

Nicely Done Gaming

Gaming Math & Casino Game Design



“Game Theory” Needs a Better Name

After 2 decades of professional game design and development, I finally had an opportunity to apply game theory. A small inventor came up with an interesting multiplayer poker game for which he wanted math analysis. Since this is a pure skill player vs. player game the question to be answered is different than in a player vs. casino analysis.

For player vs. player, I had to make sure there wasn't a trivial strategy and so used game theory to calculate an optimal mix of strategies against a perfect player.

Unless they've been exposed to game theory, most people incorrectly assume game theory is about games you'd find in casinos, Toys R Us, play grounds, etc. Similarly, “theory” seems a really inappropriate moniker for one of the more practical areas of applied mathematics.

This branch of mathematics really needs another name. In fact, this isn't the only name in this field in need of fixing. “Operations research” (sounds like 1950's efficiency studies) and “linear programming” (it's not about programming and it's no more or less linear than other branches of discrete mathematics) both do injustice to these two interesting and useful bodies of knowledge.

So *Payoff Optimization* anyone? (or “Payoff Optimisation” for my zed-fearing British colleagues)