

How Free Will Probes Mind and Consciousness: Rodney Brooks

Source URL: <https://www.closetotruth.com/interviews/1898>



Transcript - Long

Robert Lawrence Kuhn:

Rod, free will is one of the most probative concepts to try to understand what human mentation and consciousness is all about. When you go all the way from a, free will doesn't exist, it's an illusion because the world is completely deterministic, to people who would say that there's radical free will, due to um, dualistic issues, who, who, very wide dispersion of opinions. What I want to try to get, is from your experience in working with artificial intelligence, and at the forefront of building, uh, robots that are, are, are seeking to approach human intelligence, what sense you have – what internal sense you have about free will. If you could project forward in your development, you've, and trend it forward. It, do you have a sense of what it would take for you to think a robot has free will?

Rodney Brooks:

Well, I think our robots have had free will.

Robert Lawrence Kuhn:

Oh, come on.

Rodney Brooks:

Yes.

Robert Lawrence Kuhn:

Oh, come on.

Rodney Brooks:

We –

Robert Lawrence Kuhn:

Well, how are you defining free will?

Rodney Brooks:

Well, one of the, one of the robots we built is a robot called Kismet which is a head with pink ears and, and eye, eyes that look at people. And we had well over a hundred-people come and talk to the robot. Uh and, interact with the robot. It's got an emotional model, I'll put that in scare, scare quotes for you. It's got an emotional model, it expresses emotions, it, it has a voice and it listens to the emotions in a person and can distinguish some basic emotions in the voice of a person.

Robert Lawrence Kuhn:

Okay.

Rodney Brooks:

It sees their eyes, sees their head motion, et cetera. And we had hundreds of people, or over a hundred people, we videotaped them, we scored the interactions, we had independent scorers looking at how things worked between them. And not once in looking at those video tapes did we know what was going to happen next between the robot and the person. And we didn't have a random number generator in the robot anyway, you know, randomly selecting them actually. It was completely deterministic, based on its current inputs, and it was having social interactions with people. Some people would talk to it for tens of minutes, discuss all sorts of events with it. Some would show the robot things, and it would look at them and, and make sounds, it didn't actually speak English, it had English names. But not once in looking at those video tapes did we know what was going to happen next, because it was a being that was interacting with the world. Now, where is that free will coming from? If it's totally deterministic – it was it embedding in the world, it was what the person was doing, what the, where the sun was outside and how the light was coming in and how that was affecting its vision. It was embedded in this complex world.

Robert Lawrence Kuhn:

Yeah, so, what seems to –

Rodney Brooks:

And this is like Simon's ant, you know, walking across the, the beach. It is the, it is the particles of sand which determine its path.

Robert Lawrence Kuhn:

Yeah, yeah. Well, what, what seems to be sounds so silly at first, actually is very instructive in, in perhaps reflecting on what our free will is. Because if indeed the, the physical worlds are close, closest, I mean, all the activities in our brain are a result of previous activities, then what's the difference between what's happening in our brains, in a very complex way, with what's happening in your robots in a, in a --?

Rodney Brooks:

Which, which is why I said it had free will, because that's my belief of what free will is.

Robert Lawrence Kuhn:

Right, so, if, if you're saying that to me seriously, not just to pull my chain here.

Rodney Brooks:

No, I am serious.

Robert Lawrence Kuhn:

But if you're serious, that means you have to believe uh, by force, in uh, in a, in a free will that is deterministic, so some people call that compatibilism, so you're compatible with a deterministic system that you can define as free will.

Rodney Brooks:

Yes.

Robert Lawrence Kuhn:

And so, therefore, the free will that we would have is not all that different. It's a, it's not a different in kinds, it's different in quantities to robots.

Rodney Brooks:

And, and, the, one of the reasons I'm sort of confident about it is you look at this robot and it looks to you like it has free will.

Robert Lawrence Kuhn:

And, but, but is, is that sufficient for it to have free will, that it looks that way? Because looking that way is, is a reaction in the person who's, who's apprehending it, I mean, that's not from the robot's perspective it has free will, it's, it's from a third person looking at it and maybe being fooled because of your mental models of what things look like and maybe if you made it look like a, a train, it, people wouldn't, wouldn't look like free will.

Rodney Brooks:

Ah. Here's, well, actually here's a, here's another example which is even simpler which surprised me a lot. Early on, when we were building very simple robots and they were just able to move around, I noticed the following. If you had a robot that, that, you know, with wheels and it went up the wall and hit it and backed away and then it did the same thing, which would happen coz we had bugs in our program. And it did it slowly, people would say, what is wrong with that robot? If it was doing it fast, they'd say, why is it angry? And so, we explain the world based on these visible actions.

Robert Lawrence Kuhn:

Right, right, right.

Rodney Brooks:

I think we do that with each other.

Robert Lawrence Kuhn:

Yeah.

Rodney Brooks:

And, and then we like to think, oh, but that's just what we do, there's a reality where we have free will and we're conscious and, ah, we're forgetting, we're getting too excited about ourselves.

Robert Lawrence Kuhn:

Yeah, well, I, look, it's a fundamental point, uh, that maybe is brought very powerfully when you see it in the robot. I mean, if the robot really looks like it's having free will, you know, it's very simple, you know, what we're doing in, in our lives, you know, just could be a grand, uh, expression of that, writ large, but at the same principle, in, in fact it's a, it's a program that, that you know, may have been programmed by evolution or however –

Rodney Brooks:

We're, we're all too arrogant to accept that as the, as the truth.