

Can AI Mimic Spontaneous Jazz and the Blues?

<https://mindmatters.ai/podcast/ep251>

Robert J Marks:

Greetings, and welcome to Mind Matters News. I'm your not fake host, Robert J. Marks. I am not a deep fake robot imitating somebody's voice. Deep fakes are being used in Hollywood. Fake news has been around for a long time. In this sense, fakes news is old news, but generative AI has added a new strain of authenticity to fake news. ChatGPT is an example. ChatGPT and similar large language models are not slaves to truth. They lie because they don't know they lie. They don't understand what they are doing. AI always needs a babysitter to force it to behave.

Another disruptive type of generative AI is deep fake videos. Now, deep fake videos are neither good nor bad. AI is a tool and, like any other tool, can be used for good or it can be used for evil. A recent evil use of a deep fake video was aired in Russia after hackers got control of a television network in Russia's heartland. They had control for about a half hour. They played a deep fake video. The deep fake video had to be chilling to those watching and didn't know it was fake because it looked so real.

Vladimir Putin in the deep fake video declared martial law and ordered military mobilization. The deep fake Putin said, "All of the power of the country needed to be harnessed to defeat a dangerous and insidious enemy that was invading Russia." Not only was the video fake, but Putin's voice was faked. Generative AI also has the ability to mimic voices. Here's another use; deep fake video and voices are disrupting Hollywood. Whether it's good or bad depends on who you ask. And that's the topic today addressed by our guest, James Hirsén. James Hirsén is a New York Times bestselling author, international business attorney, news analyst, cultural commentator, and social media scholar. He is a lifetime member of the National Academy of Recording Artists and Sciences, and an active member of SAG-AFTRA.

Hirsén, who served for many years as a law professor at Trinity Law School and is a journalism professor at Biola University, is a member of the California and the Washington D.C. Bar Association and has the distinction of having been admitted to the U.S. Supreme Court. That's pretty cool. He is also a columnist for Newsmax at newsmax.com. Hirsén has also worked as a professional musician. James, welcome.

James Hirsén:

Hey, great to be with you. It's amazing to be with someone like you that specializes in these terribly important issues of where technology can take us.

Robert J Marks:

Well, this is wonderful. Let's start out with something that's off-topic a little bit. You are a professional musician. I looked on your webpage, jameshirsén.com, and it says you're a professional musician. It looks like you were playing the harmonica. What do you do as a musician?

James Hirsén:

Well, I made a living as a musician for many years. I'm originally from Chicago. I played the recording studios in Chicago, and the kind of records they were making were called rhythm and blues, R&B, and I ended up playing with amazing African-American artists, people like Natalie Cole and The Impressions, and Jerry Butler and I was a road musician playing with the Temptations for many years...

Robert J Marks:

Oh, wow.

James Hirsen:

... And so you could say I actually have authentic soul. Because they didn't have affirmative action in those days, especially for white musicians, and so I had to be actually funky. So my instruments are keyboards, primarily piano, and harmonica. I'm from Chicago, so I play blues harmonica, and I play chromatic harmonica because I love jazz and it's very difficult to play jazz on a diatonic harmonica, but I still play and I almost exclusively play religious events and worship music. I played in a band at the Saddleback Church, Rick Warren's church, for many years, and I am a Catholic Christian, and I play for the University of California Irvine Catholic Community. I play in their masses on a regular basis. And I do play harmonica, sacretizing harmonica, which of course, God can sacretize anything. I always have to remind myself when I hear Christian rap that God can sacretize anything because I'm not really a rap guy.

Robert J Marks:

We had talked about oxymorons before. My brother maintains that rap music is also an oxymoron, so they don't come together.

James Hirsen:

Well, I guess it depends on who's doing it.

Robert J Marks:

It does.

James Hirsen:

It is a new form.

Robert J Marks:

So you played with The Temptations. Oh my goodness, that was Motown. I really like the early blues singers; Howling Wolf and Muddy Waters and Robert Johnson. They just had really lots of soul. They were really, really fun to listen to. And they were, of course, the genesis for Motown and some of that later stuff.

James Hirsen:

Absolutely, absolutely. I guess we always say there's a silver lining in every cloud. The silver lining of the difficult and the suffering of the African American people is that they produced the original blues that you talk about, Howling Wolf, et cetera. I grew up in Chicago. I thought every city had blues, places like that. But all of pop music, country music, jazz, all of it arose because of that blend of European music and suffering people and European instruments and suffering people that resulted in blues. It's really amazing.

Robert J Marks:

And I was amazed in the early days of pop, such as... Oh, let's see; Eric Clapton, Cream and The Rolling Stones, that they covered a lot of those early music. They tried to reproduce it with a white format. Yeah, really interesting stuff.

James Hirsen:

Especially British bands. The Stones are known for doing that. It's amazing. Yeah, the original songs written by either the artists in the Deep South or the ones who came to Chicago, like Little Walter and Muddy Waters. It's amazing. I mean, they're still being covered. They're still being played, and yeah, it's a big part of musical history and it's wonderful.

Robert J Marks:

That is great. Well, let's get to the topic. That was a little rabbit trail we went down, which was a lot of fun. By the way, what did you think of the harmonica playing of people like the early Rolling Stones and the Beatles? Was that good or was that pretty amateurish?

James Hirsen:

From the point of view of consummate blues artists was, I wouldn't call it amateurish, but it was basic. But they picked up the harmonica, they listened, they didn't have anyone to teach them, but it was a great use of the instrument. I mean, particularly, they had their own quality of harmonica and recording it and everything in the British Invasion records. And we could segue from this subject, we're talking about music, but right now as we speak, film scores are being created for television and movies, feature films, using AI. It's commonplace.

And of course the pop music is dominated by music that's created by what are called digital audio workstations, which are developing AI plugins they call them, which is really forms of software that go into other software. And so AI creating music. Oh, and in the news, you're talking about the Beatles, there is a Beatles album coming out...

Robert J Marks:

I heard about that.

James Hirsen:

... Paul McCartney has blessed it as AI generated music, and we'll see how that goes. But we know the AI has tremendous abilities to mimic if you give it the right training data. So I suspect it's going to sound very Beatle-esque. We've heard a lot of tribute bands that can do it, so I'm sure AI can do it. But I challenge AI to develop blues or jazz that's authentic. Those things have a humanity in them, but AI's done pretty good with poetry and with EDM music, so it's just a matter of time. They'll probably be able to emulate Muddy Waters.

Robert J Marks:

Emulate, but do the creativity. A lot of the appreciation of music, I believe, and this is especially in true with jazz, relates to the artist. There's a communication between the artist and the listener. And if you remove the artist and just have the instrument in between, it doesn't mean as much. There isn't authenticity. And I think, for example, in art, if you take the Mona Lisa and you make an exact duplicate of it, and on the back of the Mona Lisa, you put this is a duplicate, and then you have the original Mona Lisa and you put the original on the back and they're identical copies and you put them up for auction at Sotheby's, the original is going to demand a higher price because there is that relationship with DaVinci. And I think appreciation with music is similar, that there is a connection with the artist, with the human element, that is missing in artificial intelligence.

James Hirschen:

Oh, absolutely. And I've experienced it many, many times, but especially in intimate gatherings, when a musician is playing jazz or blues in a club and there's a group of people interacting that, I believe, cannot be emulated by any AI that I've experienced. But on record, I think they can do it. So music's unique in this sense. If jazz is being performed it's being performed in real time at the moment, and it's something where there is a spontaneity based on the mood that's in the room, and obviously a record isn't going to do that. Live records do it to an extent because you join in the room at the time. But there's something magic that happens in performance art that is improvised and that interacts with an audience that is distinctly human.

Robert J Marks:

I wish I remembered the details, but there was this one music company that released an AI rapper, and they had an avatar, a picture of him, and the guy folded. I never listened to his music, but I imagine one of the contributing factors was that this wasn't human, that everybody knew it was a computer. So that's interesting in itself. Now, about the music which is being composed for movies today. I guess there's a couple of different distinctions one can make. One is that the artificial intelligence is being used as a tool in a design procedure where the user gives certain prompts and get something and says, "Yeah, I like that," or, "I don't like that. I'm going to change it a little bit." And they use it in an iterative design process, compositional.

I don't have a problem with that, but I think that if you use just the regular AI in the sense of no human interaction with it, you just train an AI and have the AI spit out whatever it spits out, that would be cheating and I think would have some of the problems that we talked about. One of the things that is happening right now is that there's a lot of artists, especially for example, images. Getty Images for example, is taking some of these AI companies to court saying that this AI companies were using their images in their artificial intelligence for their generative image generation. And they said, "This is copyright infringement. They used millions of our pictures, they didn't ask us permission. This is blatant copyright infringement." And that's going to be interesting to see how this plays out in court. And I'm wondering about the compositions they're using in movies, whether they're actually mixing a bunch of classical things together or pop things together, and whether that is going to be subject to these lawsuits eventually.

Let's go ahead and continue your conversation about AI and some of the things they could do. I'm interested in your point of view. See, I maintain that in the design of anything that what that thing does is dependent on its complexity. How much stuff it can do is dependent on its complexity. The more complex things are, the more contingencies one has. If you have something very simple like a pencil or something, there's very few things that can go wrong. It turns out that AI, like GPT-3, which is the big brother of ChatGPT, has 175,000 moving parts. And so what it can do is so amazing and so diverse that everything can't be anticipated. And what ChatGPT does is it tries to put bandaids on all of these things that go bad. And as the complexity increases linearly, the number of unexpected consequences goes up exponentially.

And they're trying to put bandaids on this. If you go to ChatGPT and you say, "Well, you're wrong in your response," it'll go back and it'll fix it. And it doesn't fix it itself, there's a human in the loop that fixes it, puts a little piece of software on the ChatGPT so it doesn't repeat the same mistake again. But it's like healing a million cuts with just a few hundred bandaids. You aren't able to control all of that. So in the tuning of this artificial intelligence, they're trying to get rid of this hallucination and such. But I don't know if it'll ever go away. I think that there's just too many ways that it can go wrong. What do you think?

James Hirsen:

Oh, no, I agree with you, especially the notion as things become more complex. It's like a Murphy's Law thing, that more can go wrong and you need to fix more, but there's so much. First of all, the thing about AI is that it has achieved capabilities faster than anyone expected it. The ChatGPT's, the best known language based AI, has been able to improve its abilities in what's roughly a year, in ways that the original programmers who put in the training data did not expect.

Robert J Marks:

Sure, yes.

James Hirsen:

I expect that trend to continue. And so for example, just in the academic world, as you know there are tools for detecting whether a student is using AI for all or part of their assignments, written assignments or even scholarly papers, et cetera, those tools are going to be ineffective. Because this is the genesis of language-based AI and its abilities, and it's getting better constantly. On its own in many cases. Because it's machine learning, it's developing. In essence, it's developing itself. And so there's no question that scholarly dissertations and papers will be able to be produced with footnotes, with human editing, if you will, and detecting whether the hallucination is happening, they're going to be able to produce things that are not detectable.

Elon Musk has said it this way. He said, "Look, you're talking about super intelligence. And I paraphrase, okay? And he says, "Well, if you think of the smartest human being you can think of and multiply it times a hundred, when you have that kind of ability, and maybe not emotional intelligence, maybe just pure intellectual calculation, interpretation of data, things that the human brain has done that this is emulating, but it's faster. It's using server farms, and it's at this level that we don't comprehend. When that kind of intellect is applied to all kinds of human activities, there's a unknown result, unknown outcome. And when it's applied to military or when it's applied to persuasion, marketing, what is the result?"

This is why we have to have a pause, but it's all the genie's out of the bottle, I know, but have guardrails because it's moving so fast. And the general AI, as opposed to specialized AI, is being encouraged by its owners to go where no machine has ever gone before. So there's a dark side to it. People say, "Well, there's AI experts." Well, AI experts today are not AI experts in six months, unless they're really staying on top of the very latest capabilities of what these programs are doing.

And of course, we're only seeing the open source AI. We're not seeing the private AI that's being developed by governments around the world, by businesses. We're not seeing those manifestations. So we really don't even have a complete picture of the data. Here's an interesting point. This is mind-boggling to think about, but it's true; AI can develop, we know, still image photographs without a camera, without a subject, without a person. Even prompting just with text AI will come up with images, using its training data, using the data that it has access to. And we know that it can do deep fakes, and you're so wonderful to have a disclaimer at the beginning of your show that they know that you're not deep fake or do they? But in addition...

Robert J Marks:

How do you know?

James Hirsen:

... They can take prompts and develop video. And people in executive positions in Hollywood know this and are talking about it. I think the creative talent, they haven't put their arms around it yet. But I believe, and I think there are other people that believe this, futurists, that in a matter of years, we will see the ability for someone to prompt AI with certain instructions, and the AI will create a feature film. It will look like a feature film. It will have been done with no cameras, no stars, no directors, no writers.

Robert J Marks:

Well, I tell you what, I'd like to push back on a few of the things that you say. Sam Altman, who was the CEO of OpenAI, came out and in a candid moment, he said that we're going to have to look at models other than large language models for the future. Which means that maybe this large language models like ChatGPT and GPT-4 and Google Language Bard and some of these other ones, have reached their pinnacle of use. And he said, "We're going to have to look somewhere else." And one of the reasons is because exponential increases are never sustainable. You always see this exponential curve and this exponential curve begins to increase, and there's lots of temptation to say that this exponential curve is going to increase and keep on increasing, but we don't know where it's going to level out.

It's like the Covid virus. Initially, the Covid cases increased exponentially, but everybody talked about leveling the curve. Well, it turns out that this has been the case in the history of AI, that new technology has been released, there has been lots of speculation, but as the technology has been developed, they recognize the limitations. And after the AI has been vetted a lot. So I think this is where we're going. Is it incredible? Yeah. Is it disruptive? Oh, yeah. Does it do things which are mind-blowing? Yeah, absolutely. But I think that this idea of AI taking over and becoming original, I maintain that AI doesn't understand what it does. It isn't creative, and it will never be sentient.

This is interesting; the Discovery Institute, one of the co-discoverers, George Gilder said, "Elon Musk is an incredible entrepreneur, but he's a retarded thinker." So I would maintain that some of the things that he says needs to be taken with a grain of salt. For example, he believes that we're all simulations, that we ourselves are simulations of some higher intelligence or something like that. So yeah, he does have these strange ideas.

James Hirschen:

Yeah, I agree with you there. It depends on the definition of sentient, but...

Robert J Marks:

It does.

James Hirschen:

... Because I am a theist and because I believe in God and purpose and in origin, and I believe in the scriptures, and I believe in Christ, I have obviously a spiritual intuitive feeling that of course, that consciousness is spiritual, and that machine will never achieve consciousness unless it was God ordained that that happened. But-

Robert J Marks:

If I was in church, James, I would say amen. We've been talking to James Hirschen about the use of deep fakes in, well, mostly in music. To find out more about James, go to his website jameshirschen.com. That's James H-I-R-S-E-N .com, jameshirschen.com. So until next time on Mind Matters News, be of good cheer.

Announcer:

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