Transcript of interview, uncorrected - on Canadian national radio CBC Radio One, 20 Feb 2017 - 'The Current' (aud. 2.1 million), repeated 17th April, (https://bit.ly/2lQocrn) (audience, 2.1 million).

AMT: Hello. I'm Anna Maria Tremonti and you're listening to The Current.

[Music: The Disruptors theme]

AMT: This season on The Current, we're looking at disruptors—people, objects, ideas that have changed how we look at the world. And today we are at the gym.

SOUNDCLIP

[Sound: Treadmill]

VOICE 1: Just warming up right now. I'm starting with 3.0 and then I go every two minute, up and up until I hit 12.

VOICE 2: Kilometres an hour?

VOICE 1: Yeah. Yes.

VOICE 2: That's fast.

VOICE 1: It is. I do three times a week. I love it.

VOICE 3: I'm blowing up steam. I was up early. Drove my kid to basketball practice. Made my other kid's lunch. I tend to be a solo runner mostly, so this works for me. I just lock it and go and I'll feel so much better during the day having done this.

VOICE 4: I'm working on the couch to 5K program. So trying to work up to running for 30 minutes.

VOICE 2: Is the treadmill your thing or do you run outside normally or?

VOICE 4: Not when it's negative 11. This is where it goes on. Yeah. It does feel awful.

VOICE 2: You don't love it?

VOICE 4: No. No. It's the other parts I love. Stopping. I love stopping.

[Sound: Treadmill]

AMT: Okay. Can you relate? Treadmill enthusiasts bright and early at the downtown Toronto YMCA. Although enthusiasts may be the wrong word for some of them—perhaps sufferer is more apt. This year the treadmill celebrates its 200th anniversary. It's become a mainstay of the modern gym but the treadmill's origins are downright torturous. As part of our project The Disruptors, we're looking at how the treadmill and the gym have disrupted

how we look at health and fitness and we'll start this exploration with Vybarr Cregan-Reid. He teaches English at the University of Kent. More to the point, he's the author of Footnotes: How Running Makes Us Human. And he joins us from London. Hello.

VYBARR CREGAN-REID: Hello, Anna Maria.

AMT: Well, we just heard that woman there not enjoying her treadmill time. She may be on to something though. What was the original purpose of the treadmill 200 years ago?

VYBARR CREGAN-REID: In the UK in the late 18th century, there was lots of penal reform and it was felt that many of the crimes that were given the death penalty should be given something short of the death penalty. And the idea of hard labour was invented. The idea of hard labour was that it should punish the prisoners' hearts and souls. It wasn't that they would be given labour to do that was fruitful or restorative. It was thought that something pointless should be done. An inventor called William Cubitt came up with his idea of the treadwheel, which we know today as the treadmill. And it became something that people were sentenced to.

AMT: That explains a lot. What did it look like?

VYBARR CREGAN-REID: Initially it started off as a sort of huge cylinder, like a water wheel that the men—because it was men—would all walk on together, a bit like a giant cylindrical Stairmaster. The wheels beneath them so that they are effectively on a floor is in motion but with small steps on it. By the time that Oscar Wilde was infamously imprisoned in 1895, prisoners then would walk the treadmill for about up to five to six hours a day. It was really serious punishment. And instead of being able to talk to one another, they were put into a sort of separated booths so that they had no sensory stimulation of any kind. It was terrifying.

AMT: So it really was hard physical labour. It was punishment. That is staggering.

VYBARR CREGAN-REID: Yeah, it is.

AMT: And so how does it evolve? Because at some point child labour comes into this.

VYBARR CREGAN-REID: It was a beginning of a movement that was recognizing that people were beginning to become more sedentary. And there was a patent called the gymnastican, which was basically a sort of cross-trainer that could be given to students or men of leisure who weren't getting appropriate amounts of exercise and they would climb inside this machine and then they would work the machine with their feet. But the gymnastican also had a huge wheel with a handle on the side and the patent explains that the reason for this is that [chuckles]—it's not funny—a child could be employed to work the wheel if the gentleman didn't want to have to go you know make the efforts of working the machine himself.

AMT: Wow. As you went through this history, what were you thinking?

VYBARR CREGAN-REID: Well, it was wondrous really. The gymnastican was not a commercial success. Only with electricity does it become workable. But the gymnastican, when you see the picture of it, whenever I show it at a talk or something, everybody in the room just breaks into laughter. It looks so ridiculous. But it's a lovely moment where we can see the beginnings of ourselves really in this history. It's something that starts with the beginning of the industrial revolution, this recognition that modes of labour are changing so drastically that we now have to find other ways of moving our bodies.

AMT: So it goes from punishment perspiring because you're under punishment to perspiring for pleasure. When does the treadmill take on what we see today in our gyms?

VYBARR CREGAN-REID: The treadmill sort of disappears in the early 20th century and is forgotten about for a generation and then a cardiologist at the University of Washington in the 1950s wants to assess the fitness levels of his heart patients. He puts a treadmill together that looks a lot more like the treadmill that we would know today. And then it's not until the jogging revolution of the sixties and seventies that it becomes a sort of consumer commodity. And now I think the business is worth around \$15 billion.

AMT: But this is not the treadmill that you would like to see, the treadmill of the future. What would you like to see?

VYBARR CREGAN-REID: Anything that gets people moving and exercising is great and there are things that people like about the mechanical treadmill now, like the fact that they can just punch in a number like 30 minutes into a treadmill or a speed. They have outsourced their responsibility for their exercise to the machine. But one of the things that's perfect about running is it stimulates us on so many levels that we're not aware of. But once you start stripping away the experience of an outdoor run in a green space and putting it onto a rubber belt in a gym, it might seem like you're doing the same thing, but actually lots of the things that you would have been doing have been lost in the translation. So the things that might create empathy between yourself and other people or yourself and a place, the things that might decrease stress, the things that might make you a better friend or a partner or a spouse or in preview or exam results or even make you less likely to commit a crime, these things are all lost on the treadmill. Our senses get stimulated in so many ways that they have very subtle effects on our psychology that aren't always very easy to trace.

AMT: So you're saying we're not out in nature.

VYBARR CREGAN-REID: Basically, yeah. We're not out in nature and we're missing out on a great deal by being so. So to get back to your original question of what needs to be on the treadmill, basically the answer is more of nature. So things like treadmills with big screens that will allow us to feel like we're running in natural spaces. We need treadmills that are silent so that we can listen to nature sounds as well.

AMT: And where would the nature sounds come from?

VYBARR CREGAN-REID: Speakers or headphones. God, this is going to be a very complicated machine because it has to release smells as well.

AMT: Oh, okay. But that is your optimum treadmill, one that releases smells and sounds.

VYBARR CREGAN-REID: That would get as close to the outdoor running experience as possible. And the effects on the runner would be almost the same.

AMT: So I have to ask, if that's what it should incorporate, why don't we just run outside?

VYBARR CREGAN-REID: That's a very good question, isn't it? You know I'm obviously a very committed outdoor runner myself and I like this idea of the perfect treadmill that has bits of grass growing out of it. Hopefully it might encourage runners to see a little bit more of what it is that they're losing when they translate the runs from analog to digital.

AMT: What do you think of those people, like some of the people we heard earlier, who just love running on a treadmill?

VYBARR CREGAN-REID: I'd love to maybe sneak a few more of the benefits of outdoor running into their treadmill experience. But you know to hear people speaking so positively about any form of exercise, I think that's just great.

AMT: It's come a long way in 200 years.

VYBARR CREGAN-REID: Indeed, it has. It's got a long way to go as well.

AMT: Okay. Well, Vybarr Cregan-Reid, thank you for your time. Thank you for having me on. Vybarr Cregan-Reid teaches English at the University of Kent. He is the author of Footnotes: How Running Makes Us Human. He's in London, England.