

THE ARCHETRON OF THOMAS TADLOCK

"Very very high-frequency of laser will enable us to afford thousands of large and small TV stations. This will free us from the monopoly of a few commercial TV stations." -- NAM JUNE PAIK

"By means of a console with innumerable knobs, switches, dials and other mysterious looking controls, three small TV monitors and a system of mirrors and color filters, Tadlock is able to compare on a TV screen constantly moving and changing colorful kaleidoscopic images. In accomplishing this, Tadlock uses all or parts of three separate live broadcasts. It is now possible for this artist (or any other using the Archetron)) in effect to create simultaneously works of art on TV screens in countless homes, thus making Nam June Paik's 'Silent TV station' possible. All that is needed is for a broadcasting organization, a closed circuit TV company or a cable TV company to avail itself of this remarkable development." -- from the notes for TELEVISION AS A CREATIVE MEDIUM, Howard Wise Gallery.

JUD: How did the conception of the Archetron first come about?

THOMAS TADLOCK: Several years ago before I ever came to New York, maybe five years ago, I was working as a light sculptor with light bulbs, in Providence, Rhode Island where I studied at the Rhode Island School of Design. I started watching television, kaleidoscoping it, and screwing up TV-- just something fascinating, like games. I'd never even heard of Nam June Paik at that point. The first kinetic show that I think was ever held in this country was "ART TURNED ON," in Boston where I saw one of his pieces, so I first saw Paik's work which then showed even greater possibilities of television. I still continued to work with the electric pieces and finally got into TV with the actual commission-- by Dorothea Weitzner, a collector-- for this machine.

JUD: Is this the only machine built thusfar?

TADLOCK: Using television, yes.

JUD: Is it a patented machine--similar to the one for Richard Aldcroft's Infinity Projector? Would you build any others?

TADLOCK: Miss Weitzner wants to do it to protect herself. From the building of this, many ideas have come of how to expand this, make several others. In fact, this is really a basic experiment anyway in what I could do with TV. It's not everything I can do with TV--because of the expense. Nobody can really afford it--it's hard to find people somehow, to get the money to experiment with this.

JUD: Have you considered the idea of projecting these images?

TADLOCK: This machine can drive a TV projector as well as a direct monitor. A color projector costs \$186,000. I could make this machine more complex and show much more. There's many more things that I'm ready to do with TV; I only need the means to implement the ideas.

JUD: How is the image transformed through the Archetron?

TADLOCK: The broadcast signal is received in black and white, and a section of the entire picture is removed--a triangular section-- and repeated in a reverse re-peat around a symmetrical axis-, to make the pattern that you see. That's a basic process-- there are three units in the machine-- there could be any number of these devices to convert the picture over and over.

JUD: Similar to the triangle repeated kaleidoscopically eight-fold in computer random dot patterns.

TADLOCK: From one given picture, you can make two or three of these symmetries, because I could take the upper left, or the lower right, and another in the middle. That's what's going on here-- there are three now--maybe there would ten, 17 or 22-- all feeding in.

JUD: This would make the image more complex.

TADLOCK: Yes. Those three black and white images are then fed as sum and differences of the gray scale--different areas are superimposed, each one given a color which is designated by the nine color controls and the three percentage controls on the electronic palette board-- or color mixer. For each of the signals coming in, there are three knobs for the three primary colors of light-- red, blue and green. By adjusting the combination of these, you can make each image any particular color-- for instance, if the red and green knobs are both on and the blue knob-,is off, it'll be yellow; and if the red and blue knobs are on, it'll be violet; and if all of them are on, it'll be white.

You can then take each converted image and make it any color you want, and combine those three colors by the percentage knobs to make it, say, 50% the yellow image, 30% the orange, and 20% the blue image, or whatever. And you can also change those while you're watching, but I prefer to set them and then leave them. And you can set them up to show in a primary system, a tertiary system, or you can set for pastels, Tibetan colors, I don't know, everybody likes different colors to play with. I'd like to make that programmable, instead of by knobs being adjusted, by filling out cards of different positions and what they mean. I can see it starts to fall into patterns that have to be explored-- and instead of positions on knobs, it can be run be sequences like they use in electronic music synthesizers-- to synthesize color patterns going right down.

JUD: What do you envision working on after this piece?

TADLOCK: There are many avenues of approach that have opened up in the making of this piece, and I'm waiting to see just what I'm going to do. I mean, I work mediumistically. I don't set out to do anything-- I just do whatever comes up. I want to further extend my idea of processing the existing information that they're throwing into the air.

JUD: How did your earlier light machines compare with the present work?

TADLOCK: I still want to work in light but it's frustrating because the image producing apparatus isn't as complex as I want it- in other words, the most advanced light source we have is the television tube.

JUD: The two to four million information bits with which to play around.

TADLOCK: Before I got into processing imagery this way, I was processing random information through a triangular rotary repeat. There might be six lights in each triangle that were wired all around so that a random pattern fed in would be a changing kaleidoscopic turning star effect. Before I really knew what I was doing, it was similar to reprocessing TV-- which is like random garbage-- I was reprocessing random information coming out of countdown circuits, etc.-- into this kind of a pattern.

JUD: Did you know Richard Aldcroft?

TADLOCK: Yes, I met him at my studio. The people next door were trying to make pirate copies of his Infinity Machine--- and somehow he came to see me. I was working on this machine at the time and he flipped. You see, the people next door had wanted me to ran one of their pirated machine copes to see if it would work. And there's some secret to the process that Aldcroft knows how to do that would keep it from blowing up from the heat--the plexiglass cylinders in all the pirate copies would blow up in three hours and the mineral oil would all come out. They lost about \$6000 trying to make those phony copies.

JUD: That secret is not included in his patent.

TADLOCK: Right. So he thought that was pretty funny. And he was talking about the same thing that I wanted to do.

JUD: The beautiful thing about his machine, and the Archetron, is that the same pattern is never repeated--That's been a dream for a long time.

TADLOCK: Plus the information that keeps coming in here. Like my patron was watching this machine when it was broadcast on TV (on Channel 13's THE MEDIUM IS THE MEDIUM)-- She watched it on TV on itself. And during the opening there were psychedelic TV shows on TV we were watching on it-- reprocessed, and so it goes on and on.

JUD: Did you ever talk to Aldcroft about his design concepts?

TADLOCK: We talked a lot. He wasn't interested in his machines at all when he was in Providence--- he was interested in making some kind of floating environmental structures. . .

JUD: Yes, floating spherical cities on the ocean

TADLOCK : Which had to do with what I wanted to do--and we were both more interested in that than in art at that point, so that's what we talked about. I listened mostly to his theories which were all very radical, but he was able to convince me of the sensibility of every one of them. Since then I've thought more and more about and I'm working on something on a smaller scale, a more personal sized environment. NOTE: (Since this interview, Tadlock has been in California completing a huge ferrocement boat, lighter than water yet virtually indestructible, upon which he plans to live and to transport the Archetron.)

JUD: What are your thoughts about Electronic Video Recording--EVR?

TADLOCK: You can't record in the home-- you have to record it on a very expensive machine-- using RF heated celluloid-- and it plays back on 16mm film base, not as light but as video. It's as cheap as a film cartridge and the machine to play it on your TV is very inexpensive also--about \$8.

JUD: Do you see any application in it to what you might want to do?

TADLOCK: I think it opens up great possibilities and I'd like to work with it. However I'm afraid it's going to fall so much under government control that it'll be years before the artist will be able to get his hands on one of those recorders-- to actually make the cartridges-- and it will naturally be completely commercially controlled--and it will be maybe a hundred years before it opens to fine arts.

JUD: I've believed for some time that one of the few possible salvations for this country would be if more, or most,, of the technology of the country were made immediately accessible to artists, rather than into the hands of . .

TADLOCK. Business. As soon as an advance comes along that's powerful enough to be of use to the artist, it is usually snapped up and kept in tow by advertising-- and government. For example the controls that are put on TV. It's been out now for some 33 years and only now are artists being able to-- allowed to use it. I think I'm being too pessimistic about all this-- but maybe being like that will get them to loosen up.

JUD: What do you think of TV as a medium for spiritual enlightenment or education? I can see something like the Archetron doing something to loosen up people's sensibilities.

TADLOCK: I've noticed that to be true-- because making this kind of meditation pattern and then feeding it with the programming that exists.-- (the time base patterns that they feed into commercials that they've discovered make you want to watch, make you want to buy, make you just want to want)-- just those subliminal countdowns they put in and things like that are reprocessed through the machine, and sometimes you can amplify it, and that makes the possibility come to the front.

JUD: Paik has been taking popular images, like his Lindsay piece, and completely transforming them beyond all proportions into the abstract. Our society, inversely, takes good things and turns them into cliches, and Paik's and your work retranyorms these cliches into pure energy concept-- pure visualization.

TADLOCK: Right. That's exactly the purpose of the work.