

Cool Tools Show Podcast Episode 123: Scotty Allen

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Our guest this week is Scotty Allen. Scotty is a nomadic engineer, entrepreneur, adventurer and storyteller who orbits around San Francisco and Shenzhen, China. He runs a YouTube channel Strange Parts, a travel adventure show for geeks where he goes on adventures ranging from building his own iPhone in China to trying to make a manhole cover in India.

Mark: Welcome to the Cool Tool Show. I'm Mark Frauenfelder, editor-in-chief of Cool Tools, a website of tool recommendations written by our readers. You can find us at Cool-Tools.org. I'm joined by my cohost, Kevin Kelly, founder of Cool Tools.

Hey, Kevin.

Kevin: Hey, it's great to be here.

Mark: In each episode of the Cool Tools Show, Kevin and I talk to a guest about some of his or her favorite uncommon and uncommonly good tools they think others should know about.

Our guest this week Scotty Allen. Scotty is a nomadic engineer, entrepreneur, adventurer and storyteller who orbits around San Francisco and Shenzhen, China. He runs a YouTube channel Strange Parts, a travel adventure show for geeks where he goes on adventures ranging from building his own iPhone in China to trying to make a manhole cover in India. And I just remember all of a sudden somehow stumbling across this video that Scotty made where he went to China to get spare parts to put together an iPhone, and it was, I think, like a 20-minute-long video, and I was just completely engaged by watching this. It was so cool. And I think, Scotty, am I correct, was this your first youtube video from Strange Parts?

Scotty: It was.

Mark: Yeah, and it was a huge hit right away.

Scotty: Yeah, first [crosstalk 00:01:21]. Yeah.

Mark: That never happens anymore. You can't build an audience. That was crazy. It's just because the content was so compelling.

Scotty: Yeah, it was really crazy. It well exceeded all of my expectations for it. I thought maybe it was something people were interested in, but I had no idea how much. People are interested in it not just in the West, but tons of Chinese people saw it as well, which I definitely didn't expect.

Kevin: So you have fans in china?

Scotty: I do, I get recognized on the street pretty regularly here.

Kevin: Yeah, yeah. Well, yeah, so, I'm headed there tomorrow, 'cause I also have my fans there as well.

Scotty: Oh, awesome.

Kevin: We should do a show together.

Mark: Yeah.

Scotty: Yeah. Yeah, totally.

Mark: There are people in China who have tattooed Kevin's on their [crosstalk 00:02:06].

Kevin: Yeah, exactly. I have young, pretty girls with my name on their shoulder. I have people ...

Mark: I love it.

Kevin: They stole my name to do a brand of fashion clothing.

Scotty: That's amazing.

Kevin: 'Cause I'm the least fashionable person in the world. And I also have bodyguards.

Scotty: Wow.

Mark: That's ...

Kevin: Yeah.

Scotty: That is pretty serious.

Mark: Yeah, because your signees get rowdy, don't they?

Kevin: Yeah, exactly. They rush the stage, and they're very rude. So, yeah, China. We can talk about China. But let's hear about some of your fantastic choices of cool tools. I know that you make things and are in that general field of making things happen, so what do you like?

Scotty: Yeah, so one of the things that I have gotten an outsized amount of value from over the past year has been this microscope that I bought here in the electronics markets in China. It's a no-brand-name microscope that I got from a little tiny microscope booth in the market, and it's really been this incredibly high-leverage tool for me, and I didn't realize how much I was missing out until I bought it.

It's been really great for doing detail work. And I use it for really small soldering work on iPhones and related circuit boards, but I didn't realize ... I had always ... Growing up, I'd been into electronics and making things even as a kid, and I was really frustrated all the time because I felt like I had bad hand-eye coordinating and I could never realize ... what I had in my head I could never sort of turn into reality because of hand-eye coordination, and I didn't realize how much of that was just being able to see. If I could see better, my hand got steadier. I could make all of these things happen that I couldn't otherwise.

And so this microscope is ... I think it would be called a dissection microscope. It's a binocular microscope. It's not super high magnification, but because it's binocular you get depth of field, and so you can really well see. So you can look through the microscope and work underneath it with tweezers or a soldering iron or other tools and really kind of in great depth see what you're doing.

Kevin: So just for ... to make clear, often when I think of a microscope I think of something that's being ... there's a little specimen that's being lit from the bottom, shining it through, and you see the optics up top ...

Scotty: Right.

Kevin: ... but in this case — maybe this is what you mean by "dissection microscope" — it's flat on the bottom, and the light is coming from the room or outside, or maybe there's a light sort of shining down onto it.

Scotty: Yeah, there's an LED ring light that goes around the base of the optics on the microscope that shines down, and then it's just got an open base below that. They actually sell a bunch of different mounts for these. You can get them on arms where you can pull them out over your desk, similar to a gooseneck lamp arm. And then you can put whatever underneath it you want. You don't to prepare it. You don't have to make a slide. You don't have to do anything like that.

Kevin: Right. But the other thing that maybe I don't understand about this is it ... This is an optical microscope, meaning that it has lenses and you see through the optics, but does it also have a little camera that's displaying it on a screen?

Scotty: Yes.

Kevin: Is that an additional thing, or is that actually built into the microscope from the beginning?

Scotty: Yeah, so it's ... Yes and no. And that's one of the things that's special about this one, and I spent an afternoon walking around the markets looking at different microscopes, at different microscope stands, to try and find one that did this. It's what I would call a "trinocular microscope." I don't know what the official term for it is, but it ... So it's binocular in that you can see through both eye pieces, but it has a separate camera tube that comes up behind those, and you can put a variety of cameras on that. And I found a bunch of microscopes that did this, but a lot of them had this pin that you had to pull that switched between one of the eyepieces working and the camera tube working, so never have the camera and have binocular vision, which gives you that nice depth of field, at the same time. And so this one has all three work at the same time, and then I have a little HDMI camera, 1080p HDMI camera, that sits on top of that, and I use that for recording my videos so that other people can see what I'm seeing at the time that I'm actually getting a full, high-quality, binocular view.

Kevin: And do you use that, then, for making videos? You can make a video of what you're seeing very easily.

Scotty: Exactly. So in the videos, when I'm doing soldering or I'm doing some detail work, I'll use the microscope and then also record with an HDMI to USB image capture device that goes to the computer. And that part actually needs some refining. We've been ... That has been really problematic for me in the past month or so in that I've been getting corrupted videos files and stuff, so I just need to find a better way to record HDMI, of which there are many options.

Kevin: Okay. Cool. And so ... So you mentioned soldering, but you could use other kind of natural specimens, or you could ...

Scotty: Yeah.

Kevin: And can you ... Would not be hard to modify, necessarily, the base if you wanted to have something that did do transmission lighting like you were ...

Scotty: No, absolutely not. The base that I've got got a plate that sits down, that snaps down into it, and so you certainly could build something else that goes into that. They probably sell bottom-lit stands as well would be my guess.

But part of the reason I brought this up is not just as a soldering tool. Obviously when I walk around the cellphone repair markets here in Huaqiangbei, everybody's got one of these in their booth, or a lot of people have these in their booth. But as well, I really see this as being useful to a wide range of other things, of model-making, of ... I'm a member at Noisebridge hackerspace in San Francisco, which you guys totally know, and I actually got one of these for them, and I know that people have used it for calligraphy. I've been trying to encourage people to use it for fine detail sewing and things like that, just because I found such value in just in all sorts of things that are around the soldering that I'm doing that are not actually soldering of ... I've even used a Dremel underneath it to be really precise about carving holes in [inaudible 00:09:06] things like that.

Kevin: Cool.

Mark: Cool.

Kevin: Wow.

Mark: So the one that you are mentioning on AliExpress is about $400.

Scotty: Yes.

Mark: Is that about the ... Because I'm sure you can buy cheaper ones. This one must be fairly good quality, like the kind that they actually use in the shops there in Shenzhen.

Scotty: Yeah, this is ... So I bought mine ... Mine is from the exact same seller as the link on AliExpress. She actually put up that link because she found out that I had made a video including the microscope and said, "Hey, I'll give everybody else a similar deal to what I paid you." I paid $300, and she raised to $400 to cover shipping, 'cause it's pretty heavy. So that includes [inaudible 00:09:50].

Kevin: Oh, so that includes shipping to the U.S.

Scotty: Exactly. Yep, yep.

Mark: That's good.

Kevin: Ah, wow.

Scotty: And I think to Europe as well. I have to check. But she's a super nice lady. She runs a very small booth in the markets. She doesn't speak a ton of English, but she's very eager to do right by people.

Mark: Cool.

Kevin: But if you ... And this is coming from what area of China, Shenzhen?

Scotty: Shenzhen, yeah.

Kevin: So if you were in Shenzhen, you could pick one up for $300.

Scotty: Yes, yeah. And that includes the camera and everything. If you wanted ... If the camera wasn't important to you, I think you could get one significantly cheaper, 'cause you wouldn't need the camera, obviously, which is about 100 bucks, and then you wouldn't need the whole trinocular tube part, which I'm sure adds a lot of cost as well.

Kevin: That's really [crosstalk 00:10:34].

Mark: Cool. Just out of curiosity, something that I've seen before that looks kind of cool and you can get them for like 150 bucks is little digital microscope that has a screen on it, like a four- or five-inch LCD screen that's kind of just attached to it. Have you had any experience with those?

Scotty: I have. I bought a really cheap USB microscope that just plugs into your computer, and then it shows up as a webcam, and I didn't realize how bad it was until I got this. It's really terrible. There are two problems: one is that it's not binocular, so you don't have any depth of field. And so it's one thing if you just want to look at something and inspect it; having depth of field is not that important. But once you start to go to actually manipulate something, then it's really important to be able to see how close you are to something, what's above something else.

Mark: Yeah.

Scotty: And then secondly, latency is super important. When you're trying to do detail work, getting that feedback loop between your eyes and your hand, milliseconds matter. If you can do it entirely optically, then you have no latency, or you have just your body's latency, but when you're going through a computer or you're going through a screen and then you're adding at least tens of milliseconds, if not upwards of 100 milliseconds on. And that sounds like very little, but it's really substantial in terms of being able to control your hand shake and things like that.

Mark: That's great. Yes, so it is worth the money to get the binocular optics.

Scotty: I think so. I think so. I didn't see this huge leverage and this huge sort of ... I mean, this has really been a game-changer in what I've personally been able to do. Things that I literally thought were impossible I now consider very doable with this microscope, and I didn't see that until I got this one. The little USB one I was still just viewing this as voodoo and impossible.

Mark: That's cool. So moving on down the list, you want to talk about something that we have heard about from other ...

Scotty: Oh.

Mark: Yes, which is fine, 'cause I wanna hear your take. It means that it's a useful tool. It's Frame.io.

Scotty: Yeah, wow.

Mark: What is it, and what do you use it for?

Scotty: Yeah, it's a ... Frame.io is an online tool that I use for collaborating on the videos I'm making. And it's a really simple tool to ... The short version is that you can upload a video to it, and then you can share that video privately with other people, who can then go in and leave comments. You can even draw things on a specific frame of the video using some drawing tools. And then you can have threaded conversations on each of the comments you leave, and multiple people can leave comments, et cetera.

And that, at face value, is super simple, but it really allows remote collaboration on videos in ways that there really aren't very many other good tools for. In fact, I don't think I've found any other good tools. I come from a software engineering background, and we have some great tools there now that have been built over the past 10 years for doing things like code review where you can do something similar, where you can go in and leave comments on a particular line of code on a change someone wants to make. And so I come from that. I come from running a remote software team prior to doing Strange Parts, and so I was really hungry for all of these tools that I'd used as a software engineer.

And so Frame.io is one piece of that. It's sort of that feedback piece of, "Hey, I did this thing. Can you give me feedback on it in a detailed way that's sort of context-based on the part you're talking about?"

Kevin: And my understanding of it is that these assets, these video parts that you're moving around, are you actually uploading them to Frame.io, or do these still go to Dropbox and they're just being indexed through ... How does that work?

Scotty: Now there's a desktop uploader app that they've built. It's actually somehow much faster than uploading just about any other way. They've done some sort of voodoo to make that faster.

Kevin: Well, it sounds like Silicon Valley. What was that story?

Scotty: Yeah, right exactly.

Kevin: Pied Piper! [inaudible 00:15:10].

Scotty: A proprietary compression algorithm.

Kevin: Exactly.

Scotty: I suspect their voodoo is a little bit more mundane than that, but ...

Kevin: [Hoodoo 00:15:22] I think it was called, right? What was the name of ... [Hoodio 00:15:24]?

Scotty: Hooli. Hooli.

Mark: Hooli.

Kevin: [inaudible 00:15:27].

Mark: Yeah.

Scotty: So [inaudible 00:15:29].

Mark: So your workflow, you're working with other people now to help you edit videos ...

Scotty: I am.

Mark: Okay.

Scotty: I am. So I started using this just with friends giving me feedback on the videos, because it's ... When you're immersed in a project for months at a time and you've spent the past several weeks staring at something in edit, it's really easy to lose perspective on what do other people know relative to what I know, and how do I tell this story, and does this make any sense to people, and what parts are interesting, what parts are boring. So I was using it with just friends, of sharing a rough cut of a video with a friend and saying, "Hey, can you look at this and give me some feedback?" And it's been great for that. But now, I've actually hired an editor who lives in Mexico City, and so he and I collaborate entirely remotely, and so now it ... He's actually asking for feedback from me, so he'll upload his rough cuts as he goes along. Typically, when we're actively in edit on something, he'll take a few days to put together a rough cut, and then will probably send me a rough cut once a day after that until we've got the final thing.

Kevin: Okay, and they ... This is priced as a subscription service where you are being charged per project or per gigabyte or something, and probably goes up the more you use it?

Scotty: Yeah. Yep. Yeah, it's similar to most online services. It's a fixed monthly fee, and then it's tiered based on a couple different things, but the big one is just space, like how much space are you taking up for the videos you're storing. Collaborators is one, but I've never even come close to hitting that. So I think I'm paying like $25 a month right now, and it's plenty for me.

Mark: That's good.

Scotty: I think there's a cheaper plan [inaudible 00:17:30]. I think there's like $10 plan as well, so it's very doable.

Kevin: And presumably you would just be using the storage for active ones, and then once they're kind of done you would move them off to Dropbox or somewhere.

Scotty: Exactly, yep, yep. So we ... Yeah, we'll just use it to store the most recent one two projects, and then we have ... It does versioning, so we can upload multiple versions of the same thing and stack them together, and I can jump between versions to see, "Okay, I made this feedback yesterday. What did you do with it today?" kind of thing.

Mark: So, Scotty, you have a ... You said your editor's in Mexico City. Did you use a special kind of a service, a gig-matching service, to find this person?

Scotty: I did. I found him through Upwork. So I reached out. I posted a job saying I was looking for an editor and roughly what I was looking for, and then I hired, actually, a couple people to do a trial edit, and I gave them both sort of the same raw video files and the same instructions, and this is the guy I've continued to work with out of that.

Kevin: Yeah, right.

Mark: Cool.

Kevin: Okay. So here's another. Your third tool that you're suggesting is somewhat video-related but not exactly. The TV-B-Gone.

Scotty: Yeah, are you guys familiar with that?

Mark: I think [inaudible 00:18:55]

Kevin: I got one ... Well, why don't you describe what it is, and then we'll talk about it.

Scotty: Yeah, so, it is ... The TV-B-Gone is a universal television remote with one button, and the button turns any TV off. [inaudible 00:19:13] is its only purpose. So this is a cool thing made by a close friend of mine, Mitch Altman, who I know from Noisebridge hackerspace, and I actually owned one long before I knew Mitch. It was given to me as a stocking stuffer at Christmas one year, probably like 10 years ago, something like that.

Kevin: Yeah, yeah.

Scotty: And I've had it forever, and I ... You know, for the first long while that I owned it, I didn't really use it very much, but now it has become indispensable because I'm

traveling a lot more, and when you're jetlagged and you're in an airport on a layover in the middle of the night in Russia and there's a blaring TV in the corner that nobody's watching, the TV-B-Gone is a great way to solve that problem. So in short, you press the button, it takes up to 15 seconds, and it will cycle through all of the off codes that are programmed in it for all of the different televisions. So you just point it at the TV, and it's great for just sort of calming an otherwise unbearable airport lounge.

Mark: [inaudible 00:20:19].

Kevin: So I got one 10 years ago, and I carry it around, but I'd never really used it more than once, because I kind of felt bad turning off if people were watching. I was never in the situation where it was only me and the TV, and so I just stopped carrying it.

Mark: So I just wanted to let you ... I just wanted to let listeners know that there was a technical difficultly with Kevin, with his recording, so we're gonna continue without him.

But my only comment, Scotty, about the TV-B-Gone was that when it first came out Mitch gave one to my friend. We were at the Maker Faire in Austin, and I had never used it before, but we were walking by a restaurant, and there were ... it was like a bank of TVs at the far wall, and my friend was standing outside, and he pushed the button, and the whole bank of TVs just blinked out, and it was very freaky to see that happen.

Scotty: It feels very subversive as a thing to use.

Mark: Yes, it did. Yeah. And I ...

Scotty: Which is part of the [inaudible 00:21:30], to be clear.

Mark: Yeah. Yes ...

Scotty: But, you know, with great power comes great responsibility sort of thing.

Mark: Right.

Scotty: Either you are ... was alluding to, that it feels weird to use it in a lot of cases.

Mark: Yeah.

Scotty: I've hung out with Mitch. He's pretty fearless about when he turns TVs off. He has a really strong aversion to TVs in the background of social gatherings, and so he will pretty much do it whenever. But I really do it when I can tell nobody's watch the TV and everybody else is annoyed by it. Then I feel very self-justified in just turning it off and ...

Mark: Sure, sure. I think that's an appropriate use case. The bar one I felt bad about it, and I never used one since, but I love the idea of them.

Scotty: Yeah. Try carrying it when you're flying. I have found that it's really easy to not feel guilty about using it in an airport, either in a lounge or just in the waiting area at the gate. There a lot of cases where everybody is stressed out by CNN or whatever it is blaring in the background.

Mark: Right, and they'd be happy about it.

Scotty: Yeah, yeah. And it's so small that I just kind of consider it part of my travel gear now. It's a keychain-sized thing, so it's really easy for me to toss it in, and even if I don't use it even every trip, it's still kind of worth the extra weight and [inaudible 00:22:55].

Mark: Yeah. Sure, they're tiny. So, the next one you have is something that I don't know anything about, unless I saw a crazy video of it. A shoe cover dispenser.

Scotty: Yeah. So, I put this in there mostly 'cause I just think they're hilarious, but they're also kind of useful. Let me explain what it is, and then I'll explain how I know about it.

Mark: Okay.

Scotty: So it kind of looks like a suitcase. The one I have kind of looks like a suitcase. It's maybe two feet by one foot by like six inches tall, and it's that silver material, silver metal that they make briefcases in the movies for carrying large amount of cash in sort of look. It's got a handle. And on top, it's got an oval-shaped hole that is slightly larger than your average foot, or your average shoe, and the idea is that you stomp your foot down through the hole and it applies a shoe cover over your shoes automatically. You don't have to touch anything. You just step in it and then step out, and now you've got a shoe cover on your shoe.

Mark: And there's an elastic band that goes around your ankle or something?

Scotty: Yep, yep. It's not all the way that high. It sort of snaps over your toe and your heel kind of thing.

Mark: Oh, okay.

Scotty: It doesn't go all the way up to your ankle. And I ran across it on a factory tour. I visit a lot of factories here in Shenzhen, and I was at an LED factory that was making LEDs. They were trying to keep dust down, and one of the ways they do that is by having everybody wear shoe covers. So there are a number of factories that will do this, and you can tell how fancy the factory is based on whether you have to bend down and put the shoe cover on yourself or whether you have one of these

automatic shoe cover machines. And so this LED factory was the first time I'd seen this, and it blew my mind. It was a special purpose thing that was so clever and so well made.

And so of course, we're standing there in the lobby, and the factory boss is ready for us to walk into the next room, and I'm sitting there with my cellphone taking pictures of me putting on shoe covers over and over.

Mark: That's funny. I love this graphic that's on the AliExpress page, the photo of a woman with a really blingy silver high heel shoe steeping into ...

Scotty: I don't really know how well it works with high heels. I've obviously never tried.

Mark: Yes, like would punch a hole through it.

Scotty: But it works great with sneakers. And so I had seen one of these at the factory, and then a friend sort of ... I guess the friend was with me, actually, that day, and he saw how much I was amused by it, and he gave me one as a gift. So now I have this ridiculous thing right inside my door at my apartment. And in China, it's very typical to take your shoes off when you enter apartments, as it is all over Asia, and so now I offer that as one of the options. Either you can take your sneakers off, or you can put on shoe covers.

Mark: That's cool.

Scotty: And I think, from what I read on some of the reviews on the link ... when I was looking for a link for one of these things, 'cause I had no idea where to get one, it seems like a lot of people are using these at their house for dinner parties and that sort of thing where they've got a lot of guests coming and they've got white carpet or something like that.

Mark: Cool idea.

Scotty: Yeah.

Mark: You know, is it actually ... Does it plug into the wall?

Scotty: No, it's totally manual. It has no electricity, no motors. It's just rubber bands and this mechanism that releases the rubber band.

Mark: Oh, okay, because the AliExpress page says that it's 220 volts, 200 watts.

Scotty: No, it is not 220 volts.

Mark: Okay.

Scotty: No, no, it has no ... It's ... No.

Mark: Yeah, I don't see any cord or anything. It just seems like, yeah, you step in it, and it ... just the pressure of stepping down causes the rubber band to snap around your foot.

Scotty: Right. It just sort of releases the rubber band, basically. They're all pre-stretched in there in a stack.

Mark: Yeah.

Scotty: And you get these shoe covers ... They're refillable, right? So you get these shoe cover packs, and you sort of stretch them out over the four pegs, and then when you stomp down it releases one.

Mark: I love it. I want one for our house. That's [inaudible 00:27:38].

Scotty: Yeah, it's awesome. [inaudible 00:27:38].

Mark: Yeah, it's good. So, we've been talking a little bit about your video. It's called Strange Parts, and people can find it just by typing Strange Parts in. Like I said, it's ... The first one right off the bat was a huge hit, and I think it's because you have a great rapport with the people in the video from all over the world. You engage with them. You're interested in what they're doing. They're kind of interested in why you're bothering to video them. And one that I thought was really interesting was when you were kind of exploring the idea of making a manhole cover, so you went to India to the ironworks, the foundries there, and they were ... they pegged you as a industrial spy.

Scotty: Yeah, that was really crazy trip. India's still relatively new to me compared to China, and I'm still sort of trying to wrap my head around how to travel and to do this kind of stuff in India. But that was a really eyeopening experience. I had flown in Mumbai to work on a different story, which I still haven't done yet but was starting to research there, and then I wanted to work on this manhole cover, so I took a train across India, which is a 28-, 30-hour train ride, which was a crazy thing.

I arrived in Kolkata, which is very different than Mumbai, very different feel. And so I went ... Across the river from Kolkata is Howrah, which is and has been a cast iron casting and machining center for quite a long time, and it has quite a reputation for it. It's actually where all of the New York City manhole covers are made, among manhole covers for all over the world, which I learned about from an amazing documentary called Cast in India, which people should totally go watch. Unfortunately, it's not very easy to watch the whole thing online. You have to actually buy a physical DVD, but the trailer is online, and it's quite cool.

And so I learned about it from there, and I said, "This is awesome. I would love to go and explore this more myself, and I'd love to try and make a custom manhole cover." And so I went over to Howrah, and I started walking around these foundries.

There a lot of small shops there. The foundries were a little bit hard to see inside just from the street, but there were tons of machine shops that were doing the next-stage finishing on the castings. 'Cause the castings come out pretty rough. It's like a sand casting process, and so you get this real rough texture on it, and usually they want to turn ... The manhole covers, they want to turn the outer diameter down to like a set known diameter so they fit in the collars that get cemented into the street.

And it was real easy to just sort of look through open doors. I was sort of walking around, and I started just taking a few videos of my cellphone of these giant lathes and literally started having people close gates in my face. And it was something that I was totally not prepared for, because in China people are very sort of open to sharing. Particularly the smaller factories are very open to people looking inside, people wandering around. There's very much this attitude in China of like, "My factory is your factory," kind of thing. And there is a certain amount of white privilege there in the sense that Westerners are seen as customers, and often there's this sense that if a Westerner has come to visit a factory in China, is interested in a factory, then they must have a large budget and sort of be here to drop a bunch of orders, and so I sometimes ... I have to be careful not to over-represent that.

But in India, I was not getting that at all. I was not getting any of those assumptions. Instead, I was sort of getting this assumption that I was there spying. It sort of culminated at the end of the day ... And unfortunately I didn't get it on camera, but it culminated at the end of the day with meeting this guy who worked at a very small foundry, and he said, "Oh, well, we're pouring ..." I said, "I would love to see the pouring process," and he said, "Well, we're not pouring now 'cause it's too hot, but if you come back tonight after dark, like a 7:00 p.m., we're happy to have you watch, and you can film." And I said, "Okay, great. I'll come back at 7:00."

And he said ... And then he started asking, "Do you have proof?" And I said, "Proof of what?" He didn't speak much English, and so we're trying to figure out what do you want me to prove. And he was like, "Well, passport. Do you have a passport?" And I said, "Well, I don't have my passport on me. It's back at my hotel." And I said, "I'm not ... It's two hours away. I'm not going back there." And he said ... I showed him a picture. That wasn't good enough. What he was trying to prove was that I was an American. He was concerned that I was Russian.

Mark: Oh, wow.

Scotty: And was ... It was this sense of they were really suffering at the hands of globalization. They had been this cast iron center for a long time, and a lot of that work was going elsewhere to Russia, to China, and he was concerned that I was sort of stealing their cast iron secrets to take to another country.

Mark: That's interesting. Oh, good, Kevin, I'm glad you're ...

Kevin: Yeah, I'm back. I'm sorry. But your little adventures here kind of reminded me you could probably continue to do that around with going to the stone carvers and having something made for yourself in Vietnam, or ... There are kind of ... Throughout the world are these little guilds where they become very specialized, and in some cases world experts, in making things, and having them make a custom thing would be a really cool ... I would just love to see more of that.

Scotty: Awesome. Yeah, I ... That's what I'm fired up to do and what I really see Strange Parts as. I think a lot of people have sort of ... Because I had so much visibility on the first couple videos that I made that were all about iPhones, people have sort of incorrectly assumed that Strange Parts is only about iPhones, and I really see this as much, much broader. This is sort of a ... I've been calling it a travel for geeks. It's really sort of exploring the industrial and technological world in all of these places that people don't normally think of when they think of technology.

Kevin: Yeah. You've seen the Geek Atlas, have you?

Scotty: I haven't.

Kevin: So it's a book about all of the cool places to visit if you're a geek.

Scotty: Awesome, [inaudible 00:34:39] check that out.

Kevin: Like going ... If you go to Taiwan and Taipei, you have to go up to the top of the 101 Tower to see the huge anti-seismic pendulum that they have up there and stuff like that.

Scotty: Oh, wow. Yeah, that sounds awesome.

Kevin: Yeah, and then Atlas Obscura also is another similar ...

Scotty: I know about Atlas Obscura and absolutely love it.

Kevin: Right, which is a very geeky resource if you're traveling. I always try and check out that before I head to a place just to make sure I don't overlook something and regret later on that I was next to the whatever it is, the foundry that's making all the manhole covers.

Scotty: Yeah, absolutely. I used to look at your sort of traditional travel guides when I traveled, and then I realized that actually I wasn't that interested in seeing yet another waterfall or yet another temple or yet another museum. Those weren't the things that excited me the most. And so sites like Atlas Obscura are invaluable in finding those hidden treasures that most people wouldn't think of as a tourist attraction but are endlessly fascinating to a geek.

Kevin: Absolutely, yeah.

Mark: That's cool. Well, I'm glad you're working on this channel, Strange Parts, because if you continue in this direction of just going to exotic places and finding out how people make things, it's something that I personally am super interested in, and obviously a lot of other people are, too.

Scotty: Awesome. Awesome. It's fantastic to hear that. Yeah.

Kevin: Yeah. And I think the little, again, the little twist that you added to it, 'cause there's lots of how things are made videos, but of actually making something custom as the means of seeing the process is brilliant, and it's just really ... It sets it apart.

Scotty: Yeah, thanks. Yeah, and it's not just making something custom. It's also trying to get involved as much as I can in the actual making process, because ultimately I learn by doing. The plan with the manhole cover if I had gotten that far was to see how much they would let me do. The foundries actually sort of operate on a collective model. The foundry is owned by one company, but then floor space is rented out by individual master craftsmen, who then employ people underneath them. So my hope was to rent out a corner of the foundry floor and actually do the sand molding and maybe even the pouring myself.

Kevin: Right. I was in a place in Java, Indonesia, where they do batik, but they do it with stamps. They make metal stamps of design, and they dip it into the hot wax and print it, and they were letting me do that. If I had been around longer, I probably could've made one of the stamps and made my own design. But that was just fantastically educational and fun at the same time, and so that would be the kinds of things that you could really excel at.

Scotty: Exactly, yeah. Yeah, I mean, there's ... It's one thing watching someone do it, and it's another thing doing it yourself. You really learn a lot more once you sort of get hands-on.

Kevin: Right. Well, great.

Mark: Well, Scotty, this has been really fun talking to you and learning about the tools you use and more about your Strange Parts channel. So just a word to our listeners: you can find out about everything that Scotty's told us about and a link to the Strange Parts channel if you just go to Cool-Tools.org. Scotty, thank you so much.

Scotty: Thank you so much for having me. It's been really fun.