Gambling: Crash Course Games #27

Crash Course: Games
https://youtube.com/watch?v=DOhJX7SqJS8
https://nerdfighteria.info/v/DOhJX7SqJS8

Hi, I'm Andre. This is Crash Course Games, and today we're going to take a chance on talking about something a little different than the board games and video games we've focused in the rest of the series. We're going to bet it all on the hope that lots of people want to watch an episode about gambling.

(Intro)

Gambling is kind of an outlier in the world of games. In fact, there's some pretty solid arguments that gambling doesn't even have anything to do with games. I'd argue that some gambling very clearly falls in the realm of games, and even when gambling isn't really a game, the two still frequently go hand in hand. In the most basic sense, gambling is the playing of games for money, and that broad definition can be a little problematic, as we'll see people in general like to gamble and will bet on just about anything.

When we talk about pure gambling though, there are essentially three types: wagers, lotteries, and games of chance. A wager is a bet on the outcome of an event. Wagers are things like bets on sporting events, horse or dog races, an election, and even a coin toss. You can wager on just about anything, and people do this all the time. I once made a bet about how long the national anthem was going to be sung in a football event. I won it, too. While wagers are often related to games, like a bet on a sports game, wagering itself isn't often thought of as a game itself.

Lotteries and games of chance have some things in common. According to the text book on internet gaming law, creatively titled *Internet Gaming Law*, lotteries and games of chance depend on the generations of random numbers through set parameters. At their most basic level, lotteries and casino games rely on a random number generator. That generator could be a drum full of numbers, like with a lottery, or it could be a deck of card or a pair of dice, like in casinos games. Lotteries are pretty simple, a player chooses a group of numbers or has numbers assigned to them randomly, and wins if the matching numbers are spit out of the number generator. The lack of player agency in a lottery means it's not much like a game, either.

Games of chance are more interesting, because they rely on giving the player an illusion of control. In reality, a pair of dice, or roulette wheel, or deck of cards is just as much a random number generator as a lottery drum. Almost all the games in a traditional casino, like blackjack, roulette, craps, baccarat, and slot machines, are all considered pure games of chance. These are games where the players skill can improve their chances, but the house always has statistical advantage. That's why these games are always backed by the casino or whoever is running the game. The casino or other game operator understands the odds of these games very well, and sets up the rules of each one so that even the most skillful player is at a slight disadvantage to the house. But, when players are allowed to throw the dice themselves, or place the ball in the roulette wheel, or cut the cards, they get a sense they're influencing the outcome of the game. In effect, they're not, but it's still leads them to bet more. Casinos usually keep that advantage relatively small though. If people didn't win frequently at casinos, they wouldn't have fun and they wouldn't want to come back. So some of these casino games, like blackjack or craps, only give the casino a very small advantage, and the players are able to place the best bets. But even if a casino is keeping five percent of bets on average, it still adds up to a lot of money over millions and millions of bets.

And then there's poker, the one casino game that many will argue is a game of skill, and in a lot of ways it is. The way the cards fall is still subject to the randomness inherent to casino games, and the player can do nothing to influence the quality of their hand. The skill comes in the reading of one's opponents, and the use of strategic betting to either force opponents out of the game or lure them into betting when you have a stronger hand.

But, no matter what kind of gambling we're talking about, there's no doubt that people have been gambling for a long, long time. Probably for as long as there have been people. Maybe one prehistoric guy bet another guy that he could throw a rock over a tree or something, and he lost his cow. Next thing you know, we got casinos all over the world. There were probably a few steps in between there though.

Actually, we've got plenty of non-speculative historical and literary evidence of gambling throughout history. The Rigveda from India includes the gambler's lament, written around the twelfth century BCE. It's a story about a gambler who loses it all. The poem reads, "My wife holds me aloof, her mother hates me: the wretched man finds none to give him comfort. As of a costly horse grown old and feeble, I find not any profit of the gamester." And the narrator advises other gamblers, to quote, "Play not with dice: no cultivate thy corn-land. Enjoy the gain, and deem that wealth sufficient. There are thy cattle, there thy wife, O gambler. So this good Savitar himself hath told me."

There are also references to gambling in the ancient poetry of China, dating as far back as eleven hundred BCE, and gambling appears in Greek and Roman antiquity, and the Christian Bible as well. After Christ's crucifixion, Roman soldiers "divided up his garments among themselves by casting lots." The casting of lots shows up in many early references of gambling, which grew out of the ancient tradition of cleromancy, predicting the future or understanding the will of gods by interpreting random distributions of stuff they've thrown around. These lots eventually evolved into the dice we know today, and became much more secular.

Playing cards emerged in China around the ninth century C.E.. We've covered the history of cards pretty extensively in our card games episode, so we don't need to get into that much again.

Card and dice games were prevalent from antiquity onward, and casino gambling first appeared in Italy in the seventeenth century. By the middle of the nineteenth century, there were casinos all over the continent that would still be recognizable today. During the same period, gambling made its way to North America. Lotteries were used to fund all kinds of things in colonial America, and all thirteen colonies used official government lotteries. In fact, fundraising by lottery was used to help initially fund a bunch of the first American universities, including Yale, Harvard, and Princeton.

Most gambling involving games of chance with cards and dice was more informal, and was happening in taverns, parlors, and riverboats all over the New World. The legends of exploitative card sharks and cheaters in the nineteenth century American imagination contributed to the changing attitudes about gambling.

Let's go to the thought bubble.

As the reform-minded progressive movement, the temperance movement, and a changing perception about gambling and corruption all took hold toward the end of the nineteenth century, legislators moved to ban lotteries in all the states, and games of chance and wagering were widely outlawed as well.

Believe it or not, making gambling illegal didn't end the practice; it just drove it underground where it eventually became an important stream of revenue for the organized crime syndicates that were springing up all over the country to take up the booze business after the prohibition of alcohol by the 19th Amendment.

The prohibition of gambling, like the prohibition of alcohol, was

pretty short-lived. Gambling started to make a come-back. Betting on horse races was re-legalized in several states, including in California and New York during the 1920s, and casino gambling was re-legalized in fits and starts. Nevada started to allow it in 1931, but it was slow to take off, largely because of the state's small population and because gambling was still widely considered morally questionable.

The prohibitions against gambling outside Nevada continued to play out in surprising ways. One common device that was caught up in anti-gambling legislation was the pinball machine. In the 1940s, pinball was considered a game of chance, only suitable for gambling. The police raided pinball parlors and destroyed the machines. Over time, pinball machines evolved into games of skill that people played solely for entertainment, and they were legalized in 1976, as attitudes toward gambling began to change.

New Jersey legalized casino gambling in Atlantic City in 1978. By the 1990s, attitudes towards gambling had shifted, and casino gambling began to be legalized in many states, starting with Iowa in 1989. Today, twenty states allow commercial casino gambling.

Thanks, thought bubble.

Now, lotteries also started to make a comeback in the 1960s when New Hampshire created a state lottery to increase school funding. Over the next few decades, that became commonplace, and today, 44 states have government sponsored lotteries. Legalization of casino gambling was pushed in much the same way. States that legalized gambling promised to tax casinos, and use the revenues to fund services. This leaves states and municipalities addicted to gambling revenues in order to continue providing services, and as legal gambling expanded in the United States, a lot of people have taken it up.

One study by the National Opinion Research Center at the University of Chicago found that 86% of adults in the United States reported gambling at some point in their life, and 52% of adults reported participating in the lottery in the last year. These gamblers bet a lot of money, and lose a lot of money. And, I mean a lot. According to *The Economist*, the world's gamblers lost a total of 440 billion dollars in 2014. American gamblers lost the most, giving up 119 billion dollars in legal wagers. And, those numbers are just for casinos and other wagering business. If you count the money spent on lotteries, some estimates of world wide legal gambling loses are as high as 10 trillion dollars a year!

So, if you lose so much money, why do we keep gambling? Well, people gamble so much, because it triggers our brains' reward system. When we do something that feels good, like eating a good meal or beating a video game, our brain rewards us with a little bit of dopamine, which makes us feel really good. We want to engage in that behavior again, no matter what the consequence might be. Humans can get addicted to gambling in the same way they can get addicted to opiates and cocaine. Drugs, like heroin and cocaine, triggers the same reward system, and, as it turns out, gambling wins do, too. In fact, compulsive gambling was classified as an addiction in the American Psychiatric Association update in its diagnostic manual in 2013. Surveys indicate that there are about 2 million problem gamblers in the United States, but addiction can't account for the vast amounts of money that are being wagered and lost.

What accounts for all those other gamblers? Sure, their limbic reward system gives them some sweet dopamine for playing, but why do they continue to play if they aren't actually addicted? It turns out there are a couple of ways that people tend to think that keep them at the casinos. Behavioral economist David Ewing identified one mechanism as the Gambler's Conceit. The idea is that people who are gambling tend to believe that they can stop taking risks, even while they continue to take risks. A person sitting at a blackjack table, having lost hundreds of dollars, can very often convince themselves that they'll quit as soon as they win their money back. That doesn't often work as planned. The games are designed so that the house has an advantage, and the player is, in aggregate, unlikely to win those losses back. But the player is also unlikely to quit if they do win the money back. They have little incentive to quit while they're winning.

Another concept that keeps people gambling is the Gambler's Fallacy. Remember that illusion of control we mentioned earlier? This is kind of similar. The Gambler's Fallacy is the idea that a player can predict what's going to happen during the game based on what has already happened in a game. Remember, these are games of chance and they're all based on random number generators. Some of them are more purely random than others, but they're random for a reason. So that players can't predict what happens. The Gambler's Fallacy is nicely illustrated by the game of roulette. Players assume that because a certain number has not appeared in a while, it will be more likely to appear in the future. Nope! Or that since a certain number has appeared frequently, it is unlikely to appear again. Also, nope! That logic is flawed because the odds are reset with every roll, and the past doesn't influence future rolls. A lot of casinos play into this fallacy though, by posting a board by the roulette table showing the last several rolls, which can "help" players predict future spins.

So gambling has been with us for millennia, all the way from the ancient casting of lots to the modern practice of playing tic-tac-toe against chickens. And the basic wiring of human brains, and the ways that risk and reward affect us will ensure that we'll be gambling for millennia to come. So, be sure to quit while your're ahead (if you can).

In the end, we can only paraphrase America's foremost expert on gambling, country music legend Kenny Rogers, and admit we're in no position to advise on when you should hold them, or when you should fold them, when to walk away, or when to run. I will suggest you quit counting that money while you're sitting at the table. There'll be time enough to do that when the video is done. Thanks for watching, and I'll see you next week. Or will I? Take a bet!

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