Explorable | Season Two, Episode Sixteen: Transcript of interview with Sasha Blair-Goldensohn

Josh Loebner:

Hey, everybody. This is Josh Loebner. I'm joined by co-host, Toby Willis. Before we get started, Toby, how are you doing?

Toby Willis:

Hey, Josh, I'm doing all right. Happy to be here recording another session with you and looking forward to diving in with our guest.

Josh Loebner:

On Explorable, we explore so many different aspects of accessibility and inclusion when it comes to travel and tourism. One of the first places that people explore, really, isn't in the physical space. It's digitally. They want to find out, not only where they are, but how to get to different destinations. We have an amazing guest today. Sasha Blair-Goldensohn. He's a Software Engineer at Google, and he has an amazing story to share, not only about his personal connection to disability, but also how that translated into some amazing innovations with Google Maps. Welcome to the show, Sasha.

Sasha Blair-Goldensohn:

Thank you, Josh. Thank you, Toby. It is a pleasure to be here.

Josh Loebner:

So, Sasha, let's just dive in. Your personal story, and your recent accessibility initiatives at Google are amazing. And we'd love to hear a little bit more about your personal story, and some of those initiatives at Google that you've been able to spearhead.

Sasha Blair-Goldensohn:

So, I was a Computer Scientist and, actually, ended up going to graduate school in computer science, finished with a PhD from Columbia University. And I started working at Google full-time then, as a Software Engineer. And my specialty, what I did my dissertation on, was the way that computers and algorithms handle human language, which is to say the kind of programs that translate English to French, or the kind of things that are used for voice recognition, or in particular, in my case, it was to try to do intelligent or at least semi-intelligent things in understanding the meaning of text. For instance, text that expresses opinions. How could we say, in general, what are people saying? And it turned out, it was interesting for products. So, you could say, "Do people like this new Chevy Malibu?" And you would find interesting things. It turns out that small, or even tiny, was a really good thing for a phone, but a really bad thing for the backseat of a car. Or these subtle things that humans know, but to teach a computer in a rule-based way were tricky. But it turned out that one of the most useful things to do with opinions had to do with reviews, and particularly, reviews of local places like, say, restaurants. I ended up working with the Maps team, quite suddenly, in the Summer of 2009, almost 12 years ago now. It was a regular morning. I was on my way to the subway to go to work. But that day, I never got to work, because as I was walking through Central Park, a giant tree branch, a rotten branch fell on my head, and injured me incredibly gravely, nearly killed me. After that one instant of incalculably terrible luck, I had many good things fall in place for me, that I'd be here right now talking to you guys. But eventually, I did get back to my job, to my life such as it was,

and as I could at Google being a Software Engineer, but now I had to learn how to get around in a wheelchair. And as with so many things, you don't know until you know. It took a while to get back to work, but I started working again very part-time. And I started getting back to those original things that I had been working on, the reviews and so forth, but more and more, as I started getting around more independently, I started to learn how many obstacles there are for what's a real disability. Paraplegia, it's not nothing, but you come to realize you can do an awful lot on wheels. But there are some little things, totally, that would've escaped me before, that are actually very big and get overlooked, and I came to realize we were not letting people know about on Maps. So, I would start to talk to friends that I work with and say, "Yeah, these maps, we do all these really cool things. But wouldn't it be cool if Maps could tell you before you get there? Does it have a wheelchair-accessible entrance?" And actually, even before you get there, you got to go there, and be able to say, "Is there a wheelchair-accessible bus route or a subway route?" So, I began to tell people about it casually, as it occurred to me, recruit allies, not in an organized way, but there were some other people with disabilities, people in their families who had had these thoughts before, and we had a ragtag bunch of people getting into this. And these things take a while, but where we moved forward, move forward. And, gosh, now it's a dozen years later, and we've made a lot of progress.

Toby Willis:

Yeah, that's great. Sasha, and thanks for sharing your personal story. My disability came on gradually, my sight loss, but it's been an eye-opening experience, if you will pardon the pun, just learning and accepting what we have before us, and leveraging the opportunity that our experience brings. And I think in the travel sector, there's so much opportunity to help us travel more independently. For our listeners who tend to be businesses, who are looking to start or grow their disability journey, from your personal experience as a wheelchair-user, what questions are you asking? Whether it be a museum, or a restaurant, or a destination, hotel, what things are you asking before you travel? And how did those questions influence your approach to using the Google Maps platform to solve for some of those challenges?

Sasha Blair-Goldensohn:

Agreed. It's a learning experience, and you have to accept your own disability. And just as you say, Toby, it's a constant journey of learning, and I always am still, and we all are. So, I have my mental checklist that I go through before I go somewhere. But there's always things that you forget, and more and more, as I've done this, I've been in this world of accessibility and disability, I learn from other people. Just because I find something easy or hard, duh, it doesn't mean that someone else will. But I'll say my own personal list, and from speaking with other wheelchair-users, the biggest one for a place that you go is physical access into the facility, into the door. So, if it's typically a restaurant, a bar, a museum, can you get into the door, and can you go to the bathroom? These are human needs. And just knowing before you go is very valuable and can save everyone frustration. And I've never found that people are trying, business owners, anybody's trying to hide this information, or make it difficult for people to find out. The biggest thing is awareness. You can't build it until you know that it's needed. But a big part of getting it into Maps, and all the billions of users that use Google Maps all the time, is not just functionality. It's not only for me, or for Josh, or for you, or someone who's going somewhere, either using a wheelchair or with someone, for that person to be able to look it up, but for everyone else who might not be the business owner, the person who's planning a party for their team at work, whatever, for them to just see it in a corner, and for it to become normalized. The best thing we could achieve would be to not be needed anymore. So, when it becomes the case that, of course, we would never build an entrance that's not accessible to everyone. We would... Of course, we're going to make sure the bathroom is. When it becomes

the thing that places feel the need to tell people when that's not the case, then we'll have succeeded, and we can go on, and work on other things.

Toby Willis:

Yeah, I've heard it said that information-sharing is half the battle. And I think with the size, and scope of Google Maps, it's such a great opportunity to get that information out there, but it's a push and pull. You depend on those tour operators, or venue owners to publish that information, or to make that information available, so that it can be published more widely.

Sasha Blair-Goldensohn:

One thing that I try to make sure is to help people understand that it's not threatening. It's not, "I'm going to catch you not doing this, or you're going to get punished if you don't do it, or you have to do it the right way," but that we're in it together. And I think that really is the mentality that makes progress, and it's absolutely a win-win situation. And so, you don't have to have the perfect ramp, the perfect bathroom, but let's work together. Let's find a way. And that's been a really interesting thing when I've gotten to travel now in a wheelchair outside the U.S., that in some places that don't have the Americans with Disabilities Act that mandates compliance, which is a real privilege, and a gift to have that in the U.S. But it does... The downside, I think, is that some people, especially in this country, there can be a feeling of fear or that they're being forced to do it, or that the punishment for not doing it is so intimidating. "Am I going to get fired? Am I going to get in trouble? Am I going to get fined?" Whereas I found in other places that I've been to... So, for instance, I was in Spain. It's not a dictated law, but it felt much more of a community effort that, "We'll get you in there somehow. We'll make it work," as opposed to you seeing, literally, fear in the eyes of an employee, who sees me coming and feels like, "Oh, no. I've done something wrong." So, it's getting that kind of mind-shift that people with disabilities, that we're just like everyone else. We just do things a little bit differently, and let's find a way to do it together.

Josh Loebner:

Yeah, well, let's... I want to know more about that. How do you think we'd change that punitive stigma to a more inclusive mindset, where the ramp may be too steep to meet ADA compliance, but having the ramp available to those who can use it, and sharing that out is important. So, how do we make that paradigm shift from punitive compliance-driven, to more inclusion-oriented information sharing?

Sasha Blair-Goldensohn:

It's delicate, because I want to be very clear and say, it's not... The ADA is great, the idea of having an official, it has to be 12:1, because if it's any steeper, that's going to be really hard to push up, and in fact, impossible. And it makes a big difference in whether a place is someplace that's really welcoming to people with disabilities, to people... And again, this is just one kind of disability, right? This is mobility chair-users. But whether it's welcoming, and you can go there independently when there's no one else around, and do it safely and easily, versus, yeah, you can do it, but you're going to have to get a... find a strong person to give you a push. And you're not very independent. It's not great, but it's so much better than not being able to get in at all. And the idea that we're in it together, the person who tried to put down that piece of plywood to make it work for today. Great. I'll come inside with you. You'll give me a push. And then we can talk about what would be an ideal ramp, but let's not let the perfect be the enemy of the good here. It's as much as possible when cities on the whole, the areas on a whole, are disability friendly. Then we're out there to be seen. When more people know more people with

disabilities, it's not like, "Oh, my gosh, I never thought about this." It's like, "Oh, yeah, that guy who I always see in the neighborhood, I should probably put down a ramp, because it'll let him come in. And that guy is always... that woman who's always taking her kids to school here. She might want to come to this place to get ice cream." Visibility begets awareness, which begets inclusion.

Josh Loebner:

I love Google Maps, and I've loved them from day one. To be able to just almost see this curtain of what our world has to offer either, literally, across the globe, and just me as a information junkie to look at maps in countries that I've never been to, to also discovering places in my own community. And the ways that you can do that are just so immersive. But Sasha, let's rewind the story before this was with Google Maps. How did you, as somebody new to disability, new to your wheelchair, what was it like? Maybe if you would be open to sharing a couple of those challenges in your localized journeys that helped spur on this initiative for you internally with the Google team.

Sasha Blair-Goldensohn:

So, I would say it has to do with that visibility question we were just talking about, where I hadn't seen that many people with visible disabilities. And I want to distinguish that, visible disabilities, which is to say someone who's in a wheelchair, you can see them. And that wasn't even on my mind, that there are a lot of invisible disabilities out there. There's a lot of people who are deaf, or hard of hearing, a lot of people with cognitive impairments. But anyway, not having seen that many people with disabilities around, it didn't occur to me that we were being excluded in this very subtle way. One of my mentors in this area, a man named Sid Wolinsky, who was the founder of Disability Rights, co-founder of Disability Rights Advocates, a great law firm out of Berkeley that's worked with us on the subway accessibility issue. But Sid said to me, "Sasha, if you go to a city, and you don't see anyone in a wheelchair there, it doesn't mean they're not there. It means they're stuck. They're at home. They're in the hospital. They can't get out, and they're not around." The way the city is built, on the whole, can be inclusive. It's pervasive. It's not just, one particular bar has steps, but it's, is the pavement smooth? Are the curb cuts in good order? Is there transit? These things build on one another. So, I remember I mentioned this trip to Spain that I took, and I was in a town called Vitoria. And in Vitoria, I started to see a lot of people with wheelchairs around, a lot. And I was like, "Is there a convention or some special event?" But I came to realize that this town in Spain, it seemed like they had got the memo, just everything just worked a little better, and it came together, to mean that people were just way more visible. And of course, I'm looking for it more, because... now that I'm a wheelchair-user. But I think it's that ubiquity and the everyday-ness of it, that that's really what we're going for. And I think if that had been the case... So, getting back to how I realized, it's that I realized that being in New York, I didn't realize that there are plenty of wheelchair-users here. You don't generally see us, because as a person who can handle stairs, who was able to walk into the subway every day, I thought, "That's just..." People with a wheelchair, I just didn't think that they were being excluded. I just thought that they don't use the subway, I guess, or if I had ever thought of it, which I never did, I don't think. In my personal case, even before that, it was when I went and took a trip to Boston. And I think it was about four years, maybe, after my accident. That was one of the first independent trips I took. And someone said, "You can meet me over at..." A friend said, "Meet me over at Harvard Yard. You can take the T there, the Boston subway." And I said, "Oh, I... Jenny, I can't take the subway. I use a wheelchair." And she was like, "No, I think they have elevators at most stations." And I remember, literally, going down to the station, and saying, "Wow, this is possible?" And asking the attendant saying, "Do all the stations have this?" He said, "Yeah, pretty much. There's one at the end of the line where

it's a little tricky, but pretty much." And it was a real awakening for me. And once the awareness shifts, it can be powerful.

Toby Willis:

Sasha, your story about Boston reminded me of my first trip as a blind person. I was using a white cane at the time. I have a guide dog now, which is a much different experience. But I recall going to Verona, Italy, and there were tactile strips in the train station where you could follow with your cane. There was braille signage, and even the museums had back-lighted tactile representations of the art. I just remember being so wowed by my ability to participate as a traveler. I've traveled a great deal in New York, and the city, both with a white cane, and with a guide dog. And it's not that easy to get around. So, I imagine as a wheelchair-user, you talked a little bit about your experience in the city and the subway and stuff, but wondering if... what it's like on a day-to-day basis getting around? And I'm sure... I know that's influenced your work with the maps. And just wondering if you have stories about that experience.

Sasha Blair-Goldensohn:

I think what's made me both a fierce critic, but also a strong believer, is that I was born here. I grew up here, and I lived my first 33 years as a blissfully unaware, fully able-bodied person, and not having any accessibility needs, and not really being aware of them. And then suddenly at the drop of a hat, you think, "Oh, man, there's all this exclusion that's being hidden in plain sight." And there's so many things that could be easy, but just aren't, because of oversights, and lack of representation. In New York, it's very dense, things are close together. It's pretty flat. So, it should be so good, but yet, it turns out no, because the primary way to get around is the subway, which is the way to get around the city, is miserably inaccessible in terms of stair-free access, let alone people who need announcements to be [inaudible 00:16:56]. People who are blind, or low-vision. It's not good on that. You name the disability. It just hasn't been thought-through, but it can be done. And I guess, since I know how good and how enabling it can be to be able to take the subway like people who don't have disabilities, it makes me want to fight for it all the more, because the dissonance is so stark when you start to realize this simple trip from my house on 77th Street to my work at 15th Street, I should just be able to hop on the number 1 subway right here, get down there in one shot, get off the train, and be down there like I'm snapping my fingers. And wait, you can't do it, because nobody's installed an elevator, or even a ramp down these 15 feet of stairs, in 2021, more than 30 years after ADA, in the city that runs on elevators, where every darn building up and down West End Avenue has at least two elevators that go up and down every day, 14, 15 floors. And everybody expects it, and needs it. And it's just, "Of course, we have that." And we can't, as a giant city that is full of billionaires and millionaires, we can't have a single elevator going down to these stations that goes up and down one floor. What? And that I never thought of it before this happened to me. No idea. So, I'm the last person to say, "How come nobody else knows? That's for shame." But it's more, "Let's get the word out that this is a solvable problem." And it's not just for wheelchairs, as discussed. So, that's the motto of our activism group that I co-founded with some friends. And we're still at the barricades. Elevators are for everyone. And it's just that simple awareness that wheelchairs are the most visible in a way that are kept out. But caregivers with strollers, travelers with heavy luggage, delivery people with heavy carts, anyone with anything, it's so needed, and would make such a big difference, and we can do it. We have the technology. It's just a matter of prioritization. An activist friend who I think is so smart said, "Sasha, a budget is a moral document. A budget is just a list of priorities. So, let's switch up these priorities. Let's say inclusion and safety for everyone is at the top, instead of some [inaudible 00:18:52] features, more USB ports, more fancy tiles, more tap and pay." And sure, tap and pay is cool, but tap and pay never let somebody get on the subway who, otherwise, would be stuck out in the rain.

Josh Loebner:

Sasha, I want to pivot the conversation back to Google Maps. And if you could, maybe just share a little bit about some numbers. Google Maps is a global product, and it's accessed by millions of people on a regular basis. But are there any numbers associated with your portion of the project, the accessibility information that... Do you have any data that you could bring to light for our listeners?

Sasha Blair-Goldensohn:

There have been three big launches in the disability inclusion accessibility space over the last years, which have been 2018, was the wheelchair accessible transit routes. So, when you look up a transit direction, so when you look on Google Maps, and this can be on the app on your phone, or else on the web in a browser. And when you're looking up directions from my apartment to the museum, or from wherever to wherever, then you can select your mode of transit. And it can be... Right now, the modes are walking, driving, and public transit. Those are the main ones. And sometimes there's also a two-wheeler mode, like a bike mode. But if you choose the public transit one, it will give you routes that are, generally, buses and trains. And within that, there's an option where you can select various things, including wheelchair accessible. At the first launch, it was six cities. Now it's more than 20. We're planning to put out an updated list but it's, again, always growing. But in many cities now worldwide, you can click that button "wheelchair accessible," and it will make sure that the trip starts, ends, and proceeds through a wheelchair accessible, stair-free route. In 2019, we launched DVG, Detailed Voice Guidance, which means when you're using your walking directions, if you turn that on, you just get extra assurance. And it was aimed, in particular, for people with visual impairments. So, the blind and low-vision community. It's also pretty good if, say, you're a tourist, and you just want a little extra assurance. "Wait, am I going the right way?" Or it's a real curb cut, as we like to say in the business. It's named after those curb ramps at intersections that are often legislated for wheelchair-users but help anyone with stuff on wheels. And so, the detailed voice guidance for blind to low-vision users, it just means that instead of saying, "Walk 800 yards," and then going silent all of a sudden. Along the way, it will say something like, "You're proceeding on the right way. You're approaching a large intersection. You have a left turn coming up," or things like that, to give you extra assurance. The third one, that we launched last May, was the accessible places launch. And that was the one that tells you in a much more prominent way. You look on Maps at an establishment. You're planning to go to a restaurant, cafe, what have you, it puts a little wheelchair icon next to it, if the entrance is confirmed to be accessible. And then when you look at it, it also lists up to four features, whether they're accessible or not. So, the entrance, the restroom, the seating, and the parking. And that data comes from a mix of three different sources. But the source that I think is the coolest are local guides, which are an awesome community of more than a hundred million people worldwide, who are contributors to Google Maps. And it can be a very small thing. It can be somebody just put in a cool photo of the place. "This is my favorite restaurant for getting a ropa vieja." But it can also be somebody who submitted 500 reviews of all their favorite Cuban restaurants around the city on the whole Northeast. But these local guides aren't only in New York. They're worldwide, which is so cool. So, that helped us get really good coverage of places around the world. And they can tell us things of all kinds. Does it have adequate seating? Is it dog-friendly? Is it wheelchair-accessible? They are such a cool community. So, we built the platform, but they have run with it. So, they used this message board that we set up for local guides, and they've organized. So, they organized an accessibility focus group of local guides who do their own meetups around the world, and just try to spread the word about accessibility in, say, Nigeria, or Sri Lanka, or Argentina, or wherever. They're just... They're awesome.

Josh Loebner:

Can you talk about those other two sources of data?

Sasha Blair-Goldensohn:

We get great data from business owners. So, the business owner has... can claim a business on Maps. And there's an application called Google My Business, GMB. And then they can put various bits of official information there, like the business hours, and the menu, and what forms of payment they accept, and these accessibility attributes. So, is it wheelchair accessible, entrance, restroom, seating, and parking. And also, they can say whether their place has a hearing loop, which is a special kind of radio transmitter that transmits to hearing aids that have this thing called t-coil. Basically, it exists in some kind of... It's, I think, most frequently in performance spaces, like auditoriums and movie theaters. But anyway, hearing loops is the first non-mobility type accessibility feature that we've added in there. And we're hoping to put more in there.

Toby Willis:

So, if you're a business owner listening, a tour operator, a DMO, claim your business on Google Maps, and upload those accessibility features.

Sasha Blair-Goldensohn:

So, that's two sources. And the third one is a ground truth information, which is to say the background information. Sometimes you notice patterns like, say, Starbucks. If something's in the Starbucks chain, you can guarantee it's going to have a wheelchair accessible entrance and restroom, because that's just their policy. So, this is the machine learning piece, that we can notice these patterns. And it's the same kind of rules that some... that people have in their minds. They say, "Yeah, Starbucks is always good. But we have algorithms that implement that." So, between what regular people say, the business owners tell us, and the patterns that we recognize, that say a certain chain, or a certain city, or a certain neighborhood, seems to have certain accessibility profiles, from all that, combining those three things, the people, the businesses, and the patterns, we can come out with more and more high coverage information, so you know before you go.

Josh Loebner:

That's great to hear. I like the triangulation effect, so that you really know that this, hopefully, is solid information, and that those places that you see on Google Maps that claim it to be accessible, hopefully, are.

Sasha Blair-Goldensohn:

And I should say that it's highly accurate, but things go wrong, and conditions on the ground can change. So, there's also a feature in there, where you can click something to report a problem. Operators are standing by. Literally, there are... We have teams that are constantly on top of that. And when there are changes, they make them very quickly. So, it's reflective, and we want to be a as accurate as possible.

Toby Willis:

That's great. It's been such a pleasure talking to you, Sasha, and learning more about Google Maps. What's on your horizon? What is the next big thing with Google Maps accessibility, beyond Google Maps, even?

Sasha Blair-Goldensohn:

The things that I'm really excited about are these three features for accessibility, the accessible transit places, and detailed voice guidance. They already exist. And they work really well but improving them in little ways. The biggest one is availability. So, they're not all available in every language in every country yet. And scaling that up, and making it, not just for everyone of all abilities, but worldwide. So, right now, for instance, the accessible places feature, you can use that in the U.S., Great Britain, Australia, and Japan. So, that's on the horizon. And we, basically, wanted to make sure it was working first. And there were not any pickups, or iron out any wrinkles, and then also increase the coverage, so that when people turn it on, it's sufficient, that they can find places that are accessible. And it's not just suddenly, "We don't know about anything," because that wouldn't be very helpful. So, we're getting there. And I'm hopeful. I won't name a date, but in the not-too-distant future, we'll be rolling it out to more regions, and eventually, worldwide anywhere you can go on Google Maps, and also for transit. For transit, it's a little bit trickier, because that doesn't use only user-contributed data. It actually uses the transit agency of every region, and city. And there's a special file format that the transit agencies are good at and are getting increasingly good at submitting to places like Google Maps, because they know that it may be a pain to put together this file, and get all their schedules, and stuff in there. But once they do that, then they don't have to build their own transit app. You can just use Google Maps or a mapping software of your choice, and it will just work.

Josh Loebner:

That's great to hear. I appreciate that there are objectives moving forward, that the job isn't complete, and that you're continuing to evolve Google Maps in a way that continues to welcome mobility disability, and so many other disabilities, and everyone, that Google Maps is a pathway to get from point A to point B in a wonderful way, and an intuitive way. So, Sasha Blair-Goldensohn, thank you so much for the conversation. This has been an Explorable podcast. Hopefully, we'll catch you next time. Thanks so much.