

73  
(Beck interview w/David Dunn & Woody Vasulka 1/22/92, Page 1)

I went to school at the University of Illinois and in order to not have to take money from my father and be able to do what I wanted. I was very fortunate to ...find this experimental music studio in Champagne and they were looking for somebody to do work and wire things and I got a job there which eventually turned into a Fellowship. Anyway, so Champagne/Urbana, University of Illinois was the very happening place in the late sixties because Lejaren Hiller who, I believe, was a chemistry professor.

...And, then there was Herbert Brün - I admired him and he took a liking to me and he was brilliant theoretician and there was a technical guy named James Beauchamp who was actually an electrical engineer who was the technical mind there and they took a liking to me and I was very enthusiastic. I would go in there and do anything just to show them I could do it and then John Cage was there. So it was a very exciting time out in the middle of the cornfields in Illinois... That was 1967. In 1968 I had a job there and I was earning \$300 a month working part-time which was enough to put myself through school and then the third year they actually gave me a graduate fellowship from the music department so I could work there fulltime and teach music students how to use the synthesizers. We had one of the first Moog synthesizers and we had built something called the harmonic tone generator. There was a big school of Fourier analysis and I

helped build that.

...Sal Martirano who was one of the most progressive and daring of the music faculty who was very kind to all of the students who showed any interest at all. He'd invite them into his home and you'd sit around and have discussions and play music. I admired him immensely because he took it upon himself in his middle age to learn electronics, circuit theory, digital logic in order to progress his art and I was very impressed.

...At the time there was a lot of experimentation with consciousness altering substances of all kinds, cannabis, LSD-25, mescaline and shamanic rituals. We'd get together and sing and chant and breathe, induce visions and hallucinations and this all fascinated me because for as long as I could remember I'd always seen lots of images when I closed my eyes which I later learned were called phosphenes and hypnogogic, hypnopompic, eidetic imagery. There's a whole class of images there. So anything that could produce these or activate them I was fascinated by. Working with the music synthesizers and the elements of frequency, voltage, amplitude at that time, the concept of a synthesizer was a very exciting concept. It was patchable, it was controllable, it was real time... I was also making light sculptures and doing light show performances, light show environments for musicians in various bands and events. So I was moving into the visual arena

and it may sound corny but one night I was walking into the studio and there was a moon out and the moonlight was coming down and it reflected off this lamppost and it shined in my eyes and I got the flash of these visual elements, color, form, texture and motion. It just sort of crystallized out of a lot things I'd been reading and studying and then I realized it would not be too difficult to make a visual synthesizer. Why just restrict it to music... I started to design conceptual circuits that would go beyond the oscilloscope and vector display and wanted to use television because my perception at that time was that here was this incredible technology of color television which I understood thoroughly at the technical level and could appreciate the complexity and yet what it was being used for in terms of programming was so dismally inadequate that it just cried out to be used for some higher purpose. There was also at that time a tremendous amount of resistance against the war in Vietnam. All of us students were in danger of being drafted, we were protesting, we burned our draft cards, so there's this incredible opposition to what I saw was technological genocide. Here was this technology and people hated it because it was so destructive and at that same time the other side of that technology was being used to go to space, there was this tremendous consciousness, let's go to space, let's go to the moon, let's make rockets and

go out there. That was the positive manifestation of that technology. I was studying electrical engineering, that's my formal credential as far as a trade in academia and I was kind of a apologist or promoter of that positive aspect of technology and I thought, "Boy, if I could get color TV and do something artistic with it. That would be a great statement as far as the positive potentials of technology." That technology was not inherently evil... I always wanted to make something beautiful out of television, that was my premise. My first problem was to get a television set, a color TV which was very expensive and I was able to get one donated by Zenith because I worked there as a summer job and knew people there and I proposed to them the idea of combining hi-fi music with television... Ron Namath, who was a professor of film there helped me get it...

I was making oscilloscope movies in the electronic music studio...And Ron Namath filmed some of them as he did some of my very first experiments with the modified RGB TV and that was the summer of 1969...Then Sal Martirano saw what I was doing and he was really enthusiastic and he asked me to start performing with him...I would go to his house with other students and we'd design gates and digital circuits and try to wire up circuits and it was this huge construction of framing with panels and thousands of patchwires...

So during that last part of 1969 Sal Martirano and his SAL/MAR troop which included me and some other musicians, we did a number of performances in Champagne, Illinois at the Crannert Center for the Performing Arts, at the student union building, and then he actually got us on a tour where we went to the Art Institute of Chicago, the University of Wisconsin at Madison, the University of Iowa at Ames. Midwest Colleges. We'd pack all this stuff in a series of cars and we'd drive from one place to the next and set it all up and doing an evening's performance of really wild stuff and people loved it... At that time was when I first built what I called DVI-Zero--Direct Video Instrument, number Zero... It's a little box, it had three color channels and one voltage to position converter. That was the big circuit I had to figure out. How do you turn a voltage into a spatial position? I finally figured out that if just took a comparator and a ramp or any wave form changing at the horizontal or vertical rates you could cause a point to be defined or an edge, a position defined by the comparator tripping from fault zero to one... I could feed audio signals into this box which were sourced from a SAL/MAR musical instrument or records or any other source of audio and then feed them into the RGB inputs of this monitor and then I fed the synch of that monitor or if I tuned the monitor, the TV receiver actually it was, a receiver to a local channel then I

could superimpose the electronic audio modulation on top of any picture that was being broadcast. So it a primitive form of collaging there.

...During that year for about three months before I got the TV receiver and all throughout 1969-1970 I filled notebooks with the circuit ideas for form generators, color modulators, line/point generators, texturizers. I really designed the ideas in a period of time and it took almost two years after that to be empowered to actually realize them to make them happen.

...As I'd mentioned earlier, I started coming out to San Francisco during the spring vacations in 1968 and 1969. I had relatives who lived out here at the time and I came to visit them and I loved it out here. Once I got the TV receiver going in late '69 I started writing letters. I must have written over a hundred letters to whoever I could think of, trying to think how I could get some support, backing, money to carry this further... I wrote to ABC, CBS, NBC. I wrote to PBS. I wrote to Zenith. I wrote to all the TV companies... The one fellow who answered me from CPB, what was his name . . . told me about a place called the National Center for Experiments in Television in San Francisco. ...After that I wrote to the Center and introduced myself by letter and this was in early 1970 and I said, "Look, I'm going to be out there in April for my annual spring trip to California and I'd

(Beck interview w/David Dunn & Woody Vasulka 1/22/92, Page 7)

like to come and see you and show you this film that we'd shot." That was how I gained introduction to the National Center for Experiments in Television... I came out to meet the National Center for Experiments in Television in April, 1970 and we really hit it off. They were blown away by this film that I showed them of my video experiments with the video synthesizer... I got a telephone call about two weeks later and they said, "We'd like you to come out here. We don't understand what it is you're doing but we love it and we'd like you to come out here and do more of it."

...Well, I arrived in August of 1970 and immediately started ordering equipment to build a synthesizer... KQED wanted to get some of this stuff on the air and that's also where I met Richard Felciano and we hit it off and started collaborating on some studies that involved both feeding music from his Buchla . . . the center had just had the small, original Buchla, the one in the upright box and I had designed my voltage range inputs to be compatible with the Buchla Synthesizer, it was zero to ten volts and the same type of patch plug and cord, mini phone jack, thinking I'll go look Buchla up and maybe we can team up and make something. I started to produce imagery and also it was my first opportunity to work with videotape.

*Excerpts from an interview with David Dunn and Woody Vasulka.*

(Beck interview w/David Dunn & Woody Vasulka

1/22/92, Page 8)

Stephen Beck

January 22, 1992

San Francisco