia (Iraq).

o Also known as (AKA), the Game of 20 Squares.

o Guesses on how it was played

§ Race Game

· Two players probably starting on opposite sides, and race to their squares on the opposite end.

o You had to have a level of civilization and comfort to play the game

§ A storage place, a place to teach it

**o The idea of mapping space on a board is an innovation of Ur.**

**§ The idea that one space can occupy a space at a time.**

**§ How space should be represented is Ur**

o Played by commoners and elites

§ As shown by gameboards scratched into the floor

§ First evidence of modding in a game

o In addition to this being a popular game with a design language

§ **It uses dice**

· How do Dice Work?

· Ur uses triangular dice, where two points of the pyramid are covered white, and two were black.

· So whatever colored tip was up decided something.

· Dice pyramid

o The results of the dice go from uncommon to less common, to common and back down.

· Allows for the player to make a prediction based on likelihood of dice rolls.

· They are random, but they have probabilities and can make an informed guess.

o **Ur is here to remind us that the relationship an ancient person had to this game would be very different from ours. They are games, but also tools of divination, a way to see if the gods are favoring you.**

§ The relationship between dice, luck, and fate.

§ There is no relationship between the religious and secular

· The God Marduk favored you or not.

o A very simple game can have A LOT going on with it.

· **Key Game:** **Senet**

o Ca3000BCE, Developer Unknown, Board Game, Ancient Egypt

§ Race game, but a single track moving back and forth, unlike UR.

§ Is both the board and the way to transport it.

§ Very popular, people playing for pleasure, drinking

§ Found on the tomb of an emperor, buried with set

o Why?

§ There’s an interesting theme and mechanic to the game.

**§ Suggested heavily that it started as meaningless and then gradually accrued a theme and be *about* the journey of the soul to the afterlife.**

· It was talked about and valued as a teaching tool for what life would be like and how to be a good person.

· You could sit there and play and have fun and also ponder on your place in the universe.

**· An idea of what the game was *about* grew out of the mechanics.**

· Mechanics or Game Mechanics

o **Units of gameplay**, re-combinable game actions that are often shared between different games (e.g. roll dice, move piece, capture opponent)

·  **System**

o The overall game described as a collection of mechanics and the rules.

**· Theme**

o The fictional or representational aspects of the game.

·  **Key Game**: **Backgammon**

o CA3000BCE, developer unknown, Board Game, Ancient Persian (modern Iran).

o Remained a popular game since forever.

o Super common in the middle east

O It’s interesting when players have to use the same track to move.

§ Similar mechanic to Ur

o Interesting use of dice

§ Your dice can be spread out across pieces. You can use them on one piece, or split them between two pieces.

o Things younger than Backgammon:

§ The U.S.

§ The French people, language, and country

§ Philosophy

§ Unification of China

§ Older than use of Iron

§ Older than the Pyramids and the domestication of the camel.

o Why?

§ It is an immortal game that burst onto the scene and has been played ever since.

§ We’ll be playing something that connects us to the past in a very visceral kind of way.

§ Has transformed today in terms of using computers to determine probabilities.

§ There’s a doubling cube, added in gambling games

· We can double the amount of money, or you can pay me now.

· You can continue to double the amount of the bets

· Invented in the 1920’s by an American in the East Village

· **Key Game: Mancala**

o Ca 600CE, board game, eastern Africa

o Family of games

§ I played Oware and Ayo,

§ In Kenya and Zanzibar, the most popular version is **Bao**

· Considered more in the family of backgammon and chess

· Spend your life mastering

· Mechanic is called “sowing”

o Emerged in East Africa but has boomed internationally

o Why?

§ A family of deep games.

§ The concept of “depth”

· It is a game that will support long term play and serious study.

o Study in terms of multiple lives.

· There is a quality in games that allows them to survive for hundreds of years.

· When a game has that longevity, when you can ALWAYS get better, that gives the game depth.

§ Mancala has:

· No randomness

· No hidden information

· Not many choices per move

§ A game tree

· A game has a limited number of states, and the game tree shows that.

· Tic Tac Toe has a limited game tree.

· There are more states in “Chess” and “Go” than pebbles of sand on the beach.

· Mancala has a huge fucking tree.

o Mathematicians love Mancala trying to figure out the complexity

§ There are moves in Mancala that would take 800 years to finish.

· **Key Game:** **Go**

o Ca 2000BCE, dev unknown, ancient china

o Played on a LARGE grid.

§ There are a lot of moves you can make

o Based on controlling territories.

§ Cutting off the players connecting lines

o Groups of pieces share liberties of other pieces in its network

o When pieces are surrounded, the pieces are taken off the board

o Any formation with two internal liberties cannot be captured

§ Strategy!

o Created by fisherman and draw the board in their hands (legend1)

o Created by Chinese emperor Yao who asked for a game to be a good influence on his son (legend2).

o Considered one of the 4 cultivated arts of the young gentleman.

o Spread to Korea from China

o Came to Japan and made its way into imperial cultures

o Why?

§ Go is what we think of as an *Elegant Game*

·  **Means it has depth and simplicity**

· Simple rules lead to complex situations

· Elegance is an aesthetic value

· Linked to the idea of emergence.

o You have a combination of rules and large complex things can happen.

**· Key Game:** **Checkers/Draughts**

o France, 1500CE Board Game

o Comes from Alquerque (aka Quirkat)

§ 5x5 board

§ 8x8 board introduced in 1100CE

o International Draughts

§ Played on 10x10 board

o Why?

§ Checkers is solved.

§ English Draughts (8x8) is considered solved.

§ When you can correctly predict the outcome of the game from any position.

§ The makers of the program Chinook.

**· Key Game: Chess**

o India, 600BCE

o Four divisions of the army

o From Persia

o In India pieces are very iconic

o Once it moves to middle east, the tension around icons makes the chess pieces abstract.

o Middle East has had the largest effect on western conception of chess.

o Chess is a bastardization of the word Shah (for King)

o Why Chess?

§ Chess has “stuff”

· It isn’t very abstract

· Enters lots of societies

· Has “classes”

o Each piece does something and has powers

o That’s innovative

· Chess makes you think like a game designer

· Since each piece had a class, the things they do could change

· Queen was an innovative move

o Originally moved diagonally, one way

o Someone came up with the idea that the queen could do whatever it wants.

· Chess has a lot of derivations and lots of things that has roots in it

· Any game with an RPG element can trace its history back to chess.

**· Key Game: Snakes and Ladders**

o 1500CE, India

o And Indian game

o Traced earlier to second century BC

o The game is considered a teaching tool for indo-religious instructions

o Connection to ethics virtues and rights

o A game about contrasting the higher and lower forms of love

§ Squares of virtue and vice

o Introduced and taken by the Victorians

o Original was for both children and adults

o Victorians decided to make it a children’s game

o Milton Bradley picked it up and changed it to Chutes and Ladders

o Why?

§ It has a long history of moral instruction

§ A game about living a good/bad life is a game where you’re making no choices, you’re at the whim of the wheel.

§ Fascinating tension and meditation on the nature of choice and meaningful choice.

§ The essence of the player is the ability to assume a role, they get caught in illusion, and the dice decide their moves.