Episode 18: Attributions

Show Notes

We are constantly explaining to ourselves why events happen. When those explanations involve linking the outcome of an event with our response, a psychologist would refer to them as an attribution. We explore how attributions affect our game playing.

Game References

Azul, Diplomacy, DOTA 2, God of War, Journal 29, Overwatch, Sagrada, Star Wars Destiny, The Witness

Research References

Heider, F. (1944). Social perception and phenomenal causality. *Psychological review*, *51*(6), 358.

Ross, L. (1977). The Intuitive Psychologist And His Shortcomings: Distortions in the Attribution Process1. In *Advances in experimental social psychology* (Vol. 10, pp. 173-220). Academic Press.

Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of educational research*, 42(2), 203-215.

Transcript

Hello! This is Episode 18 of the Cognitive Gamer podcast. I am your host, Steve Blessing. Since the last episode aired, I went to the first Tabletop Network Conference and delivered a talk. It was so nice to meet some of you there. From my perspective the conference was a total success, and I learned a lot and enjoyed it a great deal. I encourage you all to try to go next year if you are able.

Now for this podcast, I'm going to veer a little away from straight-up cognitive psychology. I'm going to talk about a topic you'll see more in a social psych text than a cognitive one. But, it's one that's very apropos to game playing, and it was a topic that was suggested to me by someone at the Tabletop Network during a ride up the elevator. Sorry I didn't catch your name, but thanks for the topic suggestion.

During this podcast we are going to discuss attribution theory. An attribution is psychology speak for a causal explanation, our way of explaining to ourselves why something happened. If you graphed it out, you would have the outcome of some event on one side, and on the other you would have a person's behavioral response. In the middle, you have the attribution—how do you connect the outcome with your response? In other words, how do you think about it? Also

connecting the two you would have an emotional response: do you feel happy, sad or some other emotion. We are going to center in on the attribution for now.

As an example, say you just lost a game that you played for the first time. The outcome is the loss, and your response may be to never play that game or again, or it may be to ask to play it again right away. Most of you have probably had both of those responses before. What's going to determine your response is the attribution, that causal explanation, that connects the outcome to your response.

The common example to use in class is another one we're all familiar with. You are driving along, and have just been cut off by a car in front of you. You swerve or tap your brakes, narrowly avoiding a collision. You may also honk or give the other driver a friendly salute. The outcome is the near miss, and the response is the swerving and the honking. How are you going to attribute the other driver's actions? What caused them to cut you off? If you are like most drivers, you probably attribute the near miss to the other driver's bad driving: they shouldn't be behind the wheel, because they are careless. That's a causal explanation, an attribution: They cut you off because they are careless.

Now then, let's examine attributions more closely. I'm drawing heavily on the work of Bernard Weiner, but it was Fritz Heider who started thinking about attributions back in the 1920s. Weiner though did a lot of work back in the early 1970s in terms of how attributions can lead to success or failure in academic settings, and that's how I am most familiar with it. I believe you will find Weiner's take on attribution theory very well suited to game playing as well.

Weiner's theory has three major dimensions that help to define what an attribution is. These dimensions are stability, controllability, and locus of control. Let's talk about stability first, and we'll come back to controllability and locus of control. Stability sees if an attribution is set in stone or might it change in the future. For example, I really like puzzle games. When I hear about a new puzzle game, regardless if it's a computer game or a physical game, it naturally piques my interest. When Jonathan Blow's maze game The Witness came out a couple of years ago, I knew I had to try it, and I enjoyed it. I recently heard about a book, Journal 29, that's a collection of puzzles that you solve, input the answers into a website and then get clues for later puzzles. I had to try that too, though I didn't enjoy it quite so much. And of course there's the board game Sagrada which I've heard described as dice sudoku. I thoroughly enjoy that game. This affinity I have for puzzle games is pretty stable, and I don't think will change across time. When the next puzzle game comes down the pike, I'll have to take a look. That's going to be a stable attribution. And remember, you create attributions not only for your own actions, but also for the actions of others. Say you recently met someone at your friendly local game store and started playing the Star Wars Destiny card game with them. While playing, they exhibit nonsportsman like conduct. You could attribute that behavior as stable, meaning that you expect whenever you play with that person in the future, they would behave similarly. Or, maybe it's not a stable aspect, you sense that something must just be off for today, and the next time you play things will be fine. That attribution of their behavior will determine if you play with that person again or not.

So, keep that first dimension in mind, stability. The next dimension is controllability. This one fits right into game playing in at least a couple of different ways. Games have various degrees of feeling like they can be controlled. Some games are truly random, such that there is no control over the outcome, some games have no random component, but most games are some place in the middle. Like with stability, your attribution of how controllable the outcome of a game is will affect how you feel about the game. Of course, people differ in how much randomness they like in their games. Some people prefer mostly skill-based games with no randomness, but some prefer various amounts of a random element. And, controllability also refers to your own ability, as well as your opponent's ability to play the game. A game like Diplomacy has no randomness within its mechanisms, there's no dice rolling or card draws, but you have to depend on the word of your opponents and allies, and that's not controllable by you. Again, this aspect of controllability will affect your thoughts about the game.

The last dimension of attributions, locus of control, is the big one, as you'll see as we go along here. Locus of control is all about whether you feel you control the events that are affecting you, or are they out of your hands? This breaks down into two main types, either an internal locus of control or an external locus of control. Sometimes these are referred to as dispositional for internal locus of control, and situational for external locus of control. These are probably better labels, as they better describe what this is all about. If you ascribe an event to an internal locus of control, that means you believe it happened because of something intrinsic to you, a disposition. In other words, it's part and parcel an aspect of you, your genetic makeup. Some people are just naturally good at sports, they were born agile, quick, and coordinated. If you believe you are good at a game because of your natural talents, that's an internal, or a dispositional, attribution. On the other hand, maybe there's an external, or a situational, factor at play. Maybe your friend won this game because the game was particularly easy or you had a poor night's sleep, or the cards were stacked against you. All of those reasons are external to you, or situational. As the situation changes, these may also change. We'll come back to this particular dimension of locus of control in a little bit, as we talk about a couple of errors and biases that happen with people's attributions.

Before talking about those biases, though, I wanted to re-iterate these three dimensions that form Weiner's theory, stability, controllability and locus of control. Any of your attributions will have components of all three of these dimensions. If you remember, I mentioned that Weiner was most interested in academic success. I believe you can see how these dimensions of stability, controllability, and locus of control, fit into that kind of thinking. But, this full theory also fits nicely into talking about game playing as well. For example, if you attribute the outcome of a game to a stable, uncontrollable, and dispositional cause, you really are thinking about ability then; that's something that's not going to change, you can't control it because you were born with it, and it's internal to you because it's your genetic makeup. In an academic sense, some students believe they are naturally good or poor in a subject, and that affects how they approach it. Likewise, if you believe you have an ability or a lack of ability to play a certain game or a class of games, that's going to affect what you play. At this point in my life, I feel I don't have the ability to play multiplayer shooters like Battlefield. So, I largely don't play them.

On the other hand, if you believe an outcome may be dictated by an unstable cause, that is, something that's changeable, and it's under your control and it's dispositional, then you are

thinking about effort. As you put more effort into something, that's obviously under your control and given the right kind of practice, will cause you to improve. And, that's internal as well; you are improving because of something you yourself possess.

Ability and effort then are both due to internal causes, and different combinations of stability and controllability. Weiner also discussed two attributions that are due to external causes, and those are luck and task difficulty. Those as well apply directly into an academic setting, as well as game playing. Both of those, luck and task difficulty, are out of your control, and again, some combination of stability and task difficulty. If you think a game comes down to too much luck, or is just plain too difficult, you won't play it, just like a student who thinks a subject is too hard or it's the whim of the teacher that dictates how well you do on an exam probably won't try too hard to study for an exam.

By way of another example on this point, I mentioned on the last podcast that I had started to play the new God of War game. I'm almost done at this point, but I have a confession to make. I've played most of the game on the easy mode. After a couple of hours in, I hit the first somewhat difficult monster to get through. It took me several tries to get past it. At that point, I made the attribution that I maybe didn't have as much natural ability to play the game, and it was going to be a difficult game. I wanted to play through the whole thing, because I have heard good things about the story. Realizing it was indeed going to be a difficult slog playing through on normal, and not wanting to devote the effort required to do so, I made the decision to drop it down to easy. Truth be told, easy is too easy, but I could sense that leaving it on normal was just going to be challenging, and not in a good way. As you listen to that confession, you could hear the attributions I was making about my assessment of my skill level and the game's difficulty. I've played through Horizon Zero Dawn and the Assassin's Creed series leaving the game on normal, but God of War seemed like it was going to be more frustrating than fun if I did so. Fortunately the game had the option to change difficulty, but for students that's not usually the case for whatever they might be studying. So, their response will have to be something different, such as dealing with a less than desired grade. Truth be told, I haven't enjoyed God of War as much as say Horizon Zero Dawn. The story hasn't sucked me in like I thought it might. I'm wondering if it's because the fighting isn't that much of a challenge, and so I'm not as invested. That might be the topic for a future podcast, another social psychology concept called cognitive dissonance.

But for now, let's stay on attribution theory. I want to close by talking about two biases that come out of this theory, and really have their basis in the locus of control dimension, the one with internal versus external attributions. The first bias is called the Fundamental Attribution Error. For this bias, we tend to attribute internal, or dispositional, causes for other people's actions, but are more likely to attribute external, or situational, causes for our own actions. Remember that driver that cut you off in the first example I gave, the one we said that what caused them to cut you off was the fact they were a careless driver? That's an internal attribution. It could very well be the case that their action was due to a cat darting onto the road or a pothole in their way, and they had to make a quick action into your lane. Those would be a situational, or external factor. And, that's probably how they would explain their action; they would say they were not a bad driver, but rather they cut you off because of that pothole.

The classic example here concerns Gerald Ford, the man who became President after Nixon resigned. He had the bad luck of being photographed while in office of tripping on the stairs of Air Force One and having a skiing accident. The media, and particularly Chevy Chase when he played him on Saturday Night Live, propagated the belief that President Ford was clumsy. That's an internal attribution that many people had of him, believing that Ford possessed the disposition of being inept and awkward. In reality, the steps of Air Force One were slippery due to rain and the skiing slopes can be treacherous. Those are external attributions. But, that's the Fundamental Attribution Error in full force. President Ford was actually an all-American football player for the University of Michigan, and a good all-around athlete. Not really clumsy. But, the Fundamental Attribution Error holds true for Presidents, as well as it does for game players. Keep that in mind the next time you are playing your favorite multiplayer game like Overwatch or DOTA 2. Maybe that player ended up getting killed because of incompetence on their part, or maybe they just had to drop the controller for a second to take care of a crying toddler. Be generous with your attributions, and don't always rush to provide an internal one, particularly if it's negative.

There is a second bias I would like to mention that involves attributions. This bias is referred to as the Self-Serving bias, and it also involves the locus of control dimensions. When we make attributions involving our own behavior, we tend to make internal, or dispositional attributions for our successes, but external, or situational, attributions for our failures. I imagine game players do this a fair bit, just like all humans do. It's all part of having a healthy psyche and positive self-image. When we win our game or make a clever move, we will attribute that to either our natural ability, "look how smart I am," or the effort we have put into the game, "Wow, I've really played this game a lot, and I know it inside and out." Remember, ability and effort are both internal causes. But, when we lose, or make a blunder of a move, we're more likely to attribute that to an external cause, like luck or the difficulty of the game. The dice just weren't with me, or maybe there was a lot of lag with my internet connection while playing during that session. Again, that's called the self-serving bias, successes are part of disposition, but failures are situational.

As a last example, I recently played Azul for the first time with my family. I lost. In explaining that loss to myself, that is, coming up with an attribution, I put it on me trying out various strategies just to see how that would affect the game. That's essentially an external attribution, because it's about me pushing on the rules of the game. And, as an aside, my daughter won the game, because she's smart, an internal attribution. That also makes me feel better, because I can take pride in my daughter's cleverness.

I hope you have enjoyed learning a bit about attribution theory. As you play games, think about the reasons you devise for the various outcomes, and I believe you'll see how they line up with what Bernard Weiner discussed with his theory of academic success and attributions, along those dimensions of stability, controllability, and locus of control. As always, I welcome any comments or questions you may have, so please email me, steve@cognitivegamer.com and also visit my website, cognitivegamer.com. Also, you can like me on Facebook, Cognitive Gamer, or follow me on Twitter, @cognitive_gamer.

I'd appreciate it if you took the time to give this podcast a rating and a few kind remarks on iTunes or wherever you listen to Cognitive Gamer. This will make it easier for other people to

discover the podcast. I appreciate those 5-star reviews! Until next time, remember to think about what you play, and have fun doing it.