

The Prisoner's Dilemma: A Fable

(Have PPT slide ready to use.)

In the mid-1920's, the Nebraska State Police achieved what may still be their finest moment. After a 400-mile car chase over dirt roads and corn fields, they finally caught up with the notorious bank robbers Bonnie and Clyde. The two criminals were brought back to the police station in Omaha for further interrogation.

Bonnie and Clyde were questioned in separate rooms, and each was offered the same deal by the police. The deal went as follows (since both are the same, we need only describe the version presented to Bonnie):

'Bonnie, here's the offer that we are making to both you and Clyde. If you both hold out on us, and don't confess to bank robbery, then we admit that we don't have enough proof to convict you. However, we will be able to jail you both for one year, for reckless driving and endangerment of corn.

(Bring in appropriate figures – 1 and 1 - in bottom right corner of PPT diagram.)

'If you turn state's witness (confess) and help us convict Clyde (assuming he doesn't confess), then you will go free, and Clyde will get twenty years in prison.

(Bring in appropriate figures – 20 and 0 - in bottom left corner.)

On the other hand, if you don't confess and Clyde does, then he will go free and you will get twenty years.'

(Bring in appropriate figures – 0 and 20 - in upper right corner.)

'What happens if both Clyde and I confess?' asked Bonnie.

'Then you both get ten years,' said the interrogator.

(Bring in appropriate figures – 10 and 10 - in upper left corner.)

Bonnie, who had been a math major at Cal Tech before turning to crime, reasoned this way: *'Suppose Clyde intends to confess. Then if I don't confess, I'll get twenty years, but if I do confess, I'll only get ten years.*

*On the other hand, suppose Clyde intends to hold out on the cops. Then if I don't confess, I'll go to jail for a year, but if I do confess, I'll go free. **What should Bonnie and Clyde do? They cannot communicate with one another in any way. (Undertake activity at this point.)***

So no matter what Clyde intends to do, I am better off confessing than holding out. So I'd better confess.'

Naturally, Clyde employed the very same reasoning. Both criminals confessed, and both went to jail for ten years. The police, of course, were triumphant, since the criminals would have been free in a year had both remained silent.

(<https://www.classes.cs.uchicago.edu/archive/1998/fall/CS105/Project/node2.html> accessed 30/3/18)