



CG GARAGE PODCAST #261 | JUSTIN DENTON ARTIST, WRITER AND DIRECTOR, BLUR STUDIO

Justin Denton, the creator of some of virtual reality's most thrilling experiences, returns to discuss his directorial role at Blur Studio and the state of VR.

It's been five years since VR director Justin Denton last joined Chris on the CG Garage Podcast, and in that time he has truly pushed the boundaries of the medium. He's produced jaw-dropping tie-in experiences for *Ghost in the Shell*, *Mr. Robot* and *Legion*. And he's indulged his passion for Dickens' *A Christmas Carol* via *Chained: A Victorian Nightmare*, which uses techniques from games and immersive theater to deliver a unique, personalized experience.

Contents

[Inside David Haller's head for Legion](#)

[Creating Chained: A Victorian Nightmare](#)

[Thoughts on VR today](#)

[Working at Blur Studios](#)

Useful links

[Justin Denton's website >](#)

[Chained: A Victorian Nightmare on Steam >](#)

[Justin's PUBG trailer >](#)

[The March at Time Magazine >](#)

CHAOSGROUP

Chris Nichols: So, it's been, I think it was 2015.

Justin Denton: Is that when we did the last one?

Chris Nichols: Yeah, it was a long time ago.

Justin Denton: Wow.

Chris Nichols: You were still doing a lot of stuff over at Legend at the time, I think. So, a lot has happened between then and now.

Justin Denton: A couple things.

Chris Nichols: And the world of VR and all that stuff has changed, and there's been a lot of interesting things. So, when you and I chatted the last time, and we were just getting together, I said, "We should do a podcast is like what's happened in that world?"

Justin Denton: Oh man.

Chris Nichols: And beyond that, and obviously with yourself as well, so what's going on? So, let's go through that little chronology a little bit.

Justin Denton: Okay, man, what ... So, we had just-

Chris Nichols: You were doing the Tequilla thing.

Justin Denton: Yeah. Had we just done Crimson Peak?

Chris Nichols: Yup.

Justin Denton: Because I think that was what kicked off us talking a lot more was we had chatted with you and you helped motivate Vlado to shift the 360 rendering into Maya and not just Max, which you guys said you would try to get it done because we were going to use Arnold I think. And you were like, "No, no, no, no. We'll get it."

Chris Nichols: We'll get it for you.

Justin Denton: And I think Vlado had said he would try to get us something working in 10 days, which we were super impressed with and instead he did it in three, which sounds about right for Vlado, which is cool.

Chris Nichols: Yeah, well, whenever I tell him it's like ... He's like, "Oh, it's a lens shader, I can do that."

CHAOSGROUP

- Justin Denton Yeah. We weren't asking for the world, but at the same time, being such a small client, I was just blown away by that. Like, it was just one of the coolest things, not to turn this into an advertisement of any kind, but that you just don't get that response very often in the industry, and the few times you do, you remember it. So, yeah, a lot's gone on since then. Pretty much right after that project I bounced over to Verse.
- Chris Nichols Verse, right.
- Justin Denton Which became Here Be Dragons. And so, that would have been with Chris Milk, and Patrick Milling Smith, and it was basically the smaller sister company to Smuggler, which is a commercial production company. So, I went over there because they were actually hiring us to do a lot of the work when I was at Legend at the time. And you know how those things go sometimes they cherry pick the people that they like to grab. So, that was what happened. The fun thing for me is it got me away from the more service work side of things, and much more into the ideating, and thinking about stuff at the very, very top level. And-
- Chris Nichols Right. And Chris Milk, I guess at the time was one of the big directors that was really invested into the VR content stuff, right?
- Justin Denton Oh, absolutely. I mean, he's definitely credited as being one of the pioneers of creating content, that's just meant to be consumed, that's not necessarily game oriented or anything like that. Adapted his skillset from being a commercial director, and creator, and music video director into this whole other world of VR at the time. Yeah.
- Chris Nichols Right. So, okay, so what were you doing over at, what was it called?
- Justin Denton It's Here Be Dragons-
- Chris Nichols Here Be Dragons.
- Justin Denton ... Yeah. Which has also now rebranded to division7, so that's changed names once again. But it was still Here Be Dragons the whole time I worked there. So, they were very much a commercial advertising, sometimes original content oriented production company specifically for VR experiences, whether that be, straight to headset for the home or sometimes it would be for location based entertainment, whether that'd be like a comic con or something like that as well. Yeah.
- Chris Nichols Okay. And what were some of the things you were working on?
- Justin Denton Yeah, so I got hired as their executive technical director, which is a mouthful, but really what that translated to is they would pair me up with

commercial side directors, and we would come up with ideas together. So, one of the first big ones that I did over there was the Take Flight piece, which was for the New York Times. So yeah, they do this whole thing every year where they have these 10 greatest like directors, actors like these kinds of things. And they do something different every year. They do a different motif with it every year and that year it was called take flight and everything had to be something related to falling, flying, anything like that.

Justin Denton And so, we ended up coming up with this really great concept of stars falling and literally attributing that to like movie stars. And so, we did this thing where we put Charlize Theron on wires, and had her hanging and floating, and things like that. And we were shooting these with high speed cameras and then, stereo converting that, and then putting that into a full CG plate. Yeah. And, so we would then create a full CG environment for like all of these things. And we created this long piece that just felt like a dream really. And that was a Daniel Askill who's just an amazing commercial director. He's just got this really, really beautiful eye. And he makes everything feel like an art piece. Nothing ever feels like a commercial with that guy. So, honestly I think that that was like one of those pieces that really shifted my mindset.

Justin Denton I came from a fine arts background originally and it let me go, "These things don't all have to feel like crummy advertisements." You can actually do something a little more free and fun with it, and artistic. And I think that has really informed me a lot on my other projects. So, yeah, so we did that one, and then after that one I just did a slew of others. I did the Mr. Robot piece. Yeah. So, that one was fun because that was my first time, like really digging in with a show runner, and Sam Esmail is an interesting character. I really like him, but he called me Mr. No because I always had to tell him no to things. So, every time I would walk in the room he would call me Mr. No, which was funny.

Justin Denton But yeah, we had a really good time coming up with that concept, and it was great to have a set that preexists. So, we went to Elliot's apartment. So, we went out to New York and then just took a little Ricoh Theta and had it on a monopod. And we walked around his apartment to just find all these like fun, cool, motivated angles. And I think that was one where we almost forgot we were making a VR piece, and just tried to make a little film. And I think it-

Chris Nichols Is that good? I mean, it must be like not being conscious of the fact that you're above the medium but more thinking about the art of it in itself. Right?

Justin Denton Yeah. And I do think it's good. I mean, I think you have to have enough of language under your belt for what it is and some good instincts for things

CHAOSGROUP

to make them work. But the combination of that and him just living and breathing that property, like he knew everything that he wanted it to feel like. And that was great. He also did something really cool with it, which I hadn't seen done before, which was the frustration of these long takes with live actors. He had Elliot wear an earwig and he would direct him as the shot was going. And so, he was actually talking to him from video village. So, he'd be watching and he'd be ... He's basically his voice, which is how he works with the actor anyway. Like that's how he works with Rami Malek. So, he becomes this inner voice, which worked like really, really well.

- Chris Nichols Because you have to do long takes in VR.
- Justin Denton Yeah. Well, you don't have to, I mean there's no rule that says that, but it's-
- Chris Nichols But people seem to think ...
- Justin Denton ... The rapid fire thing has not worked out terribly well for most people. Like Robert Rodriguez tried it and it didn't work. Fucking hats off to him for just going balls out on that and just saying, "Oh, you guys don't know what you're doing. I'm just going to do every crazy angle known to man." And he did it.
- Chris Nichols He did it but it was disorienting. Right?
- Justin Denton Very much so. Yeah. So, we did that one, and that was where I really started to see, for me personally, just the limits of it. Like, if that was the best I felt like we could do with a live action narrative storytelling with the tech that we had at the time, it just started to feel too limiting. So, that's when I started playing more with game engines. And so, after that I did the Ghost in the Shell VR experience that went with the film. And that one we did fully in the Unreal Engine. We just wanted to get that sense of being able to move around more.
- Chris Nichols It was going from three DoF to six DoF in the sense, right? That's ...
- Justin Denton Yeah, exactly. You still didn't actually have agency in the space as far as being a person-
- Chris Nichols No, but you could move in parallax.
- Justin Denton Yeah. And then we also did a couple of fun things where there's a fight scene that happens, and we basically recreated the tea room fight scene, but we re-choreographed it as well, so it would work better for 360 to being able to walk around in this space. And knowing we had it in engine, we were like, "Well, we can slow this down at any point we want." So, we made it where the user could actually slow the action down, and it was

analog style where depending on how hard you pushed it was how much it slowed down the action, which was just fun.

Justin Denton Like, I mean, it was an experiment and I'll be perfectly honest, there are things that worked and things that didn't work about it for sure. But that we really liked. My favorite part of it actually is at the very end, you go underwater with her, and you're just amongst the jellyfish. And I could've just stayed in that space. That was something that, for me, that was the most successful part of it. And could I just like had made something where you're just hanging out with the jellyfish? I think I would have been happy with that and some ambient music, you know?

Chris Nichols Okay.

Inside David Haller's head for Legion

Justin Denton And that's where things got interesting after that. So, to me it was seeing what it was like to be in that game engine and starting to go, "All right, there's a whole lot more we can do here." And obviously I'd been playing a ton of VR games and things like that at the time, so I was well versed in what was going on, but I wanted to see what can I do with this in a more live space? And luckily this request for proposal came to us to do a experience at Comic-Con for the show Legion, and this wasn't VR. It was actually AR. They immediately just were like, "We want to do something with the HoloLens." They didn't know what they wanted to do. They had no story for it or anything else-

Chris Nichols You start with the technology and try to go backwards it's a little bit hard.

Justin Denton It's tough. Yeah, it's really tough. And so, I immediately knew that that was going to be a problem because I think we've both been tasked with those kinds of things before where you're like, "Oh man, this is not going to go well." And instead I was like, "How about we just do it as an immersive theater piece, but we happen to use the HoloLens?" So it's like-

Chris Nichols Right, so you split the perspective of it?

Justin Denton Exactly. Yeah. Which is been what I've been doing since with a lot of my stuff, which is I'm going to make it a thing that I know works that happens to use the tech. It's just a tool inside of whatever this other thing is. And I had already fallen in love with immersive theater. And so, I actually went out to New York and worked with Punchdrunk, on ideas for how to make

CHAOSGROUP

this work, how to start incorporating the tech in and things like that? So, I had already written a story outline of what I wanted to do, and unfortunately nobody can go experience this now, because it was a one time only thing at Comic-Con.

Justin Denton But the idea of it was that you were David Haller who is the main character from the story. You just didn't know it yet. And the conceit of the show is that he absorbs people, that character.

Chris Nichols Right, he absorbs their power and everything.

Justin Denton No, he absorbs them.

Chris Nichols He absorbs them.

Justin Denton Their actual consciousness. Yeah, and not just in the sense that he can tap into them, they're actually alive in his mind, like as separate people. That's the original conceit from the comic book. The show has left it a little bit more mysterious than that as Noah Holly does. But that was also then my second opportunity to work with a show runner again, which was a lot of fun. But with this one we wanted to do this thing where you were one of the minds trapped inside of David Haller of the main character.

Justin Denton And so, you would show up at Comic-Con, you get admitted in, and you realize you were in Clockworks mental facility, and you would take this brain capacity test, and that was done via the HoloLens. So it was basically-

Chris Nichols So, how did that work in terms of at Comic-Con you put on a holoLens, so you still in conscious of the environment around you, but you're seeing through the holoLens. So, how did that work?

Justin Denton So, well, I mean that's actually one of the main challenges of AR right now, which is that they can't control the space around you. Like they can make things happen. But with this, what we did is we created a pop up building for our immersive theaters to act in, and we had 100% control of that environment, which means that it's pre-mapped as well, which means we have a lineup to it inside of the holoLens. So, it lines up really nicely?

Chris Nichols Yes.

Justin Denton As expected, to the point that there Rorschachs on the wall and they were basically just frames and then the HoloLens was putting the Rorschach on there. But we did a fun thing where if you stared at it for long enough the Rorschach moved. And so, there were a little fun triggers like that, that you can only do when you're in control of the environment as well.

CHAOSGROUP

Chris Nichols Yes.

Justin Denton So, yeah, so we did this fun thing where you ended up discovering you had his powers. And then shit goes haywire. There's this thing from the show called the Angry Boy, which was the main bad guy from the first season. And he actually shows up and then chases you out of there. And so, it was very adventure-esque immersive theater just with some tech over laid on top of it. But that was like when I was doing the Ghost in the Shell thing, I was like, "It'd be great if I had triggers where I could control what happens to someone." And not just that they have the agency to do it, but if I could control what happens to them, which means that as the creator, I'm choosing when these things happen.

Justin Denton It's like a triggered event in the game kind of, except for in this scenario there's a live person that gets to decide when that thing happens to you. It's very derivative of like a haunted house, like that an idea. It's not always a scare. So, what did is we created this thing we call the state machine, which is just a tablet, and it's got buttons on it that triggers certain things to happen in the game engine.

Chris Nichols So, it's like an engineer in the control that's saying, "Okay, the person is doing this, now I can trigger that event."

Justin Denton Correct. But as opposed to having it be from like mission control or control room or something, our actor had the tablet on her, and it was a part of her testing you anyways. And so, you just believed that it belonged-

Chris Nichols So, it was part of the story?

Justin Denton It was a prop. Yeah, it was a physical prop.

Chris Nichols So, there's actually a physical actor that's interacting with the spectator?

Justin Denton Yes.

Chris Nichols And so, it's physical actor, spectator, AR all in one?

Justin Denton Yeah.

Chris Nichols And then that person would make that happen. But it looked like it was part of the story the whole time.

Justin Denton Exactly. Yeah. And you had no idea that's what they were using it for. And the beauty of something like that for something that's a live scenario like that is that I don't care if the game logic works for you, that you do the

proper gesture or that you put something in the right physical place. As a guest, I care about your intent, that's the thing that matters. And so, if I see that you're trying, I'm going to reward you just as we would in a human scenario. Like if you stammer on a sentence and I know where you're going with it, and then we can move on, we get it. We'll do that multiple times during this conversation.

- Justin Denton That's something that's missing, the games have a hard time with. But this isn't a game. It's entertainment, and it's live entertainment, and you want to have that immediate reward feedback loop so they can move on, and enjoy the story, not wonder ... Anytime somebody deals with brand new tech, it's that constant fear of like, "Am I doing it right?" And you don't want that. You want to give them a story, and let them take part in it. And so, intent is everything. So, that that's been a big thing. I feel like the big conversation in most of immersive theater, and stuff like that is consent-
- Chris Nichols Consent, right.
- Justin Denton And that's an interesting thing, but for me the fascinating thing is intent. Yeah. Sorry, I went way off topic there.
- Chris Nichols No, it's great. Great. I mean, these are things that are important because as we were starting to think about the whole VR experience is like, "I mean I've talked about first versus third person experiences so much." But you've actually gone beyond that. You've gone like, "Okay, now that it is a first person experience intent versus consent is actually a big part of it." Let's go beyond that. Like what does the consciousness mean to be actually involved in this experience? Right?
- Justin Denton Yeah. It's interesting you talking about the third person fly on the wall thing. I believe that was a huge part of our last conversation here.
- Chris Nichols Oh, yeah, but that was a long time ago.
- Justin Denton I know. I would hate to go listen to the dumb things I probably said.
- Chris Nichols But you know what? We were all more naive back then. A lot has happened and that's exactly why we're redoing this podcast is because like ... Well not redoing, but we're extending it. We're going to the next phase. Like we've learned a lot since 2015. Right?
- Justin Denton Yeah. Absolutely.
- Chris Nichols And we're 2019 now. So, that's a big learning curve that's going on. And there was something that I was always thinking about when I started thinking about the VR experience is how do you create entertainment that's more first-person, and what is the proxy or what is the live action

CHAOSGROUP

version of that? And one of the things that always came up was ... I forgot the name of the theater experience that happens in Brooklyn that they always talk about where the audience becomes part of the narrative that's going on?

Justin Denton Talking about Then She Fell?

Chris Nichols No, not Then She Fell. It's-

Justin Denton Oh, I know what you're talking about. It's where they flip the audience, and you're like two audiences looking at each other or is it the-

Chris Nichols Well, you go into the building and it looks like you're just walking into a hotel. But then you realize that the people around you, some of them are actors and some of them are not. And then you start to experience the story as someone that happens to be at a bar or restaurant and you're like, "Oh, what's going on over there?" You know? Yeah. That's the whole idea is that the audience feels like they're inside the action. They don't actually participate. They're just sort of witnessing it around them as opposed to just, a wall as the theater. Right?

Justin Denton Yeah. Well, and you get into this really interesting concept of audience as performer. And there's some really interesting things going on in that space alone. I feel like that's a lot of what Justin Fix does with his stuff. The Willows has a really big component of that where I don't want to ruin anything because this is an ongoing show, but there's a component where you're outside, and you're looking inside, and someone's actually talking about something that's going on through a window, and you're not watching performers. You're watching the audience. But these become the performers to you. And that's incredibly smart. Like there's a lot of things that he does and that they do at Fix It that I'm very impressed with.

Chris Nichols Interesting. Interesting. All right. So, that was a big Comic-Con

Justin Denton So, yeah, so that was 2017 Comic-Con. And it went really, really well. We had an amazingly positive response to it. And it was my first time getting to create something that was also with live actors. I have directed actors before plenty of times, but that was a very, very different experience. And I think the weirdest thing for-

Chris Nichols And they also have to do a different performance for every-

Justin Denton Every single person.

Chris Nichols Every single person.

Justin Denton Yeah.

Chris Nichols It's, yup-

Justin Denton And they have to react to like tech failure and things like that and keep the audience in it. And that's one of the things that I love about having that live performer that has the capacity to improvise with those situations, not just in the actor thought of improving. This is way denser than that for them. And it takes a very special type of performer, and I'm always amazed by them. But yeah, so that went extremely well, and we had a great response from it. And so, I started getting a lot more interest both to create things like that and interest from others for me to create things like that too. And I had been working on something for a while already.

Creating Chained: A Victorian Nightmare

Justin Denton I'm a massive fan of A Christmas Carol, the original novella. Yeah. It's something that my family has read at Christmas time every year since I can remember. And as soon as you can read, you start reading some of it too. And it's a thing. And I love it for multiple reasons. You know I'm a massive horror fan. And it's one of those things that it's a darker story than I think it's often given credit for it because it was immediately handled with kid gloves-

Chris Nichols Right, like in a children's story.

Justin Denton ... Exactly. But you have to remember that it's from the Victorian era, and like their intimacy with death is something that we don't understand at all anymore, you know?

Chris Nichols Mm-hmm (affirmative).

Justin Denton And so, even though it was a family story, when he wrote it, which he did intend it to be that, I'm not going to lie, he wanted it to be genuinely terrifying when you read certain parts of it. And I don't think that's really been represented that much in very many versions of it, if any, really not the way I would do it. And so, I had already been thinking about taking the learnings from Legion and doing a VR piece so I could completely transport someone somewhere else, with live actors doing like full body mocap, and all of that thing. And what I ended up doing was taking this idea of A Christmas Carol, and trying to figure out how do I change it enough so I can make you the protagonist of the story? And I remember specifically the day I came up with the idea of removing Scrooge. And

CHAOSGROUP

even I was like, "Oh, that's blasphemy, you can't remove a Scrooge from A Christmas Carol. That's just the worst idea ever." And I actually think it was the best idea that I could have come up with for it.

Justin Denton Which is the reason why I don't call it A Christmas Carol. It's the reason why it's called Chained: A Victorian Nightmare. Because you remove Scrooge, and I don't think it's A Christmas Carol anymore-

Chris Nichols But really the participant is Scrooge?

Justin Denton The participant takes the place of Scrooge. But I don't want to say the participant is Scrooge. The biggest reason is that I can't imprint Scrooge upon you. Scrooge is a beautiful caricature. He's not a person by any means. He represents the worst in us and the best in us simultaneously. And it's done with a master stroke from Dickens. So, my thought was to allow you to imprint yourself into that story. So, it was taking this idea of agency that we're always talking about the buzzword that everybody likes to use, but really owning this first person type of a thing where it's like, "You're not going to go in with me giving you what your story is. You are genuinely walking into this as you, and your story that you come in with is what we imprint upon our story."

Justin Denton And that was a really interesting challenge. It took a long time to get there, and to land on what we landed on. But what we ended up doing was having the actor in the space ask you what you felt about the past, present, and future. And there were very specific questions that I'm not going to go into because there's actually a home version of this that's about to come out.

Chris Nichols Oh, really?

Justin Denton Yeah. And so, it will be very different than the one you got to experience.

Chris Nichols Yeah, I did. I should let the audience know, actually got to hang out with you over at the Aaron Sims' office, and where you guys were practicing and making it happen, and doing all that stuff. So, I saw a very early version of this, and I was blown away because it was the first time that the interactivity of it made so much more sense. One of the things I've always complained about in certain VR experiences is that it's basically a third person experience that you're thrust upon to be a first person experience. And so, you feel awkward about being that first person, right?

Justin Denton Yeah.

Chris Nichols And so I always joke about it. It reminds me of like Cirque Du Soleil when they grabbed someone from the audience and like, "Oh, now you're amongst the French clowns." And you're like, "I feel awkward." Right?

CHAOSGROUP

Justin Denton Yeah.

Chris Nichols Well, that basically starts, it starts off that way. Everyone's going to feel awkward thrust into the situation, right?

Justin Denton Of course, yeah.

Chris Nichols But what happens very clearly in this experience? And I'm going to talk about it from my point of view is there's an actor that's involved in this, right?

Justin Denton Mm-hmm (affirmative).

Chris Nichols So, the way that it works ... Actually, you know what? Why don't you describe the process of how this experience works?

Justin Denton Yeah, I feel like we jumped right into it, and people would maybe be a little confused about what this thing is.

Chris Nichols If you're going to be an audience member, and we'll talk about it from the original intent, and then we can talk about the home version.

Justin Denton Yeah. So, the short version of what it is and then I'll dig it. I'll go through it. But basically we have a immersive theater experience once again, that happens to use VR. I don't call it a VR experience. The one that will come out for home will be a VR experience. But this one was a location based thing. So, you would purchase a ticket, you'd go to the location. We actually had-

Chris Nichols Similar to some of the stuff that's going on with the void and all those stuff?

Justin Denton Yeah. The biggest difference is that we also have live actors involved.

Chris Nichols Exactly, which is a big part.

Justin Denton Which is a big difference. Yeah.

Chris Nichols Big difference.

Justin Denton That, and we once again got away from the game logic having to address what you're doing. We did the same thing with a state machine that when you tried to do something, as long as I saw you tried to make it happen, we press the button and it happens for you. Yeah. Which, again, it's a big thing for me in that live scenario. So, basically it's this location based

CHAOSGROUP

thing that you go to, and you get to experience a night of what it's like to be visited by the past, present, and future, and to face your own reality.

Chris Nichols Your demons.

Justin Denton Yeah. Maybe it depends. For you maybe it was. But, yeah, so that's the short of it. What actually happens through the experience, and there's been tons of write-ups on this. I'm not really saying anything that's not out there. But you end up going into a ... You knock on this door, and you get led into this Victorian era mud room. And there's a live actor there in full Victorian dress that you end up learning is Marley, who is a ghost, and is surprised that you can finally see her.

Chris Nichols This is live?

Justin Denton This is live. Yes. This is not in headset. Yeah. Which is a very important thing to make clear.

Chris Nichols Yes, that's simple, I want to make sure that's clear.

Justin Denton And so once she actually sees that you can see her, this is all very much from the original where Marley was shocked that you're finally aware of his presence. And so, we did that same type of thing where she ends up talking with you, and is amazed that you can see her, but once she realizes that you can see or she realizes it's time for you to be what we call accounted for, which basically means that it is time for you to take a look inside, and see what's going on with you. And that's how she then pulls you into the spirit world. So, that's the point at which the headset goes on you. And we have a very, very interesting way of getting you fully into that moment.

Justin Denton There's a big reveal that happens that I'm actually still not going to ruin because there is something to it in the home version that completely disarms you. And that's this thing that I like to do where people are always, when the tech gets involved, they're always going to start going, "Ah, is this working right?" Or whatever. Or they start thinking about it, the rendering quality, the animation, like those kinds of things. And what you have to do is you've got to like rip the bandaid off. You've got to do this like a quick jarring thing that then they go into crocodile brain, and fight or flight mode kicks in, and they have to decide what they're going to pay attention to. And we do that in a pretty fun way.

Justin Denton And then we have the new spirit world version of Marley who then gives you the rules of play. So, it definitely, I would say that moment it has a little bit of LARP feel to it. I don't typically talk about that, but that was definitely a big influence for me on how we did that moment. And then that's where you get the three questions asked to you, which then gives

CHAOSGROUP

the spirit of the past, present, and future information about you, which they then use as you're going through the rest of the experience. So, then you end up basically traveling-

Chris Nichols It personalizes it, right?

Justin Denton Yes. And that's what's so great about it is that it doesn't take much for it to be your story.

Chris Nichols So, just so people know as you have the headset on, there is a live actor that is talking to you while you're doing that, while you have a headset on. That actor is just technology wise, just so people understand, that actor is being tracked as well. So, while you hear the person that is a live person that is actually in front of you, that person is being shown to you through the VR headset in a different persona in some way.

Justin Denton Yes.

Chris Nichols Right?

Justin Denton Yeah.

Chris Nichols Which is great. What is very ... Like takes your breath away a little bit is that that person interacts with you and then will actually go over and like small things like touch your shoulder. And that is enough to bring that sense of reality to such a forward state that it's now amazing and scary at the same time.

Justin Denton It's phenomenal how quickly you can remap the brain.

Chris Nichols Oh my God.

Justin Denton I think it's an excellent example of that where it's like, "Well, how long does it take? And how much do we have to train people to know this moment is real?"

Chris Nichols Within three minutes you're like, "Oh ... "

Justin Denton Yeah. Because I don't need the headset to deliver actual reality to you. I need to, as a creator, deliver the reality of the moment to you. And when I do that, the rest of it doesn't necessarily matter that much. I'm not saying it's not important. It definitely is. Luckily, I happen to have Aaron Sims on my side there and his art direction was phenomenal. And so, it's got this whole other feel to it that is what I'm in love with it. But that ability to just grab someone and really suck them into this other world that they completely believe now because they're actually busy doing something in that world.

- Chris Nichols Yeah. It was an amazing experience. I loved it. Even in its extremely early stages I was like, "Oh my God, you've got something here. It's really, really cool."
- Justin Denton Thank you.
- Chris Nichols So, that change happened, right?
- Justin Denton Yeah, we did a ... It was supposed to be a four week run here in LA at this white space called the Great Company. They have a white space there that they rent out in Koreatown. And Carl who owns that space is just awesome. And so, we ended up selling out, and we did it for four more weeks. So, we ended up doing it for eight weeks. It was really funny too, because we were like, "Are people really going to come see this in January?"
- Justin Denton Not a problem. Yeah. And then we packed it up, and we moved it to Manhattan and we ran it for another eight weeks in Chelsea, which was also sold out. So, it did incredibly well for us. And that was, luckily I had amazing partners on that side. Madison Wells Media is just awesome, Ethan Stearns over there who actually was my producer on the Crimson Peak piece. That's how him and I met. And he was immediately my champion on getting this thing made because on paper it sounded pretty insane. And it was, but his support and Gigi Pritzker's support is why this thing got made. It was really cool.
- Chris Nichols That's amazing. So, that is a huge amount of learning that you've done between Crimson Peak and Chained.
- Justin Denton Yeah. And, I mean, there's so many other little things that have happened in the middle of all of that, but those are the big things, in total, during that time period I worked on over 20 other VR experiences.
- Chris Nichols Okay. Love that.
- Justin Denton Yeah.
- Chris Nichols So, what's your overall feeling today about that? And because obviously there's been a lot of news back and forth about like what VR means, and all those things. So, what are your feelings at this point?

Thoughts on VR today

- Justin Denton I think that people were very ambitious in those early days, and to be honest overly optimistic, myself included, it's easy to say that stuff in hindsight, right?
- Chris Nichols Yeah.
- Justin Denton That said, I think there have been tons of achievements that have happened over that time period. And I think that because it didn't satisfy the VC backing, and all of that stuff, it got soured. I'm not saying it's achieved everything it needs to, there are still some heavy limitations in the tech, and things like that. Still to this day, I don't really feel cool when I put a headset on. And that's a real barrier. So, there's a lot of things like that that I think are a challenge. I think the reality that it's probably going to be a more niche thing is setting in for a lot of people or has already set in. And I think the people that are still working in it are the people that love it. And that's a good thing.
- Chris Nichols That is a good thing. But, VR the perspective of what VR is has changed quite a bit. And I mean, I think obviously there's still amazing experiences that you can do in VR. I think Chained was one of them as a great example. I think obviously The Void is still doing really well, doing something similar to that. But the dream that everyone was going to have a VR headset in their house, that's not going to happen anytime soon. That I can think of.
- Justin Denton I don't think so. No. And there's, again, I don't think that even that's necessarily a bad thing. I think it's just a shift of the landscape. I think that it didn't necessarily promise or deliver on everything that it promised, in the early days. And-
- Chris Nichols What did it promise that it didn't deliver on?
- Justin Denton That's a good question. You just got me, made this big sweeping statement-
- Chris Nichols Because-
- Justin Denton You're like, "I want examples."
- Chris Nichols Well, the way that I'm thinking about is like, I remember like back in the early 2000s, or late 90s, there was a commercial about these guys, that were like complete dumb asses, not dumb asses, but there were guys that basically right out of college, and they were walking into a conference room with a bunch of stiff guys, business guys in suits. And they were

like, "Yeah, we just want some money." Or whatever it is. Like, "We want to do something." And they're like, "Yeah, well, so, okay, so what do you got?" And then the guy says, "Well, we got a website." "Oh, you got a website? Here's \$1 million." You know what I mean? Because that was the problem with the dotcom age, it's like a website was enough for people to just give you money. But there was no concept of what that was, what the internet was.

Chris Nichols And so, obviously the dotcom crash happened. What's interesting to me is dotcom is stronger than ever now. But the concept of what it was has changed. Right? So it's-

Justin Denton It's an interesting analog.

Chris Nichols Right. So, everyone uses the internet constantly. We use it more now than we ever have. But there's somehow there was a crash that happened because the perception of what people would do was the same problem. Right?

Justin Denton Yeah.

Chris Nichols The same thing is there's another analog I have, which is the mobile revolution when people were like, "I'm going to make an app and make \$1 billion in two weeks." Everyone thought they were going to do that. Turns out that-

Justin Denton It's a lot harder to do than they thought.

Chris Nichols There's only so many fart apps you can get on your iPhone, which is what basically everyone was trying to do is like pay three dollars, get a fart app, and I'm going to get, five million people to buy my fart app for three dollars, and I'm going to make a lot of money and retire. That ended. So the VR world I feel is going through the, "Well, what is it really for?"

Justin Denton Yeah, that's an excellent point. Because I think, it did promise at the time that it was going to transform things like online shopping was a big one that they were like, "Yeah, everybody's going to want to actually see it." Then the people who felt like that wasn't working really early on tried to do it with AR, and that really hasn't panned out that well either. I think that they thought it was going to completely transform gaming. And I think there's an argument that there are some gaming experiences out there that do that, but that doesn't mean that it's going to transform that industry. Like there can be transformative games. That's definitely true. But that once again, they make these giant sweeping statements often to get those VC dollars that are now angry at them, that cut bait, and go somewhere else. And I mean, we're seeing a perfect example of that now with the Magic Leap.

- Chris Nichols Yeah. So what's your feeling ... Okay, so just so people know when this podcast we recorded, obviously Magic Leap is going through a lot of scrutiny at this point, this moment, right? So, Magic Leap promised that the AR world is going to revolutionize everything, and then it turns out that they burned through a ton of cash, even though they were given billions of dollars. They're burning through it, and they don't have anything to prove anything at this moment. Right?
- Justin Denton Yeah.
- Chris Nichols I'm not going to give them a ... Basically, that's the news that's going on right now. So, nonetheless, both in VR and AR from my point of view, there's huge things going on right now that are not necessarily consumer level. People are using ... Like I went to a conference not long ago where people are talking about all the amazing AR work they're doing to maintain buildings. Right? So, like if you go to a hospital, hospital has a ton of mechanical stuff going on, as you can imagine, right?
- Justin Denton Yeah.
- Chris Nichols All of that mechanical stuff needs maintenance. The old way of doing things is to go to a database like pipe three, five, I got to find pipe three, five, whatever. Now, you just walk around with an AR headset or even just an iPad with AR kit on it. And now you can say, "Oh, there's the pipe, fix that."
- Justin Denton What you're talking about is tech is tool.
- Chris Nichols Tech is tool. There you go.
- Justin Denton And that's the way that I approached it for my immersive theater experiences as well. And I feel like that's why it worked well in those cases, you know? But once you start going tech as medium that gets a lot harder. I'm not saying it's going to fail all the time, but that's the difference. It's like the auto industry great example. They were using VR well before we were even discussing whether or not it was going to work for entertainment.
- Chris Nichols Yeah. Because they were using it to design cars.
- Justin Denton Yeah.
- Chris Nichols And they were doing it as a replacement for the clay model, which was way too long and expensive.

Justin Denton Yeah. It was cumbersome. You couldn't share it as well. You couldn't make adjustments to it the way you could with a digital model. So, there's things like that it's like a no brainer. You look at that architecture, I mean it's a no brainer.

Chris Nichols Architecture.

Justin Denton Yeah. It is now a staple there and will always be.

Chris Nichols Will always be.

Justin Denton So, that's the interesting thing when we talk about VR purely as entertainment or AR purely as entertainment, that's where you can really have the argument, you're having an argument as a medium, not as a tool.

Chris Nichols Yeah, there was a lot of people that was like, "Oh, well 3D is slowly dying as a medium in the Western world." I think it's still popular in Russia, and China, and places like that. But 3D is slowly dying. So the next level is VR. And so, people saw VR as an evolution of 3D film, which I don't think necessarily what's right.

Justin Denton No. Yeah. And I mean, that's also where we made the mistakes of trying to apply film logic to creating narrative based VR at first. And it just didn't work, you know?

Chris Nichols Yeah.

Justin Denton But we had to start somewhere, it's not the-

Chris Nichols We did.

Justin Denton Yeah. It's not that that was the wrong way to approach it. It was like, "Well, I'm trying to tell a story. I've got a camera. Like how do I do this?"

Chris Nichols Right. I mean, and we've actually discussed this specific thing in 2015 on our podcast, it's like we're the Lumiere brothers, right?

Justin Denton Yeah.

Chris Nichols So, the Lumiere brothers, no one taught them how to edit because that had not been invented. Right?

Justin Denton Right. It wasn't a thing. Yeah.

Chris Nichols It wasn't a thing. So, they basically approached it like theater, which is the natural evolution. Like, "Oh, film is just an evolution." Well, theater and film

CHAOSGROUP

are two different things, you tell stories very differently in both those things. And the way that the flow of logic or flow of the story is very different in those scenarios. Right?

Justin Denton Yeah.

Chris Nichols So, what's your feeling today about that medium?

Justin Denton I still love it. I still regularly do a lot of VR, and I'm actually still working on some, even though that's not my primary job at the moment. I'm actually ... Are you familiar with the new piece called the March, which is about Martin Luther King?

Chris Nichols No.

Justin Denton It just got announced, so I can actually talk about it and just a little bit. I can't say a whole lot yet. But I'm consulting over at DD.

Chris Nichols Oh, really?

Justin Denton Yeah. So, it's Ari Palitz who is one of my producers on a whole bunch of different VR things that I had done in the past. He's over there producing this piece that is recreating the, I have a dream speech in VR for a museum experience. It's going to go in the DuSable Museum in Chicago is its first location. And I can't say too much more than that, but they actually released a video that shows that they're doing motion capture, and they're recreating him, and everything else. And it's going to be incredibly powerful. So, that's an area where I think we're going to see it stay. Like that, I think it's a great example of something that can be these powerful, transformative experiences-

Chris Nichols History experiences, yeah.

Justin Denton ... It has nothing to do with the tech really. It's a delivery method, and it's a way we have yet to experience those things. It's one thing where, especially for something that's that old where even the photography quality isn't what we have today, and the archival footage isn't what we're used to seeing from today. But to have this piece that gets recreated that I feel like I can actually stand there, and see him deliver one of the most powerful speeches of all time is that's I think what this medium excels at. And the team that they have over there, I mean, they're obviously incredibly talented. And I can't wait to see what they do to finish-

Chris Nichols Can you tell me who's involved with it at DD? Because I know a lot of those guys.

- Justin Denton I'm not sure who they listed. So, I just found out that I could even say this. I don't want to say too many things yet.
- Chris Nichols Okay. Well, then let's not get into it. But we should definitely followup on this at some point and figure out, because that sounds amazing. And yeah, I think that is a powerful thing. I know that, for example, the guys over at ICT, they did a whole piece about the Holocaust survivors where you can ask them questions and they're represented as a hologram, right?
- Justin Denton Yeah.
- Chris Nichols And so, they had these old guys who survived the Holocaust, and they created holograms of them so that they could do that.
- Justin Denton Is Pinchas is one of them? The same guy that was from The Last Goodbye. I believe he's one of them.
- Chris Nichols I'm not sure.
- Justin Denton Yeah, I think he is. Because that was also with the Shoah Foundation. So, I think it's all wrapped up together.
- Chris Nichols Yeah, definitely with the Shoah Foundation. I know it's that, for sure.
- Justin Denton Yeah. And he's like one of the best. He's just really amazing. And he's very giving with his story. So, things like that I think are just amazing and I'm really happy to still be digging in there. And what's really great is because it is a museum experience, people will be there talking about it together. And so, I'm actually getting to take part in helping with what it's like for the guests to go through the entire thing. And that's something that I feel I have a really great grip on from my previous work. And this is one of those things where I'm just honored and proud to be a part of it. So, I plan on continuing to do those kinds of things in VR or if I get a chance to do anything else like I did with Chained, again, I will jump at the chance to do that. Yeah.
- Chris Nichols Yeah. I think that's really cool. So, there is obviously, since all of this has gone on, and the experiences you have, you know a lot about interactivity, you know a lot about getting things tracked on people's heads. You have a huge understanding obviously of the technology, but you do a really good job of interpreting that creatively in terms of how to make that experience happen for other people, as opposed to making it a tool as opposed to making it the primary focus on the experience. So, what are some of your thoughts about some of the other things that are big in the industry right now? Like virtual production and things of that nature?

- Justin Denton Yeah, I mean, it's exciting. You know, it's like virtual production has been something that we've all been talking about for a very long time and to get to see how far it's come. Especially, in the last three years, there's just some really, really amazing things happening. I was playing with a motion builder, and virtual cameras, and using the old, like super cheap OptiTrack system to track through while I had a live actor in my space in 2006, 2007. And at the time everybody was like, "Wow." And now that just looks like a little kid's toy compared to what they're doing over at Epic.
- Justin Denton And it's really the proliferation of the game engine is what's changing so much of our conversations as a whole, as an entire entertainment industry or just image creation industry. It is changing all of it. And because you have something like a game engine that allows you to get your hooks into it with your own coders to do anything you want it to do, I think has a lot to do with why virtual production is jumping as fast as it is right now. It's super exciting man.
- Chris Nichols I think, the problem I have is that people are using the term virtual production very liberally.
- Justin Denton Yeah. We've had this, just so everybody knows, Chris and I have had this conversation over drinks a couple of times, and I don't know if we've come to any consensus.
- Chris Nichols But the analogy I use is like saying, people are using the term virtual production as if you're saying, "Cruise control is autonomous driving." Just because your car can fix at a certain speed, and you don't have to have your foot on the accelerator, doesn't mean it's autonomous driving. There's a lot more gears needs to happen. So, in my mind, like complete, if you're going to do true virtual production, you've pretty much created ... The end goal is that you shoot it and you've got the shot. And it's all virtualized in some way. So, you captured a emotion you captured, environment you captured everything, and it's 100% photoreal, 100% real time, and then you're like, "Got the shot just like you would get in a camera." That is the ultimate goal to me in virtual production. Right?
- Justin Denton Yeah.
- Chris Nichols We are not quite there yet, but when I was starting to do that with Kevin on Construct, and we start to see real time ray tracing, and real cameras, and all that stuff, it's like, "Oh yeah." That became exciting to me. And I think what's happening just in the same way that you start to bring real actors back into Chained, and you start to interact with them, and they started, and they needed to learn a new skill of interacting directly with the audience as opposed to just interacting behind the wall. Right? Or behind the fourth wall. Right?

Justin Denton Yeah.

Chris Nichols So, now suddenly would true virtual production. One of the things that becomes very exciting with me is bringing the DP in and bringing that conversation in where suddenly ... Back in the day when I was doing shots on movies, I had to guess what the DP wanted for the shot and do my own version. And then the DP or the direction go like, "Yeah, I don't know if I like that." But if the DP did it onset decision made, we move forward.

Justin Denton Yeah. That reminds me a lot of my earlier, previous days where you're just, you're hope and prayer man. You're really like, "That looks like a shot he would make." "Yeah." Right? And then see it. And they're like, "No, that is not my shot."

Chris Nichols Right. So, you have to realize that virtual production is actually ... Because I've always had this problem with a lot of the people on the production side of things always saw CG as this black box that they had no control over. And they would go once a week to just look at a bunch of shot and say yes or no. And now they're like, "No, no, no, now I'm putting you in the driver's seat. And you say yes or no because you'll see it live." Right?

Justin Denton Yeah.

Chris Nichols And so live is pretty cool in that way.

Justin Denton Yeah. I mean I think it's one of those things where I don't think we thought it would get this far, this fast actually, at least personally. I thought we would still be struggling to get where we already are. And I do agree that we're not quite there. That's true. But I think we can see it now as opposed to just, it always felt like we were talking about it or you'd get that one part of it that worked. I think we talked about this before, like you get this like, "Oh, the camera actually tracks properly, and the lensing changes properly, and I can see it, and I can at least have my actor reacting to something that I can see now like." And that was really exciting, but then everything else didn't work.

Justin Denton You couldn't have the lighting adjust properly and affect both of them at the same time, the quality of the comp was so subpar that you knew that this was really just like a lookup for you, not the actual thing. And we're starting to see all of that get so much closer than it was before, down to the having IMUs on a camera, and the backgrounds actually shifting based on the movement of the camera and that's not even a big deal now.

Chris Nichols Yeah. I mean obviously there's been a lot of technology that's enabled that, both on the software side, and the hardware side that's enabled that. And what's interesting about it is that as opposed to actually making

things more complicated, it's actually made things simpler in a lot of ways.

Justin Denton Yeah. I mean, you look at a lot of different processes and visual effects that have been that way, where we had opticals, now that's something that a 14-year old learns how to do in a weekend watching YouTube, you know?

Chris Nichols Yeah.

Justin Denton And it's pretty wild. That's the beauty of this democratization of a lot of this hardware and software is that so many people are capable of playing with it that often we think of that just as bringing the bar down a little bit for that level. But then what does that mean? The people that are really at that high level are doing? They're doing this stuff. And so, now they've got that room, and that freedom to be playing at that new level. And that's exciting, man.

Chris Nichols Yeah, it's very exciting. I think, it's really great. And hopefully there's going to be a lot of enabling people to do things that are very creative in a lot of interesting ways. And it's not just going to be like you need \$25 million and a big studio to make that happen anymore. AR kit as an example, brings a virtual production at a way lower cost. So, that's an interesting idea as well. But we're actually already pretty close to an hour, and I want to make sure we have time to talk about some of the other projects you're doing. So, you've been directing stuff that's not necessarily VR stuff, that's gone on since then, right?

Working at Blur Studios

Justin Denton Yeah, actually, I'm a staff director over at Blur Studios now.

Chris Nichols Oh, nice.

Justin Denton Yeah. And that was an interesting shift for me. It wasn't something I sought out. Actually, Greg Talmage, their exec producer over there reached out to me, and I went and visited with them. The only person I ever knew there was Kevin Margo. And he's gone now. He's at Nvidia I believe. And so, I went in, met with them, and they actually really liked my writing.

Chris Nichols Oh, nice.

CHAOSGROUP

- Justin Denton And so, which was great because it's something I've never really been recognized for. But they had looked at all the different things that I had been directing, and they were like, "Well, have you been writing these?" So I was like, "Yeah, I have." So, I sent them a bunch of my scripts, things like that. And so, I started writing some tests for them, and one of them immediately got picked up to direct, which was the New PUBG Global Championships trailer, and which just came out in October. So, that was my first piece for them actually.
- Justin Denton And so, I'm basically making full CG cinematics as well, which is really full circle for me. It's like I started off doing previz for film and so it was full CG, and that's where I learned how to tell stories. And now I'm getting to take all of this amalgamation of everything and going, and directing mocap actors, and all of that stuff, writing my stories. And then working with just immense talent over at Blur. It's both exciting and terrifying every day. Yeah.
- Chris Nichols I bet. I've actually had last week or the week before Tim Miller was on the podcast.
- Justin Denton Oh, cool.
- Chris Nichols Yeah. So, that would be the third time that I've had Tim on, he's so generous with his time. And he's great at being very upfront about the technology. I think that what Blur is doing is incredible. And they've always been very good at finding great talent and directors, and making that on a much more grassroots level than other places, I think. They sort of look at it and it's like talent as opposed to what can you bring for me, you know?
- Justin Denton Yeah. And I mean, I honestly never would have saw myself at Blur.
- Chris Nichols Right, interesting.
- Justin Denton It wasn't as something that ... I mean, mind you, I'm thrilled to be there, but it's one of those things where I just felt like, "Man, they must grow their talent from the inside or they can hire people that have done a whole lot more traditional work as directors, and writers than I had." But instead it was a very intense process for interviews and all of that. And, me doing some writing and things like that. And they make sure that you're right for them, you know? And I love it. And it's like getting people like Tim to comment on your work, and to learn from him, and all of those things. It's very much a family.
- Justin Denton And that's one of the things that I love because I think there's a lot of places that they'll say they have a company culture or whatever, and then

CHAOSGROUP

you get there and you're like, "Hmm, okay. Yeah, maybe, sort of." That place has a culture.

Chris Nichols Yeah. Definitely.

Justin Denton Yeah. And it's all about quality. 100% of the time.

Chris Nichols Is it 20 year, 25 years, that they're-

Justin Denton 25.

Chris Nichols 25 year anniversary there, right.

Justin Denton Yeah.

Chris Nichols Well, that's pretty cool.

Justin Denton Yeah. And I'm on my second project for them now. I can't say what it is. But that comes out in January. I'm really excited about it. It's like the polar opposite of what I did on the PUBG project. PUBG project was just really big, bombastic music video, multiple fight scenes, just gunfire everywhere. Like checks the box for the little boy in me, like through and through. And I had an absolute blast on it. And now I'm doing this like much moodier piece, and it's a lot of fun. And I'm trying to find ways to ... And we've had some really good conversations about this internally ... To take some of my learnings from what I've done in VR, and how can I apply those as a storyteller back into traditional medium?

Chris Nichols Interesting.

Justin Denton And one of the first things is that I got obsessed with making the craziest transitions I could think of in VR because VR is a great place for transitions, and that's something that has fallen off a little bit.

Chris Nichols Explain that a little bit.

Justin Denton So, in VR often, as opposed to cutting shot to shot, you stay in a scene, and then you want to take someone from that location to another location. And I would try to come up with really, really wild ways of doing it, like on the Art of Patron, we did a thing where you traveled through a key hole to get into the next environment.

Chris Nichols Yes. So, traveling through small space.

Justin Denton Yeah, Ghost in the Shell, we did this thing where you jumped off the building with her and then swung around and you traveled through the glass, and as you traveled to the glass, it turned into another location.

CHAOSGROUP

Stuff that like, just really, really encompassing all around you. And that's something that I think shy of maybe the show Sherlock is not really that popular in a lot of film making today. And knowing that I was making a music video for this PUBG thing, I was like, "Well, music videos you can get away with doing whatever you want." And so, we did some really wild transitions, and because we're in full CG, we can do really fun things with like Z depth fall off, and having that like eat the frame out to reveal the other scene, and stuff like that. So, we had a lot of fun doing that, and I think I wouldn't have thought to do those kinds of transitions had I not been doing VR as well.

Chris Nichols Right. Yeah. That's interesting. Yeah, that's great. I mean, I always love an interesting reveal or a take or something that's different. And obviously you're right in VR you have to be very creative about it because you can't just like edit, edit, edit. There's no jump cuts. Right?

Justin Denton The edit, edit, edit comment's really interesting because I have found that my shot length is much longer than it used to be. I came from that era, especially, when I was doing a lot of VR for people like Peter Berg, and Ridley Scott where it was just like, what's the shortest fucking shot I can get? D. J. Caruso had me do a six frame shot of a missile, you know? And I was like, "All right, I don't even see it man." He's like, "It'll be great." And it was, it was cool. But I got stuck in that world for a while, especially, in the late 2000s, you know? And I really had to learn to slow it down. And I have developed that into my traditional just naturally. It just happens. I like to let shots breathe, and let it close up, become my wide establisher.

Chris Nichols Yeah. That's awesome. That's awesome. Well, Justin, thank you so much for the update. I think that's a lot that we've learned between then and now. And I think the audience is going to be really curious about it. Love to see this new piece that you're doing at Blur. Do you know when it's coming out? Because maybe we can time the podcast to be-

Justin Denton ... Our final delivery for it is January 10th. So, I mean, it's not far from now.

Chris Nichols Oh, so this will definitely come out after that.

Justin Denton Yeah, it'll come ... Oh, when will this come out?

Chris Nichols Probably after that.

Justin Denton Okay. Yeah. I mean, I'm guessing it'll come out early February.

Chris Nichols Okay.

Justin Denton So, maybe we could time it.

CHAOSGROUP

Chris Nichols: So, maybe we could time this to work with that. Yeah, that'd be great.

Justin Denton: Do you want me to say what it is?

Chris Nichols: No. Just in case it doesn't.

Justin Denton: Okay.

Chris Nichols: But what I will do is in the intro, I'll say, "Okay, we can talk about it." Or whatever. But yeah, I just want to make sure we're safe on it as far as recording. But yeah, that'd be exciting. That'd be exciting to have that happen in February. So, it's not super ... Is it Superbowl related or not?

Justin Denton: No, it's not Superbowl related. And then the Chained VR home version is on Steam, the preview video is already out for it, so we can link to that. But it should be out before this because I believe it comes out in the next week or two.

Chris Nichols: Awesome. And do you have any social media that people can follow you on?

Justin Denton: No, I have completely expelled myself from social media.

Chris Nichols: Good man.

Justin Denton: I miss it sometimes, but man, my clarity of life has improved tenfold.

Chris Nichols: I have, yeah. I have more anxiety. I have to be on social media a little bit more these days, but I can't deal with the anxiety of it right now. So, that's good.

Justin Denton: Fair enough.

Chris Nichols: By 2020, I think I'm going to try to use social media in a much more focused way. Anything that to become a problem, I'm going to start expunging it from my life a little more.

Justin Denton: Nice. I do have a website. I keep it relatively up to date. That's the one thing that I do.

Chris Nichols: Awesome, yeah. Okay, perfect. And that's justinden-

Justin Denton: We can put a link to that. Yeah, it's justjustindenton.com, but we'll put a link to it.

Chris Nichols: Perfect. Well, thank you-

CHAOSGROUP

Justin Denton Oh, man, thanks for having me back.

Chris Nichols All right, thank you.

Justin Denton Cheers.