

# INFINITE VARIETY

DAVID EM FINDS ENDLESS  
POSSIBILITIES JODY ZELLEN

**Digital art** pioneer David Em, whose work has been published and exhibited internationally, was the first to make images with pixels at the Xerox Palo Alto Research Center in 1975. He then went on to build articulated 3D creatures with mainframes at the company Information International Incorporated in 1976. As an Artist-in-Residence at NASA's Jet Propulsion Laboratory from 1976 to 1988, he became the first artist to construct navigable virtual worlds, following that with another Artist-in-Residence at the California Institute of Technology from 1985 to 1988. Em's recent creations engage with the myriad possibilities of AI. We first spoke in June 2023 about his history and relationship to technology. Inevitably, we arrived at AI and his recent forays into working with it. We continued the discussion in early January 2024.

**JODY ZELLEN:** *Tell us a little about your involvement with AI.*

**DAVID EM:** The AI experience for me has been very much like working with a writing partner; I'm putting stuff out there, the system is responding to it, and the system does unexpected things I never would've come up with, just like when you're working with someone in a creative way. And it's changing things perspective-wise in any number of interesting ways. One of which is the way I look—not at the pictures—but at the process of looking at the pictures.

***How is working with AI and the incredible number of “images” generated? Part of the art making process becomes about selection.***

With AI, I'm making more and more images I consider “not bad.” Images come quickly using AI—in literally a minute I'll make a half-dozen variations on an interesting idea. At the end of a night, I'll have 200 to 300 pictures to assess. The curating now becomes as important as the actual act of creation. The pacing of how I look at the pictures has changed as a result of that.

***Could you share the process of creating your 2024 New Year's card, as well as the surprises the AI generated from the elements you fed it?***

One subject I work with is fluid dynamics. By the time I generated the New Year's card, I had a body of work with lizard people doing different things. I also had images of oceans and waves, so I put them together. I wanted the image to be celebratory, so I had them drinking cham-



pagne out of flutes. I probably made 40 images, of which I selected maybe number 25. The process is iterative and one thing leads to another; then it is about choice. But as you can see, the AI sometimes makes mistakes. “Happy” is spelled H-A-P-Y. I thought that was cool, but that isn’t what was supposed to happen. That was the AI. I’ve always loved accidents in art.

For another series, I began with jaguars. I managed against the AI’s wishes to get the jaguars involved in a battle against each other. We haven’t gotten into that, but if you want to say what are the main things to talk about with AI right now, it’s that this is not an art tool. This is an interesting experiment because it will not allow me —without fooling it— to have anything to do with violence or nudity or affection. Those are off the table. Two of the artworks in museums and galleries that you see now can’t be created with the major AIs. They just won’t let you do that.

Getting back to my jaguar picture, there are Mayan-looking temples in the jungle with a body of water between them, and coming out of the body of water is this crocodile-snake thing. I had asked the AI to put a couple of crocodiles in the scene, but I hadn’t asked it for the crocodile-snake combination. The AI created this surrealist creature. I zeroed right in on that. Now I’m going down a path that was not predictable. That led me to make a series of pictures based on creatures that are mashes of other beings.

AI is the tool I always wanted. Whether you’re doing things that are generative or that are more design-oriented, it’s work. To be able to say, “Make this happen, make that happen,” is very attractive to me. With the AI, I’m finding I can take still imagery to a whole new level and that is very satisfying. It’s basically infinite. There’s no end to how many things you can do. ■

*Balam Wars, 2023. Courtesy of the artist.*