

[00:00:00]

PERSON: Welcome to the Talks at Google podcast, where great minds meet. I'm Matthew, bringing you this week's podcast episode, with world famous recording artist Imogen Heap. Talks at Google brings the world's most influential thinkers, creators, makers, and doers all to one place. Every episode of this podcast is taken from a video that can be seen at [youtube.com/talksatgoogle](https://youtube.com/talksatgoogle). Imogen, who recently wrote all of the music for the record-breaking play "Harry Potter and the Cursed Child," parts one and two, has released a new album and is currently on tour. In this chat, she discusses her amazing career, Mycelia Creative Passport, and more. You can find more info about her and her many projects via [imogenheap.com](https://imogenheap.com). Moderated by Ben Arthur, here is Imogen Heap: Her Career, Past, Present, and Future.

[00:01:03]

IMOGEN HEAP: Hi, guys. Very nice to be here on the stage. Happy to share whatever you want to ask me. And I actually spent a bit of time up interest he creative labs one day, and just saw some amazing things. so if there's anyone here that I might have met, hello again. 'Cause I saw lots of kind of music-- cool, little music apps they were making. It was good.

BEN ARTHUR: Nice. So, folks here in the audience might know you from songs that were licensed to "The O.C.," or Zach Braff's "Garden State," or your collaborations with Taylor Swift or Ariana Grande. Or they might know about your performative technology endeavor, in the Mi.Mu gloves. They might have heard about Creative Passport. They might also have heard about you doing the Harry Potter "Cursed Child" soundtrack. All of these things are out in there in the world, which seems breathtaking in their scope.

[00:02:00]

How do you think about yourself when you, you know, introduce yourself at the allegorical party. How do you consider yourself? What's your identity?

IMOGEN HEAP: I don't know. I just say I, like, enjoy anything that kind of is around the intersection of music and tech. That's what I say. I don't go, like, "I'm a musician. I'm a producer. I'm a performer. I'm an engineer. Hello. Won some Grammys." I just go, "I'm into music and tech." So.

BEN ARTHUR: "I'm into music and tech." Okay.

IMOGEN HEAP: That's what I say.

BEN ARTHUR: That's those are the big umbrellas that you consider.

IMOGEN HEAP: Yeah.

BEN ARTHUR: One of the things that I've heard you reference a couple of times--and it seems almost contradictory to my-my image of you--is only do what you can see in the headlights. Can you talk about what that means to you?

IMOGEN HEAP: Yeah. Yeah. I would love to. Before the days of Google search engine, we had a thing called Yahoo. And one day, I was in the studio, and I was making--

BEN ARTHUR: We'll bleep that out.

[00:03:00]

IMOGEN HEAP: Why? This is a nice story. And so I was there kind of going round and round in circles, trying to finish this song. So, I am in my studio. This is the first time I recorded a studio--recorded an album on my own. So I was in the studio, constantly, all by myself, for like a year. And so it does send you a bit mad. And because I didn't have an A&R man or anyone that would come in and go, "Oh, that's really good," or "Oh, you should turn some more cowbell up," or whatever they say, I was going round and round. And so I couldn't finish this song, so I went on to the search engine and I just said, "How do you write songs?" and I found this article about this writer--novelist who had written this little blog. And it said it in, "Do what you can see interest he headlights." And what she meant was, if, in the song, you can see that there's a hi-hat that needs fixing or that you can--or you're trying to finish a lyric and, you know, you can see the color of his eyes, then just do that.

[00:03:59]

Just write that bit, and just keep chipping away. And eventually, you'll see the full path ahead of you, and you'll see the--you know, all this--all the landscape. But it's that kind of, "Oh, I've got so much to do. I've got so much to do." And it's overwhelming, and it's--you can't breathe. And then you just remember, well, do what you can see now. Just do that. Don't see--don't do all that complicated stuff that's far away. You know have to get to it eventually, but you can't see it just yet. So just do that. So that's what I mean. Yeah. And I use that a lot. In everything, from, like, "How do I look after my child this morning when I've got to get to this interview, and I've got"--you know, I just say, "Do what you see in the headlights," which is make sure she has breakfast, you know. And that's just--yeah.

BEN ARTHUR: You are supposed to feed them. That's--

IMOGEN HEAP: Yes. I hear--I do hear that.

BEN ARTHUR: I'm a father, so I know.

IMOGEN HEAP: Six months, I didn't feed her.

BEN ARTHUR: Every meal. You're not allowed to skip even one.

IMOGEN HEAP: No. That's true.

BEN ARTHUR: It's very strict rules. So, one of the many things that you've juggled is the Harry Potter "Cursed Child" soundtrack.

[00:05:02]

We're gonna see a quick video introducing that album, which has just been released.

IMOGEN HEAP: That is a bit of the play, which is on Broadway here, which is wonderful. And yeah. Four--about four years ago, got a call from a friend called Steven Hoggett, who is a movement director.

[00:05:59]

And he has--he used to have this group called the Frantic Assembly. And when I released--well, just after I released a song--an album called "Speak For Yourself," which is the same album that I couldn't finish that song--and I released that by myself, with my own label. And eventually licensed it to Sony, 'cause I

couldn't deal with all the mail orders. And so--but before that, I got this call from this guy, Steven Hoggett, back then, like, 20-15 years ago. And he's like, I love this album 'Speak For Yourself.' Could I--I want to put it in this play that I'm working on. And there's gonna be, like, people dancing around to it." And I was okay, "Okay, that's sounds really good." And I didn't ask him for payment. And I was just like, "That sounds good. Yeah, okay. Here you go." And I, like, tweaked some things and made it a bit longer and that kind of stuff. And then it went into this play, and it was really great, and I loved it. it was the first time I had seen live dance to my music. And I really enjoyed it. but I didn't ask for payment. But if I had been signed to a major label at the time, they would have been like, "Ah, yes, going to spend a whole year discussing how much she should get for this. And then you won't be able to use it anyway."

[00:07:01]

So-so I basically--yeah, it was really-it was really great. And then we made friends, and we kept in touch. And then, you know, he did all these amazing things. And then the next--you know, not the next call, but a call, four years ago, was him saying, "Hi, Imogen," or Immi, as he calls me. "Working on this play, and I can't really tell you what it's about, but they love your music," and, like, all this stuff. 'Cause I did all this weird orchestral stuff, and, like, a cappella, strange stuff, for an accompaniment for an old silent movie. And nobody ever gets to hear that stuff. but he loves me, and he loves all of my music, and he knows it all really well. And so he was putting all these random bits in there, which hardly anyone's heard. And it felt really good. And he was like, "I think they really just want you to make the music." And I was like, "Who? Who? Who is it?" And he said, "I can't tell you, but it's about a boy with a scar." And I was like, okay, that's a bit of a giveaway.

[00:08:00]

And so I looked up online. I saw his name connected to this creative team, who had already announced they're doing the play. And then I was like, that's exciting. So then yeah, I met up with Sonia, who--she's the producer. And they offered me the job. And yeah, life took a very different turn. Yeah.

BEN ARTHUR: What was your relationship to the Harry Potter universe before that?

IMOGEN HEAP: Thin. Quite distant. I really don't like reading very much. I mean, that's not true. I like the information that's in the book. I just don't like the process of actually reading it. So--and I've never enjoyed-I've never enjoyed that. My dad thinks that, if it wasn't down to him kind of showing me--you know, going through--he thinks I'm dyslexic. And maybe, 'cause I really struggle, like, you know, getting the words in my head. Maybe that's why I like making [inaudible]. So, anyway.

[00:09:00]

So yeah. So that's how I ended up in there. And.

BEN ARTHUR: Fascinating. And, if I can ask, for those of your who were much, much deeper into that universe, can we fanboy and fangirl out, for a second, and ask...

IMOGEN HEAP: Sure.

BEN ARTHUR: Did you hang out with JK Rowling? Did she invite you to her house, which I assume is a magical castle that you can only access via unicorn or magical boat or something?

IMOGEN HEAP: Yeah. Yeah. I have--I did meet the lady herself a few times. Yeah. She was on--she was on set quite a lot. And yeah. She was very nice to me. She says--she actually, I think--when I first met her, she did this to me. And I was like. No, she's--she's very happy. 'Cause she--I mean, I discovered that they really wanted--they really wanted somebody British, a composer that's British, and that was a woman. So.

BEN ARTHUR: So I was never in the running.

IMOGEN HEAP: There's not that many you can--

BEN ARTHUR: Really, at all.

[00:10:00]

IMOGEN HEAP: I was--I think, also, with the help of Steven and the fact that, you know, director and him are, like, best buddies, it all helped.

BEN ARTHUR: So, can you tell us about the creative process?

IMOGEN HEAP: Yeah.

BEN ARTHUR: 'Cause, as I've heard you describe it, sort of--it's a creative process within a creative process. Because they're--they're working on their--their own thing.

IMOGEN HEAP: Is that your phone?

BEN ARTHUR: It's really awful, isn't it? Embarrassing?

IMOGEN HEAP: Roger.

BEN ARTHUR: Ben.

IMOGEN HEAP: You're name's not Roger. Your name's not Ben. Who's Roger? I just met somebody called Roger. It's very confusing.

BEN ARTHUR: You can absolutely call me Roger, though. It's completely fine.

IMOGEN HEAP: Well, now we're--now we're even. You have your phone and I called you the wrong name. So, Ben. Ben Arthur. Your question was--what was your question?

BEN ARTHUR: Your--

IMOGEN HEAP: Oh, the creative process. Sorry. Yes. So, the creative process was--they really liked a lot of existing material. But they needed it adapted. But they had--it's a five-hour play, and they wanted a lot of it to be music underscored. But they also like--there's kind of three different types of music.

[00:11:00]

There's music that they interact with, which is when they're on the stage and they're, like, moving around to music. There's the underscore. And then there's scene changes, like, you know, a wall goes across, and it's like--[sings]--and things like that. And so the underscore bit is, like, quite a lot of existing material that's just kind of bumbling away in the background, that's been adapted and stretched and added different things, and lots of high frequencies taken out, 'cause it kind of gets in the way of the

talking. So I learned a lot about how to kind of sculpt around the vocal, like, you know, human voice area. And then a lot of--yeah, lots of drones. Lots of vocal--loads of vocalizations. there's no lyrics, actually. There's only one bit that has a lyric.

BEN ARTHUR: Indeed. That's from "Hide and Seek."

IMOGEN HEAP: Of course. I had to put my famous song in there. So, that's the one-the one song they really wanted with a lyric. And I didn't want--it didn't feel right to have me singing it, and they didn't want to have me singing it anyway, so I got my friend's choir to sing it.

[00:12:01]

And then I kind of added the vocal layers underneath and made nice drones. And--but most of the time, it was just--it was all about the transitions. And that was really, really fun. it really tested my theory skills, to, like, "How do I get from that key? How do I modulate from there to there? And how do I," you know, do this? So there's a lot of existing material. And very luckily, over the years, I've been quite vigilant into kind of making-making sure that all of the songs have their stems, and they're all documented and kind of filed quite nicely. So, all of the songs from "Speak For Yourself" up all have, like, drums, strings, vocals, backing vocals, effects, blah, blah, blah, weird sounds, arpeggiated things, etc., etc. And then, so I was lucky enough to be able to pull that. And then those ones that I hadn't done, I've got this awesome assistant called Alexi. And he was in my studio, back in England--back in this village, where we live.

[00:12:57]

And he would be kind of getting those together and then dropping them into Dropbox, into Ableton sessions, where then I was seated in the theater, for about three months, and just, with my little, you know, computer and my little hard drive and whatever, and had my microphone and some little toys. And then I was just there like that, the whole time. And my only regret is that I didn't really get to talk to anyone, other than, "Did you like that?" Or, "Could you make that a bit more like this?" Or, "Could you make it a bit less--" and yeah. So I didn't really get to talk to the gang very much. And I was literally there from, you know, 10:00 in the morning till 11:00 at night. And I was always--well, not always, but I was quite a lot the time, the last one-the last one in there, saying "Hi" to the security guard.

BEN ARTHUR: And you took all of this music--something like 100 cues, and created an album.

IMOGEN HEAP: Yeah.

BEN ARTHUR: Sort of a cohesive album. What was that process like for you?

[00:13:57]

IMOGEN HEAP: Yeah. So, in the theatre, it was really great, 'cause there's, like, tons of inputs to kind of, you know, react against, and be like, "Oh, that sound works beautiful with the light." "Oh, that sound is beautiful with the sound effect." Or, "Oh, the pace of that person"--so, all of these kind of affirmations that that's working, that's working, keep going, which you don't get in the studio, when you're all by yourself. And so--but at the same time, because it's a big theatre system, and you don't hear a lot of the detail in the mix--so I was kind of getting away with murder, in terms of what I could mix in the time that I had, which is two and a half hours of music that, like, quite a lot of it, done also from scratch. And so

when I finally took that back into my studio, you know, it was like, "Oh my goodness, I've got so much work to do." There's, like, gazillion pops and clicks and all kinds of things I had to draw out. And then--and then just making it sound lush and beautiful and layered, and giving it the attention that I do to my own records. But to, like--well, it's a 78-minute album. It's, like, as much as I could fit on a CD, physically possible.

[00:15:00]

And it's 42 tracks. And so it goes into four acts, and they're, like, one long piece of music for 20 minutes, another long piece of music for 20 minutes. But it's going through 14 or 15 cues. So that's where the kind of, "How do you get from this key to that key, into 3/4 from 7/8, duh, duh, duh?" And it was really fun. But it was a lot of hard work. And I did most of it standing up. Because I also, yeah, had a life at that time in a flat in London, and so it was a lot of it just standing up. But it was quite good for my posture.

BEN ARTHUR: Excellent. Personal recommendation: I've been listening to the album for a while now. Walking through the city and listening to that on headphones gives you a very weird, magical layer of New York that--very surprising. Because you did a wonderful job sort of making that...

IMOGEN HEAP: Thanks.

BEN ARTHUR: Feel magical.

IMOGEN HEAP: Yeah.

BEN ARTHUR: Which--

IMOGEN HEAP: There were certain sounds that I always kind of were drawn to.

[00:15:56]

Kind of--the other kind of secret weapon I had was I developed, with a company called Soniccouture, my own set of virtual instruments, of all my favorite sounds in my studio, so that I could basically take them on the road with me. So I could have my Mbira, I could have my cello, like harmonic stuff. I could have my cocktail kit. I could have my Whirlies.

BEN ARTHUR: Your Marxophone, I read.

IMOGEN HEAP: My Marxophone.

BEN ARTHUR: Which is a...

IMOGEN HEAP: My Shruti Box.

BEN ARTHUR: Sort of socialist trumpet, I think.

IMOGEN HEAP: No. It's--it's a bit like an autoharp. But it has twangs on it. I don't know what you're thinking of. So, yeah. A Marxophone. I see. Right. A bit slow. A bit slow today. Anyway. So. Cut that bit out. yeah. So, I have this--we call it the Box of Tricks, which is quite funny, 'cause it ends up being a box of tricks in a magical theatre piece. And I used all of those sounds, you know, to basically make things sound like me.

BEN ARTHUR: Yeah.

IMOGEN HEAP: So, I would always use the Marxophone, and I would use the choir of me's.

[00:17:00]

I could play choirs of me's on my--I had sampled my voice. So if anyone wants to make sound--a song that sounds a bit like me, you can just buy the Box of Tricks and just go, like, a bit of Marxophone, bit of string, bit of vocal harmony things, and so, yeah.

BEN ARTHUR: So, speaking of instruments, I wanted to turn to the Mi.Mu gloves. We've got a quick little video to introduce you all to this, if you haven't seen it before. And here she goes.

[00:18:00]

IMOGEN HEAP: Okay. That was really not a very good example. 'Cause, but--

BEN ARTHUR: Thank you.

IMOGEN HEAP: What happened before. It's not your fault. It's not your fault. I think it was my team who, for some reason, gave you that. But basically, yeah, what I'd done previous to that is I'd looped my voice by going--catch my voice, and then it would create a loop. And then I would catch another loop. Well, I'd actually put that aside. And then I would catch another loop, and then I'd put that aside. And then I'd catch another loop, etc., etc. And what I'm doing is I'm going--posture, fist up is record, and when I'm out of that zone, it goes to play. Or when it goes to this [inaudible], it plays. And then it continues to play. And then, I can't remember exactly, 'cause that was ages ago, but it's something like, when I want to pull up the volume of the first loop, then I would use my finger, like this.

[00:19:00]

and I would just be like, up, down up, or just go straight to up, and it'd be 120--well, 127 in MIDI note, but 100 percent loudness. And then if I wanted to add reverb, I just use my secret finger posture, which basically activates the reverb fader, or, like, the--you know, in my software. And it just says, from naught to 100 percent. So, if I was like--dun--just sound like now. But if I was, like, over there, it would be like--dunnnnnn--like I was in a massive cave. And then, yeah. So, I play, like, basslines, or I might play tinkly sounds. Or, it's just things that I do anyway in--when I perform. Previously, you know, you kind of have to be kind of a little bit barricaded by gear, if you want to sample stuff, or you're locked into the physical nature of whatever box you're using. And the gloves are, you know, basically controllers at your fingertips.

[00:19:59]

And you can just--yeah, just be very expressive to something which is quite boring, actually. In real life, it's just, like, turn up a thing to 100 percent. It's like--eee. But you could do that really expressive, like, yeah. Or something like that. But this is much more, like, "Oh, she's making her voice bigger," you know, or "She's catching her voice. And now she's moving it left to right," you know, or maybe even in surround, which I'm doing on the tour, kind of moving in around a 3-D space. And then, yeah, just kind of sampling my voice, bringing in vocoder, harmonizer, so I can harmonize with my voice. Sometimes I integrate it with, like, an IR camera. Well, they don't make them anymore, but a Kinect. And I would map the stage into different zones, so I could be, like, when I'm over there, then, you know, make the drums more kind of sparse. And when I'm back here, make them more phonetic. Or, when I'm over there,

switch my harmonizer to minor. Or when I'm over here--you know, or when I'm in the middle, take out my harmonizer.

[00:21:00]

So, using the spatial--the stage spatially to effect the kind of bigger parameters and change in a system like Ableton or ProTools or whatever. So it's basically like a mapping device. But how it feels is you take on the physicality of something which doesn't have a physical representation. It's like a filter or, you know, a bunch of effects. It doesn't have a thing that--it's not like a bass guitars. It's like, that's a bass guitar. It's like a reverb. so you become the reverb, and you become, you know, the mixing desk, and you become the multiple, you know, voices or--yeah. It's-the only downside that I've discovered from it, other, like, lots of programming, to kind of get it so it feels really human, so that you're never even thinking about actually, "I'm going to bring in my reverb now. I'm going to sample my voice."

[00:21:59]

You're just-it just becomes second nature. "I'm gonna call my voice. Gonna make it a bit bigger. Now I'm gonna add some harp and some delays." You kind of create a gestural language the more and more you use the system, 'cause it obviously has a bit of software in between it, called Glover, which you can also add other inputs, so you don't have to use the gloves with Glover. You can use--yeah, you can use Kinect, you can use Amayo, you can use iPhone, you can use Elite Motion. You can use whatever--you know, other types of inputs, and then use them to, you know, move around things in Ableton or whatever. So, the gloves are essentially just trying to get away from this limited space I felt, of trying to add lots more gear to create a fluidity or a kind of spontaneity on the stage.

BEN ARTHUR: Sure. And for you, now that you've actually developed these, do you find, when you perform, that you're in them most of the time, all the time?

IMOGEN HEAP: Yeah. I wear them all the time.

BEN ARTHUR: All the time.

IMOGEN HEAP: On the stage.

[00:22:58]

'Cause, if I take them off, they're quite pretty, and they don't itch or anything. They basically have, like, eight bend sensors. They've got one, two, two, two, and one. They have lights for feedback, and you can program the lights to do whatever you want. It might be like turn it red when I'm in record. Which, you know it's in record, but it's nice for the audience to see, "Oh, it's in record. It's gone red." And then it's got a battery. It's got an IMU, so you can get your kind of positional data. And it's got accelerometer, so you can be, like, drum peaks, and I do air guitar, so that's really fun. And yeah. So, that kind of combination. Then you've got your axes. So, you've got your pitch, you've got yaw, and you've got roll. And then you've got different sort of zones, backwards, forwards, up, down. and the combination of that leads to so many possibilities. Because if you have the keyboard and you're like, "I'm gonna play a squidgy bass sound," so you might be like, dun, dun, dun, dun, and you want it to go, weeoh, or something, you could do that for-with pressure. You could make it slightly harder, if you want it to go weeoh.



[00:23:59]

But if you want it to, like, do that and change the tone or something around it, you would have to use your other hand, which is then entirely consumed by going weehh, and you're, like, suddenly just playing a three-note bassline with a weehh thing. But you could just be going weehh, like that, the same. But just, your whole hand. And you could move around the stage and do--yeah. So, it's not good for everything. It's not good if you want to play, like, some Rachmaninoff with your fingers. But you do that on the piano, 'cause that's what the piano's for. It's really for all of the unseen bits, the bits that don't have a voice or a physical--

BEN ARTHUR: Nice.

IMOGEN HEAP: But you do gets lost in it. That's the only thing.

BEN ARTHUR: Interesting.

IMOGEN HEAP: You just--I close my eyes all the time. And I'm, like, in the zone. I'm playing "Hide and Seek." I'm layering my voice. I'm bringing in a harmonizer. And I'm, like, "I finished the song. Did I actually look at anyone?" Because it's like, you're playing, and it's like--fills you. 'Cause I have in-ears as well. I, like, just hear the sound, and I'm just like--you just get lost.

[00:25:00]

'Cause you don't touch anything, you know, like a machine or whatever. It just kind of--it becomes really, like, a second skin.

BEN ARTHUR: A visceral experience.

IMOGEN HEAP: Yeah.

BEN ARTHUR: Fascinating.

IMOGEN HEAP: It's really cool.

BEN ARTHUR: And where in the development process are you right now? Is--are you licensing it to someone? Are you looking for a funding partner? Are you--

IMOGEN HEAP: Why? Are you offering? Well, it's funny you ask

BEN ARTHUR: I was gonna wait till later, but okay.

IMOGEN HEAP: No, I'll tell you what we've been doing. 'Cause it has been quite hard. You know, I'm not--kind of corporate structures and all that stuff's not my forte. So, we have a team, and they've grown over the eight years since we started developing it for my own personal fun time use. Which then became--we did some conferences and things like this and one before. And over time, have had loads of interest, tons and tons of emails that--we set up a company, eventually, 'cause it's like, "Well, maybe we should make them."

[00:26:00]

Instead of, you know, just for my own personal enjoyment. Or for my-my shows. And so we did start to develop them. But that's a huge curve, you know, to have to make it something that everyone can use.

Software that's, you know, intuitive, hardware that's robust, and, you know, cheap enough to, you know make enough of them. So we have--we've made, like, 50 handmade pairs for people over the years. And now we are getting much closer to releasing something this year, which--just 100 pairs. But they will be manufactured, and it'll be a lot, kind of [inaudible] cost--not that much [inaudible] cost, but maybe in five years time. It's like, if enough people Teslas, they'll be like two quid next year. So, you know, it's--the early adopters do pay the higher price. But they, you know, get the benefit of better service and whatever.

BEN ARTHUR: Sure.

IMOGEN HEAP: So yeah. This year, we're gonna release them. We have released the Mini.Mu. If you have any--a small child in your life, you can make your own glove. It's quite basic, but it's still fun.

[00:27:00]

and you can build it and code it yourself. And it's called a Mini.Mu.

BEN ARTHUR: Yeah, I can't wait to see a ballet.

IMOGEN HEAP: Yeah. Your-your girl--

BEN ARTHUR: Well, I do have a youngster who might be interested in such.

IMOGEN HEAP: Yeah. Yeah, yeah.

BEN ARTHUR: But I can't wait to see a ballet, where the--where the dancers become the musicians.

IMOGEN HEAP: Yeah. Yeah.

BEN ARTHUR: So, whoever out there is doing that should do that.

IMOGEN HEAP: Yeah.

BEN ARTHUR: 'Cause it seems built for hybrid art.

IMOGEN HEAP: Yeah. It's-it's--you kind of--because you use your whole body to move your hand. You know, you don't just be like--you're like, duh, duh, duh. Even though you might be just going like that, you kind of want to go like that. You know. 'Cause it's like, I'm catching the sound. So, for the dancers--you know, they use their whole bodies. And you could--I mean, for fine detailed sounds, it's--they're great. But you could equally use an infrared camera, you know, or a kind of an array, to have a play space for some dancers. But combined with the gloves, you could get a lot more detailed and, you know, really amazing timing, like, you don't notice any latency at all.

[00:28:00]

BEN ARTHUR: Neat.

IMOGEN HEAP: Yeah. It's really fun.

BEN ARTHUR: Well, speaking of broad shifts in technology, we wanted to talk about Creative Passport.

IMOGEN HEAP: Yeah.

BEN ARTHUR: And we have a brief snippet of a video. You can see the longer full video on the YouTube. But for the moment, we'll show you this.

IMOGEN HEAP: The Creative Passport, and identity in searchable database for music makers to upload and share their information. Everything you'd like to share about you as a music maker, verified and in one place. Map and empower the global music maker community, as you list and link to your music and sound contributions, add unique descriptive data to your profile, and individual works to increase discoverability, for brand partnerships, playlisting, syncs, collaborations, live, or session bookings. At the same time, enabling music services to innovate, benefitting both us and our audiences.

[00:28:58]

This is an identity that belongs to and works for you, while also connecting all of your external existing IDs in one place. Imagine uploading your biography only once, but updating simultaneously across all services. Sounds good? Who's going to build it? You and I. We all are, step by step, with music makers and services, in forums we host all over the world, on our ongoing music and tech tour. Interested? Show your support. Sign up, keep up-to-date with the latest developments, and get involved, at [myceliaformusic.org](http://myceliaformusic.org). Let's bring this necessary missing layer, a music maker database, to life, for the health of our global music ecosystem. 'Cause let's face it, nobody else can do it for us. The Creative Passport--by music makers, for everyone. There we go. So, join up. No, we don't really have anything at the moment.

[00:29:55]

This is more, like, a kind of call to action for musicians to think about their identity, think about what that means, think about ownership of data, about getting organized, really, about having a place in the world where you can say, "That is the digital me. That's where I, as a creative self, exist." Because, you know, it's great to have all these different services, and they have their own identities for you, or you might be--you know, you have a profile on Twitter, and la, la, la, and all these other things. but where are you? Like, I feel very torn apart. I feel very, like, a big massive tentacle in the oceans, just--I don't have a center. Like, you're speaking to my center, as a physical thing. But I don't have that--and more and more, as we kind of progress into, you know, developments in AI and discoverability, incubation--and I really believe that the future of work is gonna be around our unique selling points, around how we-how we express who we are in the digital space, so that ourselves are working 24/7 on our behalf, in our words, perhaps, in our-in our--with our ethos, interfacing with the world.

[00:31:04]

And so when it comes down to music, how do we present ourselves? We have a major problem in the music industry, whereby, you know, the commercial industry didn't adopt the technology of mp3, and didn't see Napster as this incredible, amazing opportunity to, like, go, "Wow, this is life-changing for musicians and the industry. Let's get on this and make it something really great." And instead, they kind of went, "Let's sweep it under the carpet and put people in jail." And really, just, people wanted to share music that they loved. And so what happened was that you had a huge disassociation from the music and the people that made it. Then it just never managed to catch up. And the music industry has been trying to catch up. And they're basically firefighting every day, as people try to innovate on this very crooked, kind of heavy, clunky industry.

[00:31:57]

So there's, like, thousands of services, and I've spoken to hundreds of them, who want to build new services on--you know, using existing music. But to get--to reach that point where they have the permission to do that, to license the music, it's just not viable. They have to raise so much money with VC that it then only lives little, tiny scraps for the musicians in the end, if any. And it's a very lengthy process. And I just feel, more than ever, we have an opportunity, with new technologies, where we could create an open database of works that the whole world come around and create this kind of Alexandria, this library of content, whereby all of the music services, the labels, the publishers, the collection societies, who all have their own databases at the moment, costing them huge amounts of money, that they have to keep, you know, updated and verified and all that stuff--and they're all incomplete, and they all compete with one another.

BEN ARTHUR: Right.

IMOGEN HEAP: But if that was just--just get rid of that. We don't need to have multiple versions of the same thing and all slightly different and all slightly bad.

[00:33:02]

Let's just have--let's share into a space and contribute to that--that, you know, alive kind of world of music and data, and augment what's already there into something that can be tuned into by all the services, so they don't have to have that weight on their back, basically.

BEN ARTHUR: Right. So, speaking of that, you say, on Mycelia, that you see this as a potential portal for income. Can you talk about how blockchain relates to Creative Passport, or doesn't?

IMOGEN HEAP: Yeah. Sure. So, for me, you know, I've been in the music 23 years. It's very, very hard to know where your money is at any one time. We spent about a year trying to research just the income for one song. Just one song. And it's taken, like, a team of seven students, on and off, for a year, just to try to get to the bottom of what--where--where does it come from? What is that radio station?

[00:34:00]

What is that thing over there? Why does that not match up with that? And that's for me, with a team of people, going into the offices of the PRS and the collection societies. "Could you explain this? I don't really understand that." And we're still, like, only 5 percent there. So, it's an insane amount of, you know, complication for--which comes from, you know, the physical--you know, the old day, 100 years ago, you know, "How do we pay a publisher when something gets played on the radio?" And it's much simpler. So, the Creative Passport is really just about us putting our flag in the sand, musicians at the moment verifying each other through peer-to-peer verification. Like, we have a QR code. You just shine your camera on someone else's QR code and you go, "Okay, I verify who you are." And that is a thing that then creates a trust network around all the music makers across the planet in time. But we're not ready for that yet. We're just doing a very, kind of--we're mainly just going around the world, doing this tour, where I do concerts, I do workshops, I show off my gloves, I give--I do conferences, I do Q&A, I do whatever I can.

[00:35:06]

And we meet with music makers and services, and we talk about this future ecosystem. Because essentially, if we had, like, this incredibly rich data source linked to the actual content, linking out to all of the musicians who contribute to those works, then you can imagine all these amazing possibilities of discoveries and connections and offerings of jobs and new--you know, somebody wants to book somebody a private concert because they saw--they heard something in Spotify or Google or whatever, YouTube, and they went, "Oh, right, I really, really like that person's work. I'm gonna-I'm gonna try and book her." And maybe you do it right from the song, and you--or you say, "I love that trumpet player. I want to-I want to put that trumpet player--I want to put that trumpet in my film." And then they, like, book the trumpet player. But if we don't have a way to kind of go, "Here I am, and here are my songs," we don't have anything to build from.

[00:36:00]

We don't have a home.

BEN ARTHUR: Imagine you were at a--like, a large, influential tech company, talking to some very handsome and smart employees. How would you convince them to support you, and how could they support Creative Passport?

IMOGEN HEAP: Yeah. That's a good question. I think, we're not at--we're not ready for, like, big integration yet. We need to--we need to go kind of and create a groundswell among musicians. So they--they kind of own this space. 'Cause this is an autonomous thing we need to do. We need to convince music makers to take charge of their data, and to really, like, take their digital self seriously. So, at the moment, we are talking with tons of services. We're, you know--we might have four or five, a little handful, by April or May, when we come on the tour around here and we do more--so, to bring on more music makers. But, you know, we're not ready for that, like--it's not, like, Myspace or LinkedIn.

[00:37:00]

It's not like--it's not ready. It's just--imagine if you owned this. Imagine if you owned your identity, and what could--what could grow from that. Because then if we reach, like, 1,000 or 10,000, what's gonna be the tipping point for someone--you know, a company--an organization like Google to go, "We're gonna integrate, you know, our YouTube source with the Creative Passport." And that would be mega. But we're not ready for that yet, 'cause it's not--you don't have an incentive enough just yet, because we need to have--you know, we would need to have hundreds of thousands before it's of interest.

BEN ARTHUR: Right. So-so, you need musicians, maybe some in the audience, and other people out there in the YouTube audience, to come and sort of be a part of the community and help-help shape that.

IMOGEN HEAP: Yeah.

BEN ARTHUR: So that you become a large enough organization so that you can--yeah, pull some weight.

IMOGEN HEAP: Yeah.

BEN ARTHUR: Fascinating.

IMOGEN HEAP: Because--yeah. We--you know, we have representatives on our behalf, like labels and publishers and collection societies. But a lot of us don't.

[00:37:58]

Like, so many musicians don't have any way to get even in to any industry, 'cause they might be in Sudan or they might be in--who knows where they might be. They have no way to get on to the ladder. And if we can try and, you know, reach our handshake across--or our Mexican wave across the world, or whatever, to these musicians, then we're bringing them in to this truly global community---music community. That then, hopefully, all the services will start to then go, "Well that's actually really interesting, 'cause not we're reaching into this market and this market and this"--you know, and that's their incentive. But for us, it's--you know, it's how can we create a beautiful, healthy, living, kind of ecosystem from which these services can grow on, kind of on our--that makes sense for us. And then with truly sustainable--and then we can, you know, have, you know, centuries of wonderful, beautiful music, 'cause the musicians are supported.

BEN ARTHUR: I think we have a question for you.

PERSON: I think Mycelia is very interesting. I'm kind of curious.

[00:38:59]

So, you obviously need the three majors to be involved.

IMOGEN HEAP: Not yet.

BEN ARTHUR: You don't think so?

IMOGEN HEAP: No, I don't think we need them. No.

BEN ARTHUR: How does Merlin feel about it?

IMOGEN HEAP: The thing is, it's like--it's outside of licensing. This is about your, like, personal identity. It's my skillsets, it's my projects, it's my interests, it's my philosophy, it's my biography. It's things that aren't actually, at this moment, to do with my songs. They would link to a songs database, which Mycelia isn't. Mycelia is, like, the vision, the blue sky, imagination of the future. But the Creative Passport is a thing. It's like an app, a trust anchor for other services to be able to go, "Oh yeah, that is Imogen Heap, 'cause she's got a Creative Passport, and she's been verified by her peers, blah, blah, blah." So, if you wanted to, like, go and book a gig, some promoter could pretty much trust you, because that is--you've been verified by your peers and you have a good track record and that kind of thing.

[00:39:57]

So, at the moment, where the record--like, the--kind of the majors are gonna get interested is when this database does start to emerge. Which, it is starting to emerge in places like Sweden, there's one, and Malta, there's one. And actually here, there's gonna be a new one around the Modern Modernization Act, around the mechanicals, how they're gonna be paid to the writers. And that's something that just passed a few months ago in Congress. So they have to build that in the next two years. And I'm going, "Hello, IBM and Berklee. How are you gonna do that without the music makers? How are you gonna build that without us being able to add, and add to the content that you have around your publishers?" 'Cause that's how they're gonna build it. They're gonna combine the big publishers together and create another database. But it's only gonna be as good as their combined databases. And it won't--the

problem with that is that, you know, whether they're guilty of it or not--is that the money that comes in from the services will then go to this body.

[00:40:57]

And then the money that--it can't be distributed, because they don't know the writers, 'cause they're too small fry, and it's too much effort for them to do it--will just go back to the writers that they do have--they do look after. After four years, or whatever the deal is--it's probably something like that--it will get re-distributed back to the original writers that they look after. So, the other writers are all around the world, and all the smaller writers, won't get that money. And it's tiny amounts to these other artists, but to them, it could be, like, 50 quid or 100 quid or 1,000 quid. So-so, when they create that, we want the Creative Passport to be able to enable individual musicians to be able to author into and claim, you know--a way to kind of point to, "This is how to pay me," or "This is my collection society," or "This is actually me, this missing bit here," so that we can tidy up and do the job for them, that they can't afford to do, 'cause it's tiny amounts. So, the majors--like, the record side of things--'cause they don't have, you know, ISRC and ISWC, two codes that you have, your recording and your publishing--

[00:42:02]

There is no shared database of that, which is crazy. And so if this does start to emerge, that may be where the majors start to pile in their recorded data. And that might start to flourish and become this big Alexandria. Who knows? If we can kind of make--if we can find a way in for the musicians, then it can--it can grow further. Otherwise, it will just become another kind of clearinghouse, kind of closed space, which will have all this money put into it by the--you know, public money. But it won't be further reaching. It will just be another closed database. And that'll be a shame.

BEN ARTHUR: So, we're running a little low on time. I'm sorry to interrupt.

IMOGEN HEAP: That didn't answer the question, did it? Kind of.

PERSON: Sort of. I mean, it's such a complicated space...

IMOGEN HEAP: It is complicated.

PERSON: That's it's kind of hard to--

IMOGEN HEAP: Which is why we need to simplify. And that's when they're gonna come on board, is when you're like--when you say, look, all that kind of accounting stuff that you do, and all that really annoying paperwork that you're just, like, "Oh, God, I wish I didn't have to do this"--when that disappears, because we have smart contracts and payments and, you know--

[00:43:02]

PERSON: What I'd say to you, though, is that that asymmetry of information is basically a competitive advantage for labels to be able to bargain with people like Spotify.

IMOGEN HEAP: Yeah. Yeah.

PERSON: And when you have 70 or 80 percent of Spotify's catalog coming from majors, it puts them in this position where they have to ingest majors' data.

IMOGEN HEAP: Yeah.

PERSON: And this is where I'm sort of, like, "Don't you need the majors on board?"

IMOGEN HEAP: Yeah. So, that's a good example. And the thing is is that you have--if you look at the long-term, the majors--you know, they might hold licenses for, I think it's a maximum of 35 years.

PERSON: I mean, 75--I mean, the Beatles' stuff is about to come out of licensing. It was from the '50s. So.

IMOGEN HEAP: Yeah. So-but it's like, if you think of all the new material, and most--the trend is, you know, big labels hold large amounts of existing work, and younger, you know, up and coming artists, or people like myself, own our own works. And we have small holdings around our own works.

[00:43:59]

So how can we make that really easy, so that people like Spotify can deal with us directly?

PERSON: So, it's a chicken and egg problem.

IMOGEN HEAP: It is. Yeah. And we need to be the chicken, or the egg, whichever one. But we need to get on with it. We need to make the first move, basically. Yeah.

PERSON: Thanks.

BEN ARTHUR: We have another question over here.

PERSON: Yeah. I have a completely different question. So, I assume, like, writing and forming, wearing the gloves, kind of causes you to make different creative decisions than you would if you were just using, like, a regular MIDI controller with, like, standard coders.

IMOGEN HEAP: Mm-hmm.

PERSON: Are there, like, other technologies that you think should be utilized more or really, like, aren't kind of getting the attention that they could, that could have that same potential to change the way that people either write and perform music or experience it?

IMOGEN HEAP: Thanks. Interesting question. I mean, how I write and perform music--the way--I really enjoy the kind of--the unknown. Like, "Oh, there's something over there I haven't tried yet."

[00:44:57]

Or, "There's an input there that I've never had to deal with," like audience heartbeat info, or something, or, like, I don't know, galvanic skin response or something. Like, what would I do, musically, if I knew the audience--actually, I'm trying to develop a thing. Like, it may never happen, 'cause lots of things don't happen. But it's just a simple--it's actually got a terrible name. It's called The Love Glove. I know. It's gonna be made out of shiny material. No. It's just a way that I thought would be nice to--for the audience to be able to have, like--they could show their love. Like, "I love this bit." Instead of, like, taking camera pictures or, like-or, like, clapping at the end, I could see, "Oh, somebody really likes that bit," you know, or "Oh, they really"--they've got a thing, and just like that little eye contact. And I think, when you get those kind of bits, you know, from the audience--

BEN ARTHUR: Isn't that called a lighter, though?



IMOGEN HEAP: Yeah, I suppose so. Yeah, I suppose that's true.

BEN ARTHUR: It's really only for the slow songs, though. I don't know why.

IMOGEN HEAP: Yeah. It might be something--I don't know. I was thinking about, like, then I could give back the love, and I could, like, kind of pump up the love, and then they could get more love in their hand.

[00:46:01]

And it would kind of die down if they use too much of it all the time, so it doesn't get too annoying. Anyway. I just-I just--yeah, it's true. They could just use a lighter. You just saved me, like, 10,000 pounds. I should bring you to my team.

BEN ARTHUR: I'll take a check or cash. Thank you so much for spending time with us. Thank you all for hanging out with us here at the Talks at Google. And thanks for the team for getting all this done. Lad, Imogen Heap.

PERSON: Thanks for listening. If you have any feedback about this or any other episode, we'd love to hear from you. You can visit [g.co/talksatgoogle/podcastfeedback](https://g.co/talksatgoogle/podcastfeedback) to leave your comments. To discover more unique and interesting content, you can always find us online at [youtube.com/talksatgoogle](https://youtube.com/talksatgoogle), or via our Twitter handle, @googletalks. Talk soon.