Architect Goes Blind, Says He's Actually Gotten Better at His Job

A social worker tried to tell him about "career alternatives" after he lost his sight, but Chris Downey wasn't about to stop being an architect

At age 45, Chris Downey had pretty much constructed the life he'd always wanted. An architect with a good job at a small housing firm outside San Francisco, he was happily married, with a 10-year-old son. He was an assistant little league coach and avid cyclist. And then, doctors discovered a tumor in his brain. He had surgery, and the tumor was safely gone, but Downey was left completely blind.

What he has done in the 10 years since losing his sight, as a person, and as an architect, can only be described as a different kind of vision.

Chris Downey with correspondent Lesley Stahl

Several mornings a week, as the sun rises over the Oakland estuary in California, an amateur rowing team works the water. It's hard to tell which one of them is blind. And Chris Downey thinks that's just fine.

Chris Downey: It's really exciting to be in a sport where nobody looks in the direction they're going. You face this way in the boat and you're going that way. (LAUGH) So, okay even-steven. (LAUGH)

It's not exactly even-steven in this design meeting, where Downey is collaborating with sighted architects on a new hospital building. But he hasn't let that stop him.

Lesley Stahl: Here you are in a profession that basically requires you to read— read designs and draw designs. You must've thought in your head, "That is insurmountable?"

Chris Downey: No. I never thought—

Lesley Stahl: You never thought— you never thought the word "insurmountable?"

Chris Downey: Lots of people— (LAUGH) friends that were architects and anybody else would say, "Oh my God, it's the worst thing imaginable, to be an architect and to lose your sight. I can't imagine anything worse." But I quickly came to realize that— the creative process is an intellectual process. It's how you think, so I just needed new tools.

New tools? Downey found a printer that could emboss architectural drawings so that he could read and understand through touch.

Chris Downey: They look like normal prints, normal drawings, on the computer. But then they just come out in tactile form.

Lesley Stahl: So it is like Braille, isn't it?

Chris Downey: Right.

And he came up with a way to "sketch" his ideas onto the plans using a simple children's toy — malleable wax sticks that he shapes to show his modifications to others. And he says something surprising started to happen. He could no longer *see* buildings and spaces, but he began hearing them.

Chris Downey: The sounds, the textures. And the sound changes because there's a canopy overhead.

Lesley Stahl: You can sense that we're under a canopy?

Chris Downey: Yes. It's all a matter of how the sound works from the tip of the cane.

Chris Downey: I was fascinated— walking through buildings that I knew sighted. But I was experiencing them in a different way. I was hearing the architecture, I was feeling the space.

Lesley Stahl: It sounds as if, you began almost enjoying, in a way, being the blind architect.

Chris Downey: It was sort of this— this excitement of, "I'm a kid again. I'm— I'm relearning so much of architecture." It wasn't about what I'm missing in architecture, it's what— was about what I had been missing (LAUGH) in architecture.

Chris Downey's upbeat attitude doesn't mean that he didn't go through one of the most frightening experiences imaginable — and struggle. He and his wife Rosa were living in this same home with their son Renzo, then 10, when Downey first noticed a problem while playing catch with Renzo. The ball kept coming in and out of sight. The cause turned out to be a tumor near his optic nerve. Surgery to remove it lasted nine and a half hours. He says his surgeon had told him there was a slight risk of total sight loss, but that he'd never had it happen.

Rosa Downey: When he first came out of surgery, he was able to see.

But then things started to go wrong. The next day half his field of vision disappeared. And then —

Chris Downey: The next time I woke up it was— all gone. It was just black.

Lesley Stahl: Complete and total darkness? No light, you can't see—

Chris Downey: No light—

Lesley Stahl: —anything.

Chris Downey: It's dark. It's all dark.

After days of frantic testing, a surgeon told him it was permanent. Irreversible. And sent in a social worker.

Chris Downey: She says, "Oh, and I see from your chart you're— you're an architect, so we can talk about career alternatives."

Lesley Stahl: Career alternatives, right away?

Chris Downey: I hadn't been told I was officially blind for 24 hours— and—

Lesley Stahl: And she's saying you can't be an architect anymore—

Chris Downey: Yeah, and she was saying we could talk about career— alternatives. I felt like these walls were being built up around me, just like, "Yeah, you're gettin' boxed in."

Chris with his wife, Rosa, and son, Renzo

Alone that night in his room, Downey did some serious thinking. About his son, and about his own father, who had died from complications after surgery when Downey was seven years old.

Chris Downey: I could quickly— appreciate the wonder, the— just the joy of, "I'm still here."

Lesley Stahl: It was actually joy?

Chris Downey: Yeah, it was like, "I'm still here with my family. My son still has his dad."

Lesley Stahl: You know your eyes are tearing up. You know that.

Chris Downey: Yeah, sorry (laugh). I always have a hard time talking through that.

He knew that how he handled this would send a strong message to Renzo.

Chris Downey: I had been talking with him about the need to really apply himself. At the age of ten, it's that point where if you want something you really have to work at it. And here I am, facing this great challenge.

So, motivated to set an example, he headed back to work only one month later.

Bryan Bashin: This was the most healthy thing about Chris.

Bryan Bashin is executive director of the non-profit LightHouse for the Blind and Visually Impaired in San Francisco, and is blind himself.

Bryan Bashin: He waited a few days until the stitches were out of his skull, and 30 days after brain surgery, he was back in the office thinking, "Okay, there's got to be a way to figure this out. And I'm going to figure it out."

Bryan Bashin with correspondent Lesley Stahl

Bashin's organization, the LightHouse, helps people new to vision loss learn how to figure things out.

Bryan Bashin: When someone becomes blind, the odds are 99 percent they've never met another blind person.

Lesley Stahl: Is that right?

Bryan Bashin: Yeah, that really is true. Blind people need those role models, how to be blind, how to hold down a job, how to live an independent life.

Specifically, how to work in the kitchen, safely. How to navigate public transportation. How to use screen reading software to listen to emails as quickly as the rest of us read them.

Lesley Stahl: Did you understand that?

Chris: Yes.

Lesley Stahl: No!

And most critically, how to get around in the world alone. Downey learned that at the LightHouse.

Lesley Stahl: When you first crossed a big street like this on your own, was it terrifying?

Chris Downey: Absolutely terrifying.

Lesley Stahl: I can imagine. I can totally imagine.

Chris Downey: I remember that day, stepping off the curb and it was like you would have thought I was stepping into raging waters. Take a deep breath and go for it. You gotta push through it.

Within a few months he was travelling the streets on his own and getting back to normalcy with his son.

Chris Downey: The first Father's Day came up, Rosa was like, "So, what do you wanna do? Do you wanna go on a picnic, go on a nice lunch? "I wanna play baseball." (LAUGHTER) "with Renzo." Renzo was like— he pops up. I could just— I could feel him, like, jump to the edge of his chair. "Baseball, you wanna play baseball?" (LAUGHTER)

Renzo Downey: So Dad would throw to me. And I'd play like I was playing first base.

Lesley Stahl: How could he throw the ball to you?

Renzo Downey: I'd just call out, "I'm over here." And he'd point, and I'd say, "Yeah, that's right." And then he'd throw it at me.

Chris Downey: That's something I really loved about our relationship He quickly was looking for possibilities. He wasn't saying, "You can't do that." He was like, "Well, why not?"

Downey seems to have a knack for finding windows when doors slam shut. Just nine months after going blind, the recession hit and he lost his job. But he got word that a nearby firm was designing a rehabilitation center for veterans with sight loss. They were eager to meet a blind architect. What are the chances?

Lesley Stahl: You had to believe that God's hand came down—

Chris Downey: It took my disability and turned it upside down. All of a sudden, it defined unique, unusual value that virtually nobody else had to offer.

Lesley Stahl: Nobody.

Chris Downey: Yeah.

Starting with that job, Downey developed a specialty, making spaces accessible to the blind. He helped design a new eye center at Duke University Hospital, consulted on a job for Microsoft, and signed on to help the visually impaired find their way in San Francisco's new, and now delayed, four-block long Transbay Transit Center, which we visited during construction.

Chris Downey: If you're blind, you don't drive. Right? (CHUCKLE) They don't like it when we drive. So— (LAUGH) you know, we're committed transit users. So the question was, "How on Earth do you navigate this size of facility, if you're blind?"

His solution: grooves set into the concrete running the entire length of the platform.

Chris Downey: I would just follow this, following those grooves.

With a subtle change from smooth to textured concrete to signal where to turn to get to the escalators.

Chris Downey: Would you like to give it a try?

Lesley Stahl: Okay. I know to go straight 'cause of this line. And I feel— (SCRAPING) Oh my. Oh my. So it's pretty obvious.

Chris Downey: I can hear the difference from here.

It's something sighted people might never notice and that's precisely the point. Downey believes in what's called universal design — that accommodates people with disabilities but is just as appealing to people without them. It's the approach he used for his biggest project yet, consulting on the total renovation of a new, three-story office space for his old training ground, the LightHouse for the Blind.

"I'm absolutely convinced I'm a better architect today than I was sighted."

Bryan Bashin: Coming into blindness need not be some dreary social service experience, but rather, more like coming into an Apple store — thinking that there might be something fun around the corner.

One of Downey's ideas was to break through and link the three floors with an internal staircase that sighted people can see and the blind can hear.

Bryan Bashin: In blindness, it's so wonderful to be on the 9th floor and hear a burst of laughter up on the 11th floor, or to hear somebody playing the piano on the tenth floor.

For the hallways, Downey chose polished concrete. Because of the acoustics.

Bryan Bashin: I can hear the special tap of somebody's cane or the click of a guide dog's toenails.

Lesley Stahl: The click of a g— (LAUGH)

Bryan Bashin: Yeah.

Lesley Stahl: — dog's toenails?

Bryan Bashin: Yeah.

Lesley Stahl: Well, is that good or bad?

Bryan Bashin: That's great. It's like your seeing somebody coming down the hall. I know the sound of individual people who work here by the way they use their cane or the kind of walk they have.

Lesley Stahl: You can really distinguish between people by how they tap their cane?

Bryan Bashin: Absolutely.

Lesley Stahl: If you hadn't had Chris working on this building, a blind architect—

Bryan Bashin: It wouldn't have been as rich or so subtle, for sure.

Last spring marked the 10-year anniversary of Downey losing his sight. So what did he do? He threw a party. A fundraiser for the LightHouse — where he's been student, architect, and now, president of the board.

Chris making toast at party: Maybe a slightly bizarre thing, celebrating my 10 year blind birthday (LAUGHTER), but when you're 55 and you have a chance to be 10 again, you take it.

Lesley Stahl: I get the feeling that you actually think you're a better architect today.

Chris Downey: I'm absolutely convinced I'm a better architect today than I was sighted.

Lesley Stahl: If you could see tomorrow, would you still wanna be able to feel the design?

Chris Downey: If I were to get my sight back— it would be— (SIGH) I don't know. I would be afraid that I'd— I'd sorta lose what I've really been working on. I don't really think about having my sight restored. There's— be some logistical liberation to it. But— will it make my life better? I don't— I don't think so.

Produced by Shari Finkelstein and Jaime Woods.