

6SSEL045 – Language Origins

Lecture 5 Interactive: The Evolution Game

BEGINNING THE GAME

Each player starts with five cards each, and seven population. The rest of the cards and population are held in the “bank”.

THE TURN

Each turn is divided into three stages:

EVOLUTIONARY FITNESS:

Players select up to 10 cards for their **evolutionary set**. Players can only choose a maximum of two of each type of card. If **Dominance** cards are selected then they have immediate effect. The player cannot replace them in their **evolutionary set**.

Roll a die to find the environment for the turn. There are six environments:

- 1: Wolf world = all wrong
- 2: Jungle world = Hot, wet
- 3: Marsh world = cold, wet
- 4: Savannah world = hot, dry
- 5: Tundra world = cold, dry
- 6: Goldilocks world = just right

Players count up the labels on the cards in their **evolutionary set** which match the turn’s environment to give their **environment score**. If the environment is Goldilocks, add up each environment separately and take the highest. If the environment is Wolf, add up each environment separately and take the lowest. Every player with the highest **environment score** takes two cards; every player with the second-highest score takes one card.

If any player is holding more than twenty cards (including the **evolutionary set**), they must choose excess cards to return to the stock. These returned cards cannot be taken from the **evolutionary set** for that turn.

POPULATION GROWTH:

Each player counts up the population cards in their **evolutionary set** and adds that number to their population.

PREDATION:

Each player counts up the predator cards in their **evolutionary set** to give their **predator score**. They also count up the prey cards in their **evolutionary set** to give their **prey score**.

If the **predator score** is higher than the **prey score**, the player is a predator; if the prey score is higher than or equal to the predator score, the player is prey.

Each predator must choose one other player to prey upon. The chosen player can be prey or predator in that turn.

The predator rolls one die, adds on their **predator score** and subtracts the other player’s **prey score** to give the **predation number**. If the **predation number** is positive, the predator takes that number of population from the prey player. If it is negative, the predator gives that number of population to the prey player.

After predation, the next round begins.

LOSING:

If at any stage a player runs out of population, they are eliminated.

WINNING:

If a player reaches an agreed total of population, they win. If the game is open-ended, the player with the biggest population at the end of the game wins.

THE CARDS

	Tundra	Savannah	Marsh	Jungle	Predator	Prey	Popn
Arms (pair)			2	2			
Legs (pair)	2	2					
Wings (pair)		2	2				
Hearing	2		2				
Teeth		2		2			
Vocalisation	2			2			
Colour Vision				3			1
Visual acuity		3					1
Olfaction			3				1
Digestion	3						1

	Tundra	Savannah	Marsh	Jungle	Predator	Prey	Popn
Strength	1			1	1		1
Stamina		1		1	1		1
Size	1	1				1	1
Dexterity		1	1		1		1
Evasion			1	1		1	1
Anticipation	1		1			1	1
Fecundity			1			1	2
Longevity		1			1		2
Speed	1					1	2
Omnivory				1	1		2
Cleverness	1	1	1	1			
Co-operation	1	1	1	1			

	Tundra	Savannah	Marsh	Jungle	Predator	Prey	Popn
Versatility					2	2	
Dominance							Special
Junk DNA							