Max P(C | D) proportional to P ( D | C )

P ( C

Start with just optimal play: A screenshot of a game

Description automatically generated

**Sami meeting notes in text**

1. You would need to know the constraints which you don't know.

Constraints = the unknown barrier:

A grid with different colored squares

Description automatically generated

1. But you can then assume that you have a probability distribution, uncertainty distribution over the unknowns
2. And now how, how do you get that distribution?
3. Well, it's the posterior, given any observations you'll get and real observations.

Example of an observation from an attempted barrier and its optimal play:  
  
A grid with red blue and white squares

Description automatically generated

1. If you invert the model, given those observations, you get the posterior over the unknowns.
2. And now if you, then now you have the probably the distribution and if you want to make optimal decisions, those you would take by maximizing utility average over the posterior.
3. So essentially the likelihood that it assigns to new observations, that's the utility we would be using here.
4. I know if you formulate that as, as a really **complicated thing with** **integrals** and that's the problem we are trying to solve.
5. So it really is **Bayesian inference** given that model where you have the fall back model is, is in the inner loop.
6. Then, because it is nested, you can also hit it the whole thing with reinforcement learning, which has kind of internal state, which is the unknowns there, which is I what, what I was assuming it is one of the approach we want to try.