

## **GAME MAKERS PODCAST – ACCESSIBILITY AND VIDEO GAMES TRANSCRIPT:**

### **Charles-Adam:**

You're listening to the Game Makers podcast. I'm Charles-Adam Foster-Simard from Ubisoft.

Since Game Makers launched, we've been taking you behind the scenes to see how Ubisoft teams around the world make our games, focusing specifically on different audio topics like music, sound effects and Foley.

For this episode, we'll be exploring a different aspect of game design: Accessibility.

Video games are for everyone, but many players face steep barriers to playing certain games.

Sometimes the controls aren't adapted to their motor skills or they can't differentiate between enemy and friendly colors. A deaf person might not be able to hear auditory cues while a player with visual disabilities might have difficulty seeing certain warnings if they're not bold or high contrast enough, or if they aren't accompanied by clear sounds or rumbles.

Some video games cram a lot of information on the screen at the same time, making it overwhelming for players with cognitive disabilities to see everything that's going on.

From a lack of subtitles to overly complicated controls, there are countless examples of ways in which video games inadvertently set up barriers, but also countless ways to refine and improve those features to ensure a positive gaming experience for everyone.

To learn more about what video game developers can do to make their games more accessible, I spoke with Cherry Thompson, who recently joined Ubisoft Montreal as an Accessibility project manager. Cherry shared some great insights into this fascinating topic. I hope you enjoy listening to our conversation.

### **INTERVIEW**

#### **Charles-Adam:**

Hi Cherry!

#### **Cherry:**

Sorry, that was when I took the time to take a drink of water, so sorry.

#### **Charles-Adam:**

And where are you in the world?

#### **Cherry:**

I'm actually in Vancouver. I was supposed to move to Montreal in March, but we know what happened in March. So still in Vancouver.

#### **Charles-Adam:**

And also welcome you to Ubisoft 'cause you joined very recently I believe

**Cherry:**

Yeah I was supposed to start at the very beginning of April, and it had to be delayed due to work from home, but we managed to get it going at the end.

**Charles-Adam:**

So can you tell us, Cherry, how did you get started in the video game industry?

**Cherry:**

Yeah, so I had a really unusual path into games. Uhm, I really like talking about atypical roads in because I think a lot of people get the idea that you have to go to school for game development in order to be a game developer. But I know a lot of people that did take a different road in for me. I had a previous career that was about 12 years in spanning film, production, photography and fine arts. Now the kind of two simultaneous careers and I loved that career. It was kind of, it was my whole identity. I really enjoyed it, but I've always been a gamer as well. I've always played games ever since I can remember, my dad worked in software development, so he got me into games really, really young. And I started to find games difficult to play. Then as I always had disabilities but they were undiagnosed at the time. And it was kind of the first, actually. The first warning signs that I did have disabilities was my difficulty playing games. Then at 31 I had a very sudden unexpected stroke. It was the first of a couple, and shortly after that stroke during my rehabilitation, I found it really difficult to play games because it affected my vestibular system and memory and cognitive function and it was just really difficult to play the kind of games that I loved which was largely action adventure games. And so I had to find new games to play in new ways of playing and luckily I was already kind of peripherally involved with the games accessibility scene because I had already started to struggle with my hands and things like that in the years previous, so I knew of games accessibility. I knew what it was, I knew how to mod my own controller and things like that, but suddenly when I couldn't play at all, it became really clear to me how so many games were not being made with people like me in mind. And as I had to leave my previous career, it's a very physical job in the film industry and even fine art is just very, very physical to make art. So I couldn't do that anymore. And during my rehabilitation as my disabilities progressed, I started to get really into Accessibility. I learned as much as I could about it. Every guideline out there I went to. I started going to conferences and speaking at conferences, and on my experience. And on other players experience and what it means for game development, I became a subject matter expert. This is a really long story, I'm sorry. But I became a subject matter expert where I shared my experiences with developers and explained the barriers that I faced playing games which actually gave me a really good insight into what was needed, what needed to happen within games development. So another quick side story I had lots of friends that worked in games. I live in Vancouver so the games industry is pretty big here. I had people that worked in both film and games that were friends of mine, sound designers, production and all sorts of roles. I had a friend who is a programmer and they taught me a lot too. And then I started to progress from subject matter expert as my expertise involved and as I learned more of the broader goal of accessibility and the technical aspects of Accessibility and then I became a specialist where I learned game design on the job and from literature and a lot of really generous people in games who have mentored me and taught me kind of everything I know. But uhm, yeah. So now my job

involves... while my official title is project manager, what I actually do is I work as kind of a designer and I collaborate on the solutions with other developers across many different teams and so my my role really very much spans the design spectrum of game development with a little bit of production to help guide things.

**Charles-Adam:**

So you didn't study video game production or game design? Was it tough to like, switch around from the previous career that you had into that? Like what was some of the most challenging things about that? Or was it kind of a natural progression for you?

**Cherry:**

Yeah, so it's very natural for me just because I'm a really good self-learner. Um, my path into the into film and fine art was all self-taught as well. I actually haven't been to University and I'm 38 now so. And I think that I unfortunately wasn't in a position to go to University. I came from backgrounds that when we couldn't afford for me to go to University and so for me, I've always kind of really enjoyed self-learning and it's something that comes natural to me because like something I had to do out of necessity in order to have any kind of career and that really applied really well to games development because I think school is very valuable, if you have the opportunity to go to school and you have an age where that is valuable to you, definitely do it. I don't want to discourage people not going to school if it's there. Definitely take advantage 'cause it will give. It will teach you things that I don't know. But at the same time, if you are dedicated enough, you can learn yourself. It just takes a lot of effort and I think that's the thing is like self directed learning. The difficult part of it is being dedicated enough to want to really take in as much knowledge on your own time as you can. And also knowing how to learn from other people without kind of taken advantage of them. Kind of when they offer mentorship or when they guide you through things and I think I thrive off it. Like I really love learning on the job and I love learning as I go, and I feel like I adapt really well, which is probably part of being a disabled person. Honestly, we our entire life is adaptation. That's how we can exist in the world. So right always finding always finding ways to...

**Charles-Adam:**

Like workarounds?

**Cherry:**

Right, when things are adapted, yeah, or just even like I had to teach myself how to use my wheel chair 'cause I don't have the right diagnosis to mean I have access to that kind of rehabilitation. 'cause of the way society is set up. Mostly people that get access to wheelchair lessons or rehab facilities have spinal cord injuries in our sudden disabilities, but for me, having a progressive rare genetic disorder means that I didn't have access to that and so I had to learn from YouTube and find friends on the Internet that could teach me how to do wheelies so I could get up steps and things like this. So yeah, we just built into into society that we have to kind of learn to adapt.

**Charles-Adam:**

So you mentioned your Accessibility project manager. What does that look like? Like, what is it that you do in the day today? What are the kinds of responsibilities and tasks that you have.

**Cherry:**

Oh my gosh, I could take an hour just to talk about this. I do a lot, so I do a lot of different things. My job involves so many different ways of working on Accessibility and it really depends on where production is in the timeline of the production. So really early on we start with meeting with creative, working on like kind of the core concepts of the design to make sure when I unintentionally introducing any barriers in core design concepts, making sure it's apart like a core pillar of the creative direction. Uhm, but then later on it becomes more analysis and feedback. So it really depends where I mean, kind of. As we start getting into kind of pre Alpha will start looking at prototypes and like I'll do a review on animation for motion sickness and things like this and make sure that anything that can be done is done. As long as like it works with a creative brief 'cause I think that's important to understand is accessibility isn't something that we force or that we want to change the creative direction just because of Accessibility. We want to work in harmony with that and we want to achieve the goals of creative. At the same time as making sure we don't accidentally exclude people because making video games is about creating barriers, that's what makes it video game video game. It makes it challenging. It makes it fun. It makes it interactive. It's just about making sure we understand our player experiences. So that's where my role is. I don't know if I'm explaining this well, 'cause it's very complex, but. Yeah, later on in development I think it gets most interesting for some people is that I can work with prototypes or builds and I work in harmony with design team so I'll take a look at their build or their prototype and I'll pick up issues that they can't necessarily see themselves 'cause they don't have that training or that background yet and that actually builds their experience for the future. They'll be able to see that themselves in the future, so I'll spot issues with color blindness or motion sickness or motor disabilities, like if there's an issue in the core systems design of the controls, or even the progression systems. And so then what happens after that is once I've delivered a report or something like that on on the features that are causing or may cause barriers. Then I'll sit down with designers and we'll collaborate on figuring out solutions, I'll guide them through brainstorming and I'll give them feedback on the working progress as they're going. They do a lot of documentation which is really important as a game designer.

**Charles-Adam:**

Sounds fascinating!

**Cherry:**

Yeah, I mean, that's the stuff that people hate like they hate documentation, but for me it's so important and valuable that even though I really don't like doing it like doing it is definitely a chore. The payoff is so big that it's the documentation is a big part of it.

**Charles-Adam:**

Why is the payoff so big? Is it because you're kind of helping like teams teams in the future or other teams that you're not necessarily Working with at the moment?

**Cherry:**

Yeah, so it's about the future, but it's also about the current. We need something that the developers can designers can read and have as a reference. So for programmers for example, they have all sorts of books on their shelves and they have the Internet when it like. It's this myth that programmers know

how to just code and it just comes out of their brain, which does happen, but there's often times where they'll get to a point be like Oh my God, can't quite remember how to do this one thing so they look up and that's like totally a natural part of programming. And that's the same for design like I think. Uh, it's kind of. It's not the best design practice to think that you've got it and you don't ever need to reference guides or benchmarks, and I think. But at Ubisoft, especially so many of our designers really thrive when they have those benchmarks there, and they can really just get on and do their job and then come back and check in. So that's like a big part of the documentation.

**Charles-Adam:**

So it's interesting because you. So I mean a Ubisoft. Of course there's several different studios and we're always working on a bunch of different games at the same time. With that as you mentioned, are in different stages like you mentioned, pre Alpha, which is quite early on in the development and then later on you'll have. You'll have more of a prototype or or more of a version of the game, like a build that you can actually test in, play on, and most people work on one game or one brand at a time, right? But you're actually working on several projects at the same time. 'cause you're more part of the coming of transversal team.

**Cherry:**

Yeah, that's right.

**Charles-Adam:**

Is it hard to always be switching around between different projects like you know that are also in different stages of development? Like is it hard to kind of turn your brain around and be working on games that are potentially completely different.

**Cherry:**

It can be difficult, but so I was a freelancer before I worked at Ubisoft, and so I'm kind of used to it anyway because that's why I was already doing. But it's definitely wouldn't say it's easy. It's definitely an acquired skill, and it's part of the job. That kind of you need this skill, but it's one of those skills that you can build as you go, and you kind of get used to in a way, but it does get really tiring. I will be honestly gets really exhausting to be kind of hyper focused on like yesterday, for example, I was deep and analysis like full analysis is the most exhausting thing because you're constantly just picking apart everything and you have to access every part of your skill set and memory and all of your knowledge as you go, and you're constantly flipping back and forth between settings and gameplay and kind of picking apart every part of the UI, and once you've done that, you kind of come out within like Oh my gosh, why did those like 5 hours ago and just exhausted and they're like Oh no, I have a meeting now and now I have to talk about something totally different. This is really hard, but you learn tools like going to make tea and you know just stroking your cat when you're working from home, which is like the best thing about working from home is having a cat to decompress.

**Charles-Adam:**

Easy access to the animal.

**Cherry:**

Exactly. They're very helpful.

**Charles-Adam:**

So you mentioned also. I mean I want to get into the features and what Accessibility really looks like in video games in a minute. But first of all, because you mentioned working on different games, so an kind of, let's say you have access to a prototype for a game, do you do like a single pass, let's say for features, for blind players or for players -- you know that's more visual. Do you do a pass for cognitive stuff? You do a pass for audio stuff? Or like you when you do a study or when you look at a prototype or look at a game, you're looking for all those Accessibility features at the same time. Like how do you how you kind of manage that, because there's so much that goes under Accessibility.

**Cherry:**

Yeah, so for me I do it all at once. That's just how my brain works, but it's not how everyone's brain works. And that's totally fair. So full disclosure is I'm autistic and that's one of my disabilities and for me that's one of the kind of I don't like to think of his autism as an advantage. 'Cause I really don't necessarily like that narrative, but I think it's one of my skills is that I can really hyper focus on something and really kind of, as long as I'm in the right environment, can really just access all that knowledge at once, which is really helpful, but it's not how everyone works, and that's totally valid, and I don't think everyone should have to work that way. So for me, I'm always analyzing everything at the same time, but kind of in a way that so one analysis session I'll be looking at particular part of the game. So for me I break it down by discipline and game area because I think that's most useful for how we can affect change. In production and how we can achieve the best things in design is understanding whose responsibility it is to oversee that feature or design that feature, and so it's more like I'll look at settings and then I'll look at gameplay. I'll look at the UI, look at audio and kind of break it down as I go that way. And I kind of have like this mental list of the things, the barriers that players face, but I rely fully realized that's not how everyone is able to work. Like a lot of people will have a big checklist of items to go through and guidelines, and that's one approach, and it's totally valid approach. I tried to break away from guidelines because I think guidelines can feel restrictive and prescriptive to designers, which doesn't necessarily do the best work or the best out innovative outcomes. And I think we really push it forward when we can break away, but guidelines are really good starting point for people that have less experience and less expertise. An Accessibility where they can sit and look at different areas of Accessibility and really get to grips with that. So I do know people that work that way and I think it's I think it's definitely a way that works for other people, but we're all different, right? I mean, even amongst designers, if you've got a team of gameplay design as they all work very differently to each other, and that's kind of the beauty of game development and how we can even make games. 'cause I just making a game is kind of miraculous when you break it all down.

**Charles-Adam:**

I know when I think about it, sometimes I can't even I can't even compute. Like how much work and how many things can break and not.

**Cherry:**

Brains are made for that kind of thinking, just not.

**Charles-Adam:**

Yeah yeah it's insane. OK, so let's let's dig in because you started mentioning UI and you started mentioning settings and a bunch of stuff. So can you explain kind of broadly and then maybe give some specific examples like what do we talk about when we're talking about Accessibility features in video games?

**Cherry:**

Yeah, so for me I kind of like to break it down as I don't like to think of it as Accessibility features and features. For me, all features impact Accessibility and I think that's really important for the industry to understand moving forwards is sometimes there is a feature that needs to be made specifically for Accessibility, but a lot of the time if we're assessing Accessibility or if we understand Accessibility when we're designing any feature, we don't need to then create an Accessibility feature. We can just make our features more accessible and so that is how I like to approach that. And the reason for that is what Accessibility really is when it comes down to it is addressing what we call unintentional barriers. So unintentional barrier is the ones that we designed by mistake. Just because we're not aware of that play. Their experience or were not aware of how I design can cause a barrier for someone, and that is the majority of barriers that players face when we actually think about it and we break it down. There's very few barriers in a game that we've designed as part of the gameplay or as part of the way a player interacts that is deliberate and we can find ways around. We can even find ways around those ones, and that's where Accessibility features come in.

**Charles-Adam:**

So how we get around like we few approaches?

**Cherry:**

Uhm, most accessible isn't necessarily separate features like I say, but it's about looking at our control systems out progression systems, UI, existing audio level, design narrative, pretty much anything that goes into making a games into making a game. We have to think about Accessibility because we could be throwing up barriers and we don't even realize it, so I'll give a quick concrete example, which is a really early example. One of the very first things to make the press. As being an Accessibility feature, is colorblind features. Now we can create colorblind features where players can change settings to affect changes in the UI, for example, or even in the game world, which is important, but a better approach, or like I'd say maybe not better, but like, complimentary approach is making sure that we don't need that feature to begin with as much as we can. So when we're designing at the very early stages were designing our UI or UI isn't just menus, it's kind of our HUD. It's ingame interaction points, it's icons. It's everything that a player sees basically, that isn't the game world or the character. And, uh, it's really important to understand that if we are indicating something with color, it doesn't matter what color is, it will always be a barrier with someone. For someone with color blindness vision, any disability with vision can affect color perception. So there are many visual disabilities that also have color perception difficulties and so it can be really important. That happens actually with age. I'm just going to throw that in there that we lose our color vision as we age, things become not as vibrant to us and it can happen on a particular spectrum. And so it goes beyond that, and the way we do that is we make sure that we have kind of redundancies or or more avenues of information for a player. So say we've got two enemies in

their, indicated by color, instead of just being a color symbol like a color bar or a blob above their head. That's just one color. We also make it an icon so it is two different icons for, say enemy and friendly, and that way. Even if a player can't necessarily tell the different colours apart, then they can actually just at a glance see that and not actually then this is how accessible to get so huge. Then actually even. Also benefits both visual disabilities and cognitive disabilities. Some cognitive disabilities manifest in difficulties with processing information, so that's ADHD, autism, memory deficits, brain fog, things like this, and so if we have those multiple systems of feedback, then that allows players to identify those things without too much cognitive processing or cognitive load. And then for visual disabilities. It's just a clarity situation and it gives it's all about like speed, right and processing and things like that. So that's, I think, that's the best example I can give, but I think that's really interesting right? Every time you actually bring in these like knew design ideas that are maybe a little bit, maybe require a little bit more work to put in 'cause it instead of just being, let's say a color you're also having like an additional element like a designed icon or maybe even like a sound element or something like that. Like you're you're potentially helping out a bunch of different other players Also, people that we wouldn't traditionally considered as disabled will benefit from that, and that's complex history over whether someone identifies as disabled or not, but it's really beneficial for everyone can just improve our design and make us better designers.

**Charles-Adam:**

Yeah, I was going to say like in some circumstances maybe you would choose not to play without sound for example, even though you're not deaf, just because let's say you're in the plane and you forgot, you're playing on your Switch and you forgot your headphones, or there's so many examples of people who wouldn't necessarily identify as having a disability, but where they need different features, or they would be helped by different settings to continue having a positive playing experience.

**Cherry:**

Yeah, I like to start Accessibility by looking at disability. I'm looking at disabled players because I think one of the core concepts of getting Accessibility most right as understanding that if that it's a spectrum and if we if we design with the hardest barriers in mind, then we actually catch a lot of people within that. So say we think about people that can only press a set number buttons or the whole only have a certain amount of strength. That seems like a pretty profound disability to a lot of able bodied people. And you think a lot of people have kind of very strong misconceptions on what that means. We're playing games. But if we designed to include those players first and foremost in center, those people in the way we approach our design, that's when we catch everyone else. I think, I think thinking about people that have situational disabilities first is where we will miss people that can really most benefit, but it definitely is, kind of like it's a bonus benefit, right?

**Charles-Adam:**

Right, it's like by hitting them by going to the most, uh, kind of quote, unquote, extreme version, you're hitting the rest of the spectrum, potentially.

**Cherry:**

Yeah, exactly.



**Charles-Adam:**

Can you share some more before we talk a little bit about what's going on at Ubisoft with Accessibility, can you give us some more examples of features?

**Cherry:**

Let's see some other good examples would be looking at control systems. So control systems can really impact so many different types of disabilities. But obviously the first disability that comes to mind is motor disabilities, so that's disabilities with strength, coordination, range of movement, or many other. Different ways, tremors, things like this. And, I love digging into control system 'cause it's really complex and technical and it's difficult. It's such a difficult problem to solve because control systems can really impact so much of a game like we don't even realize just how much of our game is impacted by control system sometimes. Like that's everything from UI has its own mapping to, um, every single different type of interaction in the world has a different control mapping and that gets more complex, more complex a game is. So again, like Assassin's Creed, for example, it's incredibly complex, and so that's one of those really good examples that if you approach that late in a late stage of development and could be really difficult to retrofit and really difficult to problem solve from the back backwards onwards backwards, I don't know how to say that, but you know, going backwards, but it's possible it's just more complex, so I've worked on a couple projects now. Before you buy software we worked on control systems. To on games that were already in progress and already in the late stage of development and what needs to happen is it's not just remapping so that like early implementations of remapping have really just been buttoned swapping. So what that really amounts to is, say, look at a controller and you can swap what the trigger button does with the shoulder button in it, just globally swaps everything that's difficult because, we have players that can't necessarily reach every button on the controller. Some buttons are harder to press than others. And for some people, some button presses can even injure them, whether that's due to repetitive strain injury like tendonitis or carpal tunnel, or even like my disability is my soft issues are extremely fragile, so that can cause me injuries. Some buttons can, so those are the buttons we want to avoid. Usually in there a couple of common ones. It's usually the stick presses and the trigger buttons are the most problematic, but it could be different for everyone. Um, it really depends on the frequency of use. So for me, face buttons are usually fine, but if a game only uses face buttons and it's really frantic and I end up pressing the really hard and really fast and really often that can injure me so it really gets so complex. So what we need to look at in addition to control remapping is simplifying the control system as much as we can so we can do that with creating contextual controls. So for example, if there's parkour in a game, then a player can simply push their character into that obstacle and the player will automatically vault or clime or whatever, so they don't need to press that button. Or another really common one that we've started to see's auto targeting. You want to get anything wrong, but we saw that in quite a few games in the last few years where kind of once you get it, usually exciting. You could turn on and off because it's an extra level of challenge that some players enjoy and control, which is great. But for players that need or don't want to press that button or can't press that button when you get close to an enemy, automatically target it so you'll hit the right enemies and things like this. And usually that happens in games games with a lot of Melee. So like Souls-like, some things like that.

**Charles-Adam:**

I believe like racing games have like automatically follow the road features.

**Cherry:**

Yeah, so Mario Karts are really good. Example of that is it's not auto— Gosh, I really don't wanna get it wrong, but I think it's like auto breaking and then auto steering as well or where it kind of like you can't go off the road. There's a few different features in Mario Kart which are really great.

**Charles-Adam:**

Yeah I definitely turn that one on.

**Cherry:**

Yeah yeah it's kind of like the bowling Lane Bumpers. The great thing about these features is that they're not a lot of people will see these features as oh are we giving people an advantage by allowing them to turn that on. And that is one of the myths that we face, and I really like to break that down, because if it's available to everyone and it really is that much of an advantage, then everyone will use it. And maybe that actually just makes our game more fun and a better experience for all players. But what we actually find is that players like that control they like to push their limits. They like to challenge themselves and what challenge is is different for every single person, so we think about difficulty features, which is another feature I could talk for hours about and we think about difficulty is traditionally like easy, normal and hard. But what is normal? Like there is no normal, it's kind of a miss that we've told ourselves and all across society, and so what's easy for one player is different for another, and we find that plays really like to push themselves and challenge themselves. So if steering is a challenge, then. Being able to have some assist with that will reduce that challenge, and that means that they can focus on the actual challenge of accelerating and breaking and drifting, and you know all of the awesome ways that we interact with racing games, and if that is not a challenge for players that isn't challenging, then they won't use that because it's not actually fun. If the game isn't challenging for a lot of people, and I think some players find it harder to win if they have those features turned on for some place, that will be easier to win. For other players will be harder 'cause they feel like they don't have the control to like take shortcuts or do certain drifts or things like that so. I that's a method is really fun to breakdown, but I could have had hour long meetings about that.

**Charles-Adam:**

I don't want to oversimplify, but I mean I like what you're saying because it's also about giving players lots of options like the more of these settings that you introduce, the more people can really tailor and customize the experience so that they can have the most fun, right?

**Cherry:**

Yeah, yeah, so I tried to avoid as many settings as we can just be caused by introducing more, more settings were actually introducing barriers in how accessible those settings are, right? Because the most things we have, the more of a cognitive load is, the more of like a motor load is to have to go through all those settings and set your game up. Change them on the fly, but so often we can do that without settings, and if we can, that's amazing. And that's kind of what I'm talking about with, like the control systems or with colorblind systems. But then when we do need to do settings and we do need to implement those features, it's amazing. It's an amazing and powerful tool for players to be able to customize their experience and that kind of is what levels the playing field for people very much.

**Charles-Adam:**

So I really want to talk about subtitles. I kind of want to backtrack a little bit because I think for a lot of people it's like one of the most obvious or most kind of in your face feature and I know that there's been a lot of articles online that I've read about about subtitles in video games. Can you speak a little bit about how how that works and the role of subtitles and the best practices there?

**Cherry:**

Yeah, so subtitles is an exciting feature to look at because it's kind of really snowballed and blossomed in the last few years. So we started with subtitles not even being in games, which is shocking when you think about the fact that that happened, but that is what happens with Accessibility is. And that's what I mean by an unintentional barrier. Is it just wasn't brought up or thought about? And so when players started... I'm talking about how they were being excluded. The industry kind of was like, Oh, we really don't want to do that, so we really shouldn't. And then accessible subtitles just became a standard thing in the pretty much most games have subtitles. But then once you start getting that feature in games, you start to then get requests for improving that feature, because we'll never get it right straight off the bat. It's really difficult to do that, especially if that's not your experience. You're not facing that. And so we started to see requests for bigger sizes, 'cause as ironically as displays got bigger and higher density, we got smaller and smaller subtitles in UI. There's so many reasons for that and I could talk about that for an hour from a production standpoint. There's just many reasons that happen. But so then we ended up with subtitles that were too small and then once we kind of hit that point. Assassin's Creed Origins won an award for the subtitles because of large because of the size but also because there were features like different opacity of backgrounds which helps maintain visibility of subtitles even in bright areas of games and or busy busy world design. And then we start to see people requesting other features like speaker names so that you know who is speaking. If you are playing with no sound at all or. If you are deaf and so I like to always remind people that all disability is a spectrum that it's not like one or it's not either all kind of... It doesn't matter what the disability is. There's an entire spectrum of people. Whether that's entirely deaf or whether they are definitely one ear or whether they have some hearing loss. And so there are so many different things that need to happen, but we're still getting there. I don't want to say we've got that with subtitles. We definitely have, and it's a difficult problem in production because developers have to reinvent the wheel. A lot of the time is on every production. We don't have engines that have just an ability to add really good subtitles. I think we'll get there. But the problem with that is that then everyone has to remember not to make the same mistakes and also it can be just difficult to do like subtitle is really difficult like timing is a really difficult aspect that went trying to address now in the industry is how to make sure your subtitles have good timing in that they don't disappear from the screen too soon or they have proper line breaks. So what we mean by that is when you get a sentence there breaks of where it moves to the next subtitle is natural. And works with the cadence of the conversation that usually relates to punctuation. But it can also just be about how the voice actor is. Kind of working through the cadence of the line so, but that's a really complex problem, but from a technical perspective I could talk about that, but...

**Charles-Adam:**

Sure, but I think it's fascinating 'cause it's like one feature you think like "Oh yeah, sure, just put subtitles," right? But then actually when you start unpacking it, there's like so many different things. So you kind of understand why there is a progression. There've like, you know, every step is like OK, well,

putting 1 foot, just putting subtitles and making sure that the font is really legible and that their the text size is bigger than having a background. Having speaker names, timing them correctly, having them on by default, or all these kinds of or making sure that they're there also for cutscenes or cinematics, all these kinds of things.

**Cherry:**

Yeah, exactly, and it's just it's very complex and then also of course you've got your main character subtitles. You've got your NPC subtitles and then in really complex adventure and open world games we've got hundreds or maybe thousands of characters out in the world. Or AI NPCs that are talking amongst themselves and having having discussions. And so you need to subtitle that. And how do you do that when there's also a main character talking? And how do you display that? And then there's closed captions. So we have to make sure we're indicating sound. Four players, so when there's an explosion or an animal sound that they need to know about which you started to see in Far Cry and we'll start to see in more games moving forward, and I think that's very early days and we have a lot of improvements to make there, but I think we'll get there.

**Charles-Adam:**

So can you speak to what we're doing at Ubisoft right now? What are we doing at Ubisoft in terms of Accessibility? I mean, it's a big topic I'm sure, but like what are targets and guidelines at the moment? What's their philosophy in terms of this topic?

**Cherry:**

It's obviously a lot was under NDA, so I can't talk about specifics about what we're specifically doing on particular game projects, but overall, what Ubisoft is really trying to do is we're trying to make Accessibility part of our DNA. So what that really means is that we try to make it part of the entire user experience. That's everything from website storefronts onwards down two or up to our games and laterally to our games. They don't know they will exist. Like all coexist together, and that's the whole part of the point. Is that to a player? It's really no good if one aspect of our experience is successful and other aspects aren't in the end, and so that's our end goal. It's not necessarily easy to do that instantly. There have been people working on Accessibility at Ubisoft for a few years now, but it really goes across all disciplines and I always like to stress that to developers is that every discipline should be thinking about Accessibility. It's everyone's responsibility. But experts like me I had to support you because not everyone knows how to achieve Accessibility. Like there's so many people that care about and want to do it. But one of the biggest barriers in production is knowing how to do it. And people are afraid of making mistakes, but that's what we're here for. And what we still might make some mistakes but mistakes sometimes. How we learn. So that's really where Ubisoft is a high level of what it means. Today the few of us where it is our sole responsibility have all kind of involved with a lot of different things. From PR to marketing to website development, to games. I logically personally work on games because that's where my skillset is, but it really is happening across the board.

**Charles-Adam:**

But it's interesting that you bring that up because that's also something I wanted to talk about because I know, for example the the most recent example that I can think of is that the Assassin's Creed Valhalla trailer came out a few weeks ago, and it came out with an audio described trailer, and I know that when

we, when we discussed before, you were suggesting that maybe some people would wonder like what's the advantage of having an audio described trailer to help, of course you know, a blind audience if the game itself, it doesn't necessarily have all the features to make sure that it's accessible to blind players. So can you speak about that a little bit?

**Cherry:**

Yeah, so I think that's a really common question and I think it's an important one because we all need to be held accountable and I think it's a question that is really important to answer. So I totally concede that that it can be very frustrating where one aspect of our system is successful. So we have audio described, trailers now or say our website will become more accessible before. Maybe before our games do we don't know. The thing is with that is that games is a really complex system of many different people trying to achieve many different things. As simultaneously as possible, but it's not. That's not necessarily how production works, and so it can be really difficult to get everything aligned to happen at once, and we really have to start somewhere. I don't think we should put off doing one thing just because another thing hasn't happened yet. So for example, it's going to be very complex and a long road for us to make a fully blind accessible game, but we're working on it and we're working really hard at it, but it isn't, especially in an existing games and existing. Kind of systems that can be a really complex set of features to implement. So in the mean time, if we can get our marketing accessible, which is maybe a less complex situation, it's a little bit easier to achieve then we absolutely should, and I think it's important to involve all aspects of the community in every part of games and card games as a big community, it's a very social hobby. It's a very social part of our lives and there's just something to be said to be able to watch a giant trail of her big game coming out and everyone be able to watch it and everyone be able to know what's happening in that trailer and get just as excited and get those same goosebumps and those same tingles if we can even show the impact that has on our community, how exciting and moving that is for the blind players to be included in that. It really helps us make our entire industry more inclusive because we have a situation in the games industry where it's not just our games that need to be more inclusive. It's not just our marketing. It's our entire industry. It's all workforce, it's everything and I really don't know if we can achieve that until we start opening those doors. And sometimes you just have to do that in one particular way and maybe if we can make it more accessible and one way we can really open peoples minds an breakdown the stigma and the biases that we have a society as to who should have access to what.

**Charles-Adam:**

What are some of the best practices right now in the industry in terms of Accessibility according to you?

**Cherry:**

That's a really good question, so I really loved a tweet from a couple years ago about how Accessibility is a race and we're all going to win it because it doesn't matter who gets there. First, we all learn from each other and I'm paraphrasing and adding on to this Tweet, but that's essentially what he was getting at. It's that all game development is like that. All game designers like that it would be not telling the truth, if we didn't learn from other developments and we didn't learn what players need or enjoy or want from games outside of our particular focus, even if we're making an adventure game, then we learn from a first person shooter, or we learn from even recent games as to what people, what's a good way for people to interact and what's fun, and it influences everything we do. And so that's the same for

Accessibility. Accessibility is just another aspect of game design. In the same way, so I really have talked about that. So there's a few different approaches and but this is only what we can see from the outside, and I always like to remind people of that, that what we can talk about can sometimes be very limited in what is public can be limited, so there's always more stuff going on behind the scenes we don't know about, but the amazing things that are public at the moment is so Microsoft Xbox has a set of guidelines which was built. With the Accessibility community and is a really good kind of starting point for games developers to get an idea of where they can go with Accessibility that helps everyone from AAA to Indie because it's available to everyone. Whether you work on an Xbox game or not, and that's the amazing thing about that.

**Charles-Adam:**

I don't want to cut you off, but is the use of guidelines like that like kind of useful in the sense that it's creating almost like a set minimum like a it's just keeping, you know it's helping everyone. Keep that in mind and have kind of at least like a minimum standard in terms of accessibility features can do.

**Cherry:**

That's one way to use guidelines. Definitely, that's one of the way we use guidelines at Ubisoft. Is this the core things that we want to at least achieve. And then we'll build on that and go from there and make sure that we're going beyond that. And so it really is a starting point. But it's also really helpful for developers that don't necessarily have access to an expert or just beginning their journey with Accessibility. Or for indie developers that it's not necessarily in their budget to pay an expert, and so it's really helpful for beginning to understanding 'cause I like to say that you can Google a solution, but biased Google searches get you biased results. So what I mean by that is we've seen historically someone will search for color blind filters or solution to dyslexia. Is what they get for that is, they'll get colorblind simulators which have been put into games and obviously does not help people with color blindness. Um, or, just like clear, friendly font. So one of those things that help a very small number of people. Dyslexia is kind of an umbrella category that is many different reading disabilities within that umbrella. And it's not the same for everyone. And for some people, dyslexia friendly fonts actually make it worse or don't help at all, and so. There are better approaches to how we approach that design problem and which is really what it is and if we approach it from that perspective, that's kind of a better way of approaching it is the problem isn't with the person's disability, it's without design. So and that's breaking down that stigma because that's how we think about it, and that's how we've been taught to think about it in society. But it's really rooted in bias and kind of Ableism. If I'm going to be frank, to think that we need to fix people when really it's our designs that need improving. So yeah, guidelines are a really good starting point. Really good if you don't have access to an expert. I do like to kind of push people to go beyond guidelines 'cause I think we can really innovate and do so much more which actually brings me to Sony's approach. Sony studios, all their proprietary studios have different approaches and individual approaches to Accessibility, but coordinated centrally. So the studio will be working on Accessibility and then they coordinate with User Research Department and things to make sure that everyone's kind of sort of on the same page as much as possible, and then they can share once the development finishes. So Spiderman had some amazing features or even like core parts of the way the game was designed was accessible, but it also had some difficulties 'cause we can't get everything at once. No game is perfect, it's just the nature of making anything creative. Nothing's ever finished. Nothing ever achieves everything we ever set out to do, and Accessibility is just a natural part of that

too. And so then you see improvements on that. Dreams. Full disclosure, I worked on some unannounced projects that Sony did. And the Last of Us II, recently news broke about some of the upcoming Accessibility, and that's really exciting. And that's a slightly different approach to guidelines, so I'm sure, I don't know, but I'm sure guidelines informed some of the approach, but then the designers sat down and went beyond that, and there's some great articles out there on the Last of Us II if people look that up on how designers approached Accessibility is a core part of that design pillars, and that's the approach I like to take in that I'm trying to expand on it, Ubisoft, and something that I'm really passionate about. Then we also have EA Sports have a really long history with oh wonderful personality called Karen Stevens, who has done some incredible work over the years and is really one of our pioneers in the industry and the Accessibility community. And we all know each other. We all like even though we work at technically work at competitors, we're all friends. We all like share knowledge like it's we have a conference called the Games Accessibility Conference and we all meet up and it's really just this wonderful community. You get, you see that in audio, you see that in gameplay design, you see it in production like you have communities outside of your company and that's really the same for Accessibility. And so Karen really paved the way in a lot of how Accessibility is approached, from many years ago onwards, and EA Sports has been kind of really a leader in that area, which has been great. And then I really want to shout out indie developments because there's been so much work in Indie that informs everything from AA, AAA and onwards and indeed has some advantages and disadvantages of the budget. Team size is a disadvantage, one of the advantages is when you have a smaller team, it's easier to work cross-discipline. It's easier to make sure that you're working together to achieve a similar thing, and sometimes it's even a solo development which is mind blowing so a few shout outs: There is Eagle Island and Celeste are both really famous for having assists, which is one approach to Accessibility. HyperDot, which it was a solo development. Full disclosure, I worked with them published by Glitch. Charles, the developer on HyperDot did amazing work to just make flexible design as a core part of his principles so when it came to looking at Accessibility there wasn't actually a huge amount of work to be done. And then on a smaller scale we see games over the last few years. Swords of Ditto, Falcon Age, Slay the Spire, they've all had individual features or like a couple of features that really have been moving and pushing Accessibility forward for the whole industry and so I think it's such a fantastic field that is being achieved at every every level. Great people working so hard.

**Charles-Adam:**

Where do you see the industry going, like, what do you imagine in terms of Accessibility in games in five years? For example, like what do you picture when you picture the kind of the progression of where we're all going?

**Cherry:**

So I've been asked this question a lot over the years and it's a great.

**Charles-Adam:**

It's like such an interviewer question.

**Cherry:**

It's a great question though, because the reason it's a great question for me as I've seen it start to happen like the things I said three years ago already happening. I'm like, Oh my gosh, like. Well then I'm

sure working in development, like if you're, you know, if you're coming in with the team quite early on in the development process, that game maybe will come out in five years, so you can already imagine. I'm sure some of the things that we'll see... I don't really like to talk about what I want to see. With particular games, well, I really want to see is I want to see more of Accessibility being accepted as a key discipline in the industry, so we're starting to see that with roles like mine opening up, it was one of the first roles in the industry to have a dedicated Accessibility project manager on teams. And I want to see more of that. I wanted to see be a respected discipline. I wanted to see, be seen as an arm of user experience and user research and also that to understand that it is everyone's responsibility to some degree. Because unless we have Accessibility champions across every discipline, we're not going to be able to achieve what we're setting out to achieve. And even if you don't become an expert in Accessibility, and that doesn't become your specialty or your focus, there's so many things you can do just by understanding. Some of the barriers that we can throw up in our various way and I think it's definitely important to understand that it's a multidisciplinary approach in everyone. Everyone should work together. That's my goal.

**Charles-Adam:**

It's like a change in philosophy or a shift in philosophy, and this kind of collaborative spirit, maybe?

**Cherry:**

I think I want to just reiterate that it's OK if Accessibility feels overwhelming for a developer because it does, like all aspect of game development is overwhelming. So reach out, find your experts in your company, find your champions. We will make more champions. I promise. It's a growing field and start your journey yourself. There's so many resources out there and join the Accessibility community because it's a really welcoming community no matter who you are. Even if you don't want to make it your sole focus or specialty, we will welcome you and help you and guide you.

**Charles-Adam:**

For anyone, you know, listening who's interested in joining that community or learning more. Do you have any shoutouts or resources for people? Either as designer or just as players.

**Cherry:**

Yeah so the IGDA special interest group for games accessibility has a website and a discord and a Twitter and it's an open community that also welcomes players because, I think unlike a lot of disciplines, Accessibility really moves forward when we get feedback from, direct feedback from players, and players are so generous with that feedback and their time. And that's how we learn. And that's how we get it, right. There's a really famous phrase that comes from the disability rights movement and it's called or it says "nothing about us without us," and the reason we have that saying is because disability and Accessibility has really been approached from a paternalistic perspective in society to the point where mistakes are made. When we're told how we should refer to ourselves, we're told how we should access buildings with, we don't often have a voice. And so the IGDA SIG really works to break that down. But it's also just a really welcoming and lovely community where developers can share insights and information. We talk about articles that are coming out, we have meetups and then also we have the Games Accessibility Conference, which happens once, two times a year in both North America and Europe so far. And I believe it's happening virtually this year. And yeah, come meet people.



**Charles-Adam:**

Awesome, well Cherry, thank you so much for taking the time. This was a really, really interesting conversation and I can't wait to see more and hear more about what's going on in this field of game design.

**Cherry:**

Thank you for having me on Game Makers because I think it's such a great opportunity to show accessibility is the same as any discipline in games development. Thank you so much.

**CONCLUSION**

Thanks for listening to this episode of Game Makers, a Ubisoft podcast. This episode was edited by Manu Bachet. If you're interested in learning more about Accessibility in video games, we put a number of great resources suggested by Cherry in the show notes. For more from game makers subscribe on SoundCloud, Apple podcasts, Spotify, Google podcasts or wherever you get your podcasts.