

0:00:00.000,0:00:03.040

[Automated voice]: You will not be charged for this call. This call is from

0:00:03.040,0:00:08.960

-'Christopher' - an inmate at Monroe Correctional Complex. This call will be recorded and monitored.

0:00:08.960,0:00:11.840

[Brady]: Today's guest is Christopher Havens.

0:00:11.840,0:00:16.480

Christopher's a convicted murderer; he's serving a 25-year prison sentence.

0:00:16.480,0:00:23.840

But behind bars his life has taken an unexpected path, one of redemption, and that redemption has

0:00:23.840,0:00:30.160

come through mathematics. Now we'll discuss this shortly, but first let's deal with the backstory.

0:00:30.160,0:00:35.120

Look, this isn't a crime podcast and it's not my intention to explore forensic details,

0:00:35.120,0:00:39.120

but it is important, I think, not to ignore the severity of what happened.

0:00:39.760,0:00:43.680

In 2010 Christopher shot dead a 25 year old man

0:00:43.680,0:00:48.400

named Randen Robinson, leaving his body in a Washington State forest.

0:00:48.400,0:00:53.040

Christopher was 30 years old at the time, he was addicted to methamphetamine.

0:00:53.040,0:00:58.000

He takes full responsibility for what he did, he pleaded guilty to second-degree murder and

0:00:58.000,0:01:02.480

has accepted his punishment. In fact much of what Christopher is doing now - what we're about to

0:01:02.480,0:01:08.320

discuss in the podcast - seems like an endless quest to make amends for a debt that he says can

0:01:08.320,0:01:13.200  
never be fully repaid. We'll touch on this again  
later in the interview. Now as you've probably

0:01:13.200,0:01:17.520  
already figured out I'm talking to Christopher  
by telephone; we're speaking in 20-minute

0:01:17.520,0:01:22.800  
chunks because that's when the prison phones cut  
out. The sound quality is not ideal of course,

0:01:22.800,0:01:27.200  
but there are captions on the YouTube version  
of this episode if you want to check that out.

0:01:34.880,0:01:37.040  
Hey Christopher, it's Brady.  
- [Chrisopher]: Hey how you doing?

0:01:37.040,0:01:40.320  
[B]: I'm good how are you?  
[C]: Oh I'm pretty good.

0:01:40.320,0:01:42.560  
[B]: Whereabouts are you? Like  
what's the environment you're

0:01:42.560,0:01:45.280  
in at the moment? You're in like  
a phone room or something are you?

0:01:45.280,0:01:48.320  
[C]: No, well the way it works  
is kind of how you see in the

0:01:49.040,0:01:52.560  
TV where we have this big  
area, this big open area,

0:01:52.560,0:01:57.280  
and there's all these rooms or cells. There's  
kind of like a common area where everybody

0:01:57.920,0:02:01.040  
congregates and then there's a few  
phones and that's pretty much it.

0:02:02.240,0:02:05.760  
The phones are in the middle of the mix.  
- [B]: In the movies and on TV it can

0:02:05.760,0:02:09.280  
usually get pretty hostile over who gets

to use the phones and stuff like that.

0:02:09.280,0:02:13.920

- [C]: Yeah, so fortunately I'm- I've worked myself into a place where it's

0:02:13.920,0:02:19.360

a little bit more relaxed. You know I- I don't enjoy playing those- the prison games

0:02:19.360,0:02:24.000

and you know, I worked hard to get to where I'm at so I'm fortunate to not have to go through that.

0:02:24.600,0:02:29.280

[B]: Can I ask you a couple of questions about before prison mate? There's a couple- to sort of

0:02:29.280,0:02:31.583

get- learn a bit more about you?

[C]: Sure, go ahead.

0:02:31.583,0:02:36.720

[B]: As a boy, you know, as a youngster back in your school days what were you

0:02:36.720,0:02:43.120

like? And what were you like at mathematics?

- [C]: Umm I was just kind of an awkward kid.

0:02:43.680,0:02:49.120

I didn't really have a good time socially, I was always trying to impress everybody to

0:02:49.120,0:02:53.840

fit in, I had a hard time fitting in; and mathematically I don't remember anything

0:02:53.840,0:02:59.440

specific other than that math was not one of the subjects that I was, you know,

0:02:59.440,0:03:04.320

anxious about. I never liked social studies or PE

0:03:04.320,0:03:09.280

but mathematics was never one of those and I- but I don't remember being very good at it.

0:03:09.280,0:03:14.800

My mother used to tell me that I would tutor people two grades ahead of me and I just- oh

0:03:15.840,0:03:21.360

it's from so long ago that so many things  
have happened and I've abused myself so much

0:03:22.640,0:03:28.160

in between there that I just can't remember.

[B]: Do you remember what like you aspired to be,

0:03:28.160,0:03:30.960

like obviously before things took  
some unfortunate turns? Did you

0:03:30.960,0:03:33.280

have like a like a goal or a dream or anything?

0:03:33.280,0:03:40.240

[C]: I never had any goals before I came in  
here. I was just kind of living life day to day,

0:03:40.960,0:03:47.440

I guess that's a little bit of a part of, you  
know, the problems that I was facing. I kind of

0:03:48.000,0:03:53.920

view the underlying problems that got me in this  
place as like an overwhelming need to try to fit

0:03:53.920,0:04:00.240

in with the rest of the people, and I think I  
spent most of my life trying to do just that and

0:04:00.240,0:04:06.720

it ended up setting me in- in the same, you know,  
groupings as people who were causing problems.

0:04:06.720,0:04:10.640

There was a lot of moving around in my life  
because of- my parents were in the military

0:04:10.640,0:04:15.840

and so I would uproot as soon as I started to  
make some solid friends and then- you know, I'd

0:04:15.840,0:04:24.000

have to do it all over again and so it was always  
this constant trying to feel accepted and it just

0:04:24.000,0:04:29.520

navigated me into all the wrong places, and  
before I knew it uh that was my lifestyle.

0:04:29.520,0:04:33.040

[B]: I mean now that you have- I mean we're  
going to come to this later obviously,

0:04:33.040,0:04:36.480

but now that you've learned that you  
have this aptitude for mathematics

0:04:36.480,0:04:38.480

I'm sure you look back at a  
lot of things with regret,

0:04:38.480,0:04:42.960

but is that one of the things? That you didn't  
kind of dig into that mathematics early on?

0:04:42.960,0:04:47.680

[C]: Yeah I always wonder what would have happened  
if somebody would have like- somebody would have

0:04:47.680,0:04:51.840

sent me some number theory or somebody would  
have showed me some of the mathematics that

0:04:51.840,0:04:56.080

today I would consider to be beautiful. Or if I  
would have stuck with it, I always wonder what

0:04:56.080,0:05:01.280

would have happened because uh life is so much  
different and everything that I was looking for

0:05:01.280,0:05:06.560

in my life back then is- you know, everything  
that I had fails in comparison to even, you know,

0:05:06.560,0:05:12.000

what I have now. Which is odd coming from somebody  
inside of a prison but that's the reality.

0:05:13.520,0:05:17.360

You know, everybody I think takes for  
granted that a lot of the people out

0:05:17.360,0:05:22.160

in society are actually inside of a prison  
themselves and I guess when I finally,

0:05:22.160,0:05:27.200

you know, was able to forgive myself and accept  
myself for who I was and when I finally found

0:05:27.200,0:05:32.640

something where I can live around this beauty  
that I see or- you know, build a life around

0:05:32.640,0:05:38.560

this thing that I'm passionate about and I just-

everything just kind of took a beautiful tint and

0:05:38.560,0:05:41.680  
life just changed.

- [B]: When you first-

0:05:41.680,0:05:45.920  
you know, you've been sentenced right, and you're  
starting this incredibly long sentence for a

0:05:45.920,0:05:49.600  
you know a terrible crime; you haven't  
found mathematics yet right? You're just

0:05:49.600,0:05:55.120  
at the start of this prison term, how are  
you thinking you were going to pass the time?

0:05:55.120,0:05:59.360  
Where did you think you were going to find  
purpose and meaning before the mathematics?

0:05:59.360,0:06:03.520  
What- were you thinking I'm going to get really  
fit, or I'm going to read lots of books, or

0:06:03.520,0:06:06.400  
this is just going to be-  
what were you thinking then?

0:06:06.400,0:06:12.800  
[C]: Ah, I didn't have purpose and meaning.  
So when I first came to prison all I knew was

0:06:12.800,0:06:16.480  
what I'd seen in the movies and all  
of my friends telling me, you know,

0:06:16.480,0:06:20.000  
the first thing you do if you go to prison is  
you find the biggest guy and you punch him in

0:06:20.000,0:06:25.280  
the face and so that was my mentality. And  
when I came to prison my dad was telling me,

0:06:25.280,0:06:29.040  
uh you know, you want to be a clown fish  
or you want to be a shark? And I said,

0:06:29.040,0:06:33.440  
you know, in my mind as- you know, I don't  
want to be a clown fish. And so I just started

0:06:33.440,0:06:39.760

playing these prison games and I- again I fell in with the wrong, you know, type of people and uh

0:06:39.760,0:06:45.680

I had thought originally that if, you know, I was serving such a long sentence that I would want

0:06:45.680,0:06:52.480

people to leave me alone and so I just figured after all this- you know, watching all these

0:06:52.480,0:06:57.120

movies for my life that if I did something crazy enough that they would leave me alone and not

0:06:57.120,0:07:03.440

want to mess with me? And so um I landed myself in the hole and that's kind of where it all started,

0:07:03.440,0:07:09.280

I didn't have any purpose and, you know, there was no goal but that was it. That was- that was

0:07:09.280,0:07:12.720

actually kind of the turning point in my life.  
- [B]: How did you land in the hole?

0:07:12.720,0:07:17.440

[C]: It's a little complicated. There's a lot of politics inside of prison, especially when you

0:07:17.440,0:07:23.360

go to like a very maximum security prison in the United States. If you go to one of those

0:07:23.360,0:07:28.880

places you're expected to do some sort of, uh they call it 'putting in work' where you're-

0:07:28.880,0:07:33.120

where you carry out some act of violence to kind of show what you're made of

0:07:33.120,0:07:41.280

or to earn your stripes. And if you don't you become the target. And so I- knowing I had to

0:07:41.280,0:07:47.200

do this sooner or later I uh I wanted to do it in such a way that nobody would want to ask me again?

0:07:48.240,0:07:55.440

And you know so I just kind of tried to fit their

criteria of what was um not to be tangled with,

0:07:55.440,0:08:00.240

and it got me in a lot of trouble and just-  
uh it didn't have the effect at all, it had

0:08:00.240,0:08:06.000

actually the opposite effect. Everybody thought  
that I was willing to uh be you know somewhat of

0:08:06.000,0:08:11.440

a loose cannon and then they all wanted to recruit  
me which was actually the opposite of what I was

0:08:11.440,0:08:17.680

trying to accomplish and yep, that was that.  
- [B]: Tell me about how it would turn

0:08:17.680,0:08:20.960

different though? It sounds like it was  
this time in the hole where actually

0:08:20.960,0:08:23.760

you found the light at the end of the tunnel,  
can you tell me a little bit about that?

0:08:23.760,0:08:30.640

- [C]: Sure. In the hole it's- it's loud, you  
can't see anybody, you're in your own room, it's

0:08:30.640,0:08:36.320

just a small concrete room with a light that's on  
24 hours a day - big old fluorescent light - and

0:08:37.120,0:08:42.800

people go mad in there and they're slamming- you  
know they're kicking the walls, kicking the doors,

0:08:42.800,0:08:47.920

flooding their rooms - it's pretty intense.  
And so uh after several weeks of that I would

0:08:47.920,0:08:54.480

just kind of, you know, play puzzles, do  
sudoku or I'd work out and I- I started

0:08:54.480,0:08:58.880

noticing you know the patterns of ever-  
everyday life around there where you'd see

0:08:59.760,0:09:06.800

the guards walking through in certain intervals  
at certain times of day and like the nurses or,



0:09:06.800,0:09:10.960

you know, other people. And I noticed this gentleman coming in every day for the last few

0:09:10.960,0:09:15.760

weeks and he was like he was going door-to-door sliding envelopes under people's doors,

0:09:15.760,0:09:20.320

and they were these big manila envelopes and it caught my attention, it made me really curious,

0:09:20.320,0:09:24.320

and I remember one of those days I just asked him - I said hey what's in those envelopes?

0:09:24.320,0:09:29.600

And uh he didn't actually answer me he just slid one under my door. And inside the envelope was

0:09:29.600,0:09:36.400

just a bunch of math. It was um basic math, like pre-algebra and math for the trades, and- but

0:09:36.400,0:09:41.280

I hadn't done any sort of education for- well I want to say since- I don't know,

0:09:41.280,0:09:47.920

10-15 years prior to that. And uh so I just kind of soaked it up. And it was like everything I got

0:09:47.920,0:09:53.680

out of the sudoku puzzles but more; I guess the computation was you know something that

0:09:54.240,0:09:59.200

my mind craved without me knowing it, but I just started, you know, completing his packets and I'd

0:09:59.200,0:10:04.160

send it back to him and he'd send me a new one with some feedback and I just kept on building

0:10:04.160,0:10:10.640

and building. You know, and we had been exchanging a conversation around, you know, what types of

0:10:10.640,0:10:14.480

other types of math are out there, you know what is number theory? And what is calculus?

0:10:14.480,0:10:19.840

Because I had no way of knowing any of that. You

know, he would provide stimulating conversation

0:10:19.840,0:10:25.280

and I would just keep on filling out his math packets and turning them back in and asking

0:10:25.280,0:10:30.640

him more questions and one day he sends me a kite, which is a prison correspondence saying,

0:10:31.360,0:10:35.840

you know Mr Havens, you surpassed my math abilities and I wish you left on your journey.

0:10:35.840,0:10:42.080

And you know he was just a math enthusiast but it had this meaning to me where, you know,

0:10:42.080,0:10:46.480

he's telling me that I was on some journey so-  
[B]: Who was this, Chris? Who was this person?

0:10:46.480,0:10:50.800

Was he a prisoner or a visitor or-?  
- [C]: No, he was a employee for the

0:10:50.800,0:10:56.720

educational system inside of the prison and he was just, I guess, passing out

0:10:56.720,0:11:02.160

course material which- I didn't know that I was doing any course material. It turned out that it

0:11:02.160,0:11:10.640

was a math class, just like a beginner math class. But I just thought it was stimulating material to

0:11:10.640,0:11:16.240

do in the hole and I realized, you know, like I was doing it all day all night and I'd wake

0:11:16.240,0:11:19.840

up in the middle of the night solving these problems and, you know, like wake up saying,

0:11:19.840,0:11:23.520

oh I got it! I figured this one out! And I'd write it down and I'd go back to sleep

0:11:23.520,0:11:28.880

and I'd have dreams about it and you know; and I realised, you know, I was like- I was beginning

0:11:29.600,0:11:35.920

to grow passion for my education. And it was a little strange because after several months

0:11:35.920,0:11:41.840

of this, after he sent me that kite saying that he- you know, that I've kind of surpassed what he

0:11:41.840,0:11:44.720

had available for me I just started buying books.

0:11:44.720,0:11:47.040

And I just bought the books by brute force, I had no

0:11:47.040,0:11:51.840

idea what to buy first. So I was buying books that were way above my head, way below my head.

0:11:51.840,0:11:56.240

You know, it was hard to find something that was in the goldilocks zone but, you know, all the

0:11:56.240,0:12:02.720

noise around me they were all the people that I would- used to associate with and it just started

0:12:04.320,0:12:08.880

sounding different. And I noticed right then and there that my thoughts, my values,

0:12:08.880,0:12:15.840

were starting to change because it was kind of becoming annoying all of the- you know the convict

0:12:15.840,0:12:21.520

mentality; and I've seen it for what it was right there, I was having these cognitive changes,

0:12:21.520,0:12:25.840

I think as a result from studying mathematics and it just kind of floored me

0:12:25.840,0:12:33.120

how powerful something that's just plain good can be. And I kind of- I just dedicated the rest of my

0:12:33.120,0:12:38.400

time to the study of math after that and it wasn't long after where I just kind of stood there.

0:12:38.960,0:12:43.600

I remember I came to like a fork in the road metaphorically, I was just- you know, they have

0:12:43.600,0:12:49.600

these gigantic concrete walls in this prison and everybody sees that as a symbol of confinement

0:12:49.600,0:12:54.720

and I- I remember I stood up one time and I'm looking at that concrete wall and it wasn't

0:12:54.720,0:13:01.040

a symbol of confinement, it was a blank slate where you know I could start over and I realised,

0:13:01.760,0:13:06.720

you know, I have 25 years, I could do whatever I want, I could learn whatever I want.

0:13:06.720,0:13:12.720

And in my mind, you know, the heroes were like instead of James Bond or the cowboys and indians

0:13:12.720,0:13:18.480

you'd have, you know, cryptographers or- they were all like wizards to me and so I- I said

0:13:18.480,0:13:23.280

you know I want to spend my time trying to become a mathematician. And that's kind of what I did.

0:13:23.280,0:13:26.880

- [B]: How did it go in the early stages? What do kind of the prison authorities

0:13:26.880,0:13:31.040

think suddenly when one of their inmates is ordering in all these complicated math books?

0:13:31.040,0:13:38.240

[C]: Uh I don't think that they really realized at first. I started ordering all these books and,

0:13:38.240,0:13:42.240

you know, they were getting rejected left and right for being used or for being,

0:13:42.240,0:13:48.640

you know, outside of some strange obscure parameter that they have. And there's all these

0:13:48.640,0:13:52.800

restrictions around ordering things: you have to order it from a certain type of bookseller,

0:13:52.800,0:13:57.200

and the bookseller has to be established  
enough to where they're not in their own house,

0:13:57.200,0:14:03.040

or they're have to- have to you know have to be  
soft cover, and they have to be this and they have

0:14:03.040,0:14:07.840

to be that and- or it looked like it was used  
or it was dog-eared or something, you know. So

0:14:07.840,0:14:12.560

uh they were rejecting them left and right and  
I would file appeals and they were actually,

0:14:12.560,0:14:19.120

you know, when I was at that maximum security  
whoever the head person was was passing them

0:14:19.120,0:14:24.480

through to me after I would appeal it, but then  
I got shipped out shortly later and at that

0:14:24.480,0:14:30.480

next institution they were just rejecting book  
after book after book and I would have my family

0:14:30.480,0:14:36.080

put them in the trunk of their car so that they  
can try to, you know, bring them at a visit,

0:14:36.080,0:14:41.280

you know, and uh it got to where that trunk  
was full of books that were being rejected.

0:14:42.400,0:14:48.080

And they were all sentimental to me, you know,  
because they're like the things that were saving

0:14:48.080,0:14:53.360

my life. They were the things that had this  
like- inside of those pages had this power to

0:14:53.920,0:15:00.480

to change the thoughts of this guy that lived a  
completely wretched life and, you know, to me that

0:15:00.480,0:15:07.040

was just like the ultimate- I don't know, it's  
just such a powerful thing some numbers can have

0:15:07.600,0:15:12.840

to change something that I wasn't even even  
able to change myself for so long. [B]:

0:15:17.840,0:15:22.560

Christopher has had help from the outside;  
names you're about to hear include

0:15:22.560,0:15:26.720

Luisella Caire and Umberto Cerruti;

0:15:26.720,0:15:31.280

mathematicians in Italy who have befriended  
Christopher and nurtured his talent.

0:15:31.280,0:15:34.000

Also Marta Cerruti, an academic in Canada.

0:15:36.840,0:15:42.320

[C]: So I told you that I started having these  
cognitive changes and they just kept on coming

0:15:42.320,0:15:46.720

and it felt after a while that I was going through  
this emotional turmoil, like with all these, you

0:15:46.720,0:15:51.440

know, interchanges that were happening it was like  
a tidal wave and so I put myself into a program

0:15:52.240,0:15:57.520

to try to build tools for this. And meanwhile  
these books keep getting rejected and rejected

0:15:57.520,0:16:03.120

and I was studying in like a sterile environment  
where it felt like, you know, I was around this

0:16:03.120,0:16:08.000

thing that I loved so much but I couldn't see the  
things around me. It's almost like sitting in a

0:16:08.000,0:16:12.960

classroom with a teacher behind you on the board  
writing out this beautiful mathematics and you

0:16:12.960,0:16:17.200

know it's there, and you see the book in front  
of you, but you can't see what's on the board,

0:16:17.200,0:16:22.160

you can't see those little added little  
nuggets of beauty, you know. And so I ended up

0:16:22.160,0:16:27.280

writing— this is when I started studying a little  
bit of number theory, just basic algebra really;

0:16:27.920,0:16:35.280

groups, rings, fields. And I wrote to the Annals of Mathematics to ask them for a subscription,

0:16:35.280,0:16:40.960

and I let them know you know where I was at and I- I was curious to know if they had any people

0:16:40.960,0:16:46.480

that they can put me into contact with. And they had politely responded that they felt like

0:16:46.480,0:16:49.840

it might have been a little bit over my head, their journal, because it's kind of for career

0:16:49.840,0:16:55.920

mathematicians and- which was true at the time, I didn't understand a bit of it. And they also

0:16:55.920,0:17:00.560

sent me a bunch of books, some of them by Devlin, they also sent me

0:17:01.360,0:17:08.000

Flatland - or an annotated version of Flatland - which was wonderful. And uh, you know,

0:17:08.000,0:17:13.520

at the time I had never even- I didn't know any math magazines existed so I didn't think to try

0:17:13.520,0:17:19.200

to find something more at my level like, you know, Math Horizons or Mathematics magazine. So

0:17:19.200,0:17:23.360

I just kept on studying and I started reading the books that they sent me and a couple months later

0:17:23.360,0:17:29.440

I got a letter from a lady in Italy, Luisella Caire. And she just started mentoring me, it was

0:17:30.160,0:17:36.320

wonderful because we would exchange these letters where I would tell her about all these different

0:17:36.320,0:17:43.280

maths from the books that I was reading, or my studies, and you know we'd just kind of talk about

0:17:43.280,0:17:47.920

mathematics, she'd share culture with me and it was one of the most powerful experiences because

0:17:48.960,0:17:54.480

I was finally able to interact with somebody mathematically. Here when I tried to engage

0:17:54.480,0:17:58.720

somebody I had been reprimanded because I should have been studying, you know,

0:17:58.720,0:18:02.320

these prison politic things and uh

0:18:02.320,0:18:06.560

and that was kind of something that drove me away from that lifestyle even more, it was

0:18:08.000,0:18:14.560

just that a lot of people are so unsupportive of, you know, anybody that are trying to go a

0:18:14.560,0:18:21.360

different direction than the grain inside prison. So when I became in contact with the people in

0:18:21.360,0:18:27.360

Italy, Luisella, she just started feeding me culture and, you know, showing me these little

0:18:27.360,0:18:32.640

aspects of community. She was that first link into the community that I had- I didn't know I needed

0:18:32.640,0:18:41.840

but it opened up a completely different aspect of the world to me and uh it just lit a fire.

0:18:46.560,0:18:49.120

[B]: I want to ask you about the paper you had published

0:18:49.120,0:18:51.040

because I think that's a really interesting thing that happened,

0:18:51.040,0:18:53.920

can you tell me how it came about that you became a published mathematician?

0:18:53.920,0:19:03.280

[C]: Actually it was Luisella's method of teaching me was never to- she just mentored me actually I



0:19:03.280,0:19:07.360

should say. She— when, you know, when I would have problems in mathematics she would send me

0:19:08.400,0:19:12.480

material to research the topic instead of just giving me the answers,

0:19:13.680,0:19:19.840

and that had always been the way we would exchange mathematics. I would show her these

0:19:19.840,0:19:24.480

long threads of thought of mine and instead of saying, yeah well this is what you do here,

0:19:25.360,0:19:32.960

she would instead send me research articles or chapters from specific books around that topic

0:19:32.960,0:19:37.920

that would kind of lead me down a rabbit hole a little further and further to get me

0:19:37.920,0:19:43.840

to explore the topic and eventually land on the answer myself. And that's kind of how I started

0:19:43.840,0:19:49.360

studying continued fractions; she would share all this wonderful number theory with me and I would

0:19:50.320,0:19:54.400

always explore it because it was new and it was wonderful and

0:19:54.400,0:20:00.960

I fell in love with continued fractions. And there was this one continued fraction whose partial

0:20:00.960,0:20:07.280

denominators form the sequence of natural numbers: 1, 2, 3... it's a ratio of Bessel functions;

0:20:07.280,0:20:12.320

there's no actual name for the number but Carsten Elsner and I started calling it the Braid,

0:20:13.520,0:20:21.520

but it equals like  $1.433n$  but I was struck by how all these beautiful continued fractions whose

0:20:21.520,0:20:27.360

partial denominators form these really neat patterns would have these really elegant explicit,

0:20:27.360,0:20:33.280

you know, finite forms that you can write them in like  $e$  or, you know,  $\pi$  or whatever. So I

0:20:33.280,0:20:38.880

was on this quest to just solve this continuous traction to figure out an explicit and finite

0:20:38.880,0:20:44.480

way to express it, and I guess it took me a year to learn that there was no solution in the

0:20:44.480,0:20:50.560

terms that I was looking for but in the process I started trying to solve like a general case and I

0:20:50.560,0:20:56.960

ended up uncovering family- you know, solutions to families of Hurwitz continued fractions that

0:20:56.960,0:21:03.440

would give all of the convergents. And at that time her husband seen it, Umberto Cerruti,

0:21:03.440,0:21:10.400

and we just kind of started working together at that point and he suggested research where

0:21:11.200,0:21:16.240

we investigate what happens when you apply a linear fractional transformation to it.

0:21:16.240,0:21:20.800

So I did and after another year or so I started sending results and we just

0:21:21.600,0:21:25.520

began collaborating at that point, because some of the results that I was sending were new

0:21:26.480,0:21:34.640

and I guess I found like that niche that I think every person who studies mathematics to any degree

0:21:34.640,0:21:40.880

of seriousness finds where you can kind of go down a rabbit hole and get lost where textbooks, where

0:21:40.880,0:21:45.200

nothing matters, it's all kind of locked there in your head you're just following your own thread

0:21:45.200,0:21:50.560

because sometimes there is no material to pull information from and that's that one little spot

0:21:50.560,0:21:55.840

for me, and we just started studying these leaping convergents, so these Hurwitz continued fractions.

0:21:55.840,0:22:01.200

[B]: How did it feel to have a mathematical paper published like- it must have been amazing?

0:22:01.200,0:22:07.040

[C]: Yeah it was amazing. To be honest ever since I started getting in contact with Luisella

0:22:07.040,0:22:11.840

I- I had these surreal moments. It was actually ever since I started studying mathematics but

0:22:12.480,0:22:16.640

my life just started having you know these things happening to me that were surreal,

0:22:16.640,0:22:21.280

and and I knew it was because of, you know, my involvement in mathematics doing something

0:22:21.280,0:22:26.880

good. And every- you know, it would never fail that something else would happen that was just

0:22:26.880,0:22:32.400

so so powerful that I just couldn't quite believe that it was happening and, you know, at the time

0:22:32.400,0:22:39.280

my mother and I - oh we talk all the time - and she was like always behind all of my interactions,

0:22:39.280,0:22:43.760

especially email interactions, because she used to help me with all of my correspondences.

0:22:43.760,0:22:48.720

We don't actually have the internet here. So uh I'd ask her I'd say, hey is this

0:22:48.720,0:22:54.720

this really happening? She said, yeah I think so! And uh I would just kind of- you know,

0:22:54.720,0:22:58.240

it was one thing after the other but when the paper was coming out I said you know I don't

0:22:58.240,0:23:01.840

want to believe it because if I do something's going to happen and it's going to get in the

0:23:01.840,0:23:08.080

way of it and we just kept on working and kept on working and we submitted the paper. And it

0:23:08.080,0:23:12.720

was surreal for me too because I got to see the referees, you know, chewing it and spitting it

0:23:12.720,0:23:18.240

out and it going back and forth and, you know, it got rejected from a few uh journals at first

0:23:19.200,0:23:26.240

but it was wonderful to watch it evolve from the state where we submitted to the state where

0:23:26.240,0:23:30.880

it got accepted and when it got accepted it was just this whole new feeling inside of my heart,

0:23:31.520,0:23:37.040

where I was like- uh. I mean this is the life that I could have just by studying math.

0:23:37.040,0:23:41.920

And if this is the life- if this life is already making me feel so full of, you know,

0:23:41.920,0:23:48.640

joy and love inside of a place like this then I'm- I'm in 100% I'm in, can't get rid of me.

0:23:48.640,0:23:51.520

- [B]: Do you keep a copy of the journal like in your cell or anything?

0:23:51.520,0:23:56.080

[C]: Yeah I- I keep a copy of it in my room but I also uh,

0:23:56.080,0:23:58.800

I still use it when I'm doing current research.

0:23:59.360,0:24:05.920

We're actually extending the research today, uh Stefano Barbero, Nadir Murru and Carsten Elsner;

0:24:06.640,0:24:12.080

a gentleman in Hanover who also researches a lot in leaping convergence. And so we're

0:24:12.080,0:24:18.080

getting together and we're defining uh this concept called natural leaping convergence

0:24:18.080,0:24:23.520

and uh- so yeah we're adding to it and it's exciting because this is a different feel,

0:24:23.520,0:24:28.160

I have a little bit more experience and we're moving at breakneck speeds with respect to

0:24:28.160,0:24:32.240

what I'm used to, and it's wonderful. I don't know, it's a type of connection where you can

0:24:32.240,0:24:36.000

build friendships and have social interactions that lead to

0:24:36.560,0:24:40.800

expanding our wealth of human knowledge, and there's no real words for that, I think there's-

0:24:40.800,0:24:46.480

it's the most powerful thing that I can, you know, I can think of and it's just such a beautiful

0:24:47.200,0:24:49.760

aspect of the math world.

- [B]: Have you ever found mathematicians

0:24:49.760,0:24:54.720

and people unwilling to work with you because of the stigma of being a prisoner? - [C]: Uh yeah in

0:24:54.720,0:24:59.680

a sense. I mean, you know, what was weird is when the paper came out there was a lot of claims made

0:24:59.680,0:25:04.800

on the internet, there was a lot of people that just started piggybacking off of other articles

0:25:04.800,0:25:11.440

and oh man there was like a claim that somebody made about, that I solved an ancient math problem

0:25:11.440,0:25:17.600

which is completely not true. And then some other

person took that and piggybacked and, you know,

0:25:17.600,0:25:23.360

and then extended the exaggeration further, that I was solving problems that Euclid himself couldn't

0:25:23.360,0:25:29.680

solve and then people started calling me a genius - which I'm definitely not. And it made it really

0:25:29.680,0:25:34.480

difficult because either the people that I started coming into contact with in the math community

0:25:34.480,0:25:38.800

was- they were under the impression that I was some genius and so that they were

0:25:39.920,0:25:42.800

communicating with me on a whole another level that I wasn't actually

0:25:43.520,0:25:52.000

equipped to- it was damaging. Or, you know, a lot of people I- a lot of people I come

0:25:52.000,0:25:55.920

in contact with, every once in a while I'll come in contact with somebody who's just an

0:25:56.560,0:26:04.400

extreme elitist. It's unintentional but I think my personality kind of uh clashes with them and

0:26:05.120,0:26:12.000

I find that I- I just kind of embrace the people who are embracing inclusivity a little bit nicer,

0:26:12.560,0:26:17.120

even flourishing, because one of these guys was you know- we started interacting about

0:26:17.120,0:26:19.440

a topic that was close to me

0:26:19.440,0:26:25.760

and he learned that I'm not formally educated and it just rubbed him the wrong way and he wanted to

0:26:26.800,0:26:28.400

convey after that

0:26:28.400,0:26:31.200

nothing but - you know, you should be

waiting to research, you shouldn't be

0:26:31.200,0:26:34.720

doing any of this. And I said, well what if it's just something that kind of comes out in

0:26:34.720,0:26:39.440

my heart that I just- I can't really- you know, like if I'm sitting in front of a pen and paper

0:26:41.040,0:26:46.240

just trying to enjoy, you know, mathematics and have fun and just express myself, I'm not going

0:26:46.240,0:26:52.840

to stop doing it because you say that I have to have some specific education involved. [B]:

0:26:53.360,0:26:59.520

If you care to look it up, Christopher's paper is entitled 'On non-linear leaping convergents

0:26:59.520,0:27:04.640

of a linear fractional transform of Hurwitz continued fractions'.

0:27:04.640,0:27:08.960

Christopher's modest, he's embarrassed by some of the media hyperbole that has

0:27:08.960,0:27:13.200

surrounded this paper. He hasn't solved some ancient riddle or anything like that,

0:27:13.200,0:27:19.840

despite what you may read, but to my untrained eye it still looks pretty advanced and impressive.

0:27:22.400,0:27:25.600

Let's deal with the Prison Math Project because obviously that's a pretty amazing thing you've

0:27:25.600,0:27:29.840

been involved with as well. Can you tell me why and how that came into being? [C]: Well

0:27:30.480,0:27:36.800

historically it started in 2015 as a result of the prisons rejecting so many of my books.

0:27:38.160,0:27:44.480

Luisella and I were exchanging correspondences once and, you know, it was a bummer because she

0:27:44.480,0:27:49.920

was sending me her own manuscripts and books written by her colleagues and they all had

0:27:49.920,0:27:54.320

value to me. And I was crushed when they was— when they were rejecting them and I told her

0:27:54.320,0:27:58.800

almost in joking that I said, you know what? Well, I'm going to move institutions and I'm going to

0:27:58.800,0:28:04.880

infiltrate their educational system by starting a math program and I'm going to build a library and

0:28:04.880,0:28:11.360

I'm going to get those books. So we just started planning this math program where we can actually

0:28:11.360,0:28:16.000

solve a couple problems: we can, you know, build a library to use the books but we can also create a

0:28:16.000,0:28:20.320

space for peer interactions which I've never had. — [B]: It's just like the Shawshank Redemption,

0:28:20.320,0:28:25.760

the prison film, where he starts a library! — [C]: And there's some— there's some similarities

0:28:25.760,0:28:34.000

to it. So we started this program and I remember going through all this red tape and after so long

0:28:34.000,0:28:39.200

I'm sitting in this office with this prison official and he's— he calls me up there and

0:28:39.200,0:28:43.680

he says, he's typing on his computer and he says, hey so what are you gonna call this thing?

0:28:43.680,0:28:49.040

And I'm— I felt so, you know, like I was taken back because I hadn't thought of a name for it.

0:28:49.040,0:28:53.920

And I said, do you need the name right now? And he says yeah, I'm on the— I'm on the computer

0:28:53.920,0:28:58.480

emailing this lady and she needs it right this



minute. And I said- and I just said the first

0:28:58.480,0:29:02.560

thing that popped in my head and it was Prison Mathematics Project. And I knew right there,

0:29:02.560,0:29:10.800

he kind of grunted he said, huh that's good. I was like, yeah it is good. And the name stuck, and so

0:29:10.800,0:29:16.400

we had this program that took off and it started- you know, there was a lot of really wonderful- we

0:29:16.400,0:29:21.120

would go in this classroom and we would just kind of like express our love for mathematics

0:29:21.120,0:29:28.160

by teaching these concepts in self-contained, you know, sessions. And I would always put, you know,

0:29:28.160,0:29:33.200

sequences on the board for people to solve and I would- I would do all these things. And after a

0:29:33.200,0:29:38.640

while it just started becoming like a community. You would have these people that would see each

0:29:38.640,0:29:43.520

other on the breezeway in the middle of this prison, and instead of turning the other cheek

0:29:43.520,0:29:47.360

because of our differences or, you know, they would- they would interact with each other.

0:29:47.360,0:29:52.400

And so it started building community. And it was so wonderful to see that that, you know,

0:29:53.200,0:29:58.000

meanwhile the officials here were- there were staff members that were just fighting me to

0:29:58.000,0:30:02.560

get this program shut down because it was causing them to have to work a little bit

0:30:03.200,0:30:08.960

of extra hours or an extra half hour actually. But it was too much for them and so they

0:30:09.520,0:30:15.600

fought at an administrative level with me and they eventually won out, so I just started using

0:30:15.600,0:30:21.520

the Prison Mathematics Project as a way to hold these events inside of prison, so that's kind of

0:30:21.520,0:30:26.640

how I did the first pi day thing where I- I just- I figured, you know, I'm just going

0:30:26.640,0:30:31.360

to invite everybody in the math world that I know and if I get lucky maybe one of them will show up.

0:30:31.360,0:30:38.320

Invited everybody I knew and ever- every single one of them said, yeah let's do this,

0:30:38.320,0:30:43.760

we're coming - and including all of my friends in Italy, and it was just this

0:30:44.800,0:30:52.800

whole almost magical experience. I had all of my biggest influences coming under one roof

0:30:52.800,0:30:58.080

in this prison on this one day. And the prison administration was so mad at me because

0:30:58.080,0:31:04.640

I didn't stay in my lane, I invited people without their permission - which isn't entirely true,

0:31:04.640,0:31:08.800

I had permission from one of the staff members, but since he was helping me I didn't give them

0:31:08.800,0:31:12.960

his name. You know, you find somebody that gives you support so you want to continue that support

0:31:12.960,0:31:18.560

by not getting them in trouble. So I bit the bullet and the event went without a hitch,

0:31:18.560,0:31:23.360

and because it went without a hitch I did not get in any trouble but they were pretty strict on me

0:31:23.360,0:31:28.800

the next year. After Covid hit we weren't even

able to hold any events inside of the prison,

0:31:28.800,0:31:34.400

everything shut down. Education inside prisons came to a screeching halt, all of prison

0:31:34.400,0:31:41.920

programming they started quarantining everybody, or cohorting. You know, the prison was segregated

0:31:41.920,0:31:48.640

by our units and- and it shut everything proactive down. It shut all these self-help things -

0:31:48.640,0:31:55.360

this is the time right around where the journal article had been published and Umberto's daughter

0:31:55.360,0:32:01.120

Marta Cerruti wrote an article in The Conversation about me. It went viral and in it she asked me,

0:32:01.120,0:32:04.720

well what do you plan to do when you get out of prison? I said, well I'd like to launch the Prison

0:32:04.720,0:32:10.720

Mathematics Project as a non-profit entity and provide it for people across the United States.

0:32:10.720,0:32:15.600

And this person had read the article and he was so inspired that he reached out to me and said,

0:32:15.600,0:32:21.440

you know, I would love to help you with that. And he started talking about re-entry and

0:32:22.400,0:32:26.800

recidivism and all these topics that are pretty sophisticated topics. And I

0:32:27.360,0:32:33.520

felt at the time that, you know, I was talking to some college-educated gentleman that- and it

0:32:33.520,0:32:37.760

turned out that at the end of his email he had indicated that he was in a high school

0:32:38.880,0:32:44.320

drama class, you know. I was like oh! So I said uh, you know, I said unfortunately

0:32:45.200,0:32:53.360

I said uh, I don't know if I could work with you, you're young. But I had sat on that for a

0:32:53.360,0:32:57.920

while and thought about it real hard and I had just kind of pictured for a moment that he's

0:32:57.920,0:33:03.920

probably experiencing the same type of limitations that I experienced in here by people not taking

0:33:03.920,0:33:08.080

him serious because of his age, where people a lot of the times don't take me serious because

0:33:08.080,0:33:12.720

of my incarceration. So I emailed him back and I said, you know, if we get your parents on board,

0:33:13.280,0:33:18.320

if your family is- if there's a complete transparency going like, I would be willing to

0:33:18.320,0:33:23.840

you know explore this with you. And so we did, and we ended up starting this non-profit organization.

0:33:24.880,0:33:29.920

You know, the more we worked on it, the more people started jumping on board and we just

0:33:30.480,0:33:36.640

built this program around the limitations of the pandemic so that we could offer educational

0:33:36.640,0:33:41.280

experiences and mentorship to people without actually having to come inside of the prisons

0:33:41.840,0:33:47.360

in such a way that you know all of their information, all of their personal address

0:33:47.360,0:33:54.000

information and whatever is secure so that there's no risk, also there's no risk of Covid. And it

0:33:54.000,0:33:58.960

just kind of took off, it just started growing with a mind of its own, and we started having all

0:33:58.960,0:34:05.840

these people in the math community just jumping to

to help. And prisoners started hearing about this

0:34:06.480,0:34:10.880

and we're getting letters from all these prisoners across the United States saying, where have you

0:34:10.880,0:34:16.480

guys been? I've been studying and I've had no idea where to go next, and what to do, and this is what

0:34:16.480,0:34:21.040

I love to do you know? I found that there's a lot of people that have a similar story to myself.

0:34:21.040,0:34:22.320

- [Automated Voice]: You have 60 seconds remaining.

0:34:22.320,0:34:27.280

[B]: Look I'm afraid this is what prison phone calls are like, but don't worry, Christopher will

0:34:27.280,0:34:32.480

phone back shortly. But while we have a second, I will point out that schoolboy who contacted

0:34:32.480,0:34:38.560

Christopher was Walker Blackwell, and he remains a co-director of the Prison Mathematics Project.

0:34:41.640,0:34:46.560

[C]: We get these letters every once in a while from these guys that are saying that,

0:34:46.560,0:34:51.680

hey uh I've been studying mathematics, this is what I do, this is what I love,

0:34:51.680,0:34:56.320

and I don't- you know, I have no idea where to go next and I just I want to be involved, you know,

0:34:56.320,0:35:00.720

they convey how they want to be involved in you know in something bigger but they don't know

0:35:00.720,0:35:05.360

how to how to reach for it and how to obtain it. And they don't have these solid goals

0:35:05.360,0:35:11.120

because they don't actually know what goes underneath their feet as far as the foundation,

0:35:11.120,0:35:17.120

you know. And it's just a wonderful thing to be able to start to connect these people with real

0:35:17.120,0:35:22.400

mathematicians and educators and just members with the math community. Because what we do is,

0:35:23.040,0:35:27.440

we don't actually teach people mathematics from the ground up, we expect people to be studying

0:35:27.440,0:35:33.520

on their own already and we work as kind of a simulation of what Luisella was giving for me,

0:35:34.480,0:35:38.960

a mixture maybe of what the older gentleman in the hole and Luisella did.

0:35:38.960,0:35:45.520

Our mentorships provide prisoners with support and we teach them about community

0:35:45.520,0:35:52.080

and culture of mathematics and we push them to go a step further towards making contributions to

0:35:52.080,0:35:58.480

society during this time of their incarceration. So the idea is that having these transformational

0:35:58.480,0:36:04.400

experiences myself, and how powerful they were and how they lit this fire inside of my heart,

0:36:04.400,0:36:10.160

I want to share it and I want to give other people that because I know that that's kind of what led

0:36:10.160,0:36:15.280

to my walk on a path of desistance from crime.  
- [B]: What do other prisoners who aren't

0:36:15.280,0:36:18.640

into mathematics and like prison guards and that think of all this

0:36:18.640,0:36:23.760

like when they- when they see what you're up to?  
[C]: Uh this is kind of a funny question because

0:36:23.760,0:36:28.720

I have a little bit of a reputation of

being a little weird in that respect.

0:36:28.720,0:36:33.680

Uh we don't have a lot of the things that you guys have out there in the community like a blackboard;

0:36:33.680,0:36:40.720

so uh there have been times where the inside of my room has been covered in paper and the inside

0:36:40.720,0:36:45.920

almost gift wrapped, where I'd just be standing on my toilet trying to reach the equation up top,

0:36:45.920,0:36:52.000

you know, uh and carry the 1 or whatever. I can have some prisoner or a guard walk by and just

0:36:52.000,0:36:56.960

see what the heck is going on inside the room and be like, what in the hell is going on in

0:36:56.960,0:37:01.840

there? And it would freak people out. Or for like these events, I'd be memorizing digits of pi,

0:37:01.840,0:37:08.400

like thousands of digits of pi. I remember for the 2017 pi day event I was- we were doing a contest

0:37:08.400,0:37:14.400

and I had memorized 1,111 digits of pi. And to do that I had to walk around here spouting digits

0:37:14.400,0:37:18.800

of pi to myself. And I was doing something productive but in my mind,

0:37:18.800,0:37:24.400

and in these guys- all they saw was this guy rambling numbers talking to himself walking

0:37:24.400,0:37:29.520

back and forth up the tiers. Or I'd be- you know I- when I study I memorize definitions

0:37:29.520,0:37:33.200

so that I don't have to refer to them in the book all the same time and it

0:37:33.200,0:37:38.480

just kind of gives me a different, you know, type- feel for um when when I'm studying if I

0:37:38.480,0:37:43.200

memorize definitions I kind of lock it in my head a little bit differently than when I'm

0:37:43.200,0:37:51.120

just normally studying. So I will walk outside of my room and I'll just kind of do laps on the

0:37:51.120,0:37:56.880

tier where I memorize definitions for a while and- or you know, just things and it kind of um

0:37:56.880,0:38:01.200

a lot of people see that and you know there's there's a lot of crazies around here so I

0:38:01.200,0:38:04.480

imagine a lot of people thought I was crazy.

- [B]: Have you developed other interests and

0:38:04.480,0:38:09.840

hobbies or have you just become a 100% math nerd?

- [C]: Well, you know, uh my buddy Ahmed

0:38:09.840,0:38:12.080

tells me that I- I'm like a mathematical monk

0:38:12.880,0:38:18.240

but I do kind of have a few things. I- I draw - uh although my drawings are mathematical also -

0:38:19.280,0:38:25.120

but I uh I like to do ink, you know ink drawings, and I have this really strange application of uh

0:38:25.120,0:38:30.400

just I send the ink out using a chemical that's available to me in prison and I kind of make

0:38:30.400,0:38:35.680

different hues of this one kind of pen that we can buy off of our commissary. And I come up

0:38:35.680,0:38:40.160

with these like these drawings with it looks like several different colors but it's all from the

0:38:40.160,0:38:44.640

same pen and I just kind of paint it on there. So I like drawing, I don't know organizational

0:38:44.640,0:38:50.720

stuff is probably the other thing. I love having my hands on as many moving parts as possible, it's



0:38:50.720,0:38:56.960

just something about when it all comes together  
it's magical. And it's a personal challenge to

0:38:56.960,0:39:03.040

juggle all these- all these logistical pieces and  
put them all together in such a way that music

0:39:03.040,0:39:08.240

happens, you know, and it's uh it's so fulfilling.  
- [B]: Do you ever wonder what would have happened

0:39:08.240,0:39:13.120

in your life if you hadn't been imprisoned? If you  
hadn't committed that terrible crime and gone to

0:39:13.120,0:39:16.960

prison? Because I know you were having a lot of  
problems with drugs and things like that like-

0:39:16.960,0:39:20.560

like what do you think would have happened?  
- [C]: I think that I would have either

0:39:20.560,0:39:23.840

still been out there doing the  
exact same thing or I would be dead.

0:39:25.200,0:39:31.680

Uh I have mentioned this a few times that- well  
I don't want you to get the wrong impression

0:39:31.680,0:39:37.520

that I think that uh what I did helps me  
in any way, because it didn't, but the

0:39:38.080,0:39:43.200

actual state of being in prison is probably the  
best thing that could have ever happened to me

0:39:43.840,0:39:48.880

because it helped me to change the person that  
I was and to see these things that I was doing.

0:39:50.240,0:39:57.360

You know, after uh maybe year two, year three  
at the latest, I started examining the things,

0:39:57.360,0:40:04.160

the behaviors, that really led to a lifetime of  
making bad decisions. Just what what in my life

0:40:04.160,0:40:10.480

kind of was the root of the reason why I'm here today; and I would have never examined that type

0:40:10.480,0:40:15.840

of thing, and I surely wouldn't have this uh this ability to see the beauty in all things

0:40:16.880,0:40:19.120

had I not found mathematics.

0:40:19.920,0:40:25.040

In other words had I not come to prison. Because I was just too caught up with myself I think,

0:40:25.040,0:40:29.680

and I was too caught up with what everybody else thought of me to actually- I I just,

0:40:29.680,0:40:35.520

you know, there was no time in my life where I had the the common sense to pull my head from my

0:40:35.520,0:40:40.800

butt long enough to get the real picture.

- [B]: Do you often think about when you're

0:40:40.800,0:40:44.880

finally released from prison? What you want to do, what you want your life to look like when you're

0:40:44.880,0:40:50.880

no longer incarcerated? [C]: Yeah, actually I- um I used to make these goals in prison and I'd come

0:40:50.880,0:40:56.640

up with them so fast that I decided at one point that I thought I'd try to start my career while I

0:40:56.640,0:41:02.880

was in prison. And I started doing that recently, I became the executive director of the Prison

0:41:02.880,0:41:08.720

Mathematics Project, except I decided that I would work- uh while I'm here, I would work for free

0:41:08.720,0:41:13.440

and just kind of do this as, you know, something that I enjoy doing anyway.

0:41:13.440,0:41:19.360

So this is kind of part of it, I always want to have a big active role in the organization because

0:41:19.360,0:41:24.880

it's helping so many people and we're expanding in an incredible way, but to be a 100% honest -

0:41:24.880,0:41:26.800

and I know this is going to sound a little silly -

0:41:26.800,0:41:35.040

but Erdős had it right man. Yeah he- I want to- I just want to live a life of you know um surrounded

0:41:35.040,0:41:40.720

by mathematics at all times where I can be- where whatever I'm doing is just kind of contributing in

0:41:40.720,0:41:47.920

some way. Where my social interactions help people uh instead of you know have no meaning. So I

0:41:47.920,0:41:53.040

believe that when I get out I'm going to continue my work in the Prison Mathematics Project;

0:41:53.040,0:42:01.120

we'll have expanded probably many times since then and I just hope to continue research. I

0:42:01.120,0:42:07.120

want to throw events and I want to attend events and I want to talk at events and, you know, share

0:42:07.760,0:42:12.320

in any way my story that can help people to not make the same mistakes that I have. Or,

0:42:12.320,0:42:17.760

you know, if I can inspire people to do wonderful things and that's also a plus. But that's kind

0:42:17.760,0:42:22.880

of the work I want to do, I want to continue the diversification and popularization of mathematics.

0:42:22.880,0:42:25.760

[B]: Christopher, prisons have a few roles in our society;

0:42:26.480,0:42:31.360

one of them is rehabilitation and you seem to be a really good example of that.

0:42:31.920,0:42:37.120

Another one is punishment, you know, the

taking away of freedom as a punishment for

0:42:37.120,0:42:42.480

crimes committed. How do you reconcile those two with what you're trying to do with the project?

0:42:42.480,0:42:47.200

Because part of this is kind of, you know, giving more freedom and empowering and connecting

0:42:47.200,0:42:52.960

prisoners with the outside community, which seems to be- rub against the punishment but it also is

0:42:52.960,0:42:58.160

doing a lot of good for the rehabilitation. Do you ever see any clash there or not? [C]: Well

0:42:58.160,0:43:04.080

no, I don't see clash there but there are people who feel a little uh animosity towards it.

0:43:05.520,0:43:11.840

Their idea is that justice might not be being served in the most appropriate way,

0:43:12.560,0:43:20.880

but having lived here I say this: what is justice? Is justice the act of serving 25 years in prison

0:43:20.880,0:43:26.320

and misery so that they become a better criminal and get out and make the same or worse decisions?

0:43:26.320,0:43:33.040

Or is justice the act of finding a way to forgive yourself so that you can become the best version

0:43:33.040,0:43:37.680

of yourself and not make the same mistakes so that you get out as a different individual,

0:43:37.680,0:43:43.600

somebody who's no longer a threat to society? I think that's justice. I think justice is

0:43:43.600,0:43:51.840

somebody who can fit back into society in a way that is complementary. And I think justice happens

0:43:51.840,0:43:57.920

when true change happens within the individual that caused the disruption in the first place. So

0:43:58.720,0:44:06.240

our program uses that idea. What we want to try to achieve is a community-based system of restorative

0:44:06.240,0:44:12.560

justice, so that the community becomes a factor in the rehabilitation of these individuals.

0:44:12.560,0:44:17.680

And the idea behind that is that if I decide- if I'm in prison and I all

0:44:17.680,0:44:22.240

of a sudden decide that hey, you know what this lifestyle is not working out for me,

0:44:22.240,0:44:28.080

I need to change. I need to become a better person. And so now I'm under this mindset that

0:44:28.080,0:44:33.760

I want to change who I am and change my lifestyle, but who do I have to model into? Where am I going

0:44:33.760,0:44:39.600

to go? What lifestyle do I go into? Because all I see around me is the convict mentality,

0:44:39.600,0:44:44.560

so how am I supposed to model into a new lifestyle if I don't even know what's out there? And so,

0:44:45.280,0:44:50.080

if I have this passion for something, and I'm given this ability to build a life

0:44:50.080,0:44:55.680

around this passion for higher education - and in this case mathematics - well then I've- through

0:44:55.680,0:45:00.640

the Prison Mathematics Project we give them that first link into the community, that one link.

0:45:01.520,0:45:06.640

And they have this one opportunity to to build a relationship with somebody in the community.

0:45:07.440,0:45:11.200

And if that person does really good while they're incarcerated,

0:45:11.200,0:45:18.080

and if that mentor decides that that person's

interactions were fruitful and full of positive

0:45:18.080,0:45:22.560

personal growth, and if they you know have built a dynamic with them then they have the opportunity

0:45:22.560,0:45:27.360

to take that mentorship out into the real world.

- [B]: Earlier on you mentioned your parents and

0:45:27.360,0:45:30.720

your family, I imagine when you went to prison that must have been a terrible time for them,

0:45:30.720,0:45:34.400

when you were sentenced. How do they feel now that you're a published mathematician,

0:45:34.400,0:45:37.920

you're the executive director of this project, you're- you've really turned

0:45:37.920,0:45:44.000

things around. What's been your family's reaction?

- [C]: Uh, I uh- at first my mother didn't believe

0:45:44.000,0:45:50.960

when the detectives called and said that I was in prison for murder, uh because it didn't fit with

0:45:50.960,0:45:56.560

the way I was on the inside and I had just been down this road of making all these incredibly

0:45:56.560,0:46:03.440

bad decisions, and she just couldn't believe it. Even after I first became incarcerated I was still

0:46:03.440,0:46:08.560

just kind of a knothed. And then when, you know, I started finding mathematics I think all these

0:46:08.560,0:46:13.600

changes started happening and they became so evident, and I hadn't mentioned that she was

0:46:13.600,0:46:18.640

such a presence in my life already, her and my daughter Hope, that they got to see everything

0:46:18.640,0:46:24.960

happening in real time with me. And they saw all these changes beginning to occur and, you know,

0:46:27.120,0:46:32.240

I've had a lot of conversations about this with them in fact and it's just like a a wonderful

0:46:32.240,0:46:37.840

thing to them as well, and I've even built a relationship with my father again who I- I am

0:46:37.840,0:46:42.960

assuming felt that I smeared the family name, and you know at this point in time I think that

0:46:42.960,0:46:51.600

he's no longer no longer in that mindset. So I- it's actually strengthened my relationship with my

0:46:51.600,0:46:57.680

family just due to all the efforts that I've been making with myself and with them. It's just kind

0:46:57.680,0:47:01.680

of a different- I don't know, it's night and day.  
- [B]: How do you want to be remembered? What

0:47:01.680,0:47:07.840

do you want your legacy to be now?  
- [C]: Well I think- you know I-

0:47:07.840,0:47:14.400

I don't have a big attachment of being remembered. But if I do I would like to be remembered for my

0:47:14.400,0:47:22.560

push for a diversification of mathematics to this prison atmosphere. I want to change the culture in

0:47:22.560,0:47:28.240

this place so that it becomes a breeding ground for productivity. I would like to redefine what

0:47:28.240,0:47:33.760

productivity looks like in prisons, and I would like to smash this idea of the convict mentality

0:47:33.760,0:47:38.560

and turn justice into something that is beautiful. That's what I would like to be remembered by.

0:47:38.560,0:47:43.120

- [B]: Christopher has never been in touch with the family of the man he murdered,

0:47:43.120,0:47:49.200

Randen. He's not allowed to contact them but he

does think about Randen daily and he refers to

0:47:49.200,0:47:55.440

his new life of education and research and mathematics as repaying an infinite debt.

0:47:55.440,0:47:58.720

- [C]: I know this is going to sound really silly probably to you but like I have

0:48:00.400,0:48:04.960

this feeling that's inside. You know- you know that passion when you're studying something and

0:48:04.960,0:48:10.640

you can feel it in your heart right? You have this singing feeling? And I've just been trying to like

0:48:13.040,0:48:20.240

do well enough and make that feeling sing loud enough that it's heard. I know that sounds strange

0:48:20.240,0:48:27.040

but like I just wanna- I just want my actions to- I just think that my actions if I do well enough

0:48:27.040,0:48:35.600

will reach the people and, you know, I just hope that they can see that at least the person that

0:48:35.600,0:48:48.000

caused them this pain is not sitting inside of a prison trying to become a better criminal.

0:48:48.000,0:48:52.640

Christopher Havens is now 42 years old. He's been locked up since he was 30.

0:48:52.640,0:48:56.400

The best case scenario could see him released in 4-6 years

0:48:56.960,0:49:02.000

but it may be longer. In the meantime he hopes to grow the Prison Mathematics Project across

0:49:02.000,0:49:07.520

the US, into Canada, and maybe into the UK. The program's main purpose remains

0:49:07.520,0:49:13.120

finding kind of mathematical pen-pals or mentors for people who are behind bars;



0:49:13.120,0:49:16.560

linking them up with the sort of people who have helped Christopher flourish.

0:49:16.560,0:49:21.120

There are also plans when appropriate to perhaps get teachers and mentors into the

0:49:21.120,0:49:26.400

prisons themselves. The project is a non-profit organisation, I'll include some links in the

0:49:26.400,0:49:32.320

episode notes so you can find out more. The Numberphile podcast is made possible by the

0:49:32.320,0:49:38.560

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0:49:39.200,0:49:50.480

I'm Brady Haran and we'll be back again soon with another episode of the Numberphile podcast.