



# Different Wavelength

## Axle Contemporary's new exhibit uses brainwaves to alter art

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By [Liz Brindley](#)

What if your thoughts had the power to change a work of art? At [Axle Contemporary's](#) upcoming exhibition, *Brain Waves*, they do. It's an interactive visual experience that shifts based on the movement of currents emanating from our own minds. Embudo artist Shel Neymark teamed up with students from Española's Northern New Mexico College and Steve Cox, assistant professor of engineering, to make this project come to life.

SFR picked Neymark's brain (heh, get it?) to learn more about this creative experiment:

### **SFR: What inspired *Brain Waves*?**

**Shel Neymark:** I actually had a dream four or five years ago about a fountain with drops of water falling on a really shimmery surface. I'd never done a piece that was affected by a dream before, but the image got me thinking about the project. I've also read a lot about the brain over the last 15 years and how you can exert physical control over something with your own brainwaves. It is just so interesting and so complex. The more we know, the more questions we have.

### **Why waves?**

I love looking at water. I paddle across the river every time I leave my property, so I'm always staring at the waves. I also have a tank outside of my bathroom where water drips from the roof, and I stare at the concentric circles this creates. I think it's one of the most beautiful things. Everything is waves: radio waves, sound waves, waves are all around us. I find that really interesting and I don't understand that much about them. But the waves of water and the waves of brains began to collide.

### **How does *Brain Waves* work?**

There is a visual of one drop of water that continually falls into a shimmery still pool and creates concentric circles. A viewer puts on a headband connected to electrodes and their brainwaves cause more drops of water to come into the picture, which creates a more complex system of concentric waves. There is the potential to get four more drops going, but it's not easy. It is essentially a biofeedback piece.

**What sparked your interest in biofeedback?**

I first read about biofeedback in the early 1970s when I was in college, and it caught my attention. There was something there that long ago that made me want to use the concept and led me to think about interactive art in a different way. It's about the fact that artwork is not complete without participation.

**You collaborated with professor Steve Cox and engineering students. What was this experience like?**

I went once a week to meet with the students. There were about six students helping with the project and it was cool because Steve knew their talents so well. He assigned each of them to different aspects of the process so it could come together cohesively, and it was amazing to see them work. I look at electronics and think, 'I don't get this at all.' To me, these students were geniuses, and I'm hoping to do more projects with them in the future.

**So the collaboration is not only part of the final artwork, but was necessary for this idea to come alive. It sounds like these interactions have been the main motivation for *Brain Waves*.**

Yes, definitely. The experience itself is not complete without collaborators, and the whole project is not something that could have happened without assistance during creation. It was my vision, and yet I am so grateful for the people I worked with because they had a lot of impact.

**What do you hope people take away from this interactive experience?**

I hope *Brain Waves* leads people to think about their own brains and bodies on a deeper level, but I want it to be an aesthetic experience as well. Not all artists are

concerned with making beautiful objects, but I am. I think that all art is a visual experience—the drops of water, the shimmery surface, the way the image changes as you look at it—it's beautiful.

***Brain Waves:*** 6 pm-midnight Friday June 9; 2 pm-midnight Saturday, June 10; noon-7 pm Sunday, June 11. Free. Currents New Media Festival, Railyard Plaza, Market and Alcala Streets, [currentsnewmedia.org](http://currentsnewmedia.org)