

One of the first tendencies that I noticed in the game which was motivated by a trap was the result of policy resistance. The rules of the game that are given to the human player explain that while there are three people fishing in the lake, the human player is the only boat with decision making power. The other two boats should follow the fishing patterns of the human player instead of making autonomous choices. This rule acts as a policy in the scope of the system. One actor (the human player) creates a policy that shapes the actions of other actors (the other boats), which might defer from their goals.

Following the natural tendency to resist regulation, other boats did not always behave according to the precedent set by the human player. Policy resistance suggests that the other boats might not follow this roughly-labeled policy since their interests as a fisherman might be different from those of the human player, who acts as the institution which regulates. Sometimes, the other fishermen would act differently than me by taking slightly more or fewer fish. I wasn't really thinking about this concept while playing the game, but I wish I would have. I wonder if the other boats would react with more deviation if the human player consistently chose actions that would clearly exhaust the fish supply early? I wonder if a similar trend would happen if the human player took nearly no fish? From our experiences, it seemed as if the other boats had a consistent amount of deviation, but that is largely speculative since we usually stuck to a similar pattern of typically drawing 1 or 2 fish.

One trap I personally observed a surprising lack of was the tragedy of the commons. In a typical case of the tragedy of the commons, a supply is available to be used by many actors who have a large amount of say in their level of use, including possible abuse. Actors start to take on the mindset that if they increase their use by a small amount, they will heavily benefit while the community stock of the item will remain mostly unchanged. This way, the negative feedback is minimal. Coming into the game, I thought it would be much more natural if each boat chose their own number of fish to take. I would guess that this would make each boat take more than their fair share without immediate consequences, causing the fish supply to be exhausted quickly. I am curious what motivation made the creator of the game choose to mostly exclude the phenomenon of this trap. Although I suppose it could be partially reflected by shifting of the burden if the other boats felt it was easier to rely on the human player to make wise choices than to trust their own intuition. Which would teach a more powerful lesson to children playing the game: fishing as a delicate balance between output and sustainability, or fishing is susceptible to the tragedy of the commons?

Once the fish stock did start to become depleted, an interesting tendency started to strongly affect the fishing patterns of the other boats. Once the number of fish dipped below around 10, we noticed that the other boats started claiming more fish per round. We noticed that 10 acted as a threshold. Since 10 regenerates $10 * 0.25 = 2.5$ which rounds down to 2, each day generates less than the number of fish to sustain each boat taking even one fish. This creates an ultimatum of sorts in which boats can either halt fishing or accept the fact that the supply will soon be drained, and take a large amount. Abusing the stock becomes the new acceptable normal among the boats. This seemed to be motivated by drift to low performance. It would be

interesting to observe how this trap would change if a different number of boats were in the game. Would boats be more motivated to wait until many other boats resorted to low performance? Or would tragedy of the commons motivate them to drift to low performance sooner since they view their actions as less significant to the entire system?