Ludology with Dr. Jane McGonigal Ologies Podcast March 12, 2019

Ohaaay, it's the lady sitting in the middle seat, who has to get up to pee, but you're in the window seat and you're so relieved she does, because that means you don't have to ask the guy in the aisle to get up, Alie Ward, back with another episode of *Ologies*. Oh, video games! [*Mario coin-collecting noise*] Video games, what's their deal? How do they affect our brains? Have we got an ology for y'all! First, I do have some thanks.

Thanks to everyone who's pledging some of your latte money or tossing me a quarter a week on Patreon for making it possible for me to get my physical butt in the same space as the ologists, or in this case, pay a recording studio to do our first ever remote interview. Very exciting. Thanks to everyone sporting *Ologies* merch out in the wild – that's at OlogiesMerch.com. T-shirts, hats, pins, all of that. Thank you to everyone who rates, and subscribes, and reviews. You leave such nice notes! For example, Namon says:

I love this podcast so much. I found it when searching for podcasts to sleep! Sadly, I found a podcast to binge and stay up even later. Thank you, Alie Ward, for the podcast that has everything from biology to beauty. I never did solve my sleeping problem, but I don't really mind anymore, so thank you for the podcast.

Well, thanks for the review! Try the Fancy Nancy. Just lay in bed, you think of a category, and then you think of something that starts with an A, and a B, and a C... If you didn't listen to the sleep episode [Somnology] that's in part two of the sleep episode, and it's named after my very fancy mom, Fancy Nancy, who came up with it.

Back to ludology. Who's excited? I mean, we all are. So, ludology. Let's get right into it, pals. It's a real word, it means the study of games, and it comes from the Latin $l\bar{u}d\bar{e}re$, which means 'to play'. Yay! It was coined sometime around the 1950s. It didn't mean video games back then because time machines had not yet been invented. Nowadays, it can encompass gameplay, and sports, and cards, and of course... beep-bop video games.

This ologist has been beep-booping in my periphery for years. My sister told me about her TED Talk, and she was discussing her game *SuperBetter*, that can help folks who are healing from an illness or going through anxiety or depression. So I've been a fan of hers for years, and I reached out to her. I chewed my fingernails waiting for a response... She said she was down to record, but our schedules just couldn't get aligned.

Finally I took the plunge, she ducked into a recording studio in Berkeley. We taped this remotely, you guys! And it wasn't awkward. She's... so good. She has a PhD from the University of California at Berkeley in Performance Studies and she's designed games since 2003. She taught game design and game theory at UC Berkeley and the San Francisco Art Institute; she's been named as one of the twenty most inspiring women in the world by this lady named Oprah in a magazine called *Oprah*. She's a speaker. She's author of the book: *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*, and the *New York Times* bestseller *SuperBetter: A Revolutionary Approach to Getting Stronger*, *Happier*, *Braver and More Resilient*. She's the director of game research and development at the Institute for the Future. She's legit!

I was so nervous before taping this because she's just, high-badass. She couldn't have been more affable and great. We chatted about IRL games, board games, animosity, *Fortnite*, the line between

play and addiction, *League of Legends*, gambling, lottery tickets, off-brand Atari, what *Tetris* does to the brain, video games and violence, should kids play games? We talked about aliens, soup, and how games can change your life for the SuperBetter. So let's press start on a truly life-changing conversation with Ludologist, Dr. Jane McGonigal.

Dr. Jane McGonigal: Hi Alie!

Alie Ward: Hi, Jane, how are you?

Jane: I'm great! I'm so excited to talk to you in person. Let me unzip my jacket so I don't... It might

make noise. That'll be better. All right.

Alie: So, hi!. First off, Dr. McGonigal, it's lovely to talk to you.

Jane: You could also call me Professor McGonigal for all the Harry Potter fans out there.

Alie: Oh, my god. Does that happen a lot?

Jane: Yes. When that character started to exist, it made my life so much more fun. [*Professor McGonigal saying: "The sorting ceremony will begin momentarily."*]

Alie: Do people spell it right now?

Jane: Uh, no. Not at all. But they pronounce it correctly, which never happened growing up. So it has helped a lot.

Alie: And I do have questions starting right off. Growing up, you have a twin sister? Did you guys grow up playing a bunch of board games? How do twin sisters pass the time?

Jane: Well... Okay, first of all we should talk about board games, definitely, during this interview because some new research came out showing that normal board games are really bad for your relationships. They lower your oxytocin levels. So, we do have memories growing up of playing board games, but we always fought at the end of them. Do you remember, like, games like *Sorry!* where are you would, you know, mercilessly take out other people's pieces and move them to the beginning of the game? [valley girl: "Sorry!"] Monopoly, where one person gets power and then lords it over everybody else for an increasingly unfun hour? Traditional board games are poorly designed for social interactions and are terrible for you.

So yes, I do have memories growing up playing with them. Unfortunately, my sister never recovered from those early experiences and would never play like video games or anything else with me after that. Literally just a couple of weeks ago I saw this study showing that traditional board games lower oxytocin levels; you trust each other less. It makes perfect sense because the games are... As a game designer, I can point out all of the ways that they are poorly designed to lead to negative social experiences rather than positive ones. The old school ones, the new ones are better.

Alie: Oh my god, that validates so much because I remember even when you would win at *Monopoly*, you feel bad because you were hosing everyone in your family. You were like, "I'm an asshole. I'm like, such a slum lord right now. What do I do?!"

Jane: I think people maybe know this now, but *Monopoly* was originally designed as a pedagogical tool to teach people the evils of capitalism, and it was *supposed* to make you feel bad. You're supposed to play it and say, "Wow, this is awful, and terrible, and let's be socialists." It was designed to make you feel bad. In that extent it works. But playing it for fun: not a good idea.

Aside: Oh my word, I just went down a hole on this one. Quick aside. So, *Monopoly* was actually the early 1900s brainchild of an anti-capitalist activist; she was a comedian and a writer, she was a -- gasp! -- unmarried woman, Elizabeth Magie. She made it as a cautionary tale, and in her old-timey words, [in an old record filter voice] "Let the children see clearly the gross injustice of our present land system, and when they grow up, the evil will be remedied."

Such high hopes, Lizzie, but perhaps the irony was too lost on us. And that's why a land baron who shits in a golden toilet is presiding over the nation. Anyway, so the game had a very sexy original title. It was called *The Landlord's Game*, and Elizabeth Magie worked her ass off on it, and then some jabronie played it at a house party and she was ripped off. She made five hundred bucks, and he made millions, because capitalism.

Alie: So when did you start liking game play? At what point did you start playing video games or did you start to realize that maybe designing it was something you'd want to do?

Jane: You know, I have some really positive early memories of my dad bringing home an Odyssey, which was kind of like the knockoff cheap Atari, because we were, like, a knockoff cheap family growing up. It had knockoff *Pac-Man* called *K.C. Munchkin* that was a really a bad version. Like, it wasn't well designed either and it was impossible to win. But yeah, he brought home these cartridges, and he would play with us, and teach us how to get better. Really positive early memories of spending time with my dad, learning these new games and getting better. He taught me chess, and our grandfather taught us poker and roulette at a very early age. We were like five or six learning how to play poker. So there was a lot of game play in my family.

And then we got a Commodore 64, which for computer geeks that was one of the first athome computers. You could learn basic programming. In fifth grade, I started making my own computer games. The very first one I ever made was called *You Be the Judge*. I think it was inspired by watching a lot of *Divorce Court* and *People's Court* on daytime TV. [clip from People's Court theme] So, you got to be the judge, and also you were a cat because I had to use like ASCII art and I couldn't draw a person that well, so I made you a cat. And you had a little gavel that was animated and you would hear people's testimony and decide if they were guilty or not.

Alie: Oh my god. That's so... I watched so much *People's Court* too, I completely remember that. Was it gratifying to you when you started... Even as a kid designing games, was it gratifying to see something that you had imagined be a reality? What really got you hooked in that?

Jane: It was totally the experience of having somebody sit down and play with it. I actually made board games also. My sister and I would create life-size board games in our basement because we had this weird, like, '60s psychedelic tile so we would use each tile as a space and you would have to, like, go to prom and things like that. And then we would have people come over and play that or I'd have people playing my computer game, and it was watching how people would react and, you know, did they laugh or are they surprised? Did they try really hard to figure something out? It was the ability to provoke all of these really positive emotions and see people try and be challenged. It was really interesting to me.

I think through my whole life that has been the single thing that's most interesting to me is that the greatest joy you have as a game designer is the first time people start to play with it and you're like, "Oh my god, I had no idea that's what people would do. I've got to change these 12 rules, and change this constrain, and refigure what the goal is so that they do something different." Watching people react and how it brings out good things in them, and

maybe things you don't want to bring out in them, you can change it. It's kind of like being a chef and changing the ingredients you're throwing in on the fly.

Aside: Just a fistful of delight. Maybe a sprinkle of reflective sadness. I mean, after all, she had a PhD in performance studies, so the doc knows what's up.

Alie: You also studied performance. So do you feel like there's something... almost like watching people watch a performance or watching someone watch a play or a movie that you've designed or written?

Jane: Yeah, absolutely. In the same way that theater or choreography, you need a performer to make it real. The script or the choreography as it's designed, when somebody's embodies it, it comes to life. When different people perform a play or perform a dance or a song, they bring something different to it and express themselves through it. It's the same with a game when you design a game or code a game, it's not real until a player comes to it and then they bring something different to it. With games you get an even wider range, I think, of interpretation and expressivity. They do very much have that kind of idea in common that people bring these artworks to life and that they are the essence. It's actually funny. I was a theater geek also growing up. So like double geek: theatre geek, game geek.

Aside: Jane says that when she was around 11 she saw a one-woman play starring Lily Tomlin, called *The Search for Signs of Intelligent Life in the Universe,* which was written by Lily Tomlin's now wife, Jane Wagner. In it, one character named Trudy is a homeless woman who encounters extraterrestrials. She's trying to teach them what art is, as you would do.

Jane: So she's showing them Andy Warhol paintings of soup cans, and then they hold up soup cans and they're like, "Is this art?" And she's like, "No, *this* is the art. This is a painting." They had this whole thing, and then at the end of the play, they go to the theater with the homeless lady and they forget to watch the play. They were watching the audience, and all of their reactions, and their laughter, and their goosebumps. And the aliens are like, "The play is soup, but the audience is art." [*X-Files theme with airhorns*] And I'm telling you, I think that's the most influential thing in my whole life I ever saw or heard because then I became obsessed with how the people who interact with art, or theater, or games, *they're* the art!

Aside: So the people are the art! Jane says when she was first starting her PhD work she was kind of the weirdo because everyone else was studying the games themselves, but she was studying the players and how the games affected them. But I think it's good to be the weirdo, because that usually means that you have an impact to make and you're the first person to be doing something. So, if you ever whisper to yourself, "Shit, why am I such a weirdo?" Congratulations! Because you're probably doing something right.

Alie: When did you start designing games as a job? When did it become your career?

Jane: It's such a wacky road. When I was in college, I worked with in New York City Department of Parks and Recreation. I helped run these like really big, large-scale recreation events like an Easter egg hunt, for 35,000 kids in Central Park. I always think of that as some of my early game design work because, you know, they are games. They're not digital, but you come out and play. When I went to grad school, I started my PhD program at Berkeley, I was meant to be studying scientists, specifically quantum physicists, and how they collaborate and how they communicate their research with the public. Not at all games. I got a side gig my first semester as a PhD student. There was a new game company in San Francisco that, they wanted to essentially play games in reality.

They were inspired by the Michael Douglas Movie *The Game*. [clip from The Game: "Consumer recreation services." "Call that number." "Why?" "They make your life... fun"] Which, you know, he can't tell: is it real, is it the game? It's a bunch of actors pretending to be real people, and they give him missions, and his whole life is transformed, and he has these amazing revelations about the meaning of everything. But also it's really confusing because the game is played in reality. So this company was like, "We're going to do that, but we're going to be nice and it's going to be fun, and silly, and you're not going to be confused."

They're still running all these reality games. You run around the city and do missions, like the pay phone will ring and they'll give you a code, and then you'll find a box in a pile of leaves, and the code opens the box, and there's a raft inside and you have to take the raft out on a lake. And then you find the snorkel equipment, you have to find something at the bottom of the lake. You get to be really adventurous in reality. Anyway, they hired me and that was the beginning. That was how I earned my credentials to go to the Game Developers Conference. I'm like, "I'm totally a game developer."

Aside: So working in theater turned to working in live events turned to working in live events with mobile phones, and then when did that go digital? What happened? Well, 9/11 did. Jane had just moved to San Francisco after living in New York for 6 years.

Jane: Something weird that happened while we were processing all of that was that an online community of gamers that we'd been a part of earlier that year, playing this online game called *The AI Web Game*. It was very collaborative. 40,000 people on one team all trying to solve the same puzzle. I mean, kind of like early Reddit in a way. Everybody trying to solve the same problem using message boards. That community came back to the message board even though the game had ended a couple of months earlier and they were like, "Can we solve 9/11?" It wasn't even called that yet, but, "Can we solve this? Can we figure out what happened?" When it started to emerge that it was a distributed terrorist network, they were like, "Great, we're a distributed network of collective intelligence. We can understand how they might think or operate. We can figure out what security holes they snuck through."

They started to want to use their game skills to help. That was really interesting to me because I was feeling powerless, and everyone around me was feeling just, like, frozen. And here's this online community of people saying, "Wait! We are super collaborative, super collective intelligence. We saved the world in this game. It would be stupid not to try to use those skills to help when the world really needs it." That desire was literally the day I'm like, "I think maybe I should study video games, and gamers, and how they collaborate instead of how physicists do."

I wanted to find out, is this delusional? Is this crazy wishful thinking cause we're all so overwhelmed? Or *are* there problems that gamers could solve, and are their questions they can investigate and ways that they could use their skills in real life? Eventually I started designing digital games just to see if I could be the person to come up with the that bridge. "I'm going to make a game that has real problems in it so that gamers can test out this hypothesis that they have."

Alie: How did they do with their research into 9/11?

Jane: You know, it morphed pretty quickly into trying to be of service. So, what wound up actually practically happening was getting people out to donate blood and volunteer. It became sort of more like community mobilization. But the same group of people then started investigating things like government corruption, and cold cases, and they created a kind of spinoff site

called Collective Detective. They continued to play with this and see what they could do over the next couple of years. When I started designing games, those are the people who showed up first to play.

Aside: So side note, I went to go look up Collective Detective, and the website has no pages. There's nothing to click. Simply the text, 'Investigating the mysteries of Austin. Appointments by referral only.' So I'm both spooked and intrigued.

Alie: Do you have a favorite game that you have designed?

Jane: Oh, of course. When I think the one that's nearest and dearest to my heart would be *Top Secret Dance-Off.* Don't know if you're familiar with this one.

Aside: I have not played *Top Secret Dance-Off*, as it gained huge popularity almost ten years ago. But it's not in the App Store, unlike her other hit game, *SuperBetter*.

Alie: I have *SuperBetter*, of course.

Jane: Yeah, more people played *SuperBetter* than *Top Secret Dance-Off* because I actually had to shut it down after about six months because it was taking over the players' lives and I just could not handle it. The average time spent in the game was about six hours a day, which was too much. The idea behind the game is... let's say you want to dance but you're shy. A lot of my games are based on my own problems. You really want to dance. Dancing is great for you. It feels good. But you're super shy. Maybe if you could dance in disguise, then it would bring out the top-secret dancer in you.

So the premise of the game was you start the game by creating your avatar, which is not a digital avatar; it's a disguise that you put on in real life. And you introduce yourself to the community by doing the first dance class, which is to dance without moving your feet. This introduces your avatar, which, people were wearing like masks, and wigs and I mean, just amazing. They invented just the most beautiful characters. Then there's a series of dance quests that you unlock, like dance upside down and dance on a crosswalk.

Then you power up with things like a +1 creativity, and +1 coordination, and +1 courage. The points were given to you by other players. This was 2009. People became essentially like today's Instagram stars, but for being characters in dance videos. And you didn't know who these people were, but I have since had the opportunity to meet many of these people in real life, and they're amazing.

But it got really popular in weird places. It was super popular in New Zealand for a while. I went down there to give a talk, and all the morning shows had me on TV, and there were film crews following me around. It was a weirdly popular thing in New Zealand. But what I loved about it is, because you got all your points from other players and you could only give people positive feedback, if you gave them a point you had to explain why. So it was just like, you post a video and then you'd have a hundred comments from people giving you points and these really amazing strengths and also saying wonderful things about you. I've never seen so much love and people expressing themselves. And eventually I shut the game down because it just got out of control and I was self-funding it and it was, you know... I'm not an entrepreneur, so I mean, I probably should have tried to get VC funding or something, but I just shut it down instead.

Alie: It seems like a lot of your games have really amazing intentions to change the way people live or think.

Aside: So after designing a bunch of games, including *Cruel 2 B Kind, I Love Bees, The Lost Ring,* and of course, *Top Secret Dance-Off,* Jane was working in her home office and she stood up quickly. She hit her head on an open cabinet door and suffered a concussion, which must have hurt like a bitch so bad. Now, recovery was really rocky and she ended up developing her huge game *SuperBetter* to help others dealing with anxiety and depression and recuperation. For more on this, you can see her TED talk, which was ranked in the Top 20 Most Engaging TED Talks one slot higher than Bill Gates's TED talk. Just sayin'.

Alie: And so, how far into game development did this happen? And can you tell me a little bit about *SuperBetter* and about, kind of, your recovery with that and how it made you look at games?

Jane: Yeah, so this happened in the summer of 2009. This was actually after we'd been doing *Top Secret Dance-Off* for about six months. I was in the middle of writing my first book on games. I sold the book and I had to write it, and I was halfway through it. I was already totally persuaded that games bring out the best in us and games can change the world. I'd already finished my PhD. I was well into this and writing the book on it. When I did get this concussion, it was supposed to heal in a few days, and then it was supposed to be a few weeks, and then it was supposed to be a few months and it actually... I mean, it took years to feel, essentially, 100% again.

But during that time, I had to stop writing, which created a lot of anxiety because the book was due a few months. I had to stop my other work because I couldn't think clearly. I had to stop running. I couldn't exercise at all because I was having so much vertigo and nausea with even just moving my head. I couldn't socialize. I'd go out and even just being around fluorescent lights would make me feel like I would fall over. I couldn't do anything. Doctors are like, "You can't have caffeine because it's creating triggering symptoms. You can't play video games. It's triggering symptoms."

And on top of not being able to literally do anything, I also started to have serious depression, partly from not being able to do anything, partly withdrawing from things like running and work and the socialization. But also I learned later that one in three people with a concussion experience serious depression and it seems to be part of the brain's way of protecting you. It's very dangerous to get another concussion shortly after a concussion. It's called second impact syndrome and you can die. Part of what happens when your brain is trying to heal is it literally does not want you to crawl out of the cave, or get out of bed. It wants you to protect yourself and just sit, stay put, until it's safe to go out in the world again. The part of the brain that anticipates good things happening...

By the way, I didn't know any of this at the time, right? I had to learn this because I'm like, "Why did my brain break? Why do I want to die?" I learned later that the part of the brain than anticipates good things happening, when it's sort of fired up, and you're getting dopamine hits, and your brain's saying, "Hey, go out there! Get the thing you want!" It's a good food that you're smelling or it's your partner or your pet and you want a hug or a lick and it gives you energy and focus. That part of the brain says "No, thank you. I don't want to imagine anything good happening because I want you to stay in bed and let your brain heal."

Aside: How amazing is this? Also, content warning: Jane went through some pretty tough times following her concussion and we talk a little about suicidal ideation after brain injury, which was something I knew nothing about because people just don't talk about it.

Jane: And when that part of the brain doesn't fire, you get really depressed and even suicidal because you literally cannot imagine anything good happening. Your brain just says, "Nope,

I'm not going to let you picture that." I learned after all of this was happening to me, that's part of why suicidal ideation is so common in traumatic brain injury because it's a very natural response to... It's a rational response to not believing that anything could ever happen that would be good, that nothing will ever make you happy. Somehow through all of this, the fact that I did research into how games affect our psychology and our brain gave me like one, kind of, holy grail, a-ha moment. ["Eureka!"] Maybe I can force my brain back into believing that good things can happen as a result of my own efforts and attention.

It took me years of researching after the concussion to put all the pieces together, but it turns out that that's the fundamental neuroscience of gaming. Your brain says, "Hey, something good could happen. You could go further in the game, get a higher score, or you could get an advantage on your opponent if you take an action, if you make a decision." That part of the brain that believes that something good could happen, and gives you energy, and focus, and optimism. It goes nuts when we play games. That's the signature finding of fMRI research on video gaming.

Aside: So the premise for the work that Jane did was trying to bring a 'gameful' mindset to things like recovering from traumatic brain injury, or depression, or anxiety. She went on to develop the *Thank You Game* for Oprah, and Jane has said that she's secretly curious about how games can develop the seven positive traits that Buddhists believe can help end suffering. So what are those traits? I had no idea. Mindfulness, investigation, energy, joy, relaxation, concentration, and equanimity. So how do we go from game playing to a more chill, happy brain? And I asked this for the sake of my own brain. Selfishly.

Alie: Can you tell me kind of how games changed the way we think or what happens in the brain? What happens with dopamine and serotonin? What's going on? What's in that brainy soup?

Jane: There's so much I want people to know about this and there are two big pieces. I want to tell both of them because not everybody benefits from playing video games. For some people it can become almost pathological. It takes them out of reality. It takes them out of their social relationships and their goals. So I want to preface what I'm going to say by: this doesn't naturally happen for all people, the good things. There are ways that, if you don't have a good relationship with gaming, you can change it so that you're more likely to get the benefits. I just want to preface all this by saying it's not like games are some magic pill that you play them and good things happen to you. It really depends on how you play and why you play that good things can happen for a lot of people.

Aside: Just allow me to reiterate that disclaimer. [*in the famous robotic voice akin to Steven Hawking*] Games are not a magic pill and not everybody benefits from video games especially if you have a pathological relationship to them however they can really help in the following ways:

Jane: The signature thing that I would say, as probably the person who has studied... I don't think there's ever been a scientific paper written about video games that I've not read. Thousands of them. I am *on* it. ["We're all counting on you."] I would say this sort of signature finding has to do with self-efficacy. So, self-efficacy is the belief that you have the ability to take actions that can help you achieve your goals. So you have skills, you have resources, you have pathways forward, and different people have different kinds of self-efficacy.

I might have a lot of self-efficacy as a cook in the kitchen, but maybe not in my fashion sense. Like, what should I wear today? I'm just not feeling like I have a lot of talent in that area. Different people have self-efficacy in different areas, but if you have the experience of gaining

self-efficacy in new areas, it can develop a kind of mindset that does translate. So, if you are often doing things that you're bad at and then stay with it and get better, and suddenly you have new skills and you acquire new resources, and you have achieved new goals and milestones, your brain gets better at looking at a difficult skill or task and saying, "Let me try it, because I have a great and long history of getting better at things that I'm bad at."

And that's what gaming does for most people. Games are designed to be hard the first time we play them. They are ridiculously challenging. You think about a game like golf where the goal is to get a small ball in a small hole and it is such a bad method to achieve that goal, to stand really far away from the hole, and then use a stick. It's stupid. [*Trump saying, "You've gotta make the game a little bit easier."*] Why would we do that to ourselves? We do it because we want that experience of being bad and then getting better and having to use creativity, and use practice, and determination, and learning from others. All games are like that.

Whether it's *Candy Crush*, or *Pokemon Go*, whatever it is, you get better over time and the more different games you play, the more your brain gets used to being frustrated, hanging in there, feeling optimistic in the face of setbacks. And that is the one generalizable positive impact of games that we see no matter what kind of game you play; sport, challenging cooperative board game, you're playing bridge, or playing a video game. If we can help you get comfortable with not being good at something, trying, using your skills and abilities to get better at it, and then you do in fact get better, that can translate to the rest of your life.

A lot of my work has been helping people to, one, make sure you're always playing different games. The person who always plays *Minesweeper* or solitaire, been playing it for 30 years... Not having this benefit; you've got to try *Fortnite* or something. You've got to expose yourselves to interfaces you don't understand and communities that are totally strange to you so that you're always learning and improving.

Aside: Go tell grams, "Get on a headset, go play *Call of Duty*!" She's gonna love it! She's gonna love it. So some people really benefit. To a point.

Jane: When you look at the research literature, the people who *really* benefit from this experience are people who feel like games are real in a way. They don't see them as escapist, they don't play games to ignore their problems, or shove down negative feelings, or get away from people who are annoying them. Those people tend to not benefit because they see games as separate from reality, so they don't bring the same mindset to real life. Those are the type of players who go on to be... you would call it addicted. It's not quite an addiction, but it's a kind of compulsive game play where they play more than is good for them. They feel like they just have to keep playing cause everything else is so terrible.

People who can answer the question, "What does it take to be good at this game? What have you gotten better at since you started playing this game?" And can talk about it in a way that's bigger than just the game.

Aside: Such as, for example...

Jane: "I'm a good communicator, under stress with my teammates," or, "I'm really good at thinking of different approaches to a problem. I don't just try one way. I try lots of ways." Whatever it is that you think you need to be good at, if you can talk about that you tend to start bringing those skills to real problems. And so, if you're a parent, or you're a partner of a gamer, or you're a gamer, just answering those two questions can unlock, essentially, all the good stuff of games in reality, not just while you're playing.

Aside: So being a good communicator under stress and looking for ways to solve problems! Both skills are aces. It's weird how if, in a video game, shit starts hitting fans, you can think logically, or strategically, and overcome it. But sometimes in life, it's easy just to feel bogged down, and you just wanna lie face down on a carpet and be like, "Not today, life. I am defeat." But you can ask yourself, "Hey, if this were a game, what would I do? First off, let's comb my avatar's hair."

Alie: I never thought about applying it that way. That yeah, it starts hard. Gets frustrating. You get better at it.

Jane: Alie, is there a game that you play?

Alie: I grew up with a lot of Atari. *Pong,* and Combat, like two pixels on a screen was the whole game. It's funny cause I feel like I don't play as many games as my peers, and I think instead I just use social media as a game, for that same reward.

Jane: That's terrible! You can't... because it has all the sort-of motivational aspects of games, but it's not... We gotta get you off social media and onto *Tetris99* maybe, if you like old school games. A hundred people play *Tetris* against each other until there's only one survivor, which means everybody loses so you can just embrace it.

Alie: That's more of what I need. And it's funny, my boyfriend plays *League of Legends*, my nephew and my nieces play *Minecraft*. What I find is that they play with their friends. They play online so they hang out that way. I don't know, is there a difference in games where you're playing against a computer versus you are in a community and your friends are on a headset and you're all yelling at each other trying to like, you know, kill the same elf?

Aside: Clearly I don't know what I'm talking about regarding *League of Legends*, but I just looked it up. There are elder dragons, rift heralds, marksmen, jungle monsters... I don't know if any of those are elves. Anyway.

Jane: Huge difference. It's not that one is better or worse. They're good for different things. So if you're dealing with anxiety or depression, a single player game is actually really good because you can pull out your phone and play it for a few minutes. One of the benefits of games is that it can stop rumination. So if you're anxious, you're anxious because you're imagining things that could go wrong. It requires your brain to be actively focused on visualizing things that scare you. One of the best treatments for anxiety in the moment is to just stop the ruminations, to make a conscious decision not to spend time and energy on these thoughts. A game on your phone; it could be a mini golf game, it could be *Candy Crush*, it could be *Words with Friends*. Anything that you can play by yourself is fine because it stops the thought.

Same with depression, people with depression ruminate very negative thoughts about themselves or their circumstances. If you can stop that flow of thought, it's an effective treatment. So, single player games are great and they are really helpful for things like anxiety, depression, and pain.

But social games are phenomenal for other things; the quality of positive emotions they create, the trust that they build. It's interesting you mentioned *League of Legends*. There's been great research showing that people who play *League of Legends* regularly have a stronger social support network than just about any other gamer. Meaning there are more people in their lives who will be there for them if they need advice, if they need help in reality, like help moving or physical assistance. People who play *League of Legends* have a very powerful social support system where the people they play with will actually loan them

money. There's something about the pattern of building your heroes together and depending on each other to show up for your practice or for your matches. It's really interesting that you mentioned that.

The kind of long-term relationships we build online are really powerful. There's a term in game research and virtual reality research for one of the things that really heightens this, which is presence. A lot of these games have a really strong presence, which means you feel like you were actually with someone, that you feel like you were in the same physical space.

Aside: Which brings us to... let's talk *Fortnite*.

Jane: Fortnite has a phenomenal presence factor. People who go hang out in Fortnite now – like 200 million players out of nowhere; everybody's playing Fortnite – they feel like they are together. When we physically spend time with other people, it's a much stronger bonding that happens, because we take cues from body language and facial expression, and the way that avatars are being designed you can express yourself through dances and different emotes. Your avatar expresses emotion just like you do in reality. It allows us to have a kind of bonding that I would say previously you would have needed to be in the same room with someone, but we're seeing, both in just talking to gamers but also in the research literature, that these games that have this very strong presence. It does translate to a real social support system.

Aside: So online friends and in-real-life friends: the gap is kind of closing. Both can offer social support, and often hanging out online strengthens your real-life bonds. And that's all so precious, and so wonderful, but! If you're wondering if there's a digital tipping point, I asked about that. What happens if you're chasing dragons and then you're... chasing the dragon?

Alie: The addictive nature of it, or what's happening with dopamine and how that works? And are we getting these, like, little hits kind of like gambling or like other pleasurable things in our lives? How is that working?

Jane: Oh my gosh, Alie, there's so much to say here! Let me start with the gambling question because if people can understand this, it will alleviate a lot of anxiety around video gaming versus casino gaming. The thing that happens in your brain where you feel like something good could happen as a result of your actions, it is identical in gambling and video gaming. The part of your brain that says, "Try again! Try again! You might win. Go ahead. Go for it," that keeps you at that slot machine, or you just need to play another hand in gambling or you know, make another bet, that is identical to what's happening in video gaming.

But! What happens in video gaming is you actually get better at skills, and you acquire more resources, and you gain more allies who can teach you, and help you, and show you the way. As opposed to luck-based gambling where you're just pulling the slot lever or scratching off a lottery ticket, you can actually get better and improve your chances of winning in video gaming. So it is a completely different psychological experience, a different neurological experience, because it is not delusional to stay engaged. That is a big difference between video gaming and casino gaming is that the games at casinos are designed for you to lose. They want you to fail so they can take your money and it is delusional when your brain says, "Stay engaged, stay engaged." Bad. That is ill social design and shameful, in my opinion.

Aside: PS: stay tuned for an episode on the lottery with... a lottologist. Don't believe ol' Dad Ward? Please see lotterycollectors.com, or you can subscribe to the monthly newsletter, *The Lottologist*. I've got an itch to cover it that can only be scratched by a dirty penny and a dream, but that's a different episode.

Jane: In video gaming, the games are designed for you to win and to get better. The developers are on your side, and they want you to experience success, and they want you to develop real skills and build real relationships that can help you succeed. And that's the big difference. So even though some of the neuroscience is the same, the fact that you actually can improve in games and experience real meaningful development, and growth, and relationship building, it's a different application of that kind of neurological experience.

As we see games kind of spread into different areas of our lives, I always say, is this a good use of game design? Is it manipulating people to do things that maybe aren't in their best interest? Or is this actually a good use of game design? It really depends on, is there an opportunity for them to really improve and experience success in something that's meaningful to them? Maybe fitness trackers are gamifying the steps you take, and that actually is good for you, and you can take more steps, and that will have a virtuous feedback cycle where you feel healthier, and now you're stepping more, and you're sharing with friends and it's upward spiral.

Aside: Take a sip of your beverage, or blink twice, if your brain is like my brain trying to remember where your FitBit is and why you haven't charged it in months.

Jane: That's really good. If you're using it just to get people to buy more stuff or click on ads, and... How do you get better at clicking on ads? That is not a good system. It doesn't lead to real growth and real relationship building. So that's my philosophy on how, even though it's a lot of the same stuff happening in the brain, it really matters if there's an opportunity for growth and success.

Alie: And that actually brings me... I have a ton of Patreon questions. Can I ask you?

Jane: Yeah!

Alie: So many questions. This is kind of like a lightning round.

Aside: Before the lightning round of questions from folks on Patreon.com/Ologies, I tell you about a few things I like, but before *that*, each week a portion of the revenue goes to a charity or a cause that the ologist chooses. And this week Jane picked AbleGamers.org, which works to make gaming accessible to all. So in their words:

We give people with disabilities custom gaming setups including modified controllers and special assistive technology, like devices that let you play with your eyes, so they can have fun with their friends and family. We're using the power of video games to bring people together, improving quality of life with recreation and rehabilitation.

That's AbleGamers.org doing awesome stuff. Thank you, Jane. A donation was made to them. Now a few words from sponsors who make the podcast possible. They're also all linked in the show notes.

[Ad Break]

Okay, back to your Patreon questions, which are good ones!

Alie: That dovetails just wonderfully into one Patreon question – I got a ton – from Mark Williams, David Boffa, and from Sasha KD, they all asked about gamification. And I know that... I don't think that you love the word, but is the gamification of behavior or useful technique? Sasha K wants to know: How do you feel about gamification of everything?

Jane: Yeah. You are awesome, Alie, for knowing that I do not use the word gamification to describe my own work because, historically, it's been used not in ways that authentically empower or

bring the best out of the people who are being gamified. My philosophy is, if you are connecting with somebody's deeply held values, what do they want more of in their life? They want to be a better parent. They want to learn something new every day. They want to be braver and get out in the world more, be more physically active. Whatever it is that they authentically want to do that they choose for themselves, if you can put a quest system, or a leveling up system, or a kind of cooperation opportunity where there are multipliers, if you and your friends are doing it together, you can add some game design elements that help people do more of what they want. And if they do it, they're going to experience an upward spiral of skill and ability so they can maintain it outside of the game. That's an ideal situation for gamification.

You know, I always say with my own game *SuperBetter*, that's not a game I want you to play your whole life. I want you to play it for a few weeks, and then get that upward lift, and kind of go back to reality, and maybe come back next year if you need another upward lift. We shouldn't be gamifying our whole lives in perpetuity. We should use it as a way to give us that authentic experience of getting better at something that matters to us. And then once we're better and we're doing it, that authentic value and reward system will replace the need for a more artificial game one.

Aside: So if your aunt or coworker announces every time they hit their water goal for the day, don't hate the player. Hate the gamification.

Alie: And then a bunch of people, Colin Matthew, Carla Kennedy, Helen, and Amy Goldfine all asked about dreams: Why do I dream of *Tetris* after playing *Tetris* for a long time? Two people in particular, Colin and Amy both said: I love *Tetris*, but if I play it too long I started thinking about it all the time and when I close my eyes, I literally see little tetrominoes falling. Why does this happen? Is it a Soviet mind control conspiracy? (Just kidding.)

Jane: It is not. First of all, I can say, having hung out with the original designer of *Tetris*, I will tell you he's super nice and cuddly and it's not a secret Soviet mind control mission.

Aside: Quick aside. The creator of *Tetris* was inspired by the math game, *Pentominoes*, which looks just like analog *Tetris*. Also, he is not an agent of Soviet mind control. His name is just Alexey Leonidovich Pajitnov... And he's from Moscow.

Jane: But this is the greatest question because the other public service announcement I always like to do about video games actually has to do with *Tetris* and how it takes over your mind. There have been three randomized control studies and clinical trials now, including one in the field with people who experienced traumatic events, that show that the way that *Tetris* takes over your brain, so that you are flashing back to it; it can prevent flashbacks associated with post-traumatic stress disorder. There's actually an increasing usage of *Tetris* within 24 hours of a traumatic event. If you were in a car accident, maybe you witnessed a violent activity, or you were a victim of violent activity, that if you play *Tetris* within 24 hours, before you go to sleep, that your brain is more likely to flash back on *Tetris* than the event which reduces the rate of traumatic flashbacks in the future.

Aside: [*in a drawn out, low-pitch*] Whuuuuuuuuuuuuuuuuuuuu?

Jane: It happens because *Tetris* is so visually compelling and requires so much visual attention that your brain essentially diverts resources from everything else. It works so hard on this problem that when you walk away from it, your brain is continuing to work on it. When you give so much attention to a problem, your brain thinks it's a priority, essentially. Because

Tetris is so visually challenging, your brain essentially thinks, "Oh, that's a priority. I'm going to keep thinking about it when I walk away, when I go to sleep.

So in a way, *Tetris* is kind of like this miracle. Even if you're not traumatized, if you had a really bad day and you don't want to sit there thinking about it or stay up all night thinking about it, you can use *Tetris* to block your brain from flashing back on an experience that you don't want to remember. Use the power of *Tetris* to flashback on *Tetris*. I can't tell you, since I started sharing this research, I've heard from people who've been through really horrible, terrifying things, who were able to get the game on their phone and play it and felt like they benefited and had fewer nightmares and flashbacks than they thought. To your patrons who have observed this, they are correct and it can be used in really powerful ways.

Alie: Oh, that's so amazing. Just, like, "BRB! Downloading *Tetris.*"

Aside: I downloaded *Tetris* immediately after this interview. Also, this was gonna be a whole aside about video game music, and its origins, and history, and composition, but in researching it, I found out that the study of video game music is known as ludomusicology. For real! For real. There are experts all over the world who do this, so yes, you best believe this is on the list. All in favor say 'be-bop badoop boop boop!' Okay, good.

Alie: I got a ton of questions also about... wait, hold on. I have so many different pages of questions. It's crazy. Okay. I got a ton of questions about VR. Like Justin So, Dionne Dabelow, Kirana Bergstrom, and Janelle York [phonetic] all wanted to know: What video game advances should we look forward to? How do you see the industry developing and how does VR and AR change game design, virtual reality and augmented?

Jane: Ah, so many things. Okay, I'm going to focus on a few things. One advance that we're going to see in gaming in general, as a result of virtual reality, I believe, is that gaming will become a socially safer and more pleasant space for people who have historically experienced more harassment. For women, people who are identified as queer, there can be a lot of harassment in social gaming. That's just the fact. I spend a lot of time talking to VR developers and I know that all of the major VR developers are very much focused on not repeating the mistakes of the past of both social media and video gaming. They do not want VR to be a space where anybody can come up to you and tell you what they think; anybody can come up to you and have an interaction with you. [clip from Back to the Future, Biff: "Well what are you lookin' at, butthead?"]

They want to invent new kinds of technologies for consent, for who can see you, who can touch you, who can talk to you. I'm very optimistic that VR is going to thoughtfully not replicate the kind of toxic environments that we've seen in social media and video gaming in the past. That's one thing. Yay. [chorus of children cheering 'yaaaay!'] Another thing that I'm excited about in VR is VR e-sports. E-sports is obviously becoming really popular and accepted. I mean, there are college scholarships, there's college leagues, there's more people watching online world championships for the biggest *League of Legends* finals than watched Major League Baseball World Series and watched NHL championships.

Aside: Quick aside, just to fact-check this. Let's look at the most-watched world series in recent years. 2016, Chicago Cubs are in the World Series for the first time since 1907. This is a big deal. Game seven. Who's gonna win? The viewership is about triple what it usually is for a World Series. With 40 million people watching, the Chicago Cubs take the victory! Forty million. Oh, but last year, the number of people watching the *League of Legends* finals was 100 million. Well, that's an exaggeration. It was 99.6 million. So, yeah. That's a lot. Sorry, Cubs.

Jane: So, it's very popular, but I'm interested in e-sports in VR because the e-sports in VR are often very physical. If you look at images or videos of them online, you see people leaping and crawling, and there's a real blend of physical sport. But also all of the things that require you to be good in video games and e-sports, the kind of fast reflexes, and visual attention, and resource management that are the kind of strategic decision making that we see in traditional video games and esports. So I'm excited for VR e-sports also as a way to have both real physical and beautiful gameplay alongside traditional e-sports skills.

Aside: Someone develop VR *Frogger*. But make it like *Mission Impossible*, but ushering toads across freeways. C'mon. Do it for the toads!

Alie: A bunch of people also had questions about parenting and I know that you have twin four-year-olds, so I'm sure this is going to be a thing for you. Let's see, Matt Salgado, Carla Hickenlooper, Radha Vakharia, Carla Kennedy and a few other people asked about addiction to... When should kids start playing video games and how much is too much?

Jane: You cannot go wrong if you are playing the game with them. That's the first and most important rule. There's no 'too soon' if you are playing with them and talking to them about it, and for as long as you can continue this, the better. So even if it's a single player game, like they're building something in *Minecraft*, you are sitting right there. You're like, "What are you doing? How did you know to do that? How did you figure that out? Oh, it looks really hard. What's going on?" Talk to your kids. Let them express their problem-solving process. What's motivating them about the game? Why is this fun?

You want to just draw out as much as you can because it allows kids to really reflect on how they learn, what they're getting better at, how they are capable of solving difficult problems and staying engage with hard challenges. Games are just the most incredible environment for you to validate your kid's skills and abilities as a learner, as a creative person, as a problem solver. So, it's never too early if you're playing with them. At whatever age they are, the more that you can reflect back to them.

Aside: [in a hushed whisper] What if they get annoyed with you?

Jane: If they get annoyed with you... I mean, you know, if they're playing *Fortnite* they don't want you asking them necessarily while they're trying to frantically build an escape route. But afterwards talk to them, talk to them about at dinner. That's the first and most important thing. Some parents tell me "Oh, games seem antisocial." Well, they're probably talking to their friends on a headset, or if you think it's antisocial, just sit and play with them and you've successfully solved that problem.

The other thing in terms of timing, I did help do a meta-analysis of all the studies that have looked at kids and adults, how much is too much. I will say that there have never been studies showing ill effects when people are playing less than 20 hours a week. You do see impacts on school performance, on social relationships with people who don't play games, on physical health and well-being over 20 hours per week. So that's just another, kind of, safe zone. You can say, "In our family, we don't play more than 20 hours a week. We just don't do that because, that's when all the research says it starts to kind of interfere with other goals that you have or your physical well-being. So, we just don't do it."

And in cases of serious pathological gameplay where people are staying up all night, they're not doing the schoolwork and not looking for a job, I always say, get it to 20 hours or less. Do not take the game away, because if you understand the powerful effects of games on things

like anxiety and depression and social support, taking games entirely away from someone, it's like pulling them off an antidepressant or an anti-anxiety drug without tapering.

Aside: I looked up quitting gaming cold turkey, and I did find a site called GameQuitters.com, which suggested taking a 90-day detox to re-evaluate the role of gaming in your life. It also suggests that during that time: choose new activities, schedule out your day, and stay out of the house as much as possible. So maybe it's a good idea to just record how much time you're spending on gaming if it's a problem, and then as Jane says, you can just taper off from there.

Jane: There's really no need to take it away entirely. It's about getting it to a safe number of hours. So as an intervention, if you need to intervene, get it down to 20 hours a week, and that is a much more effective strategy than trying to get somebody to stop playing.

Alie: Oh, that's so interesting. I love that you've read *every paper ever*. A bunch of people asked about violence in video games, Emily Braibish, Anna Elizabeth, Janelle York, Lauren Murray, McKy, Sarah-Jane James, Amber Cooper. They all kind of asked: Do violent video games cause more violence? Is there any link between these ultra-realistic feeling games? And then Dawn Doherty-Affleck said: My husband is a lawyer, so my question is, why does coming home from work and killing things in games like *Dark Souls* help him relax after a stressful day?

Jane: Oh, that's funny. *Dark Souls* is a very specific example. That's almost a masochistic game. It's very, very hard.

Aside: PS, I looked into this Japanese game of fortresses, and knights, and dragons, and bonfires, and moodily lit castle interiors to find a few things. One, you can play as a person who has no skin, which essentially looks like a human made out of salami, killing things with a sword. Also, it's widely considered one of the best and most difficult video games ever made. There's not even a pause button. There's no pause button! They're like, "Are you in this, or are you *IN* this??"

Jane: So it's funny, that there's some high-powered lawyer who works really hard and then comes home and plays literally the hardest game, it's definitely revealed something about that person's personality. They really do like a challenge. So, violence. Look, statistically we know that 96% of men under 21 play violent video games. I prefer to use the term games with violent content because, obviously, the most violent game is football, real football, where you are hitting people and causing brain injuries. That is an actually violent game. Video games are not actually violence. So let's say games with violent content or aggressive themes.

Everybody plays them. And if you look at the data, violent crime has gone down and down and down, exactly as engagement with violent-themed games has gone up and up. I mean, it's ridiculous. If there were any, ANY, correlation, let alone causation, you would not see this trend. Anybody who studies this, that's the first thing they will say is: over the past 30 years, violence, crime goes down, particularly in this demographic, this male demographic. It probably has to do with getting lead out of our paint. You should do a good aside on that.

Aside: Okay, first off, the fact that Jane listens to *Ologies* and knows I do asides warms my heart to the point of bursting. And also, YES, lead paint. According to an article on *Mother Jones* that delves in to the lead-violence hypothesis, they say, "Lead poisoning degrades the development of childhood brains in ways that increase aggression, reduce impulse control, and impair the executive functions that allow people to understand the consequences of their actions. Because of this, infants who are exposed to high levels of lead are more likely to commit violent crimes later in life."

So why is this? Brain scientists have done scans and found that because lead is really chemically similar to calcium, it displaces the calcium needed for brain development. Looking at the data is staggering. You can see how the bans of leaded gasoline and lead paint correlate to these huge drops in violent crimes. PS, I have a victimology episode coming up, and, hell yeah we will be talking about that.

Jane: Violent crime is going down. Violent-themed gameplay is going up. It's just not there. There's no data to suggest that there is any kind of correlation, let alone causation. However, that said, two things. There are certain types of gameplay that can turn you into a jerk. Not a violent person, but somebody who has less empathy for people they perceive as weaker than them and who are, kind of, moodier, and may yell at you or be grumpy to you and you're just like, Ugh, why are you so obnoxious and such a jerk?" That kind of game play is when you play in these very aggressive-themed games against strangers who you don't know and will never see in person.

We tend to dehumanize those opponents. We don't know who they are. We're playing anonymously online. We're trying to beat them. We build up in our mind that they're these horrible people and we hate them and we feel antagonistic towards them. Those emotions that we build up, the frustration, the anger, the hatred, it's not like you just walk away from the game and they evaporate, so they can linger. Some people hypothesize that there's a kind of testosterone poisoning from this type of gameplay. I mean, poisoning's a little strong of a word, but testosterone gets jacked up and so, yeah, you're kind of a jerk.

So, you shouldn't spend all your time trying to beat people you have never met and will never meet online. You know, e-sports is different because these are much more collegial environments. You can play against the same people again and again and again. You can see them in person at tournaments. That's fine.

Aside: [using an old-timey filter] And another thought about violence in video games...

Jane: I don't like to play games where I have to kill people. I hate it. When I play *Fortnite,* I just hide and it's literally a game of hide and seek for me. I build stuff and... I can get a top five finish without killing anyone, and to me, that's awesome. I don't like it. I don't enjoy it. There's a reason why a lot of people don't enjoy it. A lot of people don't want to simulate violence because we don't enjoy it. That's a natural feeling and it's why a lot of people are turned off by video game culture. It's not abnormal to not enjoy violence. That's also a normal thing. If you're turned off by it, that's okay. And you don't have to play violent video games or if you play them, you don't have to necessarily engage in the violent aspects of them. That is normal and that's fine, and I personally feel the same way.

Alie: This actually goes straight into... Crystal Mendoza wanted to know: What is the deal with *Fortnite*? Why is it so addicting? Is it the killing part, or is it that kind of feeling that you're hanging out with friends, that social aspect?

Jane: Yeah, there's a lot of things that is kind of special about *Fortnite*. I mean, one of the things is just how easy it is to try again. So if you're in Battle Royale mode -

Aside: Battle Royale mode, by the by, is when a bunch of players play against each other. It's like a birthday party! But you die.

Jane: - you play, maybe you're dead in five minutes. You can just play again, you can drop back in, parachute back down. You don't have to wait for anybody. This sense of abundant opportunity, and how fast the games are, and how quickly you can try again. It really powers up that part of the brain that thinks that something good might happen. It's like, "Oh,

something good didn't happen. I'm out. But wait! I'm just going to play again! And something good could happen now!" That rapidity, that sort of iterative nature of the game is really, really wonderful.

And they've done such a good job with the expressivity of the avatars and how playful the different skins are. When you encounter people, and you see what their avatar is dressed as, and you see the emotes that they do when something good happens, you just kind of feel like you're seeing people. It's really interesting. People feel like there's an authentic personality that they're able to express or an authentic emotion, and it increases the sense of presence and increases the sense of social being. The social side of it is really compelling too.

And I just think it's nice to play a game where 99 people are going to lose and only one person wins, it kind of takes the pressure off. [Lady Gaga saying "There can be 100 people in the room, and 99 don't believe in you..."] I think it's easier for people to jump in and it's... you know, when you're playing chess, one person wins, one person loses. You were the loser. In the Battle Royale, everyone's a loser! So, it's a kind of a low-pressure environment where good things can happen.

Alie: What do you think video games in movies and TV? Is there anything that you've watched that you love or hate? And Stewart Caswell wanted to know: From a game designer's point of view, what are your thoughts on *Ready Player One*? But yeah, anything in pop culture that gets it wrong or that you're excited about?

Jane: Oh gosh. Okay. Well, first of all, every *Law and Order* episode – on every franchise of *Law and Order* – and *CSI*, and *Criminal Minds* has been terrible; 100% never gets anything right. Let's acknowledge that. Even though I love them all and I watch *SVU* every week. But *Ready Player One* is interesting because I had a strong visceral reaction to the book that I still kind of feel, which is that I just don't believe it.

Aside: Okay, I was maybe the last person on planet Earth to know the plot of *Ready Player One*. I just looked it up. It takes place in 2025, the world is a desolate hellscape, and then to escape that, everyone just wears VR headsets. But there's a real-life game that happens; that's all I'll say. Also, wouldn't everyone get a ton of forehead zits from wearing a headset all the time in the future? Or would it even matter because you just see each other's avatars? Anyway, is this our future?

Jane: I don't think that VR is going to be the alternative to reality in that kind of really holistic way that *Ready Player One* imagines. I think augmented reality is a much more likely future and that VR will be more often used for, kind of, short-term immersions. I love VR. For example, it's being used in hospice care for people who still have bucket list items but they're dying. VR for kind of reliving past experiences when we get this really immersive 360 footage and you can kind of immerse yourself in things that you've experienced in the past.

I just don't buy the vision of *Ready Player One*. I just don't see that that's what people want. Kind of going back to research, my PhD research methodology was largely ethnography, of really trying to understand what drives people, and sit with the communities, and sit with individuals, and look for patterns that help explain how a society might evolve when you see a lot of the same thing bubbling up as a motivation and desire in different communities. And so I just don't buy *Ready Player One* as a vision.

I think it's going to be augmented. If you look at what happened with *Pokemon Go* and how they were able to get almost a billion users in just a few months, no product has ever scaled as quickly, including the wheel; more humans used *Pokemon Go* faster than anything that's

ever been invented. I think that gives us a better glimpse into what the future of gaming will be like. People like *Pokemon Go* because you could still see the world, and you could still have face to face contact with other people, and you could be physically active, which feels good, and get fresh air and all of that. So, that's my feeling about *Ready Player One*. I don't think we're headed towards that future. I'd love to see like, *Ready Player Two* should be about the augmented reality version of that world and it might be a better one.

Aside: I asked Jane if she watched *Russian Doll* on Netflix, in which Natasha Lyonne is a game designer. Jane said she didn't watch it because it might just feel like work to her and just stress her out. Not unlike *Fortnite*, it's kind of a birthday party, oh wait... [clip from Russian Doll: "I am not a cock-a-roach"]

Alie: Last two questions if we have a second. Is that cool? The thing that you hate the most about video games or your work? The shittiest thing about what you do, most annoying... can be anything.

Jane: Oh, god. The most annoying thing is... I hate the shame around gaming that is perpetuated by the media and to some extent by anxious parents. It makes me crazy. I think we need to stop shaming people for loving games because we've loved games since we were human beings. Some of the oldest artifacts in the world are game boards and game dice, and we need to stop creating unnecessary shame around this because it hurts people and it affects their self-image in really damaging long-term ways. That is the most annoying thing about games is the shaming and the media has a big role to play in it and we need to stop it. [clip from 1982, reporter says: "Video games! They seem to have captured America's imagination... and its pocket change, as well."]

Alie: That's legit. What is your favorite thing about video games or about what you do?

Jane: I mean my favorite thing is... I love discovering a new game with my husband, still. We've been together since 2000, so almost 20 years now. And one of the first things we did together was play an adventure game called *Grim Fandango*, one player, LucasArts, browser-based game, you explore a world together. And we spent a few weeks playing it together and I still... I love when a new game comes out, whether it's *Gone Home* game or *Fortnite* and we can sit and experience it together. We have these memorable moments in our history.

When we found *Portal*, when we found *Braid*, when we found *World of Warcraft*. I really love developing a skill with him together and having that novelty and that exploration and curiosity. There's so many positive emotions that we feel when we play and when you can feel them with someone you love, it's really powerful. And so I'm always excited when we have time and opportunity to discover and you game together. [*clip of Lana Del Rey singing*, "open up a beer, take it over here and play a video game"]

Alie: Now I'm going to have to learn *League of Legends* and download *Tetris*.

Jane: Yes. Good. Victory.

Alie: Thank you so much for doing this. I'm so glad I finally got to talk to you. I feel like I've *just* toed the line of creepy. I'm like, "Hi, it's me again. Hi Guys. Hi."

Jane: Oh no. And I wish that I had known that you would interview people on a bench at LAX, we could have done this a long time ago because that that is something that I often find myself sitting on a bench there. [classic video game theme music fades up as voices fade down]

Yes, Jane McGonigal, the woman the world needs. So befriend someone, and even if you have to do it over Skype in a remote sound booth 400 miles away, ask smart people stupid questions because they have the keys that can unlock the Easter eggs that can give you life! More lives!

Find out more about Jane McGonigal at <u>JaneMcGonigal.com</u>. She's also @AvantGame on <u>Twitter</u>, and I'll link all of this in the show notes, including the nonprofit, <u>AbleGamers.org</u>, and the sponsor links. Jane's book, once again, is called <u>SuperBetter</u>: A <u>Revolutionary Approach to Getting Stronger</u>, <u>Happier</u>, <u>Braver and More Resilient - Powered by the Science of Games</u>. Also, Dr. Kelly McGonigal, Jane's sister, is a psychologist who studies how to make stress your friend. You'd better believe I'm gonna try to make her come on the show. McGonigals: y'all good folks.

To find *Ologies*, you can follow @Ologies on <u>Twitter</u> and <u>Instagram</u>. I'm <u>@AlieWard</u> on <u>both</u>. For t-shirts with the *Ologies* logo, and mugs, and totes, and pins, and hats, all of that is at <u>OlogiesMerch.com</u>. You can tag your Instagram photos #OlogiesMerch so then I can repost them on Mondays if you want. Thank you Shannon Feltus and Boni Dutch for managing that. Thank you Erin Talbert and Hannah Lipow for adminning the <u>Facebook</u> group, full of great folks. Thank you to interns Hari Kim and Caleb Patton, to assistant editor Jarrett Sleeper of *Mindjam Media*, and of course to the incomparable Steven Ray Morris of *The Purrrcast* and *See Jurassic Right*, and also to Nick Thorburn, who wrote and performed the theme music.

If you stick around until the end, you know I tell you a secret. This week, you get two! Number one, after my disgusting botfly video confession last week, Stegasaur_Rache [ph.] on Instagram DM'd me asking if I'd ever seen videos of mango worms, and... then... ruined my life, because I watched so many. It's so gross. They make botflies just seem like child's play. Just don't do it, don't do it, don't do it. *Don't. Do. It.*

Also, my other secret is that I mentioned dating someone! For years and years, I've been super low-pro about who I'm dating because it's just a vulnerable thing, and also what if it ends? And then you have to explain that to people? I'm just quiet about it. Anyway, go get 'em kiddos, you all mean so much to me. Berbye!

Transcribed by cat lover, amateur deltiologist, red-hot grandma, sewer tofu, lover boy, former world-record speedrunning holder and frequent video game player, Asriel King. All your base are belong to them.

Some links that perhaps you'll enjoy:

This week's donation was made to AbleGamers.org

Dr. McGonigal's book, "SuperBetter: The Power of Living Gamefully"

Dr. McGonigal's TED Talk

First use of "Ludology"

The news covers video games in the 1980s and it's wonderful

Elizabeth Magie, a badass who got the shaft

More on the invention of Monopoly

Refer me to Collective Detective? Or maybe don't?

Ewa-Edits loves a cockaroch quote

Lead and violence correlations

Dr. Kelly McGonigal's TED Talk on "How to Make Stress Your Friend"

For comments and inquiries on this or other transcripts, please contact OlogiteEmily@gmail.com