Episode 35 | Alex Carey Pt. 2

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Graeme Wyman 0:41

Welcome back to Discover Stories on Re-Imagine Radio. Again, I'm your host, Graeme Wyman with the Disability Foundation. Again, if this is your first time on Re-Imagine Radio, please like the video and subscribe to the channel, as it does help with our reach. So we are joined again by Alex Carey. Alex, thanks again for joining us today.

Alex Carey 1:04

Hi, thanks.

Graeme Wyman 1:06

And we are also again joined by Bryden Veinot, the VAMS Program Coordinator. Welcome.

Bryden Veinot 1:13

Hey. Thanks, great to be back.

Graeme Wyman 1:15

Yeah. So just continuing on, we were talking kind of the different accessibility levels, and specifically what Naughty Dog was doing and the advancements they made with The Last of Us 2. But now we'll kind of go more into kind of the controllers. And Alex, Microsoft has put out an accessible controller through Xbox. Have you personally used this controller? And if you have, maybe you could tell us a little bit about the mechanics and how it works.

Alex Carey 1:48

Yeah, for sure. Yeah, so Xbox put a device called the Xbox Adaptive Controller, which is a very cool piece of technology, and I'll see if I can explain how it works nicely. So what it is,

is it's a little rectangle with a bunch of 3.5 millimeter jacks in the back. So the same type of sort of jacks you have, like for a pair of headphones, and each one of those jacks is connected to what you would think of as like a button on like a standard controller, so A and B and X and Y and all the triggers and all that stuff. So every single one of those buttons has a corresponding 3.5 millimeter jack. And then what you can do is take adaptive switches or buttons or joysticks or literally anything you can think of, and plug them into those and then they can act as a input device for that corresponding button within a game. So if you have trouble, say, pulling a trigger on the back of the controller, you could use an expected adaptive controller plugging something into the right trigger slot, and then be able to have a more accessible, more sort of tailor made solution to be able to interact with that. So that's like the really broad version of it.

Graeme Wyman 3:19

And, I guess, how long has this been on the market? The reason I ask is, I've seen that on, if you know, but we've, I've seen it and Bryden you might have as well, in the Assisted Technology Lab at GF Strong Rehabilitation Centre. And it's always intrigued me. And I had no idea that this had even come out until seeing it up at GF Strong.

Alex Carey 3:40

Yeah. So that's a great question for my friend, Mr. Google. I'm not sure if you've met him. [Laughs] So Mr. Google says, September 4, 2018. So it's been out for a little while. I do own one. I'm still at a point with my disability where I'm able to use the standard controller fairly comfortably. But, you know, it's part of my disability that I have something called spinal muscular atrophy type two is, it's a degenerative condition. So every year I get a little bit more tired and a little bit weaker. So it's, I guess, comforting to me to know that there are tech solutions already out there that I will still be able to game even when my disability progresses, that this thing that I love and care for so much is still going to be something that I can participate in. That gives me the warm fuzzies.

Graeme Wyman 4:42

No, and it'll be interesting. I'm gonna go on a tangential this time. But, and this question isn't in here, but how do you think VR will help revolutionize accessible gaming?

Alex Carey 4:54

Yeah, VR is really interesting. I am a bad game developer, where I have still yet to be in a VR headset. I'm a little worried, because one of the weakest muscles on my body is my neck, so I'm kind of worried putting a big, heavy thing on the face I'm just going to sort of fall over. So we'll see. It is definitely on my to do list to get in and see if it is an accessible experience.

I'm kind of thinking it won't be, within my lived experience and my disability. I'm not sure if that's the thing I'll be able to do, but I think the in general, it'll be, you know, revolutionary. It'll be a huge step forward for the industry and being able to communicate experiences to people, right? One of the things I know that's, I'm gonna, I don't know enough about this to speak well on it, so I'm gonna do it anyway. I know there can be problems when designing VR, but moving around in spaces or like, you know, if you're in a VR thing, like, your height changes, right? Like, if you're standing or sitting, or, like, moving around, like, you can get, like, motion sick if you try and, like, walk around or whatever. Like, there's all these design problems you're trying to accommodate for. So I think the thing that could be really interesting, again, I don't know anything, what I'm talking about, gonna say, anyway, is if you had the protagonist that you're playing as be in a wheelchair, I think would be a really interesting way to do VR, because you're sitting and you can roll around, sort of like tank controls, while still being in VR, right? So I think that's something I'm sure someone has already, you know, have a very cool prototype to this is for this kind of idea already, but I think there could be a interesting area to explore, to work around things like motion sickness and like, you know, if I walk around in the game, eventually I run out of space, so.

Bryden Veinot 6:58

True. That's interesting, though, yeah, but it does all go back to the creating experiences that you couldn't have in your regular day to day, right?

Alex Carey 7:06

Yeah, absolutely.

Bryden Veinot 7:08

Before I ask this next one, I'm just curious a tiny bit more about the adaptive controller from Microsoft. So like you mentioned, say you can't pull the like, the right trigger that's right on the back, and you can map a new button to it. Could it be, like, as easy as just, like another, like a button, or?

Alex Carey 7:28

Yeah, so, okay, yeah, it can be. So there's, there's two things. So there's a thing called remapping right where you can switch what buttons on the controller do what? So that is a solution that sometimes can work without having to have a hardware solution worked into that, right? So let's say the game says right trigger does, I don't know, shoot, but you can't push right trigger, being able to rebind that to a face button or to the D pad might be a solution to that without having to get into any hardware related stuff. But sometimes controllers can be using all of the buttons, right? So if you move something to a button, you

have to move something else somewhere. So every everything needs a home to be able to play the game, right? So that's where something where the Xbox adaptive controller can be helpful. Or people with more severe or limiting disabilities, where maybe they have very low motor function, or they may be someone like an amputee, where having having a much more flexible option, the hardware is a better solution then. So there's sort of, like, two things. I realized I didn't answer your question super well there.

Bryden Veinot 8:53

That's okay. Simply, it was just, "Can you use a face button?"

Alex Carey 8:57

Yes.

Bryden Veinot 8:58

Yeah, like with the adaptive controller in placement of the trigger.

Alex Carey 9:02

Yeah, so you can do that. But I think the easier solution to that exact problem is remapping, rather than the hardware thing. So you can just do that in a standard controller—the Xbox and PlayStation even the Switch now, thank God they put this on switch, allows you to move what buttons do what. So an example of this, one you just talked about, is like Breath of the Wild. So the Breath of the Wild had a thing where pushing in the right thumb stick had you, what was it? Go into stealth, right? So you like, crouch down and stealth. I can't do that. So I ran into situations where you need to be able to stealth to get horses, because you have to sneak up on them, and I can't get the horses. So I just wasn't doing I was just running around, climbing everywhere. And then I realized pushing down on the D pad calls your horse. But I can't call a horse because I don't have one. So it'd be nice if I could just swap those things, because I don't need to call a horse if I don't have a horse. So I literally just want to push in the right thumb stick to be down on the D pad. I just want to swap those things. That's it. That's all I want to do. So they let you do that., yay. But then the problem that runs into is it swaps all of the inputs for those two things. So if you do something like the photography mode and zoom in, which is forward on the D pad, you can never zoom back out. So all of your photos are up people's noses because you can't on zoom right, which is really annoying.

Bryden Veinot 10:54

Fair, interesting. Again, I'm sure there'll be a solution to that in the future.

Alex Carey 11:00

[Laughs] So the solution to that? So what the solution that they have right now is what's called system level remapping, where all the inputs are swapped, right? What you want is game level remapping, where the game itself just says, "Okay, I want stealth to be this button, and then every other instance of another game stays the same way," right? And what currently, so the game doesn't have remapping, but the switch does, the console does, so it's sort of like a band aid fix to the to the thing. So hopefully Breath of the Wild 2 has system level remapping, because it will make my life easier.

Bryden Veinot 11:40

So, okay, so kind of next question here, kind of ties in as well. But pretend I'm some new game developer, what would be, and I'm coming to you as a consultant, right? Maybe I'm coming to PlayAbility, and what are like the top two or three accessibility standards, things that you would suggest to be in a game?

Alex Carey 12:05

Yeah, so, readable subtitles—nice, big font, black background, adjustable, transparency, that kind of stuff. Rebindable inputs is another one. And then, like, if they have dialog subtitles, in general, I think that's almost been standardized at this point. I can't think of a game that doesn't have that. But, you know, sometimes it does happen. So those are sort of like the big three. It's like readable subtitles, that they exist at all, and then rebindable inputs, and then it gets, you know, there's lots of secondary things, but those are sort of, I think there's a couple others, but my brain is slowly being fried by my increasingly toasty room here, so. [Laughs]

Bryden Veinot 12:58

Yeah, the readable subtitles, that's a big one, because I always play with them on just because, I mean, there's so much stuff happening in a game that sometimes you can't even hear the dialog. Because, like you said, maybe there's a big explosion happening, right, and you just can't hear what they're saying. Or, like, it's too low of a frequency on one of the male voices, so you can't really hear it in your living room. But one thing I've noticed is, like, hardly any games have the ability to scale up the size of your subtitles.

Alex Carey 13:28

Yes, yeah, for sure that that is a thing, also scalable UI as well, right where, like, if you have a mini map or something and you have low vision, or some type of blindness, or that type of, you know, vision barriers that you may face, having the ability to make things bigger is really helpful, yeah. You brought up a thing that I'm just going to go off on a tangent on. So there's this idea within inclusive design of temporary and situational disabilities. So it's the

idea basically that, you know, you don't have to be what you think of as like classically disabled to benefit from inclusive design, where, you know, if you have a noisy room, it's nice to still hear what people were saying in dialogue. So you turn on subtitles, which would also help somebody who's deaf, right, you know, or you're in a noisy train, or you're playing a game on your phone, and you want, there are options that exist for you, "Oh, that helps a bunch of classically disabled people, but that also helps me in this situation," right? Like, say, you want to game with one hand, right? And you're holding your coffee right, maybe you turn on the one handed mode and play your game on your phone or something, right there. There are a number of examples like that. I can't think of good ones right now, but just the idea of situational and temporary disabilities that also like play into your inclusive design practice is helping more than just what you think of as classically disabled people.

Graeme Wyman 15:08

Well, it's certainly funny how with the advancements of accessible gaming, it feeds into so many different areas of just gaming in general, whether you have a disability or not.

Alex Carey 15:18

Yeah, absolutely. I think inclusive design and accessibility, you know, helps everyone. Inclusive design is the thing that you know. If you, if you make big, readable subtitles, if you, you know someone's watching TV on their iPad or something, and has the volume way up and doesn't have headphones because they're an inconsiderate jerk, then you can still, you know, yeah, watch or be able to follow a story they plan like it's it's not just for it's not just for the disabled. I need a shirt that says that, yeah,

Graeme Wyman 15:54

that'd be a good one. Now this is just one thing. Maybe you you might give some insight. But do you have any interesting or funny facts about, you know, things you may have learned while designing games or just in general, around accessible gaming?

Alex Carey 16:11

Yeah, so I'll tell the story that happened, and I don't remember exactly which version of the game it was, but, so, one of the Dooms, I don't remember which one, put out a colorblind option for the game, which turned out just to be a filter that visualized color blindness. So it just turned the screen the same way someone who's colorblind would see it, rather than actually making anything colorblind accessible.

Bryden Veinot 16:44

Oh, no.

Alex Carey 16:46

That's the one where I sort of go, "This would have been very easily fixed if you, you know, checked in with someone who had color blindness and had a barrier to this." So that's sort of the sad head on desk story that I like to point to, because I think that's a major component for making things accessible is working in partnership with people with lived experience in barriers that they face, right? Like having having people who are visually impaired, who are hard of hearing and deaf, right, who face strength in disability barriers, having them help you plan or help you test or help you validate the work you've already done, to make sure the things that you're making actually are benefiting people with disabilities, right? Like, I think that's a key step there. So that's something I know at PlayAbility, we're hoping to to work toward and pushing the industries is having the people with the disabilities participate in those systems. There's a saying, and I believe that disabled advocacy circles of "Nothing about us without us," which is something I think really rings true.

Bryden Veinot 18:11

Yeah, nice. So, yeah, you kind of mentioned, like the VR not being quite where it needs to be for accessibility. And then same with, like, the rebinding system to game level. How do you see any other ways accessible gaming evolving in the future, and maybe, what do you hope to see?

Alex Carey 18:33

Yeah, I think what's really interesting is, I just hope to serve as, again, as someone who does some game development, sort of as my day job. I hope it's easier for developers to implement so it's less work, and doesn't have to be a whole, you know, thing you have to do. So some of the more often used engines are Unity and the Unreal Engine. There's lots of them, and some are proprietary and all this stuff, but having those engines have accessibility out of the box, so rather than every person who's making a game have to make reboundable inputs, have the game you know, have a pre-existing framework for you to start with. You know, have that front and centre within the engine itself, and have developers have the tools to do this easier, which I'm hoping is starting to happen, but it's one of those things that, yeah, hopefully we'll get there, and the tools will be easier. Because I think if the people that make software are real lazy, if something's easy for them, they'll do that. So if it's easier to put the accessibility in than to take it out, they're going to do it, just makes it easier to do it than not do it. And then they'll be fine. I'm not, don't come at me. you all have worked very hard, but you know what I'm talking about. [Laughs]

Bryden Veinot 20:02

Yeah, correct me if I'm wrong. But like, if Unity or Unreal Engine, if they did come out of the box with the rebindable options, wouldn't that actually just already, like, take less time to make games now, like, however long it takes to do that kind of thing on the front end of making the game. But like, yeah, it seems like it would just be a lot faster, right?

Alex Carey 20:27

Yeah, for sure, especially, each game has its own, you know, design challenges to overcome. So, you know, there's always some amount of specificity within a game that needs to be made. But like, yeah, having a template to start from, or even, like, so there's like, I know in Unreal, there's like, project files that you start with when you open it up. And there's like, you know, a first person controller, so it's like a rigged up model with a dude with a gun that you can walk around and shoot boxes, right? So what I would love is, within that type of sample project, there's literally a UI session that's like, and now, if you're wanting to move rather with W, and you can change it to Q, or whatever. It just does it so it's there, and the assumption is that it should be there, rather than a thing we have to convince people of which I think it is getting better. I know more games than not are are doing that, and Triple A is putting a lot of work in because that takes a long, you know, the more team and production, the bigger the boat, you know, the longer it takes to turn. But I think they're getting there, yeah.

Bryden Veinot 21:54

I do have, I got one more. Actually, this is kind of more personal, but what are you playing right now? And like, what's your favorite game right now?

Alex Carey 22:03

Yeah, so I picked up Mario Strikers.

Bryden Veinot 22:07

Oh my gosh, yeah. [Laughs]

Alex Carey 22:09

So I've been really enjoying that. I never told my, I don't know if I ever told my origin. So I am a sports nerd. I love me some sports video games. I have, oh, I don't know if I still have it, but I had a copy of Rugby 06, which I was, like, I didn't know that existed when I had it. So I really enjoy sports games. And I think Mario Strikers was, like, it's Arcadian fun, but it's just really good. Um, so that's, I've been playing a lot of that, I believe that's made by Next

Level, which I think is based in Vancouver. So that's pretty cool, locally made to our neck of the woods. Yeah.

Bryden Veinot 22:56

Nice and any all time favourite game?

Alex Carey 23:00

Oh, God. Yeah, I'll pick a pretentious one that people may not have heard of. Thomas Was Alone, which is a platformer about being a little red square that made me cry.

Bryden Veinot 23:19

Oh, wow. Okay.

Graeme Wyman 23:21

I'll have to look into that one.

Alex Carey 23:22

Yeah, it's a beautiful little game.

Graeme Wyman 23:25

Nice. All right. Well, Alex, I just wanted to thank you so much for being with us here today. And no, as always, very interesting what you had to say about gaming. And looking forward to seeing what advancements are also going to be made in the future.

Alex Carey 23:43

Yeah, thanks so much. Is it cool if I plug my stuff?

Graeme Wyman 23:46

Yeah.

Bryden Veinot 23:47

Please.

Alex Carey 23:49

Heck yeah. So yeah. If my rattling on about weird game stuff has got you interested in games, feel free to check out Sacre Bleu. You can wishlist it on Steam as S, A, C, R, E, space, B, L, E, U, hopefully, because my French is bad. And if you happen to be a game

developer that's looking for accessibility feedback on a project you may be looking at, you can check out PlayAbility at play-ability.net.

Graeme Wyman 24:23

Alrighty, well, thanks again. And Bryden, thank you for your time as well. And yeah, again to our listeners. If you have not yet, please subscribe to the channel. Alrighty. You two take care and have a great rest of your day.

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