Briefly describe disability

g: Can you briefly describe your disability and how it affects your daily life?

chad: I am 37 years old. My disability is an eye condition called LHON. I has taken my central vision and left me having to navigate through the world has highly visually impaired. I have 5 to 10 percent left, peripheral. I describe it as imagine being in a pool with no goggles on underwater or looking through goggles that have started fogging up like ski goggles. or getting out of the shower in the morning with the mirror all fogged up You can kind of see through the mirror a bit, but barely and only peripherally Yeah. So then imagine like the cloudiness in the mirror, that being like the center part of my eye. And the peripheral is clear. So even now, as I am looking at your face, it's like in your car in the morning, when, like the window starts to fog up that color like that. That's how I can relate it to, because I can remember seeing that. But when I look at you like that [looks to the side]; I can see there's a clock over here, but I can't actually see. I can kind of tell. There's like a maybe a line or something. I could never tell where the hands are.

g: Okay, thank you. When did you lose your sight?

chad: the loss the site in my left eye was February of 2018, and by july 2018 my right eye caught up. It's been 6 years. Wait a minute. Shit.

Relationship with math

g: Okay, so talk to me about your relationship with math.

chad: I really enjoyed math as a child. Academia was not my favorite thing to do, but of all the classes I really enjoyed, math I enjoyed was your favorite class. It was my favorite class. I mean that or geography history. I really enjoyed learning formulas, knowing them, I was super quick at learning them and it is super simple once you know how to do it.

g: so how do you use like? Do you feel like you use math in your day to day life. Now.

chad: Angles, I use a lot of angle… wait are you asking in my day to day or during rock climbing?

G: Let's talk about it in your day to day life. So maybe even as like when you were a Diesel mechanic like, I feel like, that's very mathematical.

chad: I used it math all the time. Actually, we were always having to figure out, you know, just for simple things, like an engine hold 40 meters of oil. But you put, 2 liters in that., it's just basic math. But like… yeah, So a lot of measuring. A lot of fabricating. A lot of angles, We're always trying to figure out there's different strokes with things so like, if this is this long. It needs to be that long. Again, Not hardcore math, very basic standard math.

G: What was the highest math class that you took?

chad: grade 10 math, which I think was algebra… Then I also did math in college. because we had to learn formulas, for like electricity. So if, like something draws this much amperage, a wire has to be so big to be able to hold as much currentIf there's so much voltage. I was studying to be a mechanic. Truck and coach mechanic.

G: When did you do that?

chad: When I was 17, I was done when I was 20. I started in high school actually

G: Okay, can you share any positive experiences or like challenges related to learning math?

chad: The challenge would be memorizing formulas. also challenge of thinking myself, why do I need to learn this, I'm never going to use this. And also, if this is hard, I don't want to do this. But then, once I learned there was a reason and a purpose for it that I actually really enjoyed. Once I learned I could be good at it I began to enjoy it

G: and you felt like you could use it in like mechanics, and things like that, like you said like electricity?

C: Yeah, and like, in every day life, like I mean in sports with, say. playing soccer or throwing a ball you have to like throw something up in the air so like sure not measuring things. But like you're figuring that out on the fly with. If I want this to end up there, I have to kick it this high with this much force for it to fall that way so like, sure you're not writing that out, but like that is math in your head, knowing how much effort you put behind hitting this, how high you want to hit it this way for it to

land that way. and also with bike. I guess a mountain bike a lot, you know, with hitting jumps and going. I need to go this fast to hit this at this angle, the wind that distance, ATV and dirt biking.

Math and rock climbing

G: Okay. And how do you use it in rock climbing

chad: in rock climbing, you need to stay on balance. SO i will touch holds before I move my foot to a hold, i will think to myself, it is like a triangle. If this goes here, this foot needs to go here, but if those hand goes here, that is not gonna work cause my center of gravity needs to stay here. So before I do things, I analyze my foot goes here and i am gonna move here, how is that gonna make me end. What is that gonna look like? And is that gonna be okay? And if not, maybe I will move my hand down, i will try certain angles and how that is going to fit. And in my mind, i imagine what i look like in that finished position before i go to it.

G: okay. So you think about in terms of triangles and getting your body in the right positioning. Any other context?

chad: um, time spent on the wall as well. I will think about how fast I need to move based on how pumped i am and how much effort i can put into something.

History with climbing

G: Okay, how long have you been climbing

chad: 5 years? After my sight loss, for a woman. I climb A LOT.

Problem solving in general

G: okay. Alright. Here we go. How do you define problem solving in general?

chad: fun?

G: That is a characteristic of it. But what is problem solving? We use it all the time in our day to day life right? But, like, How would you define it?

chad: What is problem solving? The means of finding a solution to an obstacle.

G: Okay, is there anything else you want to add to that?

chad: trying to find the easiest way around a problem.

G: Why easiest? Why would we want to do that?

chad: so you can go further?

G: But we're just talking about in general, not rock climbing.

chad: No, i mean that in life. It's very taxing to act, not blind, which is the core of of my problem solving day to day. And it uses a lot of my energy. So the more efficiently I move through the world, trying to look like a sighted man…

G: Why do you not want to act blind?

chad: I don't want to be looked down on.

G: do You feel like there's a stigma around it?

chad: yeah, and I don't want pity from people either. I get that a lot.

G: So maybe bringing those 2 definitions together. Maybe it's like the means of finding an efficient solution to an obstacle. Would you agree with that?

chad: yes, and so that I can continue to get over these hurdles for a longer period of time. Basically, I don't want-- I want to be able to not be outside doing things for to hours and being like, now I am exhausted. I cannot do anything any more. So I have essentially like conditioned myself to be able to… because I , because I thought I'd be so less than, and I was at one point, I've now like made it my goal to be not just equal to an able bodied person, but better, so They can't look down on me.

G: Why is that important to you?

chad: um, well, probably mostly because I have kids. I really want them to look up at me, not down on me. I always looked up to my father and his abilities. When I lost my sight, I was very sad thinking that my kids would never look up to me.

G: Do you think that they look up to you now?

chad: *nods yes* is crying here :(

G: I think so too!

Problem solving in math

G: Okay, okay. So we've talked about broad broad problem solving. How do you, how would you define problem solving and math

chad: problem solving in math? It is the exact same thing.

G: So I'm gonna repeat your answer. You said, it's finding a solution to an obstacle in the easiest way around a problem. You want to use the least amount of energy. Do you think that that's important for math, too?

The clock is always ticking

chad: I do. Yeah, cause being efficient. I don't know why I ended up being efficient in every aspect. Do you want to spend 10 minutes or an hour on a problem? We only have so much time. The clock is always ticking.

G: So the clock is always ticking. We want to do things efficiently. What does that create space for? If we're moving through these problems more efficiently? What's the rush?

chad: The next problem. There's always a problem.

G: It sounds like your life. Philosophy is that it's like, just like…. I mean, from what I'm hearing, it's like life is about solving problems. And you want to move through those so that you can keep tackling them. Is there something else missing there?

chad: yeah, there is always a mountain to climb. The top of one mountain is just the start of the other. I feel like I'm never content with *being.* There's so much out there I wanna like do everything in this one lifetime.. I don't want to be stagnant

G: Do you feel like there's always the solution to a problem.

chad: *immediately responds* There is always a solution to a problem. So my favorite saying is. don't say I can't say, how can I?

Problem solving in climbing

G: how do you approach? So we've talked about problem solving in math and and broadly, and I would imagine that you would say the same thing about climbing right a finding of efficient solution to a problem. How do you approach problem solving while climbing?

chad: I don't know rests, I don't know cruxes, i know none of those things. I do it on the fly. Mostly when I am outdoor climbing I do not have a caller. So what I am looking for? I am looking for chalk, looking for different contrasts. Even outdoors, the rock, maybe it's dark, i think "that must be something." put my foot there and feel. A lot of this is is about feeling. I really like sensitive shoes for this cause I am like "wow, i can really feel everything with my foot" obviously I am touching everything with my hands, but I am also touching things with my foot, my knees….

Feeling in PS

G So it sounds like problem solving for you is about feeling?

chad: feeling and then painting a picture in my imagination and memory. Memory is HUGE. i touch things and visualize. If i put my hand or foot here, or over here, and i analyze if i touch this and put my foot here, i think, what will that bring me to. From there, can I then lock off and hold long enough to then feel for the next section.

Resting on the wall

G: So like when you're resting? What is going on?

chad: I think how much power, how much am I wasting there? Because your tank is only so, and it's only so full, and I think, am I at the very top? Do I have a lot of gas left? If so, I can be a little more careless. but at the beginning of a climb, I am trying very hard to not exert a lot of energy, and resting eveywhere I can and turning those rest good rest into. I'm gonna spend more time resting and feeling for a more efficient way to climb.

G: How can you do that?

chad: by searching longer.

G: okay, so when me and Gavin are resting, we're like looking 6 moves ahead. Right? We're like, okay, like, where's my next good hold when Tanner's resting? He's like, literally just like single arm dead, hanging like just trying to get his energy back as quickly as possible. Obviously, he's not going to. But he's trying to survive at that point. What are you doing when you're resting?

PS strategy 1: “Yellow paging”

chad: Searching. There's a term we call the yellow paging, where I'm just like searching left like I scan the wall left to right. It's like you like a sweeping motion, and if I am panicking, I feel something that is decent enough to pull on and I just go. But if i have a good rest, I think, okay, I will remember that is there, but I am gonna keep looking. I might think “oh this is even better”, because i have learned that sometimes I would just go up the first thing I find, and I've learned that that's not always the best thing. Maybe there's a jug beside it. Why, stop here when I have a good rest.
I might as well, soak up the rest while looking to make my next move more efficient.

G: Okay- So the next question, How about this problem solving when climbing, when you're not doing it on the fly, like, when you have a caller, what does that look like?

PS strategy 2: with a caller comp

chad: Being patient and listening

G: That's hard for you.

chad: Yes, very hard for me.

G; Okay, so you have these Olympic like callers, and these like the strongest climbers in the world. How does that help?

chad: Like the 1%. trust is a huge thing, I know what they're saying is right, and I don't second doubt it., because that's and time wasted. If you say, do this and like, Well, what about this? I now just you say that. Yes, yes, is the answer. but I guess it's not entirely true, because there is times I'll go to do that, and I say that doesn't work for me.

G: How often does that happen?

chad: Very rarely? But those words have come out of my mouth, maybe once or twice a comp.

G: what do you do in that situation?

chad: Wait for them to re process in their brain…What are they gonna tell me? Because what they had planned isn't gonna work for me.

G: So like, are you memorizing what they're saying on the ground like, what does the what does it look like when you have a calle like? Are they t alking? Are they mapping out the climb for you beforehand?

chad: They are. But I don't. I can't remember the whole climb, so when I get to a hold, they will maybe tell me the next few holds that are coming up in the sequence.again, a lot of it is still on the fly, But if I can get through a good rest we'll then I'll come in and be like we're gonna talk about the next 2 moves here. and it's gonna be: You're gonna go to this dish. You're gonna go to the left side of it better than the right side, using a drive by and cross to this, Yeah, like, I don't question, like are you Sure I should cross? Maybe I should bump those thoughts on pop my mind.

G: So they're not just that's interesting, because they're not just telling you what holds are there. But how to navigate those holds.

chad: yeah, and when I not patient to wait for the next command, and i do something where I ignore them, i have screwed myself through the sequence, so if i am patient and wait, even if even though I feel like Oh, you're wasting more. My energy well, now, wasted more energy because I did bump didn't wait for you. I know it's either down, climb, or to do something that's completely taxing to get

to somewhere, that if I were to just wait to that extra 3 seconds, I wouldnt have been screwed over so much.

G: So the caller isn't just saying, Hey, you have a gastone, You have a right crimp---- they are not just telling you WHAT hold is there; rather how to use it?

chad: yes, how to grab it, to the point of, they may say the angle of it. Grab it at 11:00 and then pull at 4:00

G: Oh, they oh, my, gosh, okay. So you're not just saying, cause it's like--

chad: Yeah cause like a side pull means 9-3, but maybe a side pull is 10 instead. ((tells you how the hold is oriented and HOW to grab it))

G: you're let's say you're at a rest. And they're like mapping out. So now you get to like, recalibrate. And like, Okay, like, here's what's coming. How many moves ahead to the next crux?

chad: sometimes, yeah, And then, once they say that they're then still telling me as I'm doing it. So like, they'll be like, Okay, next move is, you knw, get your left foot up wide, um, left hand gastone to a right hand down pull, then this, that…. Then okay, You better get moving. I also ask them the time. A lot. Cause if i am super pumped, and trying to shake out, and there is still four minutes left, and i am I cannot climb for four more minutes I'm gonna sit here for another minute because I can't see a clock when all the other climbers can see a clock. At nationals, I fall off the wall just under 10 seconds left

G: do you think that she's [[the caller]] also mapping it out in terms of rest and crux, and like she's telling you that, like you have a rest here, and then the crux is here

chad: so when we first get to see the climb in the comp, I don't talk to her; They stand and stay at the climb for the first minute or maybe even six minutes (out of 8), I don't really care It's more important for me that they know how I'm gonna not climb that route, cause like before, when a sighted person goes out, they start at the bottom and "CLIMB IN THEIR MIND" the whole route. I can't do that, so I don't bother them. I just stand there peacefully letting them figure out how they're gonna call me through that whole climb, Once they've done that. they then said to me, Okay, the beginning of this is gonna be a lot of--- because the bottom is always easy--- like you're gonna be like walking your feet up and bumping your right hand or this or that. We're not gonna waste much time in the beginning we're gonna get you about halfway up. And then from there there's gonna be this whole, I'm gonna tell you you're gonna cross right hand into a dish, but there's a chip up and left, and they're gonna tell me things I got on the ground, and maybe all it will be like mapping it out with me, moving my hands. and then they'll even at times be like, no, you're gonna want to grab that like this *and moves his hand*

G: do you think that they're partitioning and breaking it up of like. Here's my first rest, and then like, because they know that you can't take in that much cognitively, because it's so much. Get to the rest, and we'll refigure re regroup. Okay.

chad: but there is this hold up there that like I know you're gonna get to it, I'm gonna tell you about it now, cause its like, whatever, you may want to grab it like this but if you grab it like this and sink in deeper, it gets better., or and they'll tell me this, and later on, when I'm climbing. Remember, when I told you, you want to grab this hold really deep. This is that hold. or you know, you wanna make sure you grab it like this. And like, maybe like, move my hand. Okay. And then there'll be like this, is that hold coming up that we talked. There's that crux.

G: So she breaking it down in terms of rest and crux, like, Is that what you would?

chad: Yeah, I wouldnt necessarily say the crux. Cause a lot of it is crux, it is sustained the whole way. But you are gonna get to the point where you can rest, . But there's times that I'll be told: Rest here and my relay is I can't. We need to keep moving. and there's times where all of a sudden I'll just like fucking Find a knee bar. So yeah, its less about cruxes and more about rests, yeah, for me. It's more about trying to learn to rest.

Non- comp Calling

G: What about like when you're not comp climbing like, what about if someone's just calling it like, does this only happen in a comp? *he needs yes* okay. So that's why. Okay. So maybe if you were climbing in a different context….

chad: you know, even you and I have that 11. C, you're like, okay, like, there's a flat ledge here. You can rest here. You know, we're trying to figure that out getting up, things like that do help. Maybe someone will say like, you know, it gets pretty thin here. So this is your last good rest.

G: so it's really about resting more than anything, because it's so taxing for you in general,

Relief

chad: because I can't see relief, cause there's a few times that I'll even say, do I have relief coming soon, because I'm fucking, dying, And yeah, that's when they will be like. yeah, but it's in 5 holds, and I can be like, I can't slowly climb for 5 more moves. I need to Push it here. If I don't push it, I'm not making it.

G: Yeah, I feel like when I'm climbing. I'll be like, Okay, but I know that there's a good hold coming up, and I'll like push through, no matter how tired I am. But if you don't have that---

chad: yes, then I'll even say like that's like my my command is like it. Do I have relief coming? And then actually, in the finals and nationals. I was like getting fucking. So pumped. And like, yeah, like she knew that was happening. And we just like without me saying anything, she to start getting louder and quicker like cause I had to keep moving point of like, I can't rest anymore. If I don't, I have like 5 more seconds on this wall, let's get whatever the fuck done.

G: So she's like meeting your energy there. Cool. when it comes to like scanning routes like when you're saying you're doing this sweep. I've noticed you do this thing where you're like. You're like, okay, like, that's a good hand. And eventually that will be a good foot like, is that how you're thinking about it? *nods yes* Okay, can you say more about that process.

Foot extension of hand

chad: Yeah, like, I'll hold on, and then I'll move around looking for a hold, and I'll be okay. There's this hold here. I found my right hand, Now for me to grab that I need to move and put my foot here. I will remember that foot is beside my hip about a foot away. And then I am like if i grab this, keep looking. Basically, the PS is like, now I have four options, which of these four are the best two… and I mean which is the best efficient. So good holds doesn't always mean the most efficient because the movement to get there may be too taxing. As I am feelings things, I may think "that is not good enough for me to pull on but it will be a good foot in few moves." so then I am thinking, how can I get my foot here, cause as we know, with a <u>good foot comes a good rest.</u>

G You, said I. This is where the problem solving comes in. And you were basically said, like, I have 4 options like, which is the best. So is that what you mean like, it's like, so like, problem solving means like you might have like, you know what you need your solution to be to some degree. But the question is, how do I get there? In the most efficient way? And so maybe a part of problem solving for you is saying, Hey, I actually do have lots of options. But which one do I choose? Okay.

juggable=PS

chad: yes, that is exactly it. I mean, there's times that there isn't lots of options. But then it's like, This is the only old I can find, How do I need to position position my body so that that can be useful. If i am leaning on this, i can't pull on it. But if i flag this foot out, now all of a sudden it becomes a really good hold . then the problem solving is how to reposition my body to make it a usable hold

G: Yeah, we call it juggable at our gym, yeah, like, the whole goal is like, make a hold juggable
So I've always thought that language like, I'm on a sloper. And I'm like, but how do I make that a jug? Okay? Well, if I lay back it, it's all you know, and it may not be a jug jug, but like something like that is good enough to crank on. And maybe like, get a micro shake on. Okay.

Disability made your a better PSer?

G: Do you think your disability has made you a better problem solver?

chad: yes; I have to think more outside the box. I also come across more problems than I did before, therefore having more problems that need to be solved, making me more efficient at it. Just made my brain workable and stronger. Because prior to going blind, i was problem solving all the time as a mechanic, and i loved that about it. But then, you find out, vehicles only have so much that can go wrong with them, so you stop having to actively think so hard. A good mechanic does everything out of memory because you've already seen this issue before. Well, last time someone came in, and it didn't blow hot air. It was this and this. So you already know where to goto more experiences, to draw from more experience to draw from. So you actually stop… You stop solving problems, because you're more efficient at it. You're not actually problem solving, though. No. So I'm saying, now, you're not actually problem solving. You're just pulling out of your memory

G: So problem solving cannot just be pulling from memory?

Troubseshooting tree

chad: so yah, the first time would have had like a troubleshooting tree and been like. I need to look at this to look at this. If that's okay, then it must be this. So that's okay. Then it's going to be this, that to me is problem solving, bouncing around, checking all these. (that's a tech term, or a trouble shooting tree) , so for your vehicle, there is a user manual or a mechanics book that you would check for electrical issue, make sure the battery has 12 volts, okay now you can go this way, then this. Okay, next check. The fuse is fine. Yay, or nay, go this way or that, like there's a branch to everything. And then that tree keeps branching out until you eventually find the issue.

G: Okay, how do the how do those problem, solving skills from being a mechanic like, inform the way that you problem solving your day to day life?

chad: that you don't give up! when one thing doesn't work that doesn't just mean--- well i heard this expression the other way, when we are born not knowing how to walk, we fall and crash and hurt ourselves thousands of times. but at no point do we ever say, oh, I guess walking's just not for me. We continue trying different things. As a a mechanic I can't just say to you, Yeah, I checked your battery, and it's good, so I don't know why your fucking hot air doesn't work. No isn't an answer, ever. So you just keep going and going and going , So I learned that as long as you keep trying eventually there will be a solution and not to get frustrated with it, because once you get frustrated, your brain doesn't work very well.

G: So with your disability making you a better problem solver. You gave an example like being a mechanic like, it, like I was like, I've always been good at it. But what about your disability? Made you go beyond just the problem, solving abilities of a mechanic.

chad: a lot of the things I do, and translate into other aspects of life. So like, let's see what if I had an example, like, if I want to be able to do, I want to read this thing in front of me, I can take a photo of it and zoom in on it. I can on a magnifier and zoom in on it. In that moment i can use one of 5 apps that I have that'll read it to me. I then have tried all of these and found out what's more, what's most efficient for me. and if it's a long thing, I'm not gonna sit here and zoom in on it in real time. So I've I've worked to solve this problem, being, again like back to the saving energy. It's not that I can't read this all by zooming in on it, but that's really taxing on my brain, So if I want to read this top line that's short and sweet. I'll zoom in on it, If I want to read a whole page, I'll take a photo of it and have an ap. Read it to me so I can listen without having to struggle, trying to fucking focus on shit. So I've learned through experience what works best for me. What, all those. So all those ways, that's what it comes back to the whole. There's multiple solutions, there's multiple ways to do things, But what, say? I want to read 6 things here? Well, if I zoom in on it by the time I read one I'm not gonna have the energy to be able to read the other 5, but if I could take a picture of it and have it just speak to me. Well, then I can read all 6 of them. So I've had to like learn through experience what works best for me.

Drawing from memory

Would you say that is problem solving? It sounds like you're drawing from memory. * nods yes * So then, when are you? Problem solving

chad: the first time, when you have something new. In my day to day life, once i have done it once, then I am not problem solving any more. You're right. I am drawing from memory. The last time I came across this hurdle. How did I efficiently do it? That is not to say I then, did this did way and i can apply the same technique to a new situation. Or next time i come across a similar problem I may try to make it more efficient. Let me try this new solution path that I used over here, over here.

G: so for you, it's really important that when we're talking about problem, solving that it's like, so like---- what marks the difference like*, how do you feel* when you're problem solving versus when you're drawing from memory

Excitment/fun in PS with disability

chad: it depends. Are you talking to me now or in the past. In the past, right after my disability i had to do so much PS because everything we new to me. I was very frustrated, sad, irritated. Why can't this just be easy like it used to be, which then made things harder.

G: Then what happened?

chad: And then my sister said to me, stop saying, I can't start saying, How can I? And it was like a mind change for me whenever I would catch myself saying, I can't do this. which would then equate to: I now have a problem to solve. I then took it, as I have 2 options here, I can get frustrated and pissed off, that I have a new problem to solve, or I can get excited, that I'm now given a new problem to solve and make it fun. Like math, math can be fun or you can be irritated by it.

G: So for you, it seems like you're you turn those experiences into learning moments.

chad: yeah, and and do trying to make them fun into a game.

Are disabled people better PSers?

G: okay, so like, disability has made you specifically a better problem. Solver. Do you think that disability has a potential to make like, any disabled individual, better problem solver. And it's like, broadly speaking, like, do you think disability has the potential to make people better problem solvers.

chad: 100 percent. Because you're faced with all these obstacles. You have an option, everyone has problems, but you get to decide how to react to them. You can be defeated right away. Or you can say how do I work around this? And once you create the mindset that there's always a solution.
you know. Just try one or 2 ways and give up, You keep trying and keep trying and keep trying. It's like back to math thing. sure that there's math problems that have been trying to be figured out for fucking essentially centuries. And people don't just go. I mean, maybe some of them. This I've tried. They can't be done. but there's always someone who's out there going. No, there's a way I'm just gonna keep trying this way, or blah! Blah! Blah! Didn't work. Scrap that. Let's get a new look at this and start fresh again. and that goes with me trying to put a fucking key in a goddamn door hole as hard as hell. But I did problem solve figuring out if I put my nail in the door hole and slide my key alongside of it. It lines right in. But i did not figure that out in a minute, That took me fucking tons and tons of frustration. and then you find out when you get mad you throw the keys, and then I have to find keys again.

G: Did that happen?

chad: Yes, It just presents new problems if you let your frustration take over. Yeah, so now, things are hard. I try to laugh. Yeah. yeah, this is hard. Then i laugh, then i ask myself, And now, hmm, how are we gonna get through this and make a game out of it, because games are fun as long as you find the joy in it.

G: In what ways has climbing impacted your life. We're almost done.

Learned/memorized movement

chad**: it has made me more resilient. So like, because i am forcing myself to make sense of what is in front of me, I mean I am seeing things. Don't get me wrong, I am blind but I am still seeing things, I just don't see clearly. I can learn someone's body by what I do see. And i even make eye contact, which is a learned behavior.**

G: And why did you feel the need to learn that?

chad: Because I was standing beside a blind man, and I could see that he was fucking, wandering his eyes around, and I looked at Tara. And I was like, did you see how weird Wayne looks with this always moving his eyes around, and she was like, you do the same thing. And I was like, not anymore. I don't. I was unaware that I was doing this as you're moving your eyes around all the time searching, trying to like, make sense. The more I'm moving my eyes around, the more information I'm giving my brain, so they can then paint me a picture. and with the climbing, i am seeing rocks and stuff, like now i know what I am stepping on because it's learned. . Yeah, it now knows when I see this blur, it is this because I have touched it after seeing it. So even when I am walking on rocks, I know where to put my foot, because I have done it before. I am no longer problem solving. Before i would walk and use my stick, but now my brain has memorized : when i see this stick, that is now there.

G: But how do you know how deep it is?

On the fly reacting

chad: **Crazy? I don't know. Yeah, it's a trust thing I've also been learned to just move through the world with confidence, because i literally have to, I have confidence that I am going to be able to react accordingly on the fly. So instead of skittishly moving through this world like I did early on to my disability. I've learned that I can trust that I'm going to be okay. As long as I keep moving… I just don't don't plan!**

chad: For instance,the other day I was hiking somewhere or approaching, there was a gap between in and my stick would not reach it So then I have an option here. I can fucking. Sit there like a coward and not do it, or I just jumped.

G: That kind of sounds like a plan.

chad: but it's not like I stood there and pondered it. I as I'm walking, I'm like this. I'm like this, isn't there? But I can tell there's something there. But I don't know if it's angled like this. Is it a point, is it? Is the rock gonna roll? and how many times you probably walk into here behind me to hear like a fucking rock tumble, or whatever I step on something you probably would have stepped on if you've seen. I just jump for things, cause I know I am going to land and be able to react in the moment. I trust

myself and my capabllities. and because I've done it and done it, I now don't think twice about it. because I know that I'm capable.

G: I guess I'm still confused, like when you're walking like every rocky path is different.

chad: I'm on the fly. I'm reacting, <u>but without even thinking about it.</u>

G: You're not thinking about it, would you say you're feeling it so?

chad: Yeah, I'm not premeditated in my steps. But in the moment, as soon as my foot hits something I'm like. Oh, that's… so I angle it. But that came over time. I used to have to move so slowly because my ankles would roll all the time, stepping on things. I have strength now, so I don't need a walking stick. My ankles are so strong now.
like the way I walk today compared to the way I walked 5 years ago is night and day.

Embodiment

G: Yeah, what? How would you define? How would you define embodiment

chad: It is a learned feeling or stored behavior within my body. I am not cognitively thinking I'm gonna move my foot here to do that. My body knows how to react without me telling it how to.

G Would you say that your disability has made you more embodied? How so

chad: 100 percent. because of, we're used to hiking, , walking on a fucking sidewalk. I'm more in tune with, is before I would be looking and analyzing it. Where I'm putting my feet. where now? I don't. I just go off the fly, and I step here. Oh, or I have to hop. The the heavier my bag is, the more I rely on my stick, or if I'm walking to the airport with all my shit, my backpack like do somewhere. I can't react. The way, I need to nimble. I am like a gazelle very agile, but then once you start strapping, gear on me. I cant move

G: before, like you could plan and premeditate things. But now, like you say, I I swear you said 100 times I go off the fly, I go off the fly. What is off the fly mean? Is that? Is that your way of saying it's like this embodied response. It's like a reaction like like Tanner calls it. The body takes over. He's like there's a moment where the body takes over. But he, like, has these clear distinctions of when it happens and when it doesn't. But for you it almost seems like you live in that state.

chad: Yeah, that's why, when I do put my fear of being judged, whatever it is, I still have to unpack this of using a cane. I'm all of a sudden now, just like *phew* because i know what is in front of me, i

know i can breathe, I know it's safe. I am constantly in a fight or flight mode. even though I try not to look that way when I'm walking without a cane, scanning the road ahead of me, I am all times relying on my body. My body is taking over because I am not mindfully thinking. ***I wonder if that is true or not though, cause like,I cannot say I am NOT thinking. I mean i wonder if it is a learned behavior, because every path is different, but my body has learned how to react without having to explictly think about what to do.***

G: I'm just like pondering all this. So then, like, just so, you know, like the philosophical perspective that my study is drawn upon. And this is why you're experiencing this like existential crisis is because it literally says thinking is movement. There is no difference. And I think you just feel that compounded because you can't like. Think your way through the world without your body like you need your body by your side. You need your body as an ally, as you navigate your environment.

C: yes, and this is why I Am into being so fit and healthy, because without my capable body, I would not be able to do what I do. And my disability , though I cannot see very well, has not hindered anything in my body. So I then make sure that my body works at its best ability to take over. Someone who can see. ---How many times I said, you don't follow me when we're fucking hiking somewhere--- It's like I'm not planning my path out. I'm just trusting that I'm capable. But you don't know about me. You're like, Look. All I know is this works for me, yeah. And like, all I know is that I can put myself in a sitation to get tthrough it. I'm not telling you that you can.

G: Tanner said this. Well, and I think I said it to you, too, where he's like look like when you go into autopilot like autopilot, is like the death of like humanity, basically because we're not like seeking new solutions to problems. And so like, when something becomes intuitive, you're not really problem solving anymore. I think your way of saying that is, when it becomes memorization. It's not problem solving anymore. I, that's the the connection I see there

C; So when I am hiking, it is intutive but my body is problem solving FOR ME, without me having to actively think, "should I step like this, should I do this?" cause it is happening too quickly for my brain to react. My brain is moving my body ,it is connected, but lets speed things up again, now i am running, i am not looking at what I am stepping on, but my body is moving intuitively moving my foot like this or like that based on what it feels in that moment. It's like my foot hits this rock before it rolls like that. My brain isn't telling my foot to move like this to strengthen it So it doesn't roll over. I'm assuming my brain is doing that. It's definitely doing that. It's just happening.
<u>I kinda feel like embodidment IS intuition</u>

G: So then I was gonna ask, so I want you to go back. Okay, we're almost done. I want you to go back because you gave me this textbook definition of embodiment, but I feel like you could like literally contribute to a new definition of embodiment. You told me, learned in store behavior in my body. It's not cognitive, but I I want to go more on what you just said. So you said, I think embodiment is intuitive…

chad: I think embodment is intuitve because… [hesitates]... because, i trust the capabilities of my body itself I know that I can intuitivly react in the way necessary in that moment, in that split decision, but i am not using a PS tree in that moment, because I do not have time for it, my body is doing it for me, i embody the power to make the decision in a split moment. Based off my lived experiences, because the only reason I can do it is because I've already done it.

G: Okay? So I'm gonna read that back to you. Embodiment is intuitive. They're hand in hand because I trust the capabilities of my body, I will intuitively act in a split decision. I'm not using problem solving to in the moment, because I don't have time. My body does it for me. I embody the power to make the decisions in half a second based off of my lived experiences. I can really only do it because I've done it before.

chad: but the only reason I can do it is because I have done it before, it almost sounds I Am thinking. When i am moving, i mean i am thinking, i am not thinking left right do this. When i started using a walking stick, i had to literally think left foot right hand, it was SO slow and tedious and i hated it
but it was a necessary step in the process to get to the point of being able to run. You have to walk before you can run. And rock climbing has forced me ---because of my love for climbing---
It forced me to have all of these lived epxeriences. I am the most capable bljnd person I know because I rock climb. I have blind buddies who play hockey and are super active but canot get around nearly as good as me because they don't rock climb because they, their body, hasn't had all these opportunities to learn how to intuitively move.

G: Yes, this is really good. So when you were talking about your eyes, like like they like rock climbing is like forces you to look at what's ahead of you, and it's almost like a muscle. Would you say that you're like exercising? And so that's why your vision gets worse when you're not.

chad: That's a hundred percent true. It helps me to fill in the blanks in my environment. When i am on a wall climbing, for me to put my foot that was here, years ago, i would be searching aroung trying to figure out what it feels like. My brain now has learned to use what I have. So, But I had to learn that. Same when are are first born with your sight you can't just learn how to catch a ball. You have to learn that, you know, to learn how to put your hand where this object, you see, is going to be.

G: It seems like you're comparing a lot of like the process of going blind as like a kid learning how to walk again.

Reborn

chad: I was reborn when I want blind. and I also am very happy and lucky and fortunate that I have children who also had to like, learning to do things. Cause then, because then well, I'm learning alongside of that. and I have someone to play with me as a little kid learning how to walk, run, ride, a bike, catch a ball.

I also meet a lot of blind people That aren't fortunate to have someone who is on that level. Because, like, when I'm playing fucking catch with a 5 year old, I'm also a 5 year old. I'm just learning how to catch a ball. So when we're literally throwing a ball like this back and forth of this distance and slowly backing up, backing up. That's people all the time like, oh, you're not blind. You just caught the ball. But I'm like, have you fucking spent years throwing a ball like this and like this, and like this. No, you haven't so shut the fuck up.

G: But I just wanted one more thing. You say I'm capable, so capable is blind, like I work with. You know. I there's people on the blind hockey team who can't move the world like through the world like I do. Rock climbing affords you the opportunity to intuitively move. What do you think it is about rock climbing more than any cause you mountain bike, you play hockey.

chad: So yeah, that's a fear thing. You learn to channel the fear in rock climbing into embodiment, in the sense that you are using that fear to help… in those moments when you are so terrified, you then have to use that fear as fuel to get you through to safety. You could give up and let go and say Get me off this climb. I'm never doing it again, or you can fight through that. and then you then do it. Sometimes you're like confident, okay, if I push through this, I can do this. and I then transit that into. And you know--- walking around a city for me is so dangerous and crossing roads, and then to go. I can't do this. I can't. I'm just like dude. You fucking have climbed a mountain before, surely walk across a flat fucking road. So fear. I think fear suffocates people. Yeah, maybe the word like you, you get suffocated like constricted through fear. But if you can learn to. if you can't beat the fear, just do it scared.

G: it seems like climbings, like constrained your environment, right ?

chad: Okay, I have to learn how to walk again. It shrunk me and turned me into baby again. It took me back to ground 0 And that's why, like, at the beginning of this, I said how I was like so sad. It was like I couldn't do anything. I was just trapped.

G: But then, would you say climbing help to expand your environment again?

Hockey: reaction time and sound

chad:Yeah. if I didn't have climbing like, think. Think of the things I've got to do through climbing, of all the that i have done . If I didn't rock climb, I probably would have played hockey. I would have went

to and from cities I would had someone. You can't just walk around with a fucking hockey bag. Someone is driving me everywhere. I'm not what. The only reason I'm so capable, and trusting myself that I can go somewheres because I get I fucking hiked 20 miles in a backpack off weird terrain. I can clearly get from Point A to Point B anywhere else.. Climbing helped me grow up at a rapid rate.

G: Was there any other activities that you did that helped you in the way that climbing did?

chad: playing blind hockey as well. It helped my reaction time. Climbing is slow (yet dynamic) 99 percent of the time you are thinking, am i doing this, am i doing that? Hockey is so fast- like bang bang bang. So i think my quick reaction rate is from playing hockey, i don't have time to think--- i mean i do--- but in climbing i can 9/10 think i have this option or this option or this option, but in hockey i hear this, okay i turn here, i hear that, go there. It has heightened my hearing as well and my reaction rate. My hearing and my ability to mentally imagine where things are by hearing them. Even though i dont see where someone is, i know where they are based on what I am hearing… i would love to have audible targets and see if i can hit them, cause i used to really love taregt shooting.