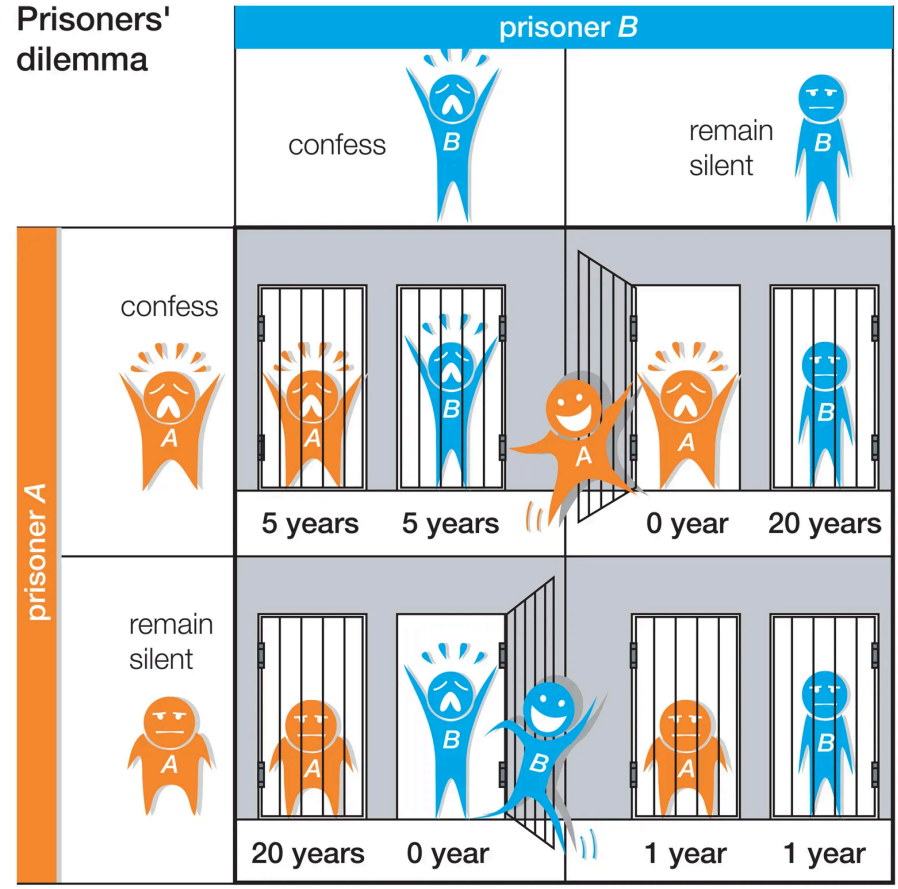
In 1950, Merrill Flood, Melvin Dresher (RAND employees), and Albert Tucker (Princeton mathematician) had developed a scenario that tested unique human behavior strategies while also perpetuating the new foundations surrounding “game theory” - trying to mathematically capture human behavior in scenarios involving strategic decisions based on choices others make in the scenario. Game theory was initially developed by John von Neumann in 1928, applying his theory to multiple economic scenarios (*John von Neumann*). After receiving the scenario from Flood and Dresher, Tucker proposed the problem to a group of psychologists at Princeton to discuss it in a lecture, where he coined the name “Prisoner's Dilemma” (Investopedia). The following lays out the scenario:



The scenario is set up so that each participant is incentivised to protect themselves and disadvantage the other (Investopedia). The participants are incentivized to confess because either way they will have a higher chance of getting the best outcome for themselves without taking into account the response of the other person. What’s crucial in this scenario is that neither participant can talk to the other person, so you are basing your response on your previous experience and relationship with the person. Considering you committed a crime with them, you should be able to judge this: This was definitely not a stranger. Not only did this scenario pose one of the first problems

surrounding game theory, but it also advanced the thought and practices surrounding probability and the ways in which it could be applied to theoretical human behavior problems. Today, game theory is used in economics, law, political science, and sociology (*John von Neumann*).

John von Neumann. (n.d.). Econlib. Retrieved December 13, 2023, from

https://www.econlib.org/library/Enc/bios/Neumann.html

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What Is the Prisoner's Dilemma and How Does It Work? (n.d.). Investopedia.

Retrieved December 13, 2023, from

https://www.investopedia.com/terms/p/prisoners-dilemma.asp