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Video link: <https://youtu.be/V8kH_fvIGhE>

When looking at plies, I noticed that with a value of 1, the computer is very easy to beat as it can’t plan ahead and only capture blocks if they are immediately available. With 2 plies, it’s a little fairer to the computer and it doesn’t lose as easily, but I’d say it is definitely still beatable. At 3 plies, things started to get interesting. The computer is now making moves that I would describe as traps. It allows me to make a box but in turn it would make a box that is worth more. At this point, the computer usually has me beat and any higher plies only make the robot beat me even more easily. In regard to board size, I found 2 to be a little too restricting in available moves and anything larger than 4 or 5 to start getting harder to keep track of. Ideally, we want a good level of difficulty as a game that is too challenging might frustrate people and they won’t want to play. If it’s too easy, they might get bored and stop playing.

At around a board size of 3 and 3 plies, I start to notice a slight delay around the beginning of the game. Increasing either of these, will cause the game to become noticeably slower. But as the game goes on, it improves. With both values at 4, the game can be pretty slow it takes some time for the computer to make a move. With each value at 5, I think the computer takes too long to make a move and making the game less interesting. I think that there is definitely a tradeoff in speed and challenge. If you are looking for a bigger challenge, you are going to have to give up some of the AI’s speed and If you want a quick game, the AI isn’t going to be as challenging. Ideally, we want a balance between these to keep the game interesting. If a game is too easy or takes too long, the player will lose interest. If we simply wanted to create an unbeatable AI, we could max out the plies but the game would likely be very sluggish just because of all the possible moves the computer could make.