Talk to me about the first climb

G: So for the 1st climb. That was the purple purple one. Yeah. And we talked about it afterwards. It didn't seem like anything like super interesting emerged on it right? it was just a little pumpy, or the clipping was weird, right?

S: There was like an odd stance where like, because gym's have stances at similar intervals. Okay, I knew that I was at a point where I should be clipping, but the clip was not where I expected it to be. I had to pause for a moment there to try and find it. Okay, other than that it was pretty good.

G: Okay. Is there anything else that you want to talk about that climb?

S: I think I got like a little more pumped on it just because I was like taking time. But I wouldn't say it's like out of. If it's not like unexpected. It's just something that comes with like having to wait to find things.

G: So you mentioned something when we were climbing. How like you need more endurance as a blind climber, right like, why is that?

Endurance and blindness

S: Mostly because you need to essentially buy yourself time to be able to find or like assess the the route that's in front of you. Like as blin climbers, we're using incomplete information to understand our world. And so by kind of like waiting on our hands and feet, like, we're trying to collect as much information as possible so that we can fully understand the problem that's that's set before us. Okay, so like, my style of climbing is, I think, pretty different on account of the fact that I know that I have to buy as much time as possible. Like, I can have longer endurance. But additionally, like I, I kind climb statically, and I try to find really good rest positions where I can like wait and look and kind of suss out what's ahead of me.

G: So when you're saying, Buy as much time as possible. Like. how? What are the problem? Solving strategies that enable you to buy time

S: so like one of them is just the positions that I use. Like I I kind of use pretty relaxed like arms, back fingers engaged, but kind of like loosely. So I don't get over pumped. Okay, and then I kind of like, sit

back on my legs as much as possible to bring my face as far from the wall as possible, and that kind of gives me a greater cone like the if you're really close to my cone of vision like, I'm not going to see as much versus if you're like 5 feet away. It's like a wider, you know. It's it's like an outward expanding Column. So the further I can get away from the wall, the more I'm going to be able to see and stand. So my rest positions, I mean. I'd say, like, probably optimize, them like any climber would. But it's t's more important to me than I think. The average climber. The fastest I climb is is probably some people's slowest.

G: so and why are you needing to rest more than someone who is not visually impaired?

S: yeah, I think the the rest come when I approach a problem that's more complex than the rest of the route. So I have to kind of stop, assess. figure out, where's the next clip like? Where is the the direction of the route? Where is my next good hold? Gonna be? And then from there, then I'll start moving then, but I can climb. you know, as long as I can, until I run into something that's unexpected, and then I have to stop and wait. Figure out how to proceed. I need to collect information, and sometimes it takes time, just kind of waiting and standing my my head and my eyes back and forth. and just looking for like the clues that the rock provides like sometimes that's the angle that the hold is positioned at like. If it's angled one way or the other, I would know that's a right hand or a left hand. Sometimes it's just like spacing, like, if it's a greater space, it's like, okay, this is going to be a more dynamic move. And you're kind of reading between the lines. There's a route in front of you. But there's also the route setters intention. <u>And I think because I often make decisions off of incomplete information.</u> It's really difficult for me to actually climb indoor routes the way that the routes that are intended, unless there's like a lot of these context clues.

Decisions w/ incomplete info

G: I'm really interested in this idea of making decisions based on incomplete information. Like. can you say more?

S: Okay. So like the the last route, the the one that was in the corner. That style of route is It's tricky for me, because my face is really close to the wall. Yes, and that mean and the positions that you're in also prevents you from leaning back or getting that larger cone of vision that makes it easier. So I end up making moves that aren't the route setters design or like what they want. And so I use the wall without the hold much more than I think the normal climber would do. But I'd say this, for, like in real life as well, just like when I'm walking down the street, I have to make certain assumptions of. There isn't something in front of me. even if there is or isn't because I I I have to run with that. Otherwise I'd

be constantly scanning and searching. and then, even when I'm in a more crowded space, I might know where some things are, but it's it would be really difficult for me to actually fully understand all the obstacles around me. So I just have to move and and just kind of work with the consequences, because I don't. I have like these constraints of like time or energy that prevent me from waiting and looking around until I actually have all the complete visual information.
I think that is something that like when I think about how I work like my job. And it requires a lot of problem solving. And sometimes you don't have all the information like, there's a 11 h time delay between Salt Lake City and Manila. and so you might have like several hours between when you get someone's email, and you can actually ask them for more information. So there's kind of a process of elimination. And then a bit of deduction about. You know what are the possibilities for the cause of this issue, and I think I'm good at leaping to conclusion or knowing when I like make an assumption or make a conclusion based on the information that I have available.

G: I'm more curious, like these like strategies, like working off of incomplete information like, How does that trickle into your inner personal life?

S:Oh, man, that's interesting. *I think so.* I think sometimes I'm more willing to to make like logical jumps than other people. And and it depends, like some people's level, like comfort level with just kind of being like, oh, yeah, no, that's what we should do. Is, is higher or lower. It's I don't know. I it's it's hard to like quantify. I'm not trying to think of a specific instance of this.

G: I guess it's just like you can't always have, like every stepping stone in between the big ones right? So for you, you're more willing to just take that jump, and you might miss it. But like it's when you're saying you have constraints of time and energy. What I'm really hearing is like, you're really trying to be efficient with your time. Right? Like, would you say like, this is the reason that you're doing all of this. And, like, you know, making assumptions and likeG: working on incomplete information, the goal is for efficiency. Right?

Sanity

S: I think it's efficiency. I also think it's like for sanity. *Yeah,* it's probably *more* for sanity.

S: I'm not sure like how much Chaz has talked talked about this. But it's like really, mentally exhausting to be a blind person. like you have to focus on really minute things hat aren't an issue, or even a consideration for a sighted person. Like, When I 1st started losing my vision, I would get hurt a lot like just hitting my heads on things, or like like stubbing my toes, or like bumping into things and i think when I come to a new location. don't have a memory of it. And those those things do happen very quickly. My brain fills in, I think, like a little bit of but ust like a memory of sorts of the place. And I I 1st

time I walk into a place I feel very blind. And then the second or 3rd time, I feel like I can see more, even if I actually can't. because I think my brain fills in some of the holes of the information that's missing, and I just kind of move around those obstacles. And then. similarly, if I'm in a space that's familiar, and a piece of it's moved like a table into the center of the room. I'm gonna walk right into that and not even like realize that happened until, like I, I hit it. Okay, but like the efficiency is *maybe a byproduct*. But I think it almost just barely gets me to where everyone else is okay and it's just like a way of my, you know your subconscious handles, remembering to breathe, and your heart and and all of these very necessary functions that your body does. And I think making a lot of these logical leaps saves my brain from having to really think about every step that i take every moment of the day for years, because it can be really overwhelming. Like when I hike it can be. I feel like the hardest part is the mental endurance of just like kind of being a little anxious about every single step and trying to balance and trying to figure out like, okay. I took a step. I I like, and I balance, and I look until I find the next step, and then I stand up and I balance. And then I hmm look for the next step, and I stand up and I balance. And I look. *and it's exhausting.* not physically exhausting. It's mentally exhausting.

exhaustion

G: Yeah, I mean, Chaz speaks of it very similarly, like everything you just said. He's like, some days I want to use my cane because I don't want to have to. I don't want to have to be the strong one today, like some days, I just want to be able to not have to do that. Yeah, yeah.

S: Sometimes I just don't want to break things like, I don't know. I have noticed. Like, if I go to reach across the table. If there's something like here so many times, I'm looking at what I'm trying to grab, and I can't see what's down here, and I'll just knock it over, and that's just like the it's just exhausting to kind of. Always feel like that embarrassment and shame that comes from just breaking other people's stuff or your own things, or making messes, and it kind of wears on you

G: Yeah, do you have you ever used like a cane or a walking stick, or anything. I've I've been using it in airports more. Okay? So sometimes, maybe it just like helps, just like some days. It's just like, I don't want to have to fucking be so engaged right now. Yeah.

S: And it's it's also like, you're kind of given a little bit of it's it's like a social relaxation in some ways, too. I think people forgive you a little easier when they see that you're blind versus like, even though I am capable of walking through an airport. I'll probably end up bumping into someone at some point.

Yeah. And I have to apologize and explain and kind of feel bad inside. But I think when I have the cane out, people just kind of shrug iit off and move on with their lives.

G:That's an interesting that's interesting in itself, right like Chas was saying. He messaged me yesterday, ranting how he got on the bus, and he was like, what bus number is this? And the guy? Just the driver, just like went off like, was such a Dick. Yeah. And then Chaz was like, Well, I'm visually impaired. So and the guy was like, okay, never mind. Yeah. And he's like you could have just told me what bus number it was, and he was pissed. And I'm like, you have to deal with this every single day---

S: and I feel like sometimes like the opposite thing happens where, like I was getting on the train in Munich, and there was someone who was like very nice, and was like taking me up getting into the train. And it was super crowded so like, Hey, can you tell? Like same things like, what train number is it? And is this like the door? Because there were a whole bunch of windows that all look like doors. And that was helpful. But then, later, when I was getting off this train, like someone like grabbed my arm and was like, Here, let me help you off the train. it was very well meaning. I think sometimes there's just not like a a standard like don't always know what is helpful. They just are like they see a blind person, and they assume they're like not totally helpless, but somewhat. and I think my my personality, or at least like I would say, like my personality before my I lost my sight has been very different than now that I've lost my sight like. losing your sight is the most humbling experience you could ever imagine, because sometimes you feel incapable of doing basic things. And I think, like, you're like holding on to your sense. Yeah, like clinging to your sense of independence. And when someone's just like assuming that you don't have the ability to maneuver through space and that you need help, it's just like a little little like jab little jab in the side that bruises your ego but and we're all just like clinging to our like feigned independence of sorts, like we are able to get around, but also like not in the same way, everyone else in our lives is able to have, like true freedom of movement.

G: thank you for sharing that. No, that was beautiful, I mean. can't imagine, I think, like more than anything like working with, like all of you guys and like hearing your stories like. Yeah, I'm gonna take out my loans. I'm gonna go fucking. See the world because you just literally can wake up one day and be blind, and you just don't know what's going to happen. So like, I just want to like, seize the day because you just don't fucking know what will happen tomorrow?

S: Yeah, like, Oh, gosh! It's like : it. It's interesting for me to hear Chaz's, because it was like so sudden right? It was like one eye, and then the next eye in like 2 or 3 months, I know, and I feel like the hardest thing for me is that it's like been years. And so it's like, you never know like, when is the last day like? Close your eyes, and you like. Wake up in the morning. You can't see. And like, how far away is that date? I don't know. It's it's like, definitely goes through phases of existentialism.

Shrinking environment

S: Also, it's interesting because I think about this all the time like my my like sphere of influence is extraordinarily small, like it's limited by how far I'm willing to bike. And when I 1st moved here I just had a a normal bike had been stolen when I was in Madison, and I got a job and waited a couple of months, and I bought another bike. and that increased my area of influence or exploration, but it's still like scary to Get around here like I'm always subject to being afraid of being killed by a car. And so like there are parts of town that I won't go to, simply because they're terrifying to get to or like places that I'd love to go, but it would just be like really hard for me to bike all the way from here to like Alta. I'd love to go skiing more, but it's totally dependent on having friends, or like someone who lives nearby who's willing to pick me up in the morning to go skiing. And so it's like. I feel like to to go and do things not in my own neighborhood, I kind of not like need to be socially manipulative, but I am like reliant on people. And so like. I almost feel weird, like asking to do things with people. Because I'm like, I know that you live nearby and that like, you're willing to go out with me---

G: Not just willing. Stoked, more than anything to spend time with you.

S: So it's just like ultimately, the 99% of my life is located between here and the office. and like people can just hop in a car and drive anywhere they want for like hours around me. And it's like, I never get to choose where I want to go except if i'm gonna like bike there.
I never really had autonomy like I never drove like. My. My parents were somewhat re restrictive of me and my brother, and so they didn't want us to learn to drive until we were like 18. So I never learned to drive, and by the time like they would have been okay with us, having that freedom. It was already like I'd already lost enough of my vision that… it was funny, because then they were like, Oh, no, you should go and get a license. But I was like, I can't see. That's like a really dumb idea. so I never really had that?

G: *goes on rant about dokumaci and shrinking environment* do you resonate with that interpretation of disability?

S: yes, totally. So I think that's like there's all of these things that I think with blindness you get frustrated by. And I think what people underestimate is just like the the lack of freedom of movement is probably the biggest for a lot of us like, especially in the outdoor space. Because we want to go and access these places that are like like climbing crahs like mountain biking locations like ski resorts that like require a significant amount of transportation and gear to get to that make it difficult to access. And so yeah, it was, really, it was interesting, actually like talking with Tanner about this for the 1st time. He Very much so has that restriction on like on him in a way that's like more severe than like anyone else really. like. Sure, he can drive, but he can't get into the back country. You can't like : get to the heart of a mountain, and that has gotta feel just like, you know. I know if he's done some of his

design projects on how you can create a space that simulates that feeling of exploration. And that's what we crave, right as I'm exploring new places. But his options of of places to explore in itself are limited? You know.

G: thank you for being so vulnerable!

S: these question being asked are like a little therapeutic, because you kind of like, have these thoughts and frustrations every day.

G: What question?

S: Just like about being restricted like, what does it feel like to be restricted? I feel like people overlook that. The environment is not accessible to everyone because of every other intersectional thing that could be layered on.

G: Yeah, I mean, it's like we were saying the other day, right? Like the layers of constraints like at a certain point that is so high and dense that there's no way to overcome it. Yeah. And like, as far as like disabled communities go like, I mean, I never. I lived in Taiwan for 2 years. I never saw a disabled person Talk about a shrunken environment like these. Spaces are absolutely not made for them

s: Have you like? What do you know of the Japanese paraclimbing team?

G: I have seen them. I have wondered. I have had questions, but I don't know much.

S: Yeah, I I also don't know much, but I think like they are super strong. Yeah, in the para climbing scene. And they're one of like the most cohesive. And I think in part, it's because they find this extreme pride to represent their country. because in every other facet of life they're told that they don't belong. And this is their one space to be something that people seem respect and and their daily lives. They don't get that respect or acknowledgement to them.

Second climb?

G: Okay, alright, alright. So we talked about a lot. We talked about the purple climb, and then I guess we maybe let's see here. So then I guess after that was the blue climb. Is there anything that you did want to mention that with any like specific problem, solving strategies, or anything that happened there?

S: That one was particularly : difficult for me, because it was a blue holds on blue wall. Okay? And so there wasn't much contrast. I think it makes. Not that I have a corner of my eye. But like it does make just kind of scanning easier because I don't have to to specifically identify everything kind of like. Oh,

that's a flash of yellow against, I believe like things stand out more and so I was just very slow on that route, and also moved left to right a lot. So because of that, I just had to be lot more attentive and just more resting was involved. There were a lot of periods where I had to like, stop and and just collect information before I did the next move. There was 1 point that I was certain that there was a hold that was missing, but I couldn't find it, so I waited around for a while, and I was like, I think. well, I hold directly above me, but it was a really bad hold, so I assumed it would be a foot but there wasn't anything between that and a better hold. That was quite a bit further away. and so I was looking for the intermediate. But I couldn't find it. I mean, maybe there was an intermediate foot that i could have used. But ultimately I just did a larger, more dynamic move to skip that problem. It was to a good hold. Yeah, but still massive. Move. pretty extended. I'd say, : That's where I think, like the bond the b1 climbers.

This where b1 climbers are so dependent on isometric movement because they have to get to that full extension level while they're searching for the point. like I can find the hold and know how far away it is. And if I grab it from the top or the side or the bottom, and they just fully extend their bodies until they find the hold and feel for the best way to grab it. and so their entire like style is static.

G: dude, full extension moves are so hard. I was like, I can't leverage any power, because I'm in a full extension. : Yeah, like, that's really hard, because you're . all your energy and everything is like you're at the tips of your fingers and the tips of your toes, and then now you have to make a move off of that. But now add the layer of b 1 where you have to search while you're in that space.

S: . I've said this before. And I've been telling people this. And I think : I think they think I'm like trying to like dig for empathy or something. But I do think it's actually good training for people to try climbing with a blindfold. Yeah, because it is, it forces you to climb completely different. And it's it's good training for isometric movement. And then those full extension moves.

Efficiency!? please!?

G: can you say more about isometric movement?

S: I think of it as like, you know, holding off static positions in the best kind of like Body geometry you can : so obviously full extension move is going to be really difficult on your joints. So you want to find an angle to apply that force to your body that's like less damaging to your joints.

G: I keep thinking efficiency. Am I imposing that onto this? Cause you don't use that word. And then when I mention it, you're like, not really. …

S: ***No, you're right. I literally majored in efficiency.*** **Industrial engineering is literally about the process of how to make things more efficient.**

G: Okay, so like, are you implicitly threading that idea constantly throughout?

S: Nooooo…

G: that's what I'm saying!!! It's just like, how does it show up?

S: It's funny, because I don't think in my own life I'm very efficient, like time-wise, Not super efficient. I think it's just they don't like to be… Like to move a little slower. But then, when I think about steps that are outside my kind of realm of of influence, or like my own life. I do kind of try to find ways that they can click together with fewer steps in between. But I'm not always like great at enacting that part of my life.

G: So okay, you can appreciate efficiency and like a broader context and how it applies to systems. But maybe in your own life, it's not like the most explicit focus. Yeah. Cause I'm like, I feel like everything you're saying is like, centered around, even like this isometric movement for me. I'm wondering why is that helpful? Well, efficiency, right? Isn't that like, I guess the way I think about climbing is it really is centered around efficiency ----

S: efficient movemen, Yeah. Because in order to climb harder, you need to use and expend less energy to get to higher points. like, if you want to climb 2,000 feet in the day. Yeah, you can't be gripped on every single pitch. You have to find a way to move or to like build your your systems in an efficient manner to move that fast. like alpinism is the ultimate like manifestation of efficiency. Yeah.

G: like zooming out for a second, which I love to do. But we're gonna have to zoom back in. more broadly Like, what do you think are the most useful strategies that you use on the wall.

Broad general strategies you use on the wall

S: hmmmm….

G: so like you say …. Find rests, lay back. Don't like lock off like. Extend your arms so that you can look up and like, see like a more comprehensive field of view. Yeah, like, we can talk about this now. I mean other than the blue one the yellow one. I thought there was a lot of really interesting stuff happening on that climb. You did a lot of backing off, especially when you were getting that Sloper, and you're like, Fuck

the Sloper sucks and you back off. Would you say that? That's a strategy that you use pretty often? I yeah, this is like, you know.

Backing off

S: you make these like leaps of of faith. Sometimes, as a blind person like you don't exactly know what's going on. You're moving off of incomplete information. But you just have to keep walking forward. : And so I think you do that with climbing But then sometimes the information that you know you make your judgment off of that leads to the conclusion that you made. And you're wrong. So you have to back off and that's like, you know, you start to walk across the street but then you hear a car, and then you come back. Usually that's how it works. I like every time I cross the street is a bit a little bit of a gamble. so you hear a car, you back off.

G: it feels likeonly like a certain type of body and a certain type of disability would afford you the strategy of backing off. Right? So like it's like almost like a privilege to be able to back off like once Tanner commits to a move. That's it. And then his rest are literally single arm dead hangs, I know. So when I was talking to him about backing off, I was like, Oh, you know, strategies like backing off, and I said it so broadly, and he was like, no, no, I can't. I can't back off. And so I think it's really interesting to think about like. how does that show up in your like day to day life like he can't back off right? There's like he's gotta be really certain in his decision. Exactly. So. It's like, Jono always calls his problem solving strategies like fuck around and find out. And it kind of feels like. That's what you're saying, too. Right? I feel like His disabilities has shrunk his environment so much that he really has to be very intentional with the way that he moves through the world. That's

S: that's so interesting. .I do think I'm pretty hesitant. Okay, in a way I didn't used to be like I definitely would say personality, and then, like like confidenc in myself, has been pretty shaken by vision loss like. I was kind of arrogant, teenager, like, definitely independent. ButI'm just like a lot more hesitant and then self-doubting : than I used to be, and so it's almost like when I think about backing off. I'm surprised i don't do it more in climbing but you kind of just like have to at a certain point commit to making a move, because otherwise you get pumped.

G: So you say you're surprised you don't back off more in climbing. iis that because you're hesitant?

S: I think it's because I'm hesitant. But I also think part of that's the you know, being comfortable with moving forward with incomplete information.

G: Ohhh.: so backing off would be like.
G: I don't have enough information. And I'm freaking out. So I'm gonna back. I'm gonna like, come down and try and figure out versus like. I don't really know where I'm going. But I'm used to not knowing where I'm going. So I'm just gonna keep going, anyway, right?

S: Oh, which I do a lot, and I think backing off is usually like I think you saw me do some pretty bad hand swaps. That's I have that as a strategy. To make up for a mistake.
Backing off tends to happen less because I've like committed to a move that's not the intended route. And usually it's because, like, Oh, that that's whole. That is, contrary to the information that I I was assuming right? Okay? So the 1st time I moved on to on that yellow route onto the slopers.
I thought it was just going to be a bad sloper. And actually there were 2 jibs on it. Oh, which is great, right, you know the ones are on the lip, the 1st one, but the second one does not. So. When I 1st reached up I was like trying to slide my hand across the second one to try and find a jib. And it wasn't 1. Okay, and that's where I was like, Oh, man, I was really hoping I could just slap my hand on top and grab something, and there wasn't anything. And were you tired at that point? Yeah. Cause if you weren't, you would just keep going right. I I could have like retreated. And tried it again.

G: So you kept backing off to that last the hold with the jibs on it, because that was your last good hold. Yeah, okay. But it wasn't enough to get everything back to continue moving forward. Right? Okay.

G: But you're saying that more broadly, like you are backing off, you are back, backing off less because you're okay with the uncertainty to some degree. Yeah, okay. And that has happened as a like a result of your visual impairment.

S: Yeah, okay. : it's like, I think I I'm just more comfortable, like making those assumptions and like being like, I'm not exactly sure if this is the possible. but it's the best one that I can find. Maybe not the best answer, but it's the best answer, or like conclusion, I can draw with the information I have.

G: And I'm just interested is thinking about how this interacts with efficiency, because that's not always going to be the most efficient way. Right? It's like, well, I'm gonna clip off this crimp, even though it fucking sucks because I'm here, and I know that I'm strong enough to do it. It might not be the best way, but I'm gonna do it anyway.

S: But you know, it'd be *less* efficient. Falling. Sometimes, You do find the good hold. Maybe it's by accident, or maybe it's on purpose. and you are able to clip off of that. But this is where, like having the endurance to kind of like move off of bad things…

Endurance > efficiency

G: so more than anything more than efficiency, the language that comes up is endurance

S: It's like mental endurance to move when your body is like, I don't know if this is good or not, and then having the physical endurance to kind of like deal with the consequences of choosing the bad hold

G: So for you, I feel like you're not. It's not so much about efficiency as it is about endurance like, would you say,....

S: is that like the is that a core idea for you? Probably, like I feel like in my every day. I'm not super efficient. But yeah, I I will bike 45 min one way and then 45 min back to like, go climbing. But yeah, that's like not very efficient, is it?

G: But for you you have the endurance, and you've built that endurance. I like the language of endurance rather than resilient. I feel like the word resilient in the adaptive space is so bootstrappy.

S: It's I don't know, cause I do. I do think t*here's something there.* There is a little like… like abrasive to keep going Knowing like this is*, this is so much harder for me*. And so there's like a little bit of that like scratching you all the time when you're like, yeah, sure, like, I can [inaudible] here and there and all over. *No one else* has to do that. I moved to do that. So you're just like it's like acknowledging the sandbag. So and some people train with a sandbag. But other people just live with it. Some people *choos*e to bike, to work every day. But I don't have the choice. I just have to deal with it.
Sure cool they have like they're able to approach it mentally from a point of pride. And for me it's like it's not proud necessarily of the fact that I'd like to work every day. It's just something I have to do. It's not a choice.
And even even like I have the choice between, like, I could ask my partner Nate, to drive me to work because he has a car. If I were from like a low income family that didn't have a car then. Yeah, they would not have the choice even to use a car, and it's not because they're not capable.

G: Alright! I think we're almost done talking about the climbs like I feel like we've talked about the pink climb, and I think

G: the recap of that is like that. One did not afford you the opportunity to be able to zoom out and see the holds in front of you. Yeah. So I got to see what happens. And you were missing some really bomber holds. But you were cranking and making it work

S: It's funny because it's like my favorite style of climbing. Okay.: yeah, I'm definitely. It's it doesn't give me the affordances of of other kinds of climbing where you would see more. But I did. There's so many no hands rest like I didn't have to use or wait my hands, and so it increases the amount of time that. or it loosens the strength of like physical endurance on the grade that I'm able to climb. Okay, I'm not getting pumped. Okay, I can stand on my hand on my feet for a longer period of time and try to find holds. but then, also in a corner like that holds are not irrelevant. But they are something that you can. skip a few without without being completely shut down. . There's there's space for mistakes.

G: So endurance. isn't going to be your number one strategy on something like that, because there's space to not have to just brute. Force your way through it. Okay. it's forgivable.
 okay, thank you. We're like 10 min left. I really appreciate it. So you said something at the very beginning of our interview. Yet last time you said something, and I know that you had a documentary on this tour, that that whole onsite thing which was awesome. : And you were saying, like, you kind of on site life. Can you say more about that?

Onsighting life <3

S: So, we're talking about how I don't really look at the routes. I think sometimes it's a little scary when you see those holds. They're very hard. And I think I'm not as good at planning as I used to be, in part because planning a life that might include going totally blind is really scary.

You would think that would make you want to actually plan out what you're gonna do. But also, if you don't plan, you kind of get to live in a serendipitous way for a little bit longer. Whereas, like, once you go totally blind, you don't get that serendipity as much. Like, every movement has to be thought about. Every time you cross the street, you have to go through a process of, you know, determining the traffic, pressing a button, listening for traffic... like, even knowing what street you're on is going to be difficult.

And so I feel like, for right now, it's a... I don't know if I'll lose my sight, and I don't know when I'll lose my sight. Not having that information, you kind of just have to keep moving forward until it happens, with that likelihood out of your mind. Otherwise, you'll obsess over it. And so by kind of onsighting things...

I think when you know you're about to do something really hard, it's a lot scarier than if you're not sure how hard something is gonna be. And then you end up working through it, and it wasn't so bad after all. The idea of doing the scary thing almost is worse than actually doing it.

G: Wow. Thank you. I appreciate your vulnerability.

S: It is therapeutic for me too

G: We've talked a lot about : obviously problem solving and we've talked about a lot, and I guess a question I have is like, How would you define creativity?

Creativity

S: *OoOoO!* colorful spaghetti and glitter.

1) the ability to create a spontaneous solution to spontaneous problem.
2) or to come up with a novel solution where every other answer leads to the same the same like conclusion.
    a) Like everyone knows. Oh, I'm trying to think of a good example here. Yeah, the mentally like one plus one equals. 2, right? We know 1, 2, 3, 4, and one and one is 2. The the to have the creativity to come up with a *proof* of like. Why that is the case, like you needed some creativity to get there.

G: So you were using the one plus one equals 2. Example to talk about intuition. You're like, I just know, like, it's not a skill I've learned. It's just like I don't need to have to be able to explain it. Because I just get it. Yeah. And then so where does creativity interact with that intuition idea?

S: It's like someone had to look at and be like we but break it down even more like, why is that the case? And and to look at it where everyone else is like. Well, why do I need to know? They look at it and and find a new, a new way of understanding the problem

G: *So it sounds like* the granularity is difference between intuition and creativity creativity. It sounds like you're saying, like you're breaking it down to its components.

S: It *could* be that I mean. and this one plus one equals 2 example that might be like a mathematician's version of creativity. That's like creativity to them is through their breaking down of problem into a into a proof. But maybe an artist creativity could be using colors in a way that no one else has.
And coming up with a style that no one else uses. It's it's looking at things and creating a framework for things in a way that no one else has.

G: So this is interesting because you're talking about. You had 2 definitions for creativity. One was the novel solution where---

S: everyone else draws like the same conclusion.

G: Yeah, I guess I'm still trying to make sense of that. So it's like in a math classroom. When a kid says, Oh, but I found another way to do it. Is that okay?

S: it's like finding a new way to do things. finding a new way to consider something. people have different brain chemistries and look at the world differently. But we've all kind of like agreed on these.

not like standards, like *truths?* or like in physics, We all agree to the same rules and creativity could come in the form of breaking those rules. If you find anything else or just *freedom of of thought* outside of these structures that we created

G:: So then, you*r other* definition was the ability to create spontaneous solutions to a spontaneous problem.

S: Yeah! Okay? I think there's like there's the creativity that comes with looking at like what I said before, of like, huh! Like looking at something specifically and coming up with a different answer. And there's also like, in the moment : when you're just in a place or in a situation. And you just It's like having the ultimate constraint like a single point in time, a single place and having a new idea coming from your environment or situation.

G: So you're just in this single point in this single time, in your environment. And a problem presents itself. Yeah, a problem emerges---

S: And it's a novel problem. because it's a novel problem, whatever you come up, come up with, it's going to be novel.

G: do you have an example?

S:I mean, in some ways, it's like a 1st ascent. Okay? Yeah. Someone walked up to a bit of rock that no one's ever seen before, and decided like, actually, *I* can climb up. And the way that we find a way to the top. It's a novel problem. And it's a novel solution. And it's a little spontaneous in that sense, too.

So what do you think is a relationship between like problem solving and creativity.

S: Oh, man, it's you. It's like, inseparable. Okay, like, you can't t problem solve-- i mean *you can*-- But it would be very (drawl?) to like exclusively solve problems with structure exclusively.
But also that's kind of math in some ways. There is like a lot of like dynamic space there, right? Because it's coming from different applications. Right? Like, they're using the same structure of math to solve all sorts of different kinds of of problems.

G: can you solve problems without creativity?

S: No. unless it's something that you have a heuristic for---

G: But like, would it be problem solving, though, if you're just using a set of prescribed heuristics?

S:I don't think so. Unless it’s ike knowing all the beta for a route. And it's just coming down to your physical ability. But even then, like in the case of paraclimbing, your physical ability is different than someone else's physical ability. And so you're actually not using the heuristic like adapting

to the problem …so you are problem solving

G: feels like breaking beta is problem solving, yeah, right which most adaptive climbers have to do.

Disabled people better PSers?

G: are disabled people better problem solvers.

S: *laughs*I think So

G: like.

G: what does it mean to be a better problem? Solver? First, I think we should define that

S:I mean is better. What like : before we get to problem, solver what is considered better for your situation. Like for me. It's probably something that uses less of my mental resources. Efficiency, like efficiency like. I mean, probably like better for me, would be like that to probably be more efficient. Because, yeah, being being a blind person, is mentally exhausting, okay, or physically exhausting. Or all of these things.
But also, it depends on the scale of the problem maybe it's a problem that only needs a low level solution that's not complex. And maybe the problem is extremely complex and a better solution for a non complex problem was probably be a more efficient solution. But if you're talking about a more complex problem, it's probably a more accurate solution.

G: And that might not necessitate efficiency

S:. Yeah.

G: okay, so if we're going with the og for you better meaning less mental resources, though obviously the type of problem matters. are disabled People better problem solvers?

S: *stumped*. But, man, it's hard. Because if there's physical problems and mental problems and emotional problems and disability impacts all of those. And so it's hard to to nail down a single one.

G: So then I'm going to go ahead and ask the question, are disabled people more creative problem solvers.

S: **Yeah, definitely creative. Because I think it opens up the effort that each disabled person needs to put forth into adapting themselves to the situation they're in, or to adapt their situation to the person that they are. So, for example, like Tanner talking about his version of restricted movement, the places his wheelchair can get. My version of restricted movement is the places I'm willing to bike to, or like that. We each solve that problem different ways because we have different situations. And even the way Tanner deals with his situation versus other people in chairs who deal with their situation... it is a creative sort of expression of their own... So, okay, [it's about] what they want to achieve. So the way that every person deals with their disability is kind of like a first ascent.Everyone approaches it from a different background and different self. And so the way that they deal with coping with disability is novel. Right, like you can... you can go through therapy and like physical therapy and emotional therapy to figure out and be given strategies to cope with the challenges. But ultimately you have to work through how you are going to use those strategies to survive.**

G: And then what is it about disability that makes you more creative? What? How more broadly like? How does that relate to more creative ways to thinking about problems?

S: It's like the in some ways it's like, we're talking about more constraints. But then : you don't have any. Not that you don't have any examples, but you don't. There's no clear path. And so you're forced to come up with something.

G: Is that how you felt like you had to?

S: I didn't have a family that understood disability, or even how bad my disability was. I felt like that the preconceived notion of what a blind person should do or could do, was limited. And so I just did what I wanted to do. And found tools to cope with my disability. That allowed me to do what I wanted. which was like, be an engineer and go rock clubbing andlike kind of live a normal life. But a little bit of making peace with the world you live in, and a little bit of kind of saying fuck you cause the environment's just not made for you.

G: is there anything else you want to share?

S: I don't know what is relevant!

G: goes on capitalism rant and highlighting what my study is trying to contribute.

Design and disability

S:. Okay, if if we're thinking about this like like design. right design is based on empathy and like your ability to to understand where someone else is coming from. But then it's also like, yeah, someone's designs are going to be built off of their lived experience. And if you think about the lived experience of a disabled person, it's different than the lived experience of probably like: 98% of the rest of the world. Or
The rest of the world that doesn't have the exact same disability as you do and so the designs that you create, or the perspective that you bring to the solutions that you design is is like so different than what your average white male middle income person is going to come up with. and I mean. that can be in any way. It could be visual. It could be like physical, it could be functional. But that lived experience is unique and brings a unique perspective that can be expressed through design and expressed through design.
So even if they're not, maybe you take an average person like totally average, like I said, like white male middle income and have them solve the same problem as someone who's been disabled. They will come up with different answers, and maybe it seems like the the disabled person came up with a better answer. : because no one's seen that answer before. But it's not to say it's because they're like this is maybe not in support of your hypothesis. But this is like is like, you know, if they both have the same problem, solving ability. People are going to see the disabled, the disabled person solution as being more creative because they've just never seen that perspective before.

G: It's you're saying, maybe it's not better. It's perceived as more creative because it hasn't been seen before.

S: Yeah.

G: So for that. Okay, so this is all about perspective, like, maybe the disabled person solution actually isn't more creative. But there's no representation like, you're not seeing that before. so it's perceived as creative, due to its novelty. Yeah, but only because we don't do research and learn from the the non white male middle class. Yeah, okay.

S: But again, that's like just a hypothesis. I do think, actually, that people with disabilities are forced to be more creative. And so they flex the creativity muscle more. And so I do think, like, yeah, they can come up with or novel solutions to things. But I I also am saying, like. maybe, even if they are the same level of problem solver as the rest of the world, they can still be coming up with solutions that are perceived as more novel.
This is like holding the assumption or like fixing the variable of creativity and just looking at the outcome from like a qualitative point of view.

G: And you're saying, from the qualitative perspective. That's where we're going to see that richness of the problem solving. Whereas if it's quantifiable, you would probably be missing that. Okay?

Empathy [not always]

G: So yeah, I mean, I think. The word empathy comes up so much for you when you say design is based on empathy like, would you say that like, if you were going to characterize like your problem, solving framework.. Would you say that it's really grounded in empathy?

S: Yeah. I mean, it depends on the problem, right? The kind of problems that I sold for for my job and day to day are not based in empathy. They're based on like: logic and numbers and information. Okay? But those are problems in like manufacturing and business. And that sort of very grounded money based world. But that's that's separate from the user of the products that I helped build. Someone who's who's a designer is looking at those empathetic considerations of touch of, of how something feels when you, when you use it, and and and how easy it is to use, or how delightful it is to use. And you're thinking about the interaction between an object. Some of the emotions. People hide things emotionally.
They buy things because they like them. : And you know who's to say what what person likes or another. But that's why the designer has to think about what someone likes and try and and create something that appeals to those desires. Okay?
Or if you're trying to make something for everyone like you're creating a park, you have to think about the entire cross section of people that if you're you're making a backpack, you're already at a couple of things you're like, it's a backpack, or who it's for. Okay. what kind of adults like, what do they like to do? They like to go climbing. Okay, what is their economic status? How much are they willing to buy this pack for? Okay, that's another group. Okay, what kind of things can we afford to provide at Price Point that people : will like? And you've already like, basically arrived at the solution just by Stacking on constraints, stacking constraints likeThat makes it easy because you're like great. I know that I need a material that costs this much. And appeals to this user group that's like already, very well defined. Okay, but like a park anyone from anywhere, any walk or wall of life goes to parks. So someone designing a park has a part of a job because you need to put yourself in the
in the shoes or shoe or wheelchair of the kid, the adult, the old person the family the whoever goes there and enjoys that space . So that's an extreme kind of empathetic case of trying to create something for everyone. And that's that's really difficult than a very constrained problem.

G: you're saying like, for your work, it's like logic and numbers, and like it's a more logical approach. And you've given this example of a backpack and a park. But for you, Senada, a problem solver like, if you like. Think of, like your dream way of solving problems. What kind of problem solving are you? Empathetic or quantifiable?

S: awww , I'm a feely person. Definitely more empathetic. I am still considering the people that are impacted by a logic and financial decision. So it's like. I know, we want to provide the best product possible. But let's say something. Some dimension is is incorrect, and we find it. While it's in production. We need to tell the factory like. Stop. undo it, do it again, and that kind of sucks. And so, even though you are, are making a logical decision for the comp--- or like yourself. you it's like sometimes because you know the emotional implications.

G: Lastly, is there always a solution to a problem?

S: Not always a solution for everyone, but always a solution for SOMEONE.