

Interview „Jack Burnham“

Englische Originalfassung – Takes 1 – 9

1

Jack Burnham:

My father was in insurance and I started out doing advertising – illustration, advertising design. And I was very fortunate my second year at Boston Museum School because I had two teachers from MIT (which) were young architectural designers and they worked with Györgi Kepes. And one of them turned me on to Naum Gabo, great Russian constructivist sculpturer. And I became very enchanted with his work and I went down and visited Gabo several times. He was one of the great pioneers in technological art back in the twenties with his brother Pevson and I met Ian Selin in one of Kepes' classes on light and before that I began to do neon sculpture and I was working on a summers floor, a sign shop. I've been in the army in Okinawa in Japan and I worked as a sign painter, - so it was natural. And I did some constructions in – in light.

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I-I found it very fascinating; it was like a gordian knot. And I said to myself: Why are all these artists fooling around with paint? – What they want is light. Light –light is very precise, very simple, and direct. And when I met Otto Piene in 1962, you know, he thought the same way very much; so we had a kinship.

2

Jack Burnham:

Well, you know, when Moholy Nagy came to this country, Josef Albers was at Yale at that time and - and they were really great forces in American art school pedagogy. And they both sent out dozens of students all over the country to art schools, universities - so I would say between 19 - or - 1947 and 1967, 1970 they had enormous influence in this country in terms of their ideas. And of course Kepes too, with his „Light in motion“ book...

Lutz Dammbeck:

It was like a network?

Jack Burnham:

It was very much a network, you know, where school ties, old boy ideas... - you were either part of the new Bauhaus, the new Chicago Bauhaus group or you weren't.

3

Jack Burnham:

I was in such the program (at MIT and Lincoln Lab); I was one of the first persons to receive a stipend or a fellowship at the Center (Center for Advanced Visual Studies at MIT). And Kepes didn't really have much money. But he was a great - he was a great talker. And he would convince deans and vice-presidents at MIT that he should get this money then. So, we got very small amounts but it was enough to last a year, two years Otto Piene stayed on for five years and then became the Chairman.

4

Jack Burnham:

When I was at Yale in 1958 I began to understand Marcel Duchamp and this was at the time when Georg Hamilton produced the first very good English translation of the „Green Box“, his notes for green box – just some of them, not all of them. And that was enormously influential because I said to myself: My God, back in 1912, 1910, 1915 he is doing everything that Pop Art is doing, he is doing everything the surrealists, the dadaists - everybody has done only twenty years before. That was enormously influential.

5

Jack Burnham:

Back in 1952 when they published his (Norbert Wiener's) first book on cybernetics. And that was like a breakthrough at the same time cybernetician Ross Ashby published his book which I think is a better book on the basic mathematics behind cybernetic, behind feedback theory. And it's fantastically interested in them. And I thought well, you know, you know, when I began to write ‚Beyond modern sculpture‘ I devoted several chapters to the vitalists and to biology of the 19th century and how it influenced 20th century sculpture. And I thought: My God, here is a whole – here is a whole area of biology that artists are going to get into. That deals with the nervous system, not just more physiology of shells and evolution things like that.

6

Jack Burnham:

There were mindsets. And you know, young people particularly their brains are at war, they have two or three possible personalities, it's depending on where they find success and what their education is and what their family background is. They go in this direction or that direction and I would say I was really driven between a very artistic Dada-revolutionary background and a technological background and both were strong. And that's where - when Duchamp came in - because I said: 'My God, here is a brilliant mathematician, a great technological mind, who is also totally subversive.' And one of my real problems with Bauhaus and these other people was what - they were so regimented - so regimental, - you know -, so - so structured. And I-I thought to myself - you know - Duchamp is so beautiful because he destroys structures and this seems much more like the method of 20th century. - He is so structured, he uses structure and he destroys structure.

7

Jack Burnham:

In 1969, ah, 1968, 69, 70 at Lincoln Labs they had a big IBM time sharing computer. And really you had to be an expert to use it because it was time sharing because if you missed your - you missed your program your next step - it might take 15 minutes to get back on because they were so crowded. And so if you were nervous like me or the two other artists they had it was very difficult.

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I think after a while we sort of gave up and they gave up in a way – ah – ah ... - what they wanted to know is: How do artists think and how can we use this in the construction of good programs for - for building - ahm – you know - in cartho ray tube images, you know. Can - can we make – I would say today that - I will say with authority that the way people read pictures is exactly the inverse of the way artists construct pictures, that there is a very deep correlation – physiologically and psychologically – between the way artists create images and the way the viewer reads those images.

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I would say Lickliders lab over at MIT was much more experimental, much more interested in man-machine projects, in sensory projects, in pattern recognition. – Lincoln Labs was much more devoted – as far as I could see – to large scale computing problems. At that time the idea of integrated circuits was just getting going; the idea of basic programming – visual – visual images was just getting going. – No, they were all stick images, they were very slow, and they were very geometric– you know, it was quite poor.

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And then I remember back in 1946 the ENIAC which was the second computer, second modern vacuum tube computer at MIT and that was huge. Dozens of – ah, dozens of air-conditioners, thousands of tubes, I think about twenty thousand tubes, all set in radio chassy racks on-on-on big metal cabinets; - whole rooms, it was an enormous thing, very noisy, thousands of wires. And - you know – a computer – you know - by the 19 – by the 1970th a small PC-computer could do all of that work and twenty times more.

8

Jack Burnham:

Well, the one thing you find with computer languages, with logical positivism and the early attempts to analyze natural language that Carnap and all those people developed – this very soon become out of date, they become passé. You know, Lingus was saying, you know, these are too simple by the 1950th , when, you know, American and British structuralists began to, you know, people like – ahhm - lets see, what's his name now, at MIT - a man who invented generative (?) of grammar –

Lutz Dammbeck:

Chomsky? –

Jack Burnham:

No.

Lutz Dammbeck:

No? –

Jack Burnham:

No. - Noam Chomsky.

Lutz Dammbeck:

Chomsky!

Jack Burnham:

Ya. Basically what he was doing using the algebra of tree structures to develop – you know – the way in which again the brain makes choices internally and subconsciously before it comes out as a string of words which are the text.

Lutz Dammbeck:

And software again should be a platform for all such visions and ideas? –

Jack Burnham:

Well it could theoretically but of course, you know, it cut many corners. It had to because of time and money and technology, you know, it had its limitations. That was a theoretical concept.

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Well, one of the things I remember Oliver (Selfridge) talking about – this was at a time when in London in 1968 she (Jasia Reichard) had done the Heard computer-show at the ICA in London, and it was almost completely several mechanisms little cybernetic animals and computer-printouts. And I can remember Oliver Selfridge saying: „This is not the way to go. Our computers are basically interactive, they basically, two or three intelligences working together, ah, you know - So I got the idea, right there: This is the way, the „Software“- show should go; man and intelligence working together – just the idea of making a pretty picture out of little x's and making a printout – it's done, you know, it's like doing an Andy Warhol. So, we decided not to have any computer printouts in the show for that reason. It should - If we did any computerthings – they would be interactive – hands on, voice on.

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Karl Katz - he said, I did a lecture on the Guggenheim on systems theory and contemporary art. And he was suppressed and he said, he know about my book ,Beyond

modern sculptures', so would you like to be the curator for a show on computers?" – I said I would love to (?) on the budget, the time-scale, everything else, - explaining to him that I thought, I was a professor at North-Western in Chicago. There were many limitations.

(-)

My criterion was: 'Does this thing work? Does it make sense?' - And again, the interactive part was very important, cause like Nam June Paik gave us a piece, which could have cost – you know - a lot of money, and which was really an installation. And it was nice but we said: does this really fit or not, you know, it doesn't make any sense, so we didn't use it. We used a small conceptual work of his, but that's all.

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Many artists at that time – that's a hobby, also mine – but many artists in New York were doing that: de-, - you know: deconstruction-, anti-form-people – you know – were throwing things on the floor, - throwing graphite, throwing hot lead – all sorts of things like that, they were random-pieces Bob Moore was doing big pieces with cotton stuff. So it wasn't new. But it was sort of going Jackson Pollock one, two parts better.

(-)

Oh, you have to remember that Mandelbrot in Paris and some people here in this country in mathematics and physics were developing chaos-theory and theories concerning randomness. It's a central part of linguistics and a central part of communication-theory, measurement and randomness. – It's essential to natural language, to any kind of communication.

(-)

Well I – when we – when Nicholas Negroponte made his piece for the software show that was exactly the idea to take white gerbils into a semi-structured environment, produce some chaos and then – by a computer – reorganize it into a structured environment. – A way – it was a way of saying: 'Can we computerize – ah, - the demography and the

ecology of a city?' – in terms of the destruction of old sections, rebuilding, so forth. It was very imperfect model but that was the theory behind it.

(-)

The idea was to introduce rats into a semi-structured environment – say a natural city and they – they are the randomizing function. They introduce chaos, they knock over blocks, they push them out of place and then you have this giant hand – so, go around, pick up the blocks re-stock them. Every once in a while they get a gerbils tale clock; it's a big clock – it was sort of like „1984“.

Lutz Dammbeck:

And the rats, they had names or it was -? –

Jack Burnham:

Oh no, they - they would get – they would get very exhausted after about two hours in-in this big machine. So they would have to be put in a little plastic pin where they can get some food and they would get a rest for a while.

Lutz Dammbeck:

But what was the difference to the experiments by Skinner or Boring at the same time? –

Jack Burnham:

No difference! - Yea, I mean they were working in the education but it is to model – it is to model an everyday activity but to make it real-time and to computerize the whole thing.

9

Jack Burnham:

We both developed those ideas at the same time, in the early sixties from 1962 onward. We both studied people like Norbert Wiener and Bertalanffy, Hungarian biologist and other people who were interested in systems theory from an industrial point of view, from an ecological point of view.

Lutz Dammbeck:

What was so fascinating with this?

Jack Burnham:

The point is, I think as a structuralist, we both began to see that art wasn't just the object, art was a system. It was the entrepreneurial system of galleries, critics, museum-curators, restorationers, patrons - the whole - the whole thing: art wasn't an object, art was a system. Once you began to study in that context, it becomes – for Hans Haacke obviously it became very, very politicized. And that's, how we developed this, this art...

Lutz Dammbeck:

It was a closed system and you would open it, or...?)

Jack Burnham:

That's part of it, part... It was like a good sociologist, you know: going, studying any culture. It began to look from all points of view. And there was also a systemic anthropology at that time, which was a new way of studying very very old sights. Not - not just in terms of – of – you know - say fragments that you, – thank God – , but you began to

link those fragments also to the surrounding ecology, water-supplies, forest stations, animal supplies, everything. You began to look for pits where physics were, where burial graves, burial places were for graves, so that you began to look at a primitive village in terms of all the systemic aspects – to see, how it was organized as a society.

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Well, the result- was for someone subversive; because systems-theory at that time which was during the Vietnam War was promoted very much by – you know - Mc Namara who was secretary of defense then.

He systematized the American defense-department: the army, the navy, the air-force and put them under systems theory guide-lines for the way they made their procurements – ah – logistics, everything. So it was an idea.

It was very much hated in the art world. And – but to us it was very beautiful because it began to be a way of looking at how museums did business, how galleries did business with artists. To us it was very important. So that in a way in many cases early systems artists really used the galleries as–as–a gallery business techniques, the philosophies of board of trustees for museums as-as-as-as artifacts as a way - as subject matter for-for-for - as works of art of works of art.

Lutz Dammbeck:

This means Mc Namara used and his people used systems theory as a weapon or for weapons?

Jack Burnham:

For weapons, ya.

Lutz Dammbeck:

And you and Hans Haacke and other used systems theory also as a weapon.

Jack Burnham:

I was working with system theorists in the engineering department at Northwestern University, with a man Gustav Rath who was for very, you know, a very strict systems theory approach in terms of say going to a hospital doing systems analysis of their – you know – how they treated patients, ambulance, food, you know, everything like that, you know. In other words: looking at it in terms of good business practices. And we began the same – well, you make a closed system out of a hospital; and a hospital isn't a closed system, began looking at it from other points of view, you know, people who come in the emergency room, people who don't get access to hospitals, distribution of hospitals in a city and so forth, you know, it became –. If you used systems theory as an open system it becomes very subversive, very quickly. And really, that's the way artists have used systems, conceptual artists, ever since.