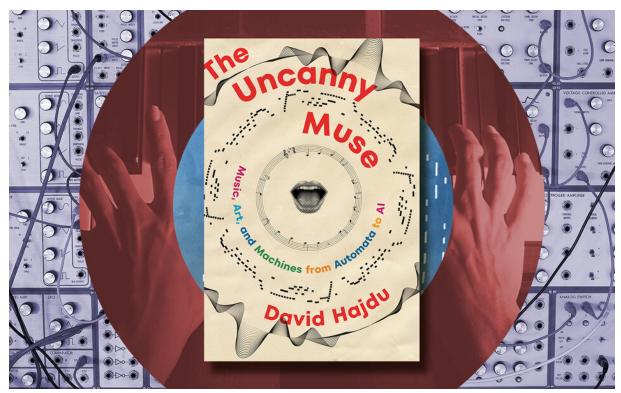
### **Don't Rage Against the Machine**

By Eric Liebetrau | Mar. 19, 2025



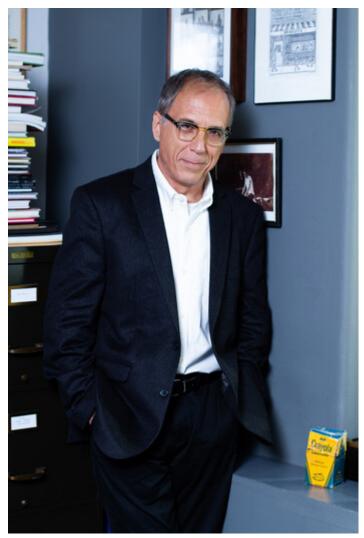
Columbia Magazine

In his latest book, *The Uncanny Muse*, Columbia Journalism School professor David Hajdu examines the relationship between music, art, and machines, telling a rich story of a collaboration that reaches back centuries and is flourishing in the age of artificial intelligence.

#### This is an ambitious topic. Tell me about your methodology.

As a journalist interested in history and as a historian who employs the tools of journalism, I'm used to casting a wide net, typically using only a small portion of

what I find. For this book, I was not interested in being encyclopedic or all-inclusive. This was an intellectual inquiry driven by my curiosity about a handful of questions. I just trusted my nose and where it took me.



David Hajdu

You write about the ways in which musicians have experimented with using machines going back to the "automata" of the 1880s, which produced music and drawings. One of my favorite sections of the book is about the player piano, which came into widespread use in the early twentieth century. Why did this particular machine capture your interest?

There are dimensions of the player piano that have been lost to history, and in some cases, haven't been fully teased out. One is how it framed our conception of ragtime, a style that brought Black music into the homes of people of all races and ethnicities. The character of that machine framed the way that ragtime was

delivered and then altered the way it was created and constructed.

Another surprise to me was that player-piano rolls were edited to sound like more than one person was playing. The composer could, for example, create rolls that would be impossible for a single musician to play. There was a kind of protosampling going on, where they would reference other existing works. Often, classical pieces and melodies could be layered on top of each other.

# That kind of sampling became a hallmark of the synthesizer, invented more than a half-century later, which you argue transformed rock music.

The synthesizer proved to be capable of not just synthesizing — simulating, replicating, and imitating familiar sounds from nature and other instruments — but also producing new sounds unlike anything else we had heard. One of the main points of the book is that while we like to think of art as the exclusive province of humankind, we have always used machines as not just tools, but as something close to collaborators. Sometimes, the machine is doing as much as we are. And sometimes, the machine is doing more than we are — for example, with techno and house music.

Synthesized music didn't just revolutionize rock music. It's all around us now, whether on the radio or used as the soundtrack for a film or streaming show. Today, for example, very few projects use orchestras to create scores. The soundtracks are electronic tones, abstract noises, and effects — synthetic concoctions, barely music at all.

# Can you elaborate on your point about techno and house music? How is the machine doing more than humans?

House music is music that is stripped down to its pure mechanical essence, with most of what we consider musicality stripped away: the chord changes are removed and the melody is reduced to just a couple of notes or tones. Techno, with its throbbing, incessant mechanical beat, literally sounds like the pounding of a machine. Detractors will claim that it's too mechanical and not really music. However, we have to judge any particular kind of art on its own terms, and there are circumstances when to be mechanical or to sound like a machine is very powerful.

# Many observers consider machine-made music and the use of AI as threats to the world of art. Do you agree?

I don't think that computational creativity or AI art will threaten human creativity. I think human beings will always create. Many people predicted the end of art when photography was invented, claiming that the camera would replace the artist. But the camera replaces only some functions of some artists. AI is different from the camera, and it represents machines that have a kind of agency and the ability to create on their own. Still, I don't see why we should be afraid of AI replacing art. I'm confident that we will continue to create art that expresses our human experience, which is something computers can't know.

There's a scholar in the UK named Simon Colton who is working with a concept called the "machine condition." He's developing algorithms that will enable machines to express in art what it means to be a machine. I think that's what machines should be expressing. Perhaps the results would freak me out and maybe terrify me, but that's great. That's a function of art.

We have to remember that every new phase of art is designed to do something new and to alienate advocates of earlier aesthetics. Art is always in a dialogue with the past, and most new innovations emerge as direct critiques of past work. So, machine art will not just be different from what we do as human artists; it could also offer critiques of what we do as human artists, which is a wild idea.



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