# Project

## Description

## Questions:

1. How does the game change if you have a tight uncertainty interval at the beginning of the game?

* A tight uncertainty interval would indicate that the overall proportion of values would on average be close to the median of 0.
* A smaller proportion of agents with extreme certainty in their decision to not vote or vote
* Hence a greater proportion of agents with low certainty in their decision to vote, meaning overall throughout the game. The frequency of voting will drop significantly.
* Potentially leading to Red maintaining a greater number of green agents (followers)
* Distribution:

Diagram

Description automatically generated

1. How does the game change if you have a broad uncertainty interval at the beginning of the game

* A broad uncertainty interval would indicate that the overall proportion of values would be spread approximately even across the uncertainty range
* A greater proportion of agents with extreme certainty in their decision to not vote or vote
* As there is a general increase in the average proportion , this would mean the frequency of voting will be rapidly skewed throughout the whole game.
* Potentially leading to Red rapidly changing in the number of followers throughout the game.

Distribution:

Chart, line chart

Description automatically generated

1. In order for the Red agent to win (i.e., a higher number of green agents with opinion “not vote”, and an uncertainty less than 0 (which means they are pretty certain about their choice)), what is the best strategy?
   1. Discuss and show with simulation results how many rounds red agent needs in order to win?
2. In order for the Blue agent to win (i.e., a higher number of green agents with opinion “vote”, and an uncertainty less than 0 (which means they are pretty certain about their choice)), what is the best strategy?
   1. Discuss and show with simulation results how many rounds blue agent needs in order to win?
   2. What impact did grey agents have on the simulation