- <u>00:00:00</u> Because he had sent me some notes here. So, um, there was like some research paper by Ian McCammon about, uh, some of the Hicks that facets. Is that, is that one of the things that you talk about?
- <u>00:00:12</u> Yeah, so that was a big thing that came out, um, number of years ago. I'm not sure, but Ian McCammon's done quite a bitter research into kind of human factors in the snow world. Uh, and he was maybe one of the earlier people to kind of introduce it and he came up with the acronym FACETS, um, which is just a couple of common, uh, heuristic traps for that skiers can fall into. Um, or, excuse me.
- <u>00:00:36</u> Well, we'll ask you about that then and we can get into that as we're going on. Um, and then I know Ben in, in our conversation, I don't remember directly afterwards he talking and he said, you know, it used to be focused in on, Hey, it was the snow conditions and the weather, and then it was this, that realize that. Yeah, that wasn't it. So maybe we'll start off with, with kind of like saying, all right. You know, what else besides the snow? Can, you know, when you think about avalanche, we think about snow conditions, weather and then maybe going into that. Is there anything, um, from your perspective that you really think would be important? I mean, you kind of understand what we're, we're, we're trying to do here. Anything that you really want to talk about that you think would be interesting for the listeners or anything you want to stay away from?

00:01:20

Um, nothing necessarily to stay away from. I think in general what I've taken away from the last number of years kind of becoming more interested in this is it's not just a like a snow world problem. It's not just an avalanche, uh, wallowing back country skiing problem like this translates throughout life. Um, you know, our who we are and, and where we are in life just depends on a series of decisions we've made to get there. And, you know, kind of wrapping my head around that a little more, I think it's probably changed my life. Um, wow. In general, just kind of realizing that, you know, everything now to me is decision making problem almost for good or worse. Uh, you know, kind of complicates things sometimes. But um, we are where we are and we end up with what we have or what we don't have or you know, whatever it circumstances due to a series of decisions that got us there and how we make those decisions and interpret the information coming in and gain more information to make better decisions or you know, stay ignorant and make a not so informed. But yeah, I think that's one, one like kind of takeaway I got from the number of years of this. Like it really reshaped my whole life conscious, like back country skiing, avalanche world.

00:02:36

Cool. And that's a great, we love that kind of component. Absolutely. Absolutely. And so, Oh, I'm sorry, I'm gonna interrupt you because this is, it's a long format podcast. So we will just start, we'll, we'll start talking, we'll have conversations, we will go down whatever rabbit hole you want to go down. And then I will often talk on our own and kind of bring that and hopefully tie it back in intelligently. Not all.

- <u>00:03:00</u> Yeah, we'll see about that.
- 00:03:02 Intelligence is a very, you know, a loose term, loose term thing with that. It's fun. We laugh, we're gonna, you know, so we're not here to try to stump you or to do anything. It's just really about having a conversation with you like we would've, would have. And I love the idea of that this goes beyond that. Yes, it was, you know, you brought it about because of the work that you're doing around avalanches, you know, keeping people safe there, but it also is a much bigger picture. And that's, I think, really true just of, of this in general.
- <u>00:03:36</u> Uh, you've, we've got video going, but just to let you know, we will not be recording the video. We will only be recording the audio. Okay. Okay. Yeah, yeah. Good deal. And, uh, so like I said, we're gonna do the post-production later, but we're gonna welcome you in. Uh,
- <u>00:03:51</u> yeah, as if that's the beginning of the show. And then, um, Tim, I don't know if you read this, but Tim always likes to talk about music at the end, so I'll ask you a question or two. So just one.
- <u>00:04:02</u> Yeah, yeah, I think you said you were good with that, right? Oh yeah. I love music.
- 00:04:06All right, good, good, good, good, good. And then as Tim said, we start with a speed
round. Basically we'll ask you, you know, this or that and it's just that idea. Just
going quickly in there and then, um, just on that, Tim, I will have the last
question on that, so great. I'll start then you can start. Okay, I will go next.
- <u>00:04:25</u> Three, two, one.

Chris Brown. Welcome to the Behavioral Grooves podcast.

Thank you for having me, yeah, we're doing great. We're doing great. Where are we talking to you from, by the way? I lived in salt Lake City in Utah. Awesome. Nice. Awesome. Yeah,

- 00:04:45I heard of it once. It's heard of it. Yeah, yeah, yeah. All right. We're going to start
with a speed round. We always start with a speed round. So, uh, Tim, why don't
you go, what's your preference? Chris' coffee or tea?
- 00:04:58 Depends on the time of day. Oh wow.
- 00:05:02 Okay. Uh, if you had to live life without a laptop or without a cell phone, which would it be?

- 00:05:08Cell phone. Oh, prefer to live the rest of your life in cold weather or warm
weather? Cold weather as long as there's skiing. Huh?
- 00:05:18 I liked the caveat there. Yeah, I would agree with that. All right. A groom trail or wild back country.
- 00:05:26 Wild back on. True. Yeah. Into

00:05:30 kind of what you do and how we found out about you. So, uh, Ben Grantland who is, uh, works with me as my partner and, and just doing all the crazy stuff that we do at the lantern group, uh, is a avid downhill skier and an outdoor enthusiast. He took a class from you on avalanche safety. So tell, tell our listeners a little bit about what you do and, and your background with avalanche safety and we'll get into how that relates back into behavioral science. But a little bit of that background. First, Chris.

- Ob:06:02 Okay. So one of the hats I wear, um, is in the avalanche education, uh, industry. And it's a growing industry as more people become involved and interested in back country skiing. Um, so the American format as of now, as of a few years ago, is, um, a series of courses and they're geared towards recreational back country skiers, which the majority of us are, or towards professionals science technicians, um, people that are doing avalanche control work at ski resorts for, um, got for highway work, um, guiding operations. Uh, so that's kinda the two veins that came a little bit from Canada, from what I've understood. And I work as an **avalanche educator**. Um, so what Ben took was, uh, a level one recreational avalanche class. Um, and that's kind of the introduction to getting into the back country on your own. And I also work in the snow world as a, as a ski guide and do some snow safety work, observation work, and um, help with forecasting team at some guiding operations.
- 00:07:09 All right, so I'm sure our listeners are sitting here going, okay, this is behavioral groups. What the hell does that have to do with the behavioral science? So what was very fascinating, Ben came back from this and he was super excited and, and he, he talked about this, he said, you know, I was going into this thinking that I was going to be learning about, you know, snow conditions and weather patterns, but there's a third factor that's involved. Do you want to talk a little bit about that and kind of how that got implemented into this world?

00:07:44Yeah. So the larger factor I think that contributes to accidents and fatalities in
the avalanche world is not necessarily the snow weather conditions. Um,
those exist regardless of whether or not we're out there. And it's mostly the
decisions that we make that put us in harms way. And unfortunately,
sometimes this isn't very obvious, but we're making decisions that could
potentially kill us or harm us. Um, when we're skiing in the back country and
especially in an activity that's so enjoyable that many of us, um, indulge in for
recreation and pleasure, it's hard to imagine that there could be consequences
so high. And so kind of getting in the human psyche a little bit or your own
psyche at the very least? Uh, I think it's probably more important than the

snow science part of it, especially considering, um, the snow science part is always, there's kind of quite a few question marks out there.

<u>00:08:45</u>	We're not able to gather the vast amount of data that we'd like to have all the time. And then aggregating that data and taking and making it useful for the common person is very complicated. So, uh, most people come in thinking that, you know, like, Oh, the snow pack and the weather information. That's why I need to know. It's like, yeah, that's the background. But we have professionals already kind of ciphering that information for us in packaging it for us. And these are that um, avalanche centers throughout the United States and Canada and Europe that kind of take all this data and I agree and turn it into something that the recreational user can use. Okay. That's taken care of all that. What we really need to do is watch how we use that information. And I think that's kind of what goes into the decision making part of it.
<u>00:09:35</u>	Yeah, go ahead. Yeah. This is the classic decision making under uncertainty then isn't it all much about what the weather conditions are telling you and then you have to decide whether or not what decisions you're going to make in order to stay alive.
<u>00:09:51</u>	Yup. Yeah, totally. Um, and I, I think, uh, with that all those, um, uncertain factors, you know, that should get played into. And that's something that I said when I started talking about margins. Like the more uncertain you are, the larger your margin should be, uh, to accommodate for that uncertainty. Um, and you know, you constantly have this data coming in and actually, uh, I think it's Phil Tetlock's book. I'm super forecasting and an excellent, uh, example and he discussed how the most accurate forecasts aren't necessarily the most knowledgeable people in that field, but there are people that can, um, change and update their idea of the world or their idea of the problem, whatever is going on, uh, with the new data that's coming in. So as opposed to kind of sticking to your idea when you go out, you know, like, Oh, I have uncertainty, but this is what I think is going on. All of a sudden new data's constantly coming in and really like adjusting and changing based on that new data is what makes people the most accurate forecasters. And to some extent we're all forecasters in our lives.
<u>00:10:57</u>	Right? And the problem is is that we make an initial judgment and we don't update that information in our ongoing decision as we're going forward with the new data as it comes in. We're not very good at that. We have certain heuristics and various different things. So is that what you, so when you're working with, with people on this, that's how you're, you're training them, you're, you're having them look at these kinds of factors. Is that what you're doing? Yeah.
<u>00:11:25</u>	Bring more awareness to it these days. I think, um, you know, like Ben, most people come in not really thinking of that. Um, not thinking that that's really the factor and, you know, kind of understanding yourself and your ego and how, what your personal, your a sick traps are and what you know, you can fall into easily. I think being aware of those is really the first step to, um, dealing with

them. Uh, you know, if you're totally ignorant, not aware of them, then we can't really manage them yet. But once we, once we start becoming aware like, Oh, I usually make this mistake or you know, like I usually fall into this trap, then all of a sudden that's at least a little bit lingering in the back of our mind as we go out. And, you know, I think that awareness is really the first step and then you can build on that like how we manage them and how, how to deal with it on a daily basis.

<u>00:12:13</u> So how do you integrate some of this decision making under uncertainty into your training classes?

00:12:20Um, now there's been, this started to be a like checklists kind of develop that
can help us. And this came out of initially kind of the airline industry. Um, you
know, with these checklists kind of bring this stuff, uh, to the forefront and
that's kind of what the Ian McCammon, um, acronym FACETS is. It's just a facet
is, um, an angular snow crystal that can usually be a weak layer in our
snowpack. So it kind of played into the whole like snow science thing, bring,
bring awareness to some of the common human factors that we fall into. Uh,
and I think for everyone there's a different way to deal with them and manage.
Um, you know, I have one coworker that has that acronym actually like written
on his glove. Um, so like he's staring at it constantly. Um, he also is like another
acronym written on his other glove.

00:13:14 And so there's kind of many different ways to fall deal with it, I think. So you don't fall into these traps. Um, and it's kind of a personal basis and I think that's like the, maybe one of the more difficult things is identifying 'em and then choosing a way to deal with it. Um, I think one of the things that gets in the way a lot is kind of our ego and you know, instead of thinking of it as like a deficit or a weakness in us, just recognizing that it is what it is. Um, and working with it, you know, if we deny that like there's an issue or not, I don't want to call it a problem cause it's not necessarily a problem, but you know, we deny that we have like these flaws and things. Um, and she just perpetuating a cycle that could get us in trouble as, as opposed to like, um, really kind of identifying, owning, owning it and not seeing it as like being a lesser person or being a lesser human or you know, not as smart. And so like kind of taking some of that ego out of it I think is pretty important. Yeah.

00:14:16 And just realizing we're human and as humans we have, Ben came into this with a really strong behavioral science background and yet we know that just knowing this stuff isn't always, you know, [inaudible] enough for us to actually understand how it impacts us. And we really have to make it a tangible, we have to make it something that we, we work with and not there. So just on facets, right. I want to go into fat or, uh, into that because, um, it's, it's very cool. So I, so it's an acronym. So, familiarity, right. Acceptance, consistency, expert, halo, first tracks, and then social facilitation. Is that that, did I get that right? Yup. All right. So do you want to go into it to, you know, we don't have to go into all of those, but you know, let's, let's peel away some of the layers on some of those. Talking about like familiarity, how does that impact somebody who's going out on the snow when, all right, well, wouldn't familiarity be good, you know,

00:15:19 so can be good and bad. Um, but the downside of it or the human side of it is becoming so familiar with an area that you started becoming complacent with what's around. And this happens to regular users of a certain area to like higher end professionals. And you know, you kind of find this actually had a lot of accidents happen with people that are like well trained and fairly knowledgeable. And so going out, you know, to this area, you go every day and you have this idea of what's going on there. You've been going there for five, 10, 20 years, you know, multiple days a season and you have this idea of built up in your head. This is what I'm going to encounter. Like this is my safe spot. I've never had an accident here, never gone in an avalanche. And you're just shutting down things and putting filters in your like visioning your senses so you're not absorbing all that data that may be coming out.

<u>00:16:16</u> And so you go out there on an unusual day and all of a sudden there's different things going on and you are ignoring them because you think you know that area. And next thing you know there's an accident. This can be very common with like a wind event. So like you normally have prevailing winds in a certain area. So let's say like coming from the West, um, a lot of places here. And so if you get an East wind event that moves the problem to unsuspecting areas and it's an uncommon wind events, so like that'll happen and all of a sudden you'll see people go out and start getting into accidents and they're like, Oh well, you know, we never have a, a slab, a chunk of snow that could potentially avalanche form in this area. So I'm going to ski there except you know, today I came out and something totally different is going on and it is sitting there because the winds change and now it moved it to that spot where I'm normally see.

<u>00:17:12</u> So you're, because you're familiar, you don't, you don't even notice it because you're just going, Oh, this is that every day. Like you said, I've been doing this, this place for five, 10, 15 years. I've never experienced that. I don't need to even look for that because this is how it has always been.

<u>00:17:28</u> Yeah. You can kind of get into like autopilot mode. And I've, I've caught myself doing this a number of times and multiple areas where I travel pretty regularly and it starts scaring, scaring me pretty bad when I, when I recognize it in myself when I'm walking up Hill and the skin track and my brain is totally shut off. Yeah. I even looking around, I know every turn, every, you know, steps so well that my brain is totally shut off. I'm not even like in, in the, um, in the place that I'm walking in it just autopilot mode on the way up. And um, when I started realizing this, I'm like, you know what? I need to go somewhere else or I need to like pay more attention here because all of a sudden it like really scares me when I, when I realized that like I'm not paying attention at all. Like I get hit by a truck right now and I wanna know because I don't want expect the truck to be, you know, in the mountains. 00:18:19 It's scary for me when it, when I realized that one in particular. So how do you train again, how do you train to be aware of this familiarity by us or this, this, this issue about familiarity? So one tool that I use for all of these for the most part and I try to encourage for other people to use, um, is try to start identifying these before you go out. And so I'd come up with the idea a plan every day or plan a, plan B, plan C, um, and in all those plans be like, okay, I'm going here. So, which, which heuristic trap could I fall into? Or, you know, who am I skiing with today? Like my skiing with beginner user friends that, you know, all of a sudden I'm like, Oh, expert halo. Like I need to watch out for that. Like everyone's just going to be diverting to me because they're newer or like, am I diverting the somebody else?

00:19:11

Am I going out with like a mentor or like somebody I really look up to like, Oh, I've ever walked watch out for the expert halo. Or you know, like I go there every day. I've met her, like be on my toes because I get really complacent there. Um, so I think identifying those in the morning and a lot of in general what can help keep us safe is the, making as many decisions as we can and identifying these factors in like the safety of our own home. So like sleeping, um, at breakfast with coffee in the morning as opposed to like staring at a beautiful powder slope that like all of a sudden things are influencing us. And this is a little bit of like that, that System one and System two thinking like, you know, we need to make like as much logical decision as we can before you even go into the field.

00:20:00

And then we just, when we're out there, we're going to be making hundreds or thousands of system one type decisions and we need to like limit those and make as many logical decisions so that we have that bandwidth when we're out there to make those smaller, simple, constant ones. Um, hopefully we're not making these large like, um, these large life or death decisions out there when we're influenced by blue skies. And a semi powder slope. And so like identifying those, writing them down, taking a plan. I always have like a notebook in my pocket. Um, I'm writing stuff down that notebook before I leave. I'm writing stuff down during the day. Uh, you know, like even identifying maybe weather elements or like, Hey, it's a Saturday, there's going to be a lot of people out there. And so every day I leave with um, stuff written in my notebook.

<u>00:20:50</u>

And one of those main things is like, what are the, what are the major risks today that like aren't necessarily related to skiing. And so a lot of days, like, especially in the central Wasatch in Utah, that's like very busy. One of those things can be like, it's going to be busy, there's going to be lots of people around. And so like, yeah, there's not much of an avalanche changer, but there may be somebody above me all the time and they could trigger an avalanche on me. So like these little things that kinda keep aware as we go out or like, Hey, I'm going out with all new people with avalanche classes. A lot of times that's like one of the risk management things I write down. It's like I've never been out in outdoors with these people. I don't know any of them. I don't know what they're dealing with.

<u>00:21:31</u>	They don't know what I'm dealing with. So like that's kind of a big risk going out or like an unknown factor that could play into our day. And I think that's one of the key things. And like that came out, uh, somewhat of the checklist system is, you know, with airlines and the medical industry and says like getting some of the stuff out of out before you're dealing with it in the fields. Like double checking, triple checking and get into the root of it before you're actually like in the element where, um, you know, reaction time and stuff is maybe more important.
00:22:03	All right. It's almost like you start with a premortem . You, you know, you, you, you start, you, you, you sort of start with what things could go wrong today and then you work from that, right?
<u>00:22:13</u>	Yeah, I can say that that's probably an accurate way to put it.
<u>00:22:18</u>	All right. So, so you talked a little bit about, uh, familiarity and you also brought in this expert halo component, right? So expert halo is this idea that you defer to somebody who you see as an expert? Is that the way that that works? And you don't necessarily pay attention as much again because you're going Oh, they know what they're doing.
00:22:39	Yeah. Um, pretty much that's it. And this, this one I think is pretty interesting and fun to play with. Cause I'll go out with friends fairly often and, and some friends or you know, other ski guides and professionals in the field. And we have usually at this really good running dialogue of information sharing through the whole day. Other times I may go out with less experienced Fran, you know, very good skiers, snowboarders, strong skiers, but I'm not as well versed, you know, in, in decision making in the back country world maybe. And I'll find myself like asking them, I want an open discussion. Like, Hey, how do you feel about seeing this run? And a lot of times, you know, the answer will be like, Oh great, it looks good, but I'm asking you because like I want to know your real paint. Like give me a reason why we should see this other than like, because Chris just led, it's okay. Um, I want like a fact here. Like, Oh, we don't have wind loading or we don't have this. And so I kind of find that one pretty interesting to play with and uh, it's usually more easily identifiable. Uh, I know a lot of times I leave in the morning and, and my wife will be like, make sure you don't have your guide halo on, you know,
<u>00:23:55</u>	[inaudible]
<u>00:23:56</u>	to that human trap. And I'm like, Oh yeah, going out skiing with a couple guy buddies and like all of a sudden we're all have our little halos on. We're all just, you know, moving around, not even like thinking about what we're doing. It's good to have, it's good to have

<u>00:24:09</u>	partner that reminds you of your frailties. That's my role with you, Tim. That is my role with you to remind you of your frail. Somebody has got to do it and vice versa and vice butts. But there are none for you. That's not true. So well, and what I find really interesting about this one, and I think this is true for all of these facets that you're talking about here, is that it doesn't just, uh, make a difference in, in avalanche training or skiing. These are life lessons, right? I mean, we often defer to an expert when really there's no reason to, or maybe that expert isn't giving the right information. So we, we discount our own intelligence on our own, you know, thoughts around these, whether it be, you know, safety in, uh, a work environment, whether it be, you know, making a, a decision on, uh, you know, do we trust this research, you know, all of those factors without actually taking that into account.
00:25:13	Yeah. I think that's easy to fall into. And I like to hope I'm a lifetime learner and

Vean. I think that's easy to fail into. And Tike to hope I'm a lifetime learner and like the curious mind, um, I had a probably the best professor teacher I've ever had in my life and I think one of the main things I left from his course in college was not necessarily any facts or anything, but he was the first person I think that taught me how to think, not how to learn now, how to like, regurgitate information but to like always have that curious mind of like, Oh, you know, the world is round. Why, why do you just take that for granted? Like, have you ever seen it? You know, and just little things like be curious about everything, question everything. Uh, you know, don't be that annoying person that's constantly like, just nitpicking every little thing. But like question things be like, why, why is that the case?

- <u>00:26:00</u> You know? And that's what I encourage, um, my partners to do. I was like, question almost everything I do. And if I can't give you a good answer to that, then you know, it's probably not a good, this patient really, or you know, there's not fact behind it. Like you should be able to back it up with, with instances or facts or data or something. And I think we can easily fall into that in the world in general, especially if you just listen to the news and like that's all you're getting is like you're getting biased information from anyone for me, from, from you guys, from the news, you know, and you don't explore that a little bit, then you're really just only getting part of the picture of her.
- <u>00:26:38</u> Yeah, I think that's so true. Yeah, of course. I wanted to go back to, you talked about ego earlier and

<u>00:26:44</u> I think about the, the kind of person, and I'm thinking about people that I know who are avid skiers. I have, I had a brother who was a averaged back avid back country skier and a freestyle rock climber and very adventurous guy. And I tend to think of adventure a not so much with ego purely, but certainly with a higher tolerance for risk and, and maybe, uh, an abundance of self confidence, you know, without overstating that. Um, is, is first of all, is that a fair stereotype to apply to, to the kinds of people that you're training and, and, and if it is or isn't, I guess then what do you do with that? I D do you do tailor your message in such a way that addresses a potential, uh, a greater potential for overconfidence or you know, or lower, uh, regard for risk? <u>00:27:37</u> Yeah, that's a very interesting, um, idea and question. I, I actually think my job title and reality would be risk management. Um, you know, in certain areas I'm not, I'm not in the ski industry. A good frame, kind of bring this to light to me a number of years ago, but not really in the ski industry. I'm in the risk management industry. I'm not really in the Alpine climbing in shaman risk management industry. That's just kind of the, the medium in which we're operating. Um, but I can see that and I think confidence and ego can be a little different. And, um, you know, making decisions off fact as opposed to, um, just ego pushing through I think is important. And trying to be able to separate those is really important. And that's I think what everyone battles with. I know I kind of battle with that to some extent.

00:28:32Um, and I think the mountain environment especially is a good place to train
yourself to get out of that kind of in a daily life. Um, cause we all think we're
pretty special and you know, the world revolves around us for the most part, uh,
living in ourselves. And so the world does kind of revolve around us and you
know, we forget to a lot of times that there is a lot more going on out there and
you know, until recently, like it was the earth and the world and the human race
like it was a very hostile environment and we've tried to conquer it and make it
safe and, uh, you know, put barriers and safety nets everywhere and we've
done a pretty good job. Um, and I think the mountains is a great place to like be
reminded that, uh, you know, everything doesn't revolve around you.

DO:29:29 The mountains don't care. You can do everything right and still get killed in an instant. Um, in this summer I work, um, quite a bit in the Tetons Alpine guiding and you'll see rockfall throughout the year, um, sometimes larger, sometimes smaller. And I think it's really good visually for people to see that sometimes when they're like, Hey, what, what caused that rock falling? Or like it sometimes it just happens. Like that's the, the mountains are moving. Like things are falling apart slowly, you know, Evo evolutionary change and, and geological times right now. And you know, when people see that they're like, wait a minute, nothing caused that. So like what if we are walking by there and it's like, well yeah, that could be a problem. You know, like we, we move through certain areas where we know this is a hazard quickly to reduce our exposure. And, and I think those are, I've, I've had a couple people at least kind of had that revelation of like looking around.

<u>00:30:25</u> And, and ranges, you know, larger mountain ranges or not that the Tetons is very large compared to, you know, some of the great ranges in the world. But, um, you know, it kind of humbles you and brings you back down and you're like, Oh, I'm not actually that important. You know, like the, I don't really matter that much. Like I could get crushed here right now by this place. I love recreating in and it's totally impartial. It has no feeling, you know what, it's not gonna feel guilty. Like there's no, um, consequences for the mountains for killing somebody. It happens. And I know there's certain times when I get into that kind of familiar already, um, mindset and all of a sudden I'm like, man, I'm kinda like getting a little, um, cocky almost, you know, like I'm getting a little comfortable and I have certain areas that I go to like reset that and they're, they're larger areas and I'll go out there, I'm alone or you know, with very few people and I look around, I'm like, what?

00:31:25This is big. Like this is big train. There's like large avalanche paths around me
and it really kind of resets me in being like, you know, you don't really know that
much. You just still just learning. We're all just constantly learning. And I think in
general, taking that into life is pretty important. Like it's easy to get wrapped up
in the ego and we like build it and build it and build it. And resetting and
becoming humble I think, um, just can make you a better human in general and
like, or more pleasurable to be around and more tolerable maybe. But, uh, it's
just a good like lifetime lesson or lifetime, um, attribute I think to like just kinda
stay humble. You know, when you, especially in the mountains I find the more
confident cocky you get is a lot of times when you get injured or killed.

00:32:18 And I've seen people, um, have that happen and one of the great kind of snow science, um, individuals, Bruce Tremper who, uh, lives in Utah, used to be the head of, um, Utah avalanche center has done quite a bit of wonderful writing about, about Abeline shines back country skiing. And so she kind of drew up and I don't know if he came up with it or somebody else, but a kind of life cycle graph of I'm a backcountry skier and you're, you know, you take level one, your confidence kind of grows and then something happens. You know, you get in an accident, a friend gets in an accident, like it plummets and all of a sudden you're like very unsure. You're like scared of everything and you know, your risk acceptance level dropped quite a bit and then all of a sudden nothing happens for a while and nothing happens for a while and you're like, Oh, I'm doing this right, doing this right.

00:33:08And then you get caught in an avalanche one day and like plum, it's a game.
You're like, I have no idea what I'm doing anymore. And like risk tolerance goes
down. Like, you know, confidence goes down, you're very conservative and a lot
of times it'll happen like two to three times in like a life of somebody in the back
country or, or more. I mean that's just kind of a general life cycle. But I think
that kind of like goes into the whole like feedback loop system that's associated
with like the decision making and back country skiing.

<u>00:33:34</u> Yeah, I think that's, and again you're talking about this in this back country real world that happens in real life all the time too. Now I think I might need to get into the back country to humble myself a little bit more. You know, my head gets a little big and sometimes I'd probably need to go out there and just experience that because I think it's really true. But I think that life cycle of going through, being overconfident and then getting a setback and then reassessing and saying how that works. I think those are really interesting. I do want to go back to facets cause I think there's a couple other really good components here that I want to make sure that we touch on at least. And so two of them that that I'm really interested in is acceptance but then also first tracks. So D can you talk a little bit about acceptance and then maybe get into first Rex or vice versa, however you want to handle that. <u>00:34:23</u> Yeah. So let's start with **Acceptance**. I think of acceptance and there can be a couple of different ways to interpret any of these, but, um, when I try to keep in mind with acceptances, like just accepting risk and this definitely happens to me, I really enjoy skiing, high risk, high consequence, ski runs. Um, and so, you know, when you go out, and I would call this to some extent, like objective based skiing and so you're going out in the morning with this big objective, like, I'm gonna go ski this big ski run and it's going to be awesome. You know, and like that's kind of your accepting you're accepting risks are already and kind of pigeonholing yourself a little bit, um, before you're even out there. And so I kinda think acceptance can be taken a few different ways, but like you're, you're just accepting this risk because you want something so bad or because other people are with you and they're kind of playing into it of like, Oh, you know, this risk isn't that big of a deal.

And, um, you know, a lot, I don't think anyone has probably really stood on top of a slope for and a skier on a slope and been like, okay, if I drop into this right now, there's a, there's a 54% chance I'm going to die, you know, or, or a, uh, 72% chance I'm going to die if like they're dropping and being like, Oh yeah, I'm probably going to be okay. Um, you know, like the risk. Yeah. It's not that big of risk. Like I'm it, this might be Ellie risk tolerance, you know, or whatever. But, uh, yeah, I think as soon as, and I encourage people to do this when you're out there, like, think like what are the real consequences, not like the perceived risks, uh, what's the actual risk? What are the actual consequences? Is it like a broken leg or broken arm, uh, you know, a blown knee or are you going to die or are you going to die in like, your body's never gonna be out.

00:36:29

You know, I'm like, when you start actually verbalizing that in your head, all of a sudden like skiing, it, taking a ski run that may kill you is, it doesn't seem like that hard of a choice to make anymore. You're like, well, you know, like if I walk across the road right now, I have a 72% chance of getting hit by a car. Well, I'm just not gonna walk across the road today. It's, um, so I kind of look at that. That's how I perceive except acceptance. Um, you don't, if you could look at it pretty, pretty common day situation of like getting in the car every day. Like you get in the car every day. Not, not everyone, and not every day maybe, but, um, you know, you're in the car very often and driving in a vehicle is extremely dangerous. Uh, there's like 50 or 60, 40 to 60,000 people a year in the U S I think that die and auto related accidents, like that's a pretty big risk. It's like, dude, when you actually get in your car, do you actually think about that risk? Are you just accepting and you're like, this is what I do every day. Gotta get in my car to go to work, you know?

<u>00:37:32</u> Yeah. It is. It is. For most people it is the riskiest time that they will have during the day is when they went from, when they start their car and drive to wherever they're going and didn't get out. It's by far, you know, unless you're in a high risk work environment or if something else, it is by far the most likely time that you will get a significant accident or hurt or killed and is most easily overlooked. Yeah. It's the most underrated amount of risk that we take. Well, you talked about earlier the, the whole thing about familiarity and he's going, Oh, I went through this whole component and not really even realizing what was going on. Think about how many times you do that when you're driving, particularly if it's a routine. It's my, it's my transportation into work. And if you ask somebody, you know what was going on on that drive into work, you know the first time you do it, you're paying attention, right?

You're, you know your is, you're a 16-year-old learning how to drive if you're not super from egotistical and overconfident, it's, it's a lot of concentration. You know, a few years into it, it goes away, it goes away and you're just driving along and wow that, I didn't even notice that that was all thing was going on on the side here because I'm just in my routine into my habit. And yeah, it can be, as you said, this, this really dangerous thing and I think we overlook those times. Like you were saying, w nobody would go into and say, I'm going to cross this busy freeway and I think there's a 72% chance that I'm going to get hit. But because there's this idea that we've already accepted and this is going to be this great, you know, trip down the mountain that I'm going to do or I need to get to work and I need to just do this, that we don't accurately assess the risks that are involved.

00:39:20 Yeah, yeah, absolutely. I know Annie Duke, sorry to keep pontificating on. Um, so we've interviewed Annie Duke a couple times now. Uh, and she's the author of thinking in bets and she talks about actually in our decision making, we don't do a really good job of evaluating the probability of things and by actually really making a concerted effort to, they say, yes, this decision, I think I'm going to be right 78% of the time or 84% of the time. But really putting a number to that and not just an arbitrary number, but thinking about it a is really important to us in, in making good decisions. But also then going back and evaluating and saying, you know, I thought that was a 78% chance of being right. I was wrong. You know, why, what, what happened? And then readjusting, coming back into your component earlier, Christopher talking about, you know, we have to constantly go back and assess our decisions and assess the information that we have at hand and bring that into our decision making component. It's a Basie and kind of thing. So, absolutely. Sorry. I pontificated there. Rabbit hole like we often do. So all right. Fresh tracks tracks I was talking about. Yeah.

00:40:41 So yeah, **Fresh Tracks** I think plays into, um, one thing in it. I think, uh, one of the more common things for acceptance to can kind of play in the first tracks. Um, a lot of people look at like, acceptance as like being accepted, kind of so like, you know, like wanting to be recognized by your friends as being awesome or cool or like whatever that may be, which kind of can start to play into like where first tracks come in. And, um, I think there's, I think tracks in general, um, as a more broader look at it. So you have first track. So like there's this fear of missing out, kind of or like,

00:41:23 but before we go there first tracks for our non-skiing friends... what does first tracks mean?

<u>00:41:30</u>	So skiing fresh untracked is one of the best sensations in life in my opinion. Uh,
	and it's substantially different sensation than skiing. Um, tracked up snow. Uh,
	you if it's good snow, you feel like you're flying through a cloud core loss like
	that. Yeah, maybe the closest comparison and it's, it's beautiful too. So, you
	know, you look down and there's this blank canvas and you ski it and you look
	back up and you just put your Mark on that canvas and it's there until the next
	storm or until other people destroy it. And there is many enticing, um, aspects
	of first tracks depending on who it is, you know, who, who the individual is that
	that is looking for him. But, and powder skiing, I would say it's probably one of
	the more desirable things to participate in or to indulge in, I should say.

00:42:31 It's an indulgent activity. Very much so. All skiing as you know, we're not really unfortunately saving the world by skiing. It's very, very selfish, indulgent activity. Um, it's nice one, it's pleasant. Um, but yeah, does that give a kind of frame of reference for kind of first track? I think that's a fantastic, yeah, that's good. Um, so yeah, so like racing for first tracks, I find myself, this kind of also complain like scarcity, which is one of the other ones. Um, and I, I call myself out multiple. Like I'll literally verbalize it, say it out loud and be like, Oh, scary to like I'm walking up the skin track, I'm walking up the uphill way to get to the top of the ski run and all of a sudden I see people coming off from the side or people behind me catching up to me and I'm like, Oh no, Oh no, they're going to get the first track first I need to.

<u>00:43:25</u>

And all of a sudden like your decision making is just shut down. Like you're just, I need to beat them and drop them before them. And so like you kind of shut off to like all that information that's coming in, you're just ignoring it. And like now you're making a decision based on the person behind you getting those first tracks before you. Um, and that kinda goes into the scarcity thing of like fresh snow and fresh powder is a limited resource and it's becoming more and more limited I'd say with like kind of our different weather patterns and changing weather patterns. And, um, so any women in resource has a high value. So like fresh snow and, and the back country skiing world has a pretty high value that kind of starts influencing you. And like all of a sudden when you think that it's all gonna go away, um, it kind of entices you, starts giving you the wrong reasons to make that decision.

00:44:20

Uh, and then that kind of goes into just tracks in general. So something that's common for people to think is, you know, if there's tracks on that slope, then it must be safe to ski. So, so somebody else skied it or so and so skidded. And so it's our, it safe. They skied it and there's no avalanche. Right. Um, and that's like a huge myth and it gets a lot of people in trouble. Cause, um, you know, the first year that the fit skier, that 30th skier, the 200 skier on that slope could be the one that finds the, the trigger point or the sweet spot that that causes an avalanche. And so a lot of people kind of make that decision, like myself included. I've fallen into all of these traps multiple times, you know, lots of times and, and you see those tracks and you're like, Oh, well so-and-so, um, skied it or th that must mean it's safe, so I'm going to go ski it.

- 00:45:15 And it's like, okay, was that a fact-based decision or is that like more of a just like kinda intuition be like, Oh yeah, it must be safe. Like that's, that's more the intuition feel, which can be good sometimes. But, um, and actually the most deadly avalanche problem and the hardest one to predict and forecast and no one is going to happen is bad lines problem that happens when the fit that 20th skier skis on the slope. It's not, it's usually not the first year. And that's what's even more scary as these are the larger Atlantis, um, that usually kill people. Um, I look at them as for the most part on survivable and I, it's like a problem I don't mess with, there's a number of like different avalanche problems. Some of them for me, I'm comfortable managing. Um, there is a few type persistent slab and deep site instabilities that like I don't mess with them.
- 00:46:08

And those are the ones where the, you know, fifth, 10th, 20th year hasn't sewed in two weeks and you know, somebody triggers a large avalanche. And so that kind of tracks thing can play into that pretty bad. With all the training that you've had, you've also had a lot of experience in the field. Uh, have you ever been in an avalanche? Yes. Um, then in a few avalanches and I've been very, very fortunate, um, to not have been majorly injured or killed. Uh, and it's, uh, pretty, um, I'm sure you guys are familiar with the term like wicked learning environment. Um, I would say we operate in a wicked learning environment and unfortunately a lot of people that had been caught in an avalanche didn't get to learn from that experience. Um, I find that, you know, not that I'm glad I was in them or, uh, would condone getting an avalanche, but I've learned the most probably from those incidents and those accidents.

00:47:19

Um, and I think that's another kind of mindset to keep is like just continued learning. Like get better, learn from your receipts, don't be ashamed of them. Um, that used to be a, **there used to be a stigma** kind of in the industry of like, Oh, if you've been in an avalanche, you don't know where you're doing. And there's the **shaming** and like, you know, you don't talk about it. We wouldn't discuss it. And more and more that's really trying to get dispersed. And, um, we, we want to talk about these things first, uh, with people that are surviving. Luckily, like, let's learn from what happened. Like you didn't, you're not a bad person. Again, you didn't like mess out like this happens. Um, you know, I've talked to some trends after, uh, avalanche incidents that they've been caught in and eh, you know, you're pretty emotional wrapped up and like, you're like, I'm an idiot sometimes.

00:48:09

You know, it's like, well, no, like you just didn't get lucky. Like, and I think a lot of what happens skiing in the back country of fortunately is we are getting lucky. Um, it's, it's almost a game of Russian roulette. It is. And we get lucky a lot. Um, and if we don't identify that or recognize it, then it can be toxic. And when you don't get lucky, when you get unlucky or when you get caught in an avalanche, it's very, very apparent that there is a mistake made. And so you don't have to decipher it as much. It's like, okay, I made a mistake where, what led into it? So there are great learning opportunities. Um, and I think like something that we promote and try to do as like debriefing, um, not only like debriefing and accent and like, let's talk about it.

<u>00:49:02</u>	Like now we're starting to see, you know, there's issues with PTSD and these
	incidents and like, you know, long term psychological issues that can be related
	to accidents. And I mean, that's been known for quite a while in other industries
	and other areas. But, um, even just like when you don't get an accident, like I
	think almost every single ski run I'd take, I try to at the bottom of the skier and
	be like, Hey, was that a good decision or did I just get away with it? Um, you
	know, and I got away with it pretty, not often, but like more than I'd like to
	admit probably.

<u>00:49:33</u> So you do a post assessment of, of your runs and try to look at those to say, the decisions I made up there, were they good or were they not good? And yes, I, I got it down and I got down safely, but now I'm thinking back on this and you know, yeah they were really good decisions or wow. I just, you know what, I probably pushed the limit there and I, I got lucky this time. Is that what you do and [inaudible] on a regular basis?

<u>00:49:59</u> Yeah. I try to do that every single skier on, I encourage people like, especially now blind spots to do that, like, uh, like at the end of the day, um, you know, talk to your partners and like it's good I think to include your other partners cause they may have saw something that you did. Um, you know, so like I may be like, Oh yeah, I mean, great decision in there. They're looking at like, you triggered an avalanche that you didn't even see. It just didn't happen. Um, and then the learning can really start so know when I get to the bottom, like, no, I kind of got away with that. It's like, okay, why did I get away with it? What were the mistakes? And let's try not to make them again on the teacher.

<u>00:50:38</u>

What went into that decision to, to do that? That I either missed or I was so focused on whatever it was that I, I didn't look and see what the other aspects were. And again, you know, you're talking about this in, in a skiing context. Yeah. But this is just, this is much broader than that. This is a, a component. We can look at this in our everyday lives. And again, going back to, you know, Annie and talking about looking back at your decisions and saying, Hey, we made this decision particularly as you think about business or, or other facets where we make a decision, we go and we do it and then we look back at the results. And oftentimes we get lucky and we're successful. But it wasn't because we necessarily made the right decisions. It is literally because we got lucky. And if we don't realize that we think that we're smarter than we are, we think that we're better than we are and the next time we do it, we're maybe not going to get so lucky. And that I think is similar to what you're saying here.

<u>00:51:46</u> Yeah. I think all this kind of like intertwines and plays in to, you know, the, the ego to some extent too because it just keeps building that I'm building and building and building and maybe building that on false pretenses, which is, which is really dangerous. Um, and another thing that's a problem kind of like, you know, the less knowledge we have, um, whether that be through our experience in training or just, you know, what we know from today, we might not be able to accurately recognize a mistake that we made. Even so, you know, like an example I could get to the bottom of a ski run, I think about it really hard and I'm like, Oh yeah, that, that was a good decision. You know, like I need to, I made a good decision. Um, it then avalanche like it felt good. Everything went well.

00:52:32

Like, you know, this factor is in play, this factor is in play and it all worked out and then you turn around and you see somebody's ski into it and trigger an avalanche. I'm like, okay, well let's go investigate what happened. Let's go see what having to like, Oh wow, there's this week layer that I didn't even know existed in this snowpack that caused that avalanche. Like that was bad information gathering on my part or uh, you know, the that's just a gap in my knowledge that if that second person I dropped in and caused an avalanche and go up and investigate it, I would have never have known. So, you know, there's a lot of times your, your, um, even when you think you're doing a good job, you may not be. And so I try to be like hyper critical of myself a lot and like some close calls maybe I've had.

00:53:20

Um, I, I'm pretty hard on my, like I, I think about it a lot and it kind of sticks with me for a while. Um, and it's really frustrating and I think it kind of falls into my personality, like ADD/OCD type, you know, thinking of like, I just keep repeating, repeating, repeating it, but I'm ruminating over it. Yes. Well, hopefully if I'm hard on myself, like maybe I'll learn actually cause that, you know, identifying as the first step, but then like learning continuing on. And so your thing and the whole like feedback loop, you know, wicked learning environment aspect of snow world is kind of scary. You know, like when we, when we make a bad decision and almost kill ourselves, we don't like get burned. Like when we touched the stove, um, you know, like we may get the opposite and this is actually, uh, something I read.

00:54:10

Um, Laurence Gonzales all is I think, *Deep Survival* book and he actually starts going into like the chemical makeup, you know, and some of this decision making. And, uh, unfortunately with skiing I see it as pretty, can be pretty toxic cause we made that bad decision. We got away with it, we don't know it. Um, we just got an amazing ski run and so are flooded with like endorphins and serotonin and like adrenaline and, and those feel good to us. And so now we're building a chemical dependency on potential fatal behavior. Um, and when you think of this like a little more objectively, it's not very much different than, um, than a drug addict or using drugs. Like, you know, you, you use a drug and it makes you feel good and so you continue doing it while it's killing you. So it's like, in my mind, very similar to that.

<u>00:55:06</u>

It's like that's very dangerous. You're like, you're actually rewiring your brain chemistry to some extent to make bad decisions. And that's why I'm terrifying in the long run. And like really trying to break that cycle I think is we're all trying to figure out still as human Danny Kahneman talks about, he's really open after receiving the Nobel prize. He still says there's a lot of things that I just can't overcome in my own decision making. I have to, you know, the heuristics and biases that I have are still there in sometimes the only way I can overcome them is with good data as, as you're, as you're referring to have good data, make decisions in a cool state rather than a hot state and rely on your system to, and hopefully you'll make better decisions. Yup. Yeah. So Chris, before we started talking, you talked about how, you know, doing this and kind of researching into this has not only affected how you go about skiing and the training that you do, but also your life and you don't want to talk a little bit about, you know, how, how this has really impacted you on a larger scale.

00:56:12You're smiling [inaudible] so no telephone them or words cause it's just
ingrained. Um, you know, now everything I do feels like a decision making
process to some extent. Um, you know, and it is as unconscious thought as it
used to be. Your unconscious movements. Um, you know, a lot of simple things
that become much more scheduled. I don't know if that's the right word, but,
um, it just goes into like, Oh, you know, I'm just just going to the store that's a
mile away. I'm going to put my seatbelt on. You know, like it's, it's just those
little, it's like, okay, well if I don't, you know, I'm driving a car that's dangerous.
I'm going to the, to the grocery store. It feels safe. It's just down the street.
Most accidents happen within so many miles of your house. Like this is actually
when I'm probably more likely to get in a car accident.

00:57:23 So why would I not put my seatbelt on for the five-minute ride, but I do for the two-hour ride. Um, it or just even just like moving around out sigh, you know, like kinda just looking where I step. Maybe some of this comes from working in the mountains in the summer too. Or like, like consciously walking, not just, you know, on autopilot, like moving down there down the sidewalk or the road, like caught, like being like, okay, I'm constantly making decisions. Let's take the filter off a little bit and let's make some of these decisions a little bit more intentionally. Um, as opposed to just erratic. You know, even just like cooking dinner, it's like, okay, before I start cooking, let's think of like, how is this going to play online? Like I don't want to just start chopping this and throwing that in the pan or like it's not gonna be ready at the same time. You know, there's just lots of little, little things that kind of just, it just gave me like a whole different perspective on life. I think slowly, um, you know, just world worldview wise and, and then just like analyzing other decisions and totally unrelated fields. Like how, how did that person, how did that politician get to there? So, you know, like just, and to analyze like the, the background behind where something is now and how it's ended up there,

00:58:52 that decision tree that like one decision leads to an op, you know, these other opportunities. And then what decision made from there when they could have done a different option and how that leads through. And I think that's a really good way of looking because as you said, I love the idea that wow, we operate on autopilot so much and, and we do and we do it for a reason, right? I mean we, it's our brain take a lot of energy and the more we can put it on autopilot, the less energy we have, uh, have

00:59:22to use. And so we're, we're energy conscious as a, as a species, right? That's
how we evolved. So, but sometimes that's that system one thinking that that
habitual thinking where we are on autopilot, where that decision isn't always

the most optimal. And so again, not saying that we have to make, you know, is this single step a good step and the next step, a good step, right? We, we, we can't do that. We would be stymied in our, in our life, but there are times when we need do need to stop. We do need to say, let's, I need to think about this. I need to think about the implications of this decision moving forward and what that's going to then open up to in the next. And think, you know, a couple steps down the line. And so I think it's a good way of approaching our life. Well I just want to say Chris, I love you living, it's inspirational to me to hear you talk about being so intentional about things. And yeah, there is a certain drag as Kurt said, there's a certain amount of effort and energy that gets expended right and are in our heads, but it's, I think we also benefit from being aware rather than just going through life on autopilot. Right? I mean don't, you know, we actually get more out of life with more intentionality. So Bravo to you man.

01:00:40

Thanks. Yeah, I liked the day, especially in this world, you know, in our age like there's so much that as has diverted to that like we're moving so fast and it's so much information coming in and we need to ignore so much information just to get through the day. And you know, watching children operate is like one, one way to like see an alternative. Like they all that information is new, they're not filtering all of it out. And this is again, like something I tell people over and over and over again. [inaudible] friends and like just slow down, um, slow down and make better decisions. You see more, you hopefully enjoy life more. Uh, and like just try to like step out of our modern like rat race. And that's that question earlier. Like would you rather have a cell phone or computer, you know, and like, it's like, well, it cell phone detaches me a little more.

01:01:40

I feel like I use computers more to gather data and cell phones more. It's like waste time almost or so I think that's just important to like slow down and then start differentiating and like recognizing like, when do I need to slow down and when is it less important or unimportant? And it's like, Hey, this is like potentially an important part of my life or my day or my career or this relationship. Like, let's slow it down a little bit. I'm trying to make better decisions before I do something that can't be undone. Um, and I'm by no means good at this, you know, like I'm constant, but I try, I'd like to, you know, have that more ingrained. But like you guys said, like we only have so much bandwidth. We can only, you can only,

01:02:30right. Danny Kahneman, you know, Nobel Laureate in this sense is exactly. You
know, he's, he's constantly, he knows this probably better than most of us.
Yeah. He still is doing this. So it is a constant learning constant component and it
looks like Tim is getting itchy to, to, to talk about one of his favorite topics.

01:02:53 One of the things I'm curious about is with all of this preparation and intentionality in your skiing, do you, and I know that you love music, do you like to listen to music when you're skiing or not? I do light too. I don't very often. Um, why is that? I am reducing one of my senses. Yes. I love music. And every once in a while I indulge in that, uh, while I'm skiing I'd say, or more walking up Hill. But, um, I'm missing one of my senses when I do that. And that parents me some and not that I don't, don't do it or don't, I mean some people that's their program, you know, like if you're skiing in a low risk area, like thinking that's totally reasonable. You know, I'm like, who should I be to say what's right or wrong? And like I love skiing and music.

01:03:51 I just don't do it very often helping cause, um, you know, sound is one of my senses that I need to keep gathering that information and that's, that's really pretty much the only reason that I don't as often as I'd like. So, uh, when do you listen to music? All the time. Otherwise I'll try to, I like to put music on in the morning if I remember and I'm not, you know, to like shut down before my coffee, you know, and I get home. My life is better, is better when there's music playing I think. And what's on your playlist these days? Um, everything, I like almost every type of music. I'm not a huge fan of, um, electronically created music to some extent early, like instruments. Um, I used to play the drums when I was younger, not so much anymore. Um, I actually just got my drum set back, but I haven't used it.

01:04:55 But I really love, um, jazz funk, uh, and old, old hip, I don't want to say old hip hop. It's old now, but like you have locked from the 90s, early two thousands, this, you know, when I was growing up to some extent, um, Emrae gay, I like those three the most, but I listened to almost everything lately. I've been listening to a lot of classical music on the radio. Um, because I find when I'm driving it reduces my stress level and keeps my road rage down. Um, it's very, ah, you're driving and, and I do enjoy classical music. Like any type of music that takes skill to create. I'm a huge fan of like, I mean it, it, and whether that's like death metal, which I also listened to sometimes, or whether that's classical music, which, um, oddly enough, those are closer than you think in some ways.

01:05:59 Uh, I have quite a few friends that have bands and are very musically active. Um, one of my good buddies has like 20 or 30 guitars and like, you know, 10 bases and uh, used to have almost like a recording studio to some extent in his upstairs bedroom. And yet on like, I, um, I just love music, especially, uh, instrument creating music, whether it's, whether it's jazz, rap, you know, like whatever. It's like it all. So what artists top your list, whether it's across jazz or funk or old style, hip hop or reggae or classical. I mean, I mean that is, that's a diverse pallet right there, but, but what artists, uh, are there any artists that really inspire your, or somebody that just really gets you grounded or gets you excited or engages you? Reggae? I really like steel poles, like kind of some of the older reggae from the 70s.

01:07:03 Um, hip hop, I'm like really big fan of Wu Tang clan who I, I've done, they, they're a little bit deeper than they may seem valid. [inaudible] there's a really good book by one of the members called the Dao woo. And they were a little bit more intellectual than a lot of people probably give them credit for big chest players like very into like some Islam ideas from, from my perception, maybe I'm wrong. Um, and yeah, I really liked that. And like a lot of the stuff that came out of that era, the nineties in the eighties too, they're creating beats. And then there's kind of this, this crossover with, um, a guy named Matt, an artist named Madlib that has a lot of different projects and like one of his projects is kind of blue note stuff. Like he has hip hop background and, and but one of those projects that like hold, play each individual instrument and like them putting them together and make like blue note is his uncle or his dad I think was like a, was it semi recognizable jazz trumpet I think.

01:08:16 Um, so he has that background and then a guru from like what used to be, um, the group Gangstar he's gone and he had done a number of projects where we pulled in, um, uh, jazz musicians and kind of did like, you know, a, um, them playing the actual instrument but close to hip hop and like, they really like those type of fusion. Yeah. You'd like to fusion in the crossover stuff and then going into, you know, into like jazz and funk. Um, I, I like, like culturing it like blows my mind. He's pretty awesome bass heavy stuff from like Marcus Miller, Stanley Clark, like, uh, yes. Um, a bunch of like Stanley Clark's projects that can't, they're like different bands. He's been a part of, uh, you know, Bela Fleck, Victor Wooten, like, you know, getting into like more of the blues grass type stuff. Um, but those are, it's, I listened to a lot of, um, like Herbie Hancock, Coltrane, um, and like Marcus Miller, Stanley Clark type stuff, which apparently somebody told me Stanley Clark and, and Mark is familiar, like heavy jazz. They're not funk to me. It to me it sounds like fuck one an expert. I've never heard them called funk. So I, I think that that's great though. Yeah. I hung out and then like, what am I, a couple of my friends, their band is like, had some pretty heavy influence from like some of those bases from like Victor Wooten and Stanley Clark and various failures. So they make,

01:09:57 well Chris, this has been absolutely insightful, fun. Fantastic. So I just want to say thank you. Yes. [inaudible] just want to, uh, commend you on, on the work that you're doing. And you said skiing itself, it doesn't do, but you, you're actually doing some work that that is, uh, helping people stay safe and stay alive. So commend you very, very much for that.

01:10:21 Well, thank you both for having me and as well as bringing some awareness, um, to kind of decision-making behavioral sciences. I think that's really important. And you know, it's not, it, it's important in every aspect of life. You know, every field that you can apply these things to any field, any career, any, you know, problem in life really. And I, I really glad there's people like you out there. It brings more awareness to these ideas.

So we will end the recording there. And, and

01:10:55 um, if I could just ask, if you could send us a photo, a, you know, a head shot or a, we know a photo that you'd like us to use, need to be a headshot. It can be anything you meet on the mountain. I know. Well that's what I'm thinking. And then you may, maybe you want a mountain shot, but uh, you know, something, uh, that we can use for, you know, putting your in and then

<u>01:11:14</u>	a, uh, a little bio and any links, uh, if, if you're open to people contacting you, you know, would you, you, do you have a way that you'd like to be contacted, you know, through like a LinkedIn or, or a Twitter or, or an email account, you know, whatever like that. Uh, so if you're open to that and if you're not, that's cool too. Yeah. Also, yeah, I'll try to get that to you shortly. Should I just email 'em
<u>01:11:39</u>	the same email thread we had kind of going on.
<u>01:11:42</u>	That'd be great. That'd be great. And also, you know, what about the, uh, do you, are you consistently with one teaching program, one school of avalanche training? Um, no, uh, not, not at all
<u>01:11:57</u>	there. So in the U S who's an overseeing organization, um, the AAA, the American avalanche association, and they, um, have kinda set out learning outcomes and I don't want to say standards, but kind of a baseline for these different level avalanche courses. And then as of now, um, if you are an avalanche educator, curriculum producer, you create your PR curriculum and you have that approved by the AAA and then you're a AAA approved, um, Atlanta education program, which is,
<u>01:12:34</u>	would it be worth linking to the AAA, uh, in our show notes
<u>01:12:39</u>	share that can, that can explain it all under them. There's two larger organizations, airy, um, which I think Ben Ben's classes and areas, the one that Ben did. Yeah. Um, which is American Institute for avalanche research and education. And then there's AI, which is American avalanche Institute. Um, I mean, don't put this in, but I worked for both of them. Um, I worked for both of them. We'll put in whatever you want. Two of the larger ones. There's also, you know, growing number of like smaller regional ones and Arie works as a large, um, curriculum per producer that then sells that curriculum to providers. So for a number of airy providers, and then AI is different where they produce the curriculum and they're like the employer, I should say, or their pattern.
<u>01:13:32</u>	Okay. But if, if you, if you think there'll be worth including a link to any of those organizations in our show notes, then shoot those over to me if you would as well. Okay. Awesome. Yeah. Thank you. Yeah, I'm good. Um, so.