

[Intro Music: "Robert Henry" by The Westerlies]

Angela Eaton 0:01

Welcome to Data dialogues. We bring together folks working in different parts of the environmental movement to have conversations around their reflections and learnings working with environmental data. By talking through who's using what kinds of data, and how, we're working to personalize the landscape that environmental data is sitting in, so that it can be more accessible and useful to everyone. I'm your host, Angela Eaton.

Hi. So, today we're hearing from Muki Haklay. Muki is a professor in the Department of Geography at the University College London. For the past 25 years, he's been interested in issues of environmental information and public access use and creation. Muki co-founded Mapping for Change and the Extreme Citizen Science Research Group at UCL. Hi, Muki.

Muki Haklay 0:56

Hello.

Angela Eaton 0:57

Muki, I am so excited to be talking to you.

Muki Haklay 1:01

It's a pleasure to talk with you.

Angela Eaton 1:04

So, one of the things that I think about is that, if we're talking about the environment, we're talking about spaces outdoors. But we're indoors looking at this data, and I— for me, anyway, that's my case. So I'd like to start off with an experience or an outdoor space that you really love. Could you tell me about that?

Muki Haklay 1:25

Yes. I'm extremely lucky to live next to a big park in London, Gladstone Park, which is 10 minutes' walk from my home. And during all the lockdowns that they experienced in the past two years, it was such a relief to walk out. And there are some corners in the park where you don't

see any house and it's just green space. It's a very, very nice place to relax and to kind of reach out.

Angela Eaton 1:58

Well, a lot of what you do is, you work with groups on monitoring efforts. Can you tell me a little bit more about that, and what brought you to it?

Muki Haklay 2:10

Yes, so I'll start from where it came in. So, as you kindly mentioned, I started my work around interest in public access to environmental information. So now what will be 23 years ago, in 1998, there was a big and important agreement that was signed in the European area, which is called the Aarhus Convention. So it's a convention between 46 countries, if I'm not wrong, covering public access to environmental information, participation in decision-making, and access to justice. And I was just kind of working on my PhD. And it just came in the right time, because I was asking questions about environmental information. So that's where my interest about the whole public access to environmental information came from. There was things before that. But I started thinking, especially at the time, there was interest in participatory geographical information systems. So, on the early PCs, it was suddenly possible to provide information to communities, and also generate information by communities. So, that created an interest of not just thinking about what the authorities can give to the public, but also what the public actually knows. And one of the first experiences that they have was in a workshop where we showed members of a community in South London data that the enforcement authority, the environmental authorities were keeping about their area. And then after a while, they started to say, "This is wrong, and that's not accurate, and actually I know that, say, the bus station is not located here, it's on the other side of the street. Can you show me how to move it?" And there were people who never touched a mouse and haven't worked with a computer and that actually gave them the motivation to start sharing information. So that was kind of a screen-based experience. But at the same time, I was becoming aware of things like Global Community Monitor and the Bucket work that they were doing at the time. And I was also thinking about very simple approaches for data collection, because it was clear to me that environmental information should be created by the communities just as much as it's created by the authorities. So, that finally got into action, something like, about eight, 10 years later, when it was possible to work with communities on measuring noise level next to airports, or using a very simple device to monitor air quality and things like that.

Angela Eaton 5:20

I'm wondering, how is it, then, that the community data or the community information, the community knowledge, is then taken up by policymakers? Or is there any resistance to that? How do you smooth that out?

Muki Haklay 5:38

Absolutely, there is a resistance to that. And it was— But it was always assumed that that data and measurement are more valuable or have more purchase, in the political process, than the problems that communities experience. So when someone in one of the cases, they told us that for six years, they've been complaining about the level of noise, and nobody was paying attention, but once they started using noise monitors that we provided them and came to the bodies, both in the local authority and in the Environment Agency, with numbers that came from their measurements, suddenly, they were listened to. And it wasn't an argument that this data is the most accurate; it's actually to say, "Hey, there is a problem here. Now bring in your expert and measure the situation." That's actually the way we framed it and we structured it, which, again, it's very similar to what's going on in the States. Yeah. And what you do is that you use that data as a starting point to bring people to the room. And then at that point, the community members can tell the stories, because now it's a story backed with data.

Angela Eaton 7:13

Do you feel that community members needed to have the backing of a researcher at UCL in order to be heard? Or was it something that was because they had scientific instruments in order to get that data understood? How did that work?

Muki Haklay 7:33

I think you're absolutely right; it's really difficult to separate between the use of the instrument and also the extra bit of having UCL in the mix. And I've been talking throughout this time, and ever since, on mutual co-option, that actually the process between the researchers and the community, where it worked best, is each side co-opting the other side; they know what they want to get out of it. Luckily, because I'm interested in participatory approaches and participatory experiments, and seeing what happened with environmental information, all this, you know, I came to different communities without a specific agenda of saying, "I'm here to check about the birds. If you are not interested in the birds, I'm not interested." I could come and say, "What

would you like to measure? What is the issue? And let's figure out how we can do that," because I was more interested in saying that. And communities were seeing that as an opportunity to identify a problem that could address with data, and then working together to collect it. And indeed, they were using, frequently, the link with UCL. But since then, I've also seen many cases where the power of data itself worked. You know, so the university wasn't needed there, once the, say, the methodology was established, or the approach was established.

Angela Eaton 9:07

What are you working on now that you're really excited about?

Muki Haklay 9:10

So, I'm kind of going full circle, and I'm looking, again, at environmental information as an object of wonder that I've just, the more I've looked at it, the more I don't completely understand it, it raised me all sorts of questions. Like, for example, I think that the environmental movement's got really big blind spot to information technology, and by association to the technology behind it. So, say, although Silicon Valley is one of the biggest collections of Superfund sites anywhere in the US, you kind of look, and you look for, where are the campaigns of the environmental groups against it? Well, where is Greenpeace fighting against Bitcoin, which is literally melting their ice? Like, there are— It's really, literally doing that, with pictures of servers running in Alaska because it's cheaper to keep them cold. Where are all these things? And I think that that's a blind spot that is coming because environmentalism is so connected to information. And therefore information technology is seen as a friend. And you don't challenge it. Something's going on there, which fascinates me. So those questions are questions I'm asking now.

Angela Eaton 10:40

I also think that there's an idea that environmental concerns happen over there, not here. And, you know, I think you're right, there's a "technology will save us" idea too.

Muki Haklay 10:54

Yeah. And, with our computers, and with our devices, they could last much longer. The operating systems are not really, really optimized to save every ounce of energy and every bit of it, so they would last longer. And all the rest of it could change. But we're just not discussing it. And I think that that's really interesting problems about how environmental information is

understood and plays out in the world. So those kind of questions I'm asking now. They're academic, I know, but I think that they have implications on practice.

Angela Eaton 11:40

So, that brings me to your Data Dialogue partner, Sof Petros. Sof Petros is very interested in fossil fuel divestment, and is also an environmental educator and activist. I'm thinking about your conversation. I don't know what it's going to be yet, but I'm wondering if you have any sparking thoughts for Sof.

Muki Haklay 12:05

Yes. So, the issue of divestment is a fascinating one, because that also leads me to another kind of thing that fascinates me in the same area is that, I'm realizing, so— Where Geography is at UCL, just above us is Earth Science. And you realize that actually, the people who are modeling climate change and helping with reports about the situation, we're sitting side by side with the people who are producing the students who would go to fossil fuel companies to generate, or to mine, all the stuff out of the ground instead of keeping it in. And when UCL, a few years ago, had a discussion about divestment, it was the Earth Scientists who really stood up in saying, "This is something that brings us both students and investment, and how can we say to our partners, that we don't work with them?" So, that's something that fascinates me about the places where there is these contradictions between practices and between where people are going. And how do you deal with those social tensions?

Angela Eaton 13:31

All right, then. Well, I am wondering, we like to promote community. And if you have any projects that you're working on right now, that you'd like to give us any information about through websites or social media, would you do that?

Muki Haklay 13:49

Yes. So, some of the projects that we're working on, and people might be interested, first of all, if you look for the ExCiteS story map, you will find examples of work that we're doing with different non-literate groups around the world to allow them to record information about their environment. We also have some work around helping communities to record information, you can find it in Mapping for Change. Some recent projects include, for example, smell, and activities around that. And there are— one of the big projects that I—again in the university—am

involved in, is starting a Master's program in Citizen Science. And if you look for Master in Citizen Science at UCL you can find that.

Angela Eaton 14:52

That sounds exciting, okay. Well, I can't wait for this discussion that you're going to have and I really appreciate your time today. It was so nice to meet you. We'll talk soon.

[Outro Music: "Robert Henry" by The Westerlies]

Today's segment was the second in a three-part conversation series. To listen to Sof Petros' complementary conversation or Sof and Muki's dialogue together, please head over to Spotify, Apple Music or our website, [openenvironmentaldata.org](https://openenvironmentaldata.org).

To read a transcript of this episode and to access resources mentioned throughout the show, please take a look at our show notes, which you can find in the caption for this episode or at [openenvironmentaldata.org](https://openenvironmentaldata.org).

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