

@Risk: From Apathy to Climate Action with Andri Snaer Magnason

[Music]

Jodi: Hey, I'm Jodi Butts. Welcome to @Risk, brought to you by Interac.

Travel across oceans, catch a glimpse of the tent belonging to a pair of citizen scientist newlyweds perched on glacier. Get the real story on Andy Warhol's death in New York city. Andri Snaer Magnason's *On Time And Water* is an epic journey across geographies and from exacerbation to optimism.

A magic cow inspires him. He finds purpose in his extraordinary family, an Icelandic and well-adjusted version of the Royal Tenenbaums. He discovers hope in conversation with the Dalai Lama. Crocodiles show us the way to a stable planet. A memorial to a melted glacier written by Magnason himself reminds us of the cost of getting lost. Like the author, *On Time And Water* is as gravely serious as it is charming and delightful.

Magnason nudges and pokes, he never demands or chastises. He has written a gracious, careful, and refreshingly welcoming invitation to recognize our misperceptions and interdependencies so that we might actively enlist in the fight against climate change. Whether you are far along or just starting out on your own journey, Magnason is the perfect travel companion on our way to a more hospitable and vivacious planet.

Thank you for joining me, Andri, and welcome to @Risk.

Andri: Thank you very much.

Jodi: So Andri, why are we as a species so terrible at comprehending the grave risks our planet is facing?

Andri: That's a very big question. So it seems that- and I was trying to understand that in my book *On Time And Water* is why is it that we are so intelligent and we make lots of great things, lots of mistakes, but basically I believe we are a good species. Why is it that when scientists come up with something that is very thorough and understood, around at least 20 years ago it was kind of a consensus among scientists how CO2 affects the atmosphere and warms the planet. Why does that not instantly become policy, and why is that not implemented into industry and plans?

And so in my book, I'm trying to understand also how other ideas and how other paradigms can take decades even centuries for an idea to settle in and become a new reality. And I compare this to when Iceland had this freak mini revolution in the year 1809, very shortly after the French revolution a man came and gave us freedom. But the problem was that we didn't understand the words. We didn't understand freedom, liberty, democracy, constitution, all these all these words that came with this person that he locked in the local authorities and he said congratulations Icelanders, you're free. But we had never asked for freedom and the French revolution had not been translated to Icelandic.

So it wasn't until after 100 years of struggles that we eventually became independent. And the people that actually understood what he was saying, they were born around 1809. So I'm comparing this to terms like ocean acidification, a term that was created like 2003. And this is actually the biggest word in the world, but culturally we don't seem to understand it yet.

Jodi: And so who can help us with that understanding? Is it the role of artists, or who?

Andri: Understanding comes, I think, from almost all aspects of our societies. Like human rights. I can talk to you and we can talk together about human rights. It's not like we let we believe that's up to social scientists to talk about human rights, or we can talk about women's rights or feminism. But it's not... Like we feel we don't have permission to talk about it because that should be up to feminist theory in the university. But it seems like we had been insecure regarding issues like global warming. I didn't feel I had permission to write a book about it, because I felt like that was up to scientists. They should do their studies, they should present their studies, and they should do the graphs.

But then I met some scientists, and they told me that they have their scientific discipline. They can talk about their findings in a special way, and it needs to be under this discipline. But they said people don't really understand graphs, they don't understand findings like their scientific papers. But people understand stories. And they said take my papers and put it into a story.

And that was like an enlightening moment for me, because I'm raised by a family of doctors and nurses, and they would always frown upon somebody that was not with a medical background writing about health and stuff that they had no idea of no idea what they were talking about.

So I felt kind of afraid of stepping into people's playground, but these scientists, they had become increasingly kind of irritated that they were not reaching people. So it was the urge of some scientists, glacial scientists, and climate scientists, that they told me people understand stories. Tell the story.

Jodi: And we need those stories too, right, when we think about the solutions to climate change, not just understanding the problem.

Andri: Yeah, and I think it's also very much in the language. So the word climate change, I was telling people I was writing about climate change and I could see how their eyes glazed over and they were like oh no, he's going to tell me something boring. But then I reframed it and people asked, what are you writing about, and I said, I'm writing about time and water. And they were like, wow, interesting, what do you mean? And then I would explain what I was talking about, which was basically explaining climate change without saying the word.

And it seems like we always have to rephrase, refresh, and re-tell things. So just like democracy had to be retold a thousand times for 100 years until we reached democracy. But the problem with climate change is we don't have 100 years to understand it. We have to... We should have understood it 30 years ago.

Jodi: Yes, you write beautifully how it's not just climate change that we have difficulties wrapping our heads around, but time itself and its passage is a real challenge for us as humans to understand that it's not static.

Andri: Yeah, the time aspect is something that I felt equally important, or maybe most important in writing the book. Because all the science is, of course, pointing to the future, and it's pointing at events that might be happening or tipping points. In the year 2100, we see graphs of glacial melts where many of the major Icelandic glaciers are gone in the year 2120.

And that's one of the cultural issues that you, if we go back again to your first question why humans can't grasp this, is we're kind of accustomed probably to react to urgent situations. But we could prepare ourselves for a winter, and to live through winter. But maybe not two winters, or three winters. And it seems like when we have a time scale of something happening in 2080, we just brush it off. It doesn't touch us. And then culturally that's all up to Hunger Games And Blade Runner to kind of write about that time.

So I wanted to create intimacy out of dates like 2080, 2100, even 2160, with just by doing very simple calculations. And I used my grandmother actually to help me with that. So my grandmother, she does a calculation with my daughter, and my grandmother, she was born in the year 1924, and that means she's 97 this year. And she did this calculation with my 12 year old daughter, and so she was calculating when is someone still alive that you will love? That is when will somebody remember my daughter in what year?

So if my daughter becomes 90 in the year 2098 for example, she might have a favorite grandchild that would be born maybe around 2070. And that person will still be talking about her as her major influence in her life in the year 2160 if that person becomes 90. So my doctor can touch... She's influenced by 1924, and the life of somebody born 1924, and she will probably influence somebody greatly that is still out there in the year 2160.

And it's not even a far-fetched calculation or a rare calculation, it's just very likely that this will be the reality. So 2160 is like 140 years after Blade Runner. So city planning and our politics and our industries and our daily life, it seems like we're not thinking in this you could call it like Roman Krznaric, a philosopher, talks about cathedral thinking. That is like people in the middle ages, they used to plan a cathedral building maybe three four hundred years into the future. But we're very much into quarterly annual earnings and four years of governments. But 2160 is just, it's not even in our... it's just so far it just seems to be absurd to think in those terms.

Jodi: Well, I loved that little puzzle, and I played it with my daughter and tried to frame it as so when you're shopping, try and think ahead to that grandchild you're going to have and whether that article of clothing will still be on the planet even if you're not wearing it any longer.

Andri: Yeah, and probably. And even when I took my dog for a walk and we were putting the poop in the bag, I was discussing with my daughter, okay, maybe how long will this bag last? Is this a gift to the future if we put the poop in a bag, and so will somebody find this?

And every single day when we put something into the atmosphere when we add CO₂ to the atmosphere, we are putting more pressure on future generations, and we're at least not making

their life easier. And that's kind of the unbearable dilemma that we're in. I think every generation that was building highways and infrastructures and the modern life that we live in, I think they sincerely believed they were making the future better for their descendants.

We're in this unbearable situation where kind of scientifically it's proven that we are not doing it. We are undermining the future while we haven't kind of gained some kind of control over the amount of CO2 that goes into the atmosphere.

So that can lead to cynicism and all sorts of kind of bad spirits in politics. And what do you call it, apathy. But I think that if we find and when we start kind of really moving into the right direction, that we can find higher meanings in so many aspects of work and industry where people are actually feeling that they are turning things to the better.

Jodi: And you felt that personal connection, that's also why you wrote this book. You write in it that you felt compelled to write it. What compelled you?

Andri: Well it's, of course, I just felt that if this is the biggest challenge that humans are collectively faced, and I thought if I'm a writer here and now and I have talent and choice to write what I want to write, of course I could just write another crime novel or something. But I felt that I had some kind of obligations of writing about this issue.

And suddenly it was like everything came together. There were stories that I wanted to talk about like family mythology, my grandparents journeys on the glaciers, because they were founding partners of the Icelandic glacial research society. So I was in a very good situation of bringing glaciers closer to the heart, while they are most of the time it's difficult to have sympathy with glaciers or love for them.

And then I was invited to interview the Dalai Lama, and I'm not a journalist so this was actually one of the first interviews that I took in my life. So talk about starting with high stakes in interviews. So I took it very seriously, and I was like, what can I ask a person that has reincarnated 14 times?

And I was thinking and I was browsing mythology, and then I found this strange comparison between Nordic mythology where the world started as a frozen cow, sounds like a whispering game that went wrong. So once upon a time there was nothing, and then came the frozen cow. And from the udders of this cow came the four rivers that nourished the world. And then this has always started, kind of, I have always questioned, what is this?

But then when I was preparing the interview, I saw that the origin of the Ganga River is a glacier called Komuk, and that means the mouth of the cow. And Mount Kailas is the most holy place in the world, and from there come, and from the glaciers around that area, come the four major rivers of Asia. So you could say that suddenly I understood that, of course, glaciers as a source of life, glaciers as the foundation of life for a billion people in Asia was something that was not discussed and rarely talked about.

And I felt okay, I can take my grandmother, the Dalai Lama, and mythology, and I can try to pack that into some kind of a story about ice as a source of life and how this ice is actually diminishing because of us in the next 100 years and what effect that might have. So I said that I got a

revelation from the holy cow to write this book, the frozen holy cow. Maybe listeners will stop taking me seriously now, but it's about finding poetic metaphors.

Jodi: And connection.

Andri: And connection.

Jodi: Yeah, that's what I really took from it. You know, as Canadians we're a snowy people as well. I certainly felt the connection, and I really appreciated how the book is an emotional journey as well. When you read the science and the data and the statistics, it can be very overwhelming, and that can lead to paralysis. But I was really quite moved by your conversations with the Dalai Lama, and I think that conversation, in addition to seeing the connections with the magic cow, but I could also just see the tone in the writing that you really walked away with an optimism that I'm not sure you had before your conversations with him.

Andri: Yes, that's true. Like the Dalai Lama, he's in exile in his nation. The people of Tibet have been going through incredible difficulties and pain, and you would believe that he might be angry or pessimistic. But I was very taken back by how he doesn't speak badly about the people that have oppressed his nation, and his kind of long-term optimism. But also how he also prioritizes the problems, because of course free Tibet is very important. But if we do not get our heads around global warming and start fixing that issue, then then a free Tibet within the world collapsing it is not worth anything. Or that struggle depends on us finding a solution for global warming.

So then both I could see that he could understand that this issue is kind of the basic fundamental issue of all other issues, that we won't accomplish them unless we find a solution to this. But also his light-heartedness, that he doesn't really lose his sense of humor. And it's not contradictory to be silly in one second and deeply serious and even philosophical or spiritual in the next one. So that aspect also was like talking to the scientists. I felt I had permission. If he can laugh within his situation, then then I can also allow myself sometimes to be naturally silly if I want to, also because the issue is so overwhelming that you just need to clean it out with laughter or some kind of catharsis before you go to the next stage.

Jodi: I've worked in healthcare for almost two decades now. And some of the wisest words I ever received were from a nurse who at the time was an executive. But when she was actively nursing at the bedside, she was caring for people with cancer. And we were chatting about something and I made a joke and I laughed, and then and then immediately apologized because I was like, sorry, I know this isn't a laughing matter. And she said no, that's okay. Because what I learned from being an ICU nurse caring for cancer patients is that if you are down in the hole of a grave, how can you lift someone out?

Andri: Yeah, exactly. And also like in this regard, like if you're paralyzed or not. Because my family has lots of medical people, and I spoke to them quite a lot about this issue of climate change. And they were saying it was like a doctor that was tiptoeing around the patient, not trying not to tell him that he actually had cancer or he actually had something serious and was just pretending that everything was okay. And they told me also that people in fact do not get paralyzed most of the time. Of course, some people do. But bad news, people mostly meet it with strength and with

resilience and often with fighting power, often with a sense of humor and determination. And then also sometimes life-changingly, in their own kind of perspective and identity.

And also like because lots of scientists that are climate scientists, they were kind of all tiptoeing and trying more downplaying their findings in this strange kind of idea that they would paralyze people if they would tell the truth. But it's also like my family has been working as paramedics sometimes in ambulances, and it's not like if they hear there's an accident somewhere that they become paralyzed and they say, oh no, what do I do, they just buckle their seat belts and handle the situation professionally.

And that's what we all should do collectively. We should just look at the problem and start handling it professionally. But until now, we're not handling it professionally. We're just kind of tiptoeing around industries. And it's not until we see the Corona crisis where we actually see kind of firm hands on situations where industries are even just stopped or changed overnight because of a common good or a higher need.

And this is something that we haven't really seen with climate since we're just supposed to change really gradually. It's not supposed to disrupt anything. We're not gonna have any light speed like we had in the vaccine. We're not gonna have like a light speed operation on transport or energy or food or anything. And I think in hindsight our children will see us as rather lazy for not taking this challenge and really working up to it.

Jodi: There's so many things I want to ask you, but I'm going to focus in on going back to the water part of *On Time And Water* and just thinking about our responsibilities as the human race on the planet today. You wrote a memorial to a glacier. How did you settle on the words and impact you wanted to create with that memorial?

Andri: I had no kind of idea that it would have any impact. It was more like a quirky thing that I was asked to do by anthropologists from Texas, Dominican and Simony Boyer. And they had been kind of doing research on the anthropocene, and they noticed that Iceland had lost its first glacier to climate change and asked, would you write memorial for it on a copper shield? And I was thinking, okay, this is something that very few people will see, maybe 10 people a year. But somebody will see this after two, three, four hundred years. And even the copper plate will probably last longer than the stone itself it will be placed on.

So suddenly you started this long-term thinking. I'm talking maybe to somebody in three, four, five hundred years, even, or at least 300 years. And then I was thinking trying to work out what kind of text do I write. Should I be overly poetic, should I write in old medieval metric form? And then the name of the glacier is very special because it's Ok, and so of course Ok is not okay anymore which is a very ironic name for a glacier that is dead. And then Ok also means yolk, that is the archaic word for the beam that carries water. So this glacier used to carry the water that is keeping it away from the oceans. But now that ocean the water has gone to the oceans. And Ok also means yoke, that is yoke also means oppression, that is you are under the yoke of a dictatorship. So Ok has become the yoke of future generations.

So I was ranting about that for a whole summer until I just thought, okay, I'll just do it super simple. I'm just going to write this monument is to acknowledge that we know what is happening and what needs to be done, but only you know if we did it. August 2019, 415 ppm of CO2. So yeah, so in the end I just decided to write it just very direct, that is, to our contemporaries, but also kind of to the people in 300 years that might stumble upon this rock on the mountain.

Jodi: You make such an important point. I mean you make so many, but this one just really struck me as we need to write it in the skies that when glaciers melt they will create an initial false prosperity. Can you explain to the listeners what you mean by the false prosperity of a melting glacier?

Andri: Yes, that's kind of the devious situation that you can see in some places in India or in Asia, where people are living off the melting water of glaciers. So while the glacier is melting, the melting rate might increase 10% a year or something. Then people will have more water and access to more water temporarily while the glacier is melting, just like when you're emptying your bank account or something, not saving for the future.

So you have this false prosperity while the glacier is melting and you can maybe get more crop you can have more water for your industries. But then when the glacier is gone or it has reached this tipping point of collapse, then suddenly you will have much less water and even much less water than before the glacier started melting. And these glaciers, for example, in Asia they are perfect systems they because the monsoon, the wet season, is so intense where you have an over abundance of water and it's actually damaging.

So the glacier is a perfect system. It keeps the water when you don't need it and it's abundant, and then it gives it to you when you really need it. So even though glacial water might only be 10 of the total water in some regions, it might be 100 during the most important time when it's about making or breaking for your ground water or your crop.

So now when we are experiencing this we could have this false prosperity and then after that we have a very devastating situation. So that's a very I could say like a very evil dilemma or like Timothy Martin talks about that it's a wicked problem. And this is something we have to prepare for. And the problem is that when you have prosperity, then you should use that time to prepare for what comes after that. But people tend to get lost in that situation of not worrying what comes next.

Jodi: You mentioned COVID-19 and climate change. And COVID-19, they really share a common thread in that they're both problems that seem to exploit our weaknesses as humans, our ability to perceive risk, to be able to, as you say, take advantage of prosperous times to invest when things are more resource challenged. And in terms of your observations of the pandemic, does the world's response to that threat give you hope or pause when it comes to thinking about our response to climate change?

Andri: I think it gives me hope actually. I think that we will probably underestimate the effect of corona in the short term, overestimate to the short term but underestimate to the long term. And it was a very good example, I remember when Italy was burning. Like it was a terrible situation even while that was happening, and it was so easy to translate Italy to London or New York. Still, it was

not like the politicians and the policy makers and the infrastructure could translate that and say, okay, in two weeks, Italy will hit home.

So eventually that did happen, and everybody was kind of unprepared. And that was like a small microcosm. If you can't translate two weeks of events to your own population, how can you react to a 50-year arc like we talk about in climate change?

But the good thing I think is, if you want to say good, is that I think we just got the biggest metaphor that humanity has collectively received like in terms of reference to situations. When we're talking about climate change, we have been talking about the Manhattan project, we've been talking about the moon landing, the Marshall plan, the New Deal, or the Green New Deal. We can refer to past economic realities or initiatives that states and other governments when they were trying to reach maybe a big goal.

Now every single child on the planet has gone through the strangest situation that you could imagine. Being locked from school, not allowed to hug your grandmother, all theaters and everything closed. Just this really, really strange situation that I think we underestimate because I never imagined that the world could stop. I never imagined that you could... Like a government could tell you to close a store or close a cinema or change anything, it was all up to the market. And we were in this kind of growing neoliberal, we're just supposed to choose green and then eventually maybe the world might become green.

When the hole was in the ozone layer, it was not like up to conscious consumers to have ocean friendly hairspray while the other were just recklessly going on with ozone damaging hairstyle, they just took it off the market. But we haven't seen this these kind of collective responses to fossil fuels and oil where it's just basically almost forced out of the market.

And I think the generation that both had the climate strikes, that went through the climate strikes and then had corona, and they have all these climate words since they were born. The climate words did not come into my reality and ocean acidification did not reach my reality until I was 30 something. But this generation that is raised with all these issues and has gone through the climate strikes, this generation will ask okay, we need five percent of GDP for total energy transition. What sacrifice was made for corona? And they will see okay, that was like 10 of the GDP. And they will see that what needs to be done for climate changes is a light speed operation in innovation, and lots of social changes and changes in industry and consumerism. But they will ask okay, we need five percent of GDP, but we can still hug grandmothers, we can still party, we can still go to school, we can still go to the cinema, we can hug, we can have mosh pits in the concerts.

So I think they will see things that we saw as impossible because the economy was such a god. I think they will see it differently. And they are so connected to the future because a university student today reaches the age of my grandmother in the year 2097. A child born today reaches the age of Biden in the year 2097. So I was raised with the year 2000 as a utopia, like a far distant future. But now we are 20 years past this future and we haven't really updated to the next future goal. And I think this generation will be very connected to the year 2100 and be very determined that they will not live in a messed up world by that time.

Jodi: You have this beautiful story you tell about your Uncle John, your paternal Uncle John, and his impact in the world. And I'm gonna ask you to just to briefly retell that story because I think it really brings together the role of purpose as individuals. It's a collective problem and it requires collective action, climate change and fighting climate change, but the role of the individual and their purpose is still vital and I loved how you brought that to life through the story of your maternal Uncle John.

Andri: Yes, thank you. He was a big inspiration. You can imagine having an uncle that is a crocodile specialist, that's like working in the Amazon and he had a poor constrictor in his bedroom when he was a teenager, and raised in New Jersey, son of my grandfather in America.

So he had invited me to come to help him volunteer on the primal research of anacondas in Venezuela and then help him catch Cayman crocodiles in the Amazon. And he devoted his life to working with local communities on crocodile preservation. And somebody asked when I started writing this into the story, okay, you're writing about Dalai Lama, glaciers, your grandmother, and you're putting crocodiles into it? And I said yes, it's the key to the story, it's the key to connecting everything.

So he was working worldwide and he made this action plan when he was a PhD student of a kind of a global action plan of crocodile conservation. And he got this calling when he was a child, maybe only 10 years old or something. He saw a documentary about crocodiles being on the brink of extinction in so many places. And he decided then, and he loved frogs and turtles and snakes and all these reptiles, and he got this calling to save crocodiles. And he was very modest, and he was not like these typical crocodile macho types. He always- when I was asking him about the danger of crocodiles, he would tell me the traffic in Venezuela was much worse than crocodiles. And never kind of was bragging about or posting his crocodile wrestling skills.

But he would talk about them almost in a, you could say a feminine way, but like a in a sexual way. Like talk about crocodiles as good mothers, and they were closer to birds in tending for their offspring. And he needed to work very modestly because he did not make these internet campaigns, like save the crocodiles and petitions against governments. He just had to listen to people, speak to people, and convince them that it might be good for the long-term benefit to have a crocodile in their marsh because it would help replenish the fish and prevent diseases. So it would help maybe poor farmers to understand better that they were and are a vital part of the ecosystem.

And now even on the bigger picture we learn that crocodiles that live in wetland areas, protecting crocodiles is also protecting carbon sinks. But eventually he sadly died from malaria in India in the year 2010. And at the time I didn't know how big or respected he was, but his obituary was in both the New York Times and the Economist. And then in the year 2013, a great skeleton was found in Kenya, very close to the first steps of humans or the first remains of human beings. Like a five million year old skeleton of the biggest crocodile species that has roamed the planet. And this crocodile species needed a name, and it got the name *crocodilis thorbjarnarsoni* which is the last name of my uncle.

So he reincarnated as a prehistoric crocodile. And not just any crocodile but the biggest crocodile that has lived on earth. So I thought that despite his tragic ending, it was in the way probably close to a childhood dream of that ten-year-old to reincarnate as a prehistoric crocodile after saving species actually from extinction. And that's what is remarkable, that a single human or a group of humans can affect a 50 million or 150 year evolution of a species if it dies or not. And that's kind of the power of humans now, is so much of nature, so many species are in our power to protect them or not.

Jodi: You're an Icelander, but this book could have easily been written to Canada. We have our glaciers, we have three ocean coasts, our great lakes, and a large oil and gas industry. What do you want to say to Canadians?

Andri: Well that's yeah, that's all in the book that Canadians, Canadians are probably the biggest water resourceful place on the planet. Canadians have maybe tragically become addicted to the oil sands. And that is something that I'm also writing about is how we collectively have to get out of these problems like yeah, when we start benefiting from fossil fuel and coal. But Canada is in a very good situation with all this land and all these possibilities of powering itself with clean energy.

Canada is, of course, a very important place internationally. The voice of Canada is respected and listened to, and therefore I thought it was kind of tragic in a way that both Norway and Canada became oil nations in the last decades. Because they've been kind of beacons of democracy, both of these nations, and almost like a small devilish test on us.

But the book is not still demanding anything from people. I decided I just wanted to, rather than demand things from people, I just wanted to give them the opportunity to understand it themselves, what the situation was. Give people maybe metaphors, language, data, and believing that when you have that, you will eventually want to do the right thing. And you will not be forced to do it.

And when we have the paradigm shift, it's not because we are missing. It's not... like we have had all sorts of revolutions. It's not like we're missing not having a king. Or when a friend becomes vegan, it's not like he's craving for a hamburger, he just doesn't want hamburgers. So I think when the understanding is reached, then the paradigm shift is more effortless than maybe we imagined before we go through. It's not like we miss not smoking in the child's room or something, it's just we just understand something and we don't want the bad habits anymore.

Jodi: Well, Andri, thank you so much for *On Time And Water*. It is a rich and inviting story both about your family as well as the challenges we need to meet. Thank you.

Andri: Thank you very much. Pleasure talking to you.