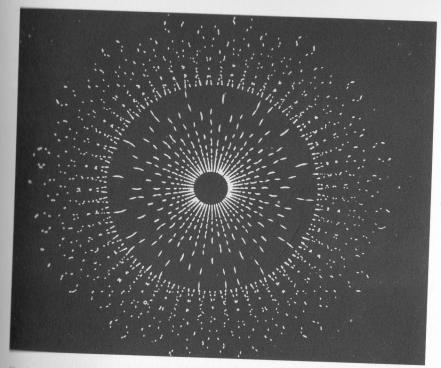
(and collaborator Stephen Beck)

By the mid-1960s, the film society movement had run its course, at least in the United States, though a limited public awareness of alternative cinema was maintained and developed in a variety of ways. In New York, San Francisco, and a few other major cities, an avant-garde film movement was in full swing. Alternative screening spaces introduced audiences to a wide variety of young filmmakers, as well as to the achievements of the 1950s, the 1940s, and earlier decades. But for those of us living away from major cities, awareness of the full range of filmmaking was harder to come by. We had increased access to feature-length "foreign film," and we knew from Jonas Mekas's "Movie Journal" column in the *Village Voice* that there was a lot going on that we weren't seeing. But our experiences with what was then called "underground film" were at best sporadic.

For me, the most memorable moment of access to a wider range of critical film forms in the late 1960s came by way of a set of programs assembled and distributed by Janus Films, called "New Cinema" (perhaps to evoke Mekas's "New American Cinema"), which premiered at Philharmonic Hall at Lincoln Center, and subsequently went on tour. New Cinema was a diverse, international collection of films—short melodramas and documentaries, animations, avant-garde films—more reminiscent of film society programming than of the then-contemporary programming at underground screening venues. For me, the two most startling revelations in the New Cinema programs were Chris Marker's La Jetée (1963) and Jordan Belson's Allures (1961).* Marker's film



Design used in Jordan Belson's Allures (1961).

remains widely known, but *Allures*, and Belson's work in general, has moved out of the public eye, in large measure because Belson himself withdrew his films from circulation in 1978. More than any other film in the New Cinema programs, *Allures* sang the excitement of the future, and of the potential of what Gene Youngblood would call "expanded cinema," while simultaneously enticing viewers in the direction of the long history of Eastern spiritual thought. Indeed, the combination of visceral pleasure and spiritual energy in *Allures* and in Belson's other films of the 1960s—*Re-entry* (1964), *Phenomena* (1965), *Samadhi* (1967), *Momentum* (1968)—were crucial in the thinking of both Youngblood (see "The Cosmic Cinema of Jordan Belson," in *Expanded*

^{*}The other "New Cinema" films: Act without Words (1964) by Guido Bettiol; Actua-Tilt (1960) by Jean Herman; Al! (1964) by Yoji Kuri; All the Boys Are Called Patrick (1957) by Jean-Luc Go-

The Apple (1962) by George Dunning; The Concert of M. and Mme. Kabal (1962), Renaisme (1963), and The Games of Angels (1964) by Walerian Borowczyk; Corrida Interdite (1958) Denys Colomb de Daunant; The Do-It-Yourself Cartoon Kit (1961) by Bob Godfrey; Enter (1965) by Fred Mogubgub; The Fat and the Lean (1961) by Roman Polanski; Les Mistons by François Truffaut; The Most (1962) by Gordon Sheppard and Richard Ballentine; The Most (1963) by Richard Lester; and Two Castles (1963) by Marian Bozzetto.

Cinema [New York: Dutton, 1970], pp. 157–177) and Sheldon Renan (see "The West Coast Abstract School" and "Jordan Belson," in *An Introduction to the American Underground Film* [New York: Dutton, 1967], pp. 93–96, 116–118), along with Mekas, the two most influential American critical-cinema chroniclers of the decade.

Belson's 1960s films were instantly identifiable, and remain memorable, because of certain characteristic visual gestures that, in a wide range of particular films, provide metaphors for a cinematically distinctive sense of human existence. As William C. Wees suggests, "The single most common shape [in Belson's films] is the circle, whose center corresponds with the center of the screen and whose peripheries become concentric rings or spirals with radiating dots and lines. Sometimes these mandalas of light are geometrically precise constellations of tiny glittering dots; at other times they are pulsing discs and halos of misty, glowing colors"; and at still other times this shape looks like pupil and iris and suggests a "cosmic eye" (Wees, *Light Moving in Time* [Berkeley: University of California Press, 1992], pp. 131, 133). That the imagery suggests outer space one moment and atomic particles the next is a way of suggesting that, basically, the macrocosmic and the microcosmic are one and that the means for understanding this unity is the "inner eye" of the spirit.

Originally (and still) an abstract artist in the tradition of Kandinsky, Belson recognized the potential of film as an extension of "nonobjective art" at the "Art in Cinema" screenings, a series of programs organized by Frank Stauffacher and Richard Foster and presented, beginning in 1946, at the San Francisco Museum of Art. (The early "Art in Cinema" programs are listed in Stauffacher, ed., Art in Cinema [New York: Arno, 1968].) Belson began his filmmaking career as an abstract animator, making "visual music" akin to the films of Hans Richter, Oskar Fischinger, and Norman McLaren. From 1957 to 1960, in collaboration with musician Henry Jacobs, Belson wowed audiences at San Francisco's Morrison Planetarium in nearly a hundred "Vortex Concerts." Belson and Jacobs used the planetarium's visual and sound systems to create evening-long presentations of abstract sound and image-ancestors of the current laser shows so common to planetariums and sports arenas. Working with real-time motion at the Vortex Concerts changed Belson's way of approaching film. By the 1960s, he was no longer an animator, but had begun to use "a special optical bench . . . essentially a plywood frame around an old Xray stand with rotating tables, variable speed motors, and variable intensity lights" (Youngblood, p. 158), though Belson has always refused to reveal the particulars of his method.

Increasingly unhappy with the reception and exhibition of his work, and with the difficulties of maintaining first-rate prints, Belson finally withdrew his films and himself from the public sphere, preferring to make films, graphic work, and paintings in private. He has been able to support himself and his filmmaking during this retreat partially as a result of his contributions to Philip

Kaufman's *The Right Stuff* (1983) and other commercial film and video productions. Selections from his films remain available on *Samadhi and Other Films*, a 1989 Mystic Fire video, accompanied (unfortunately) by a soundtrack composed by John Luther Adams; but the excerpts on this video provide merely an evocation of the experience of seeing Belson's work projected in 16mm. One can only hope that Belson's films will at some point reenter theaters and the consciousness of new generations of filmgoers, before the processes of decay do irretrievable damage to the few prints that remain and to the originals.

I have not had the pleasure of meeting Belson in person. Our interview began as a phone conversation in San Francisco in early December 1992; and continued in subsequent phone conversations in 1993–94. In January 1994, I supplemented our discussion of *Cycles* (1975), Belson's collaboration with video artist Stephen Beck, with a phone interview with Beck.

MacDonald: I'd be interested to know what you remember from the period of the late forties and early fifties, when you were starting to make films.

Belson: I'll do my best, though memory is not my strong point.

MacDonald: Where was your film work first shown?

Belson: At Art in Cinema, I think. I got very turned on by Art in Cinema. Even though I was a child of the motion picture era, it had never occurred to me to make movies. I thought of myself only as a spectator. But when I saw the Art in Cinema series, particularly the hands-on type of films that Norman McLaren made, the possibility of combining film and what I considered Art intrigued me. I guess I saw some Fischinger there too, and the very earliest Whitneys [Five Abstract Film Exercises, 1943–44].

MacDonald: There are interesting relationships between your early work and some of Fischinger's films, Radio Dynamics [1942], in particular.

Belson: Well, yes. Fischinger was one of my heroes. But I think the real similarity is that we both belonged to the school of non-objective painting. I don't know if you're familiar with that term, but at one time the Guggenheim was called the Museum of Non-Objective Art. It was dedicated to a certain type of modern art: Kandinsky, Rudolph Bauer mainly, kind of an Art Moderne with spiritual overtones. Fischinger was part of that movement, too. In fact, I believe the Guggenheim supported Fischinger for a while to get out of Germany and settle in the United States. The director of the museum was a formidable lady by the name of Baroness Hilla Rebay. On the basis of my paintings, she also partially supported me—put me on a monthly stipend for a couple of years.

MacDonald: When was this?

Belson: 1949–1950. Looking back, I now have the greatest respect for her and what she accomplished. She is entirely responsible for commissioning the pres-

ent Guggenheim Museum, designed by Frank Lloyd Wright. She had enough money to encourage people to work in that non-objective style, and she did. She exhibited some of my paintings in their annual shows. Harry Smith was very desirous of connecting up with her, so when she came to California, we both met her at the airport and took her first to my studio in Berkeley and then to his wretched little room over a bebop nightclub in the Fillmore district of San Francisco. When he wanted to move to New York, she provided the means for him to do so and also allowed him to stay in a studio in the old Guggenheim Museum itself, where he lived and worked for his first few months in New York—or so he told me.

MacDonald: When she came to San Francisco, had you both started to work on film?

Belson: We were painters, but both of us had made some films. I remember I was about to show her one of my films, when she grabbed the reel and started unwinding it onto the floor, looking at it with her naked eye. She told me that this was not advanced filmmaking, compared to Oskar Fischinger. I suppose I was a little hurt by it, but I realized she was right. I was just starting out. I'd done two animated films: one unbelievably crude—Transmutation [1947]—and then Improvisation #1 [1948], which was a little more polished. They were still just black and white drawings on cards. The title, "Improvisation," was typical of the non-objective artists, who aligned themselves with music. Those films are lost now.

Few people even know that I am also a graphic artist, but to me it's as important to my creative development (and my sense of self) as my film work. It's been my main activity since I stopped making films in 1989. Of course, even before I started making films, the paintings I made seemed to call out to be animated. Actually, I thought of them as animations-in-painting. These early paintings contained sequential imagery where a form would be shown going through some type of metamorphosis. Logically, the next step was movement. All those early graphic works were pre-cinematic. The early film works were really paintings animated. Looking back now, it seems pretty inevitable that I would flip over into film, though I certainly had no conscious intention of making films early in my life, except maybe when I was a child and had fantasies about being a Disney cartoonist. In many ways abstract films were the "cartoons" of art film programs.

Art in Cinema was started by Frank Stauffacher, who helped me shoot *Transmutation*. He had a camera and I asked him if he would help me film the animated drawings I had made. Stauffacher was a graphic designer, but he didn't start making films until after he had founded the Art in Cinema series. Then he made some films that have become classics in their own way: *Sausalito* [1948], for example. Tragically, he developed a brain tumor and died shortly thereafter. But he was very instrumental in stirring up interest in films and filmmaking in this area.

Hy Hirsh was very helpful, too. He was a professional photographer and on the staff at the Palace of the Legion of Honor [a San Francisco art museum]. He was in charge of photographing the exhibits and the individual art objects for their files. He had his own darkroom at the museum and he was very skillful with cameras, and he also had a motion picture camera. He was a little older than most of us and very generous with technical assistance. It was only after Harry Smith and I were working on films for a while that he actually started making his own. He made oscilloscope films at first: *Come Closer* [1952] and *Eneri* [1953], which is "Irene" spelled backwards. He helped me film my scroll paintings, and he took me downtown to a camera shop and helped me buy my first camera, a used 16mm Bell & Howell: thirty-five dollars. He took the start button apart so I could take single frames with it, and showed me how to frame and focus with a mirror (there was no through-the-lens viewer).

MacDonald: What about Smith? What films had he made at that point?

Belson: I met him in Berkeley in 1946. At that point he had not made any films, but as I remember, we both started making films after seeing the Art in Cinema programs. He had a rather scornful attitude towards artists. He preferred to think of himself as an anthropologist. However, he was a considerably skilled and talented artist himself, and he did produce some extraordinary works of art. In fact, I think his paintings, his drawings, and other graphic works are where his real genius shows through. He did some remarkable paintings around 1950 in which every shape was synchronized, note-for-note, to Dizzy Gillespie recordings. Two of these are reproduced in American Magus, Harry Smith by Paola Igliori [New York: Inanout Press, 1996].

MacDonald: Texturally I find what he called *Early Abstractions* [completion dates unclear] stunning.

Belson: You mean the paintings-on-film?

MacDonald: Yes.

Belson: When he started to do those, he was still in Berkeley. I remember seeing him working on them. Though he was scrupulously neat in the films, he worked on the floor, on a rug, and the rug was all sprayed with colored dyes and inks. He had a method of using pressure-sensitive tape, pre-cut into dots like they use in office filing systems: "Come Clean Gum Dots" they were called. You could buy them at stationery stores. He made a special effort to contact the manufacturer and actually went to Los Angeles to get their entire selection of graduated-sized dots and circles so he could animate without having to cut them himself, though he did cut strips and other shapes of masking tape which he would put onto the clear 35mm film stock. After he put the "Come Clean Chim Dots" and the other shapes onto the filmstrip, he would spray colored dyes onto it with a mouth atomizer. Then, before he took the gum dots off, he'd coat the whole thing with Vaseline or something of that sort. Then he'd pull the dots off and color the uncovered sections. He called these films "batiks," because that is essentially what the batik method is: designs are painted with wax on cloth, dyed, and then later the wax is melted off. Those films were very vital. They had a raw, brut quality because of the way they were done.

I remember he then tried another technique. He borrowed a camera, made a

lightbox, put cutout forms on the lightbox so that everything was blacked out except perhaps a circle with the light behind it, and at night with the lights out, playing a phonograph record, he would dance around his room and film the lightbox from various angles. Then he'd wind the film back, put the record on again, and film another cutout, say a triangle. And so on. The record would give him cues as to when to bring things in, when to take things out. He improvised a couple of little films in that way [see Smith's *No. 4*, on the *Early Abstractions* reel at Film-makers' Cooperative in New York]. In one night he could do a whole abstract film and have a synchronized soundtrack as well.

Later, he tried to interest Hilla Rebay in the idea of his doing a three-dimensional film in the non-objective style that she favored, by sending her a series of paintings he had made for viewing with a stereoscope, which he also included. He had worked out the stereoscopic principles of what made things look in front of or behind other things. He also did a series of small, impeccable paintings in that perfect non-objective style and tried to interest her in financing a film in which those compositions would appear. I've got slides of those paintings, which I hope someday to see published.

MacDonald: When I was doing research on Amos Vogel and Cinema 16, Carmen D'Avino told me that the fact of Cinema 16's audience for unusual forms of films was the instigation for his filmmaking. He might not have made any films, had Vogel not created that audience. Would you say the same for your work and the Art in Cinema programs?

Belson: Probably, yes. I could list artists whose work we saw during those showings that inspired us in some way. People like Douglas Crockwell. Most people have forgotten him. He was a successful illustrator in the Norman Rockwell style and used to do Saturday Evening Post covers. In fact some people confused his work with Norman Rockwell's: Rockwell, Crockwell. Anyway, he did weird, surrealistic, spooky little films. I'd love to see them again. And I was turned on by Rhythmus 21 [1921] by Hans Richter. Something there gave me a clue as to how I might get started, as did the early surrealist films, and [Georges] Méliès, and the early films by the Whitneys. And McLaren. I got a big kick out of Begone Dull Care [1949] and Fiddle-Dee-Dee [1947] and remember studying them on rewinds to see how some of the effects were achieved. I suspect that's where Harry got the idea of painting on film, too. I tried to follow McLaren's career as best I could. McLaren did a 3-D film in 35mm called Now Is the Time [1951], which was shown in regular movie theaters (you used Polaroid glasses). I found some of his other techniques intriguing, though I never used them.

Smith and I, and Hy Hirsh spent a lot of time together. Occasionally we would go to a downtown theater that showed nothing but cartoons—on the marquee they'd have, "20 CARTOONS 20." This was before television, where they now have cartoons twenty-four hours a day, it seems. I think we were looking for anything that was visually dynamic and animated. In those days animated car-

toons were about the only creative things going on in the commercial film world. *MacDonald*: At a certain point, your films began to reflect your interest in Eastern metaphysics. What led you in that direction?

Belson: That's a big question. I was always on the fringe intellectually: Jung, Aldous Huxley, Thielard de Chardin, magic, the occult, et cetera. When I was about thirty-five, I had I won't say a mid-life, but a one-third-life crisis. I was profoundly dissatisfied with everything about myself and my life, and I decided to see if there wasn't another level or dimension to life that I could turn to as a way out. Gradually, I got into hatha yoga, which seemed like a perfect method for tuning the mind and the body to be more receptive, to understand more than just the brute facts of existence. This led to studying other Eastern philosophies.

Up until that time I was a complete agnostic. I had always found religion and religiosity repulsive, actually. I had a friend [Dorsey Alexander] who became very religious in a proselytizing, Bible-quoting way, and whenever I saw him coming down the street, I'd hide in doorways. But eventually I was able to think about spiritual things without cringing.

Yoga was the key to it all. Hatha yoga gives you a system and a very clear, precise technique for developing the spiritual side to your consciousness. It does this through physical exercises, and by various precepts and codes of behavior. I stopped eating meat and became a vegetarian, an extremely important atep—but unfortunately, especially at that time, a step out of society. My theory was that if I could refine and perfect myself, I would become a better artist.

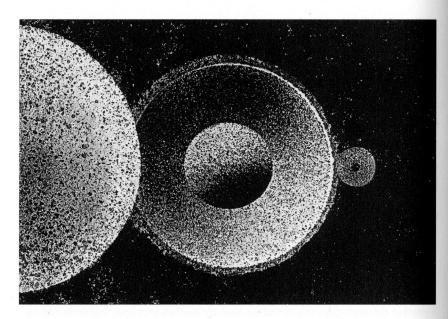
MacDonald: When I was looking at your early scroll films, I noticed that at first you were creating these animated surfaces, but by the time of Allures you've begun to envision virtually infinite space—levels beyond levels. In a sense, this change charts the spiritual development you're talking about.

Belson: That's a good observation. Of course, Allures was also a reflection of what was happening in the world at large—in outer space. Allures was probably the space-iest film that had been done until then. It creates a feeling of moving into the void. Re-entry was also very influenced by the exploration of space.

MacDonald: Recently I re-read Gene Youngblood's description of the Vortex Concerts in Expanded Cinema. I had always identified them with mid-sixties psychedelia, and was surprised to find that the Vortex Concerts came before that. They were related to space exploration in a different way: they took place in a planetarium.

Belson: Right. By the time the sixties came around, Vortex was all over. The culmination, I suppose, was taking the show to the 1958 Brussels World's Fair. I don't think we ever recovered from that.

Vortex started in a straightforward way. Back then, San Francisco had a very new and attractive planetarium, Morrison Planetarium, in Golden Gate Park. It had a lot of specialized lighting, and projectors which simulated all kinds of astronomical phenomena in a very smooth way, probably state of the art (Henry



Horizontal Mandala (1952) by Jordan Belson, used in Mandala (1953).

Jacobs and I found out when we went to Europe how primitive planetariums over there are, compared to what we have here).

The people at the Morrison were, and I assume still are, quite clever from an engineering point of view, having built their own star projector and other specialized projectors, and they were also quite polished in their performances. They used the full color spectrum in house lighting with a dramatic flair. But for the most part it was all pretty dry, the astronomy lecture kind of thing. Henry Jacobs, who was a composer of electronic music and very informed about what was being done in that field throughout the world, told me in glowing terms that he had discovered what a wonderful theater the Morrison Planetarium was, with a multidirectional sound system, and it would be great if we could put on an electronic music concert there. At first, the idea of using the visual possibilities of the theater was secondary, but when I saw all those great projectors, I changed my mind. We decided to work together and make it an audiovisual concert: electronic music and abstract imagery. Henry is a bit of a con man, and he sweet-talked the planetarium people into letting us experiment with their auditorium. They were open to the idea: they were proud of their facility and thought this might be a prestigious way to use it, a way of displaying their smooth astronomical effects and their multidirectional sound equipment, and a way of making more people aware of the planetarium.

MacDonald: Were you well known at the time as a filmmaker?

Belson: Maybe in a very small circle of aficionados my name stood out, but the planetarium people didn't know us from Adam. Henry got them interested. We started out rather modestly with just performances of electronic music over their good speaker system. They gave us a few nights when they weren't putting on their usual show. They'd provide the personnel: the ticket takers, the ushers, and the people who keep the building lit up . . . and parking. The Mortison is right in the middle of Golden Gate Park, easy to get to. It was a rather attractive event. Audiences came, and the program became more and more elaborate. Our demands on the planetarium's engineering department became more time-consuming. They were building special equipment for us. At first, they rather enjoyed the challenge.

MacDonald: How long did it take for the audience to develop?

Belson: It was surprisingly fast. People were ripe for it apparently. This was just on the brink of the era of the light shows and the happenings. The audience was a real cross section of the population. In fact, some of the people were a little too colorful for the planetarium's staff! We had good advertising. We had posters in the streetcars and the buses, and TV newscast coverage—Henry, the PR man once again! It doesn't take much to get the news people out to cover an unusual creative event. The highly respected art and music critic, Alfred trankenstein, came to one of our early shows and wrote rave reviews in the San brancisco Chronicle. It just snowballed, and pretty soon we were getting huge crowds. We had to put on two or three performances a night, when only one was scheduled. People would wait for the hour or the hour and a half it took for a performance, and we'd do it again for them.

In fact, we were so successful that we destroyed the whole thing for ourselves. The planetarium eventually came to feel that *they* were working for *us*. I suppose they felt we were using everything they had developed and stealing their glory. Actually, we weren't just using their effects. Henry went down to Stanford and got the chief engineer at a think tank there to build a special totary-controlled mechanism which allowed us to whirl the sound around the room smoothly, hence the name "Vortex." The planetarium had the speakers arranged in a circle, but they weren't being used in a rotational way. In those days the effect seemed miraculous.

It was a very important period of discovery for me. Up until that time, all of my films had been animations. This was the first time I used imagery moving in real time, blending images together from various projection sources and creating multiple superimpositions. The house lighting there allowed you to flood the whole dome with any color you wanted, in deep, saturated colors. I remember a simple effect where we made the whole dome very dark red and then we introduced the full starfield into the dark red and gradually faded the red out, leaving only the bright stars against absolute black. It was very dramatic.

The audience would always break into spontaneous applause when they saw it (which never happened in the planetarium's regular shows). And unfortunately, we upset the planetarium's lecturer when we accidentally left the star projector on and rotating overnight and set them back 2,000 years! Then they accused us for the death of some fish in the adjoining aquarium.

Anyway, we used their equipment, but not the way they originally intended, and the star projector was the least of it. We added devices that projected interference patterns over the entire dome, which allowed us to create effects that had people screaming as if they were on a roller coaster. Interference patterns are created when you have two visual patterns that work against each other. I don't think anybody had seen those particular effects at that time. I still have some of the paraphernalia.

I used the effects carefully. I wasn't just blasting the audience psychedelically. It was all carefully composed, and synchronized with the music, so that there was form and shape to each piece. I suppose we would do about eight compositions on a program. For some of the compositions I might do only a mood setting, and for others, something more elaborate. During the two or three years of Vortex Concerts, I did about fifteen full-blown synchronizations to electronic compositions from all over the world—composers such as [Toru] Takemitsu from Japan. Also, I had learned to time images, to fade in and fade out, dissolve, to compose in ways that were very different from anything I had done on film so far. As you know, animation is pretty much one frame at a time. With animation you tend not to think in terms of multiple exposure, dissolves or fades; you don't even need a camera, you can do it all on cards or directly on film. After those synchronizations for the Vortex Concerts, my films started to have a different look, I had found new and more sophisticated ways to produce controlled abstract imagery.

MacDonald: Was Allures the first film you finished after that period?

Belson: No. There was a shorter film, called Seance [1959], which was done to a composition by Pierre Shaeffer, who taught at New York University, I think. At the Vortex programs we performed a composition of his that I decided would be a perfect soundtrack for a film. I took some of the imagery that I was already working with from the Vortex Concerts and made a film out of it. I recently sent a copy to Anthology Film Archives.

Allures was an expanded version of the same sort of thing. It used imagery I'd been working with for Vortex, and an electronic score that Henry Jacobs and I produced together.

MacDonald: The individual Vortex compositions were eight to ten minutes long?

Belson: Right. Somewhere I've got the programs stashed away.

MacDonald: Do you still have the scores?

Belson: I may have saved my notes on what images to bring in at what point, but I don't think they'd make much sense to anybody else. I made my notes with

a fluorescent crayon and read them during the performances under an ultraviolet light so I could see without lighting up the room. It was very complicated because I had to remote control twenty to thirty different projection devices.

MacDonald: I assume no direct records of the performances were ever made. Belson: No. In fact, filming was not possible because of the extremely low level of light used. If you had walked into the darkened chamber during a performance and looked up, you would have seen absolutely nothing. But people who were already in there, whose eyes had become accustomed to the dark, might be seeing a very vivid, brilliantly lit display. And we could make it very, very dark in there, rock-bottom black, absolute void!

It was such a subtle and beautiful arena for these experiences to take place in, a perfectly smooth hemisphere to project on, perfectly silent projectors that worked by remote control. No smoking, so no beams of light revealed the source of the images. You could create some beautiful and terrifying sensations and feelings there.

I guess we were the first to use planetariums for something other than astronomy.

MacDonald: Tell me about the Brussels World's Fair.

Belson: Vortex in Europe was really very funny. We found out that there was a planetarium on the fairgrounds, and we persuaded some rich people here in San Francisco to give us the money to go. We had been invited to participate in a week of experimental music events. John Cage and other avant-garde composers were there. The planetarium director was under the misguided notion that we were rich Americans. He didn't know we were just penniless opportunists. He seemed to think our presence was going to bring prosperity and attention to the planetarium. The planetarium was already there before the fair was built. It turned out to be an old, neglected, decaying, dingy, art deco building, in the middle of this modern glitzy world's fair, a leftover from an earlier fair in the thirties.

MacDonald: How many shows did you do?

Belson: Two or three, I think. They were a total disaster. We had made the false assumption that we could pick up a lot of the equipment we needed right there in Belgium. But we couldn't even find a roll of electric tape. We had to get some things from the Bell & Howell Company in London because we simply could not find them in continental Europe. And then to make the situation even more absurd, the planetarium gave us an assistant who didn't speak English, and we didn't speak anything but English.

The planetarium itself was very primitive. It didn't have any of the niceties the Morrison had. There was no fade in or fade out, no dimmers. Snap, the lights go on; snap, the lights go off—like in a kitchen! The equipment was all very clunky and antiquated. Instead of knobs that would turn, they had levers that you had to slide up and down. It was like Frankenstein's laboratory. And a deplorable looking cloth dome, all stained. And wooden folding chairs!

To add to the comedy, Henry was out on the Zeiss star projector, rigging up some pieces of our equipment for that night's performance, when I innocently pushed a button on the control panel, and all the lights suddenly went off and I heard this crash. Henry had fallen off the star projector and had hurt himself badly. We had this wild ambulance ride, like out of a Mack Sennett comedy, to the fair hospital, where they taped Henry up—he'd cracked or bruised a rib.

MacDonald: Did you show at other European planetariums?

Belson: We contacted two (Paris, Moscow), but we never got a nibble; actual disdain from Paris.

MacDonald: I first saw your sixties and early seventies films other than Allures, when Sheldon Renan presented them at a summer institute at Hampshire College. He made clear to us that the films were more precisely structured than I had realized, though there wasn't time for him to go into the details. Could you talk about how the structures of these films developed?

Belson: In the films I made in the late sixties and early seventies there were specific reasons why I put images together in the particular ways that I did. The films may seem abstract, but if you are familiar with the kinds of subjects I was dealing with, you might see aspects of the images not otherwise evident. However, I wouldn't want to burden viewers with thinking that they have to understand precisely what these images mean to me.

For example, *Re-entry* was based to some extent on John Glenn's first flight into orbit. If you listen very carefully to the soundtrack, you actually hear John Glenn's voice mumbling something about passing over Perth, Australia. The structure of the film begins with leaving the Earth, then goes out into orbit and beyond, glimpsing some aspect of the universe not visible here on Earth—a glimpse of Heaven perhaps—and then comes back to Earth, reenters. At the same time, that voyage is a simile for the transmigration of the soul. *Re-entry* is like a birth experience. In *The Tibetan Book of the Dead* birth is described as a reentry into the world, from outer space, through the mother's womb.

Sometimes I would choose a subject that I was not only interested in, but wanted to know more about. It would take maybe a year to produce a film. During that year, I would study as much as I could on the subject, and eventually the images would arrange themselves in an order appropriate to the subject. Samadhi is a good example. I hoped that somehow the film could actually provide a taste of what the real experience of samadhi might be like [The definition of samadhi varies: in Hinduism, it is a state of deep concentration resulting in a union with, or an absorption into, ultimate reality; in Buddhism, it is the meditative concentration that is the final step of the Eightfold Path].

Usually the subjects I chose to build images around had some kind of traditional form of their own that I found useful in constructing my film. Take *Chakra* [1972], for instance. If you study the chakras (the psychic centers in the body), you find that there are seven of them (there's some disagreement about how many there are, but the general consensus is seven). They're usually

depicted as arranged along the spinal column and described starting from the bottom, going to the top. Each chakra has its own unique characteristics, and centuries of elaboration and analysis have accumulated around these characteristics. Whether or not you believe the chakras exist, this tradition and literature do exist and many intelligent people have taken them quite seriously. In *Chakra*, I was able to transfer the traditional order of the chakras into a film, starting with the first (lower) chakra and working up to the seventh (top) chakra.

I based Light [1973] on the electromagnetic spectrum: infrared light on one end and ultraviolet light on the other; visible light is in the middle. The order of the spectrum made a perfect storyline—a solid, almost scientific basis—for me to follow in placing my images.

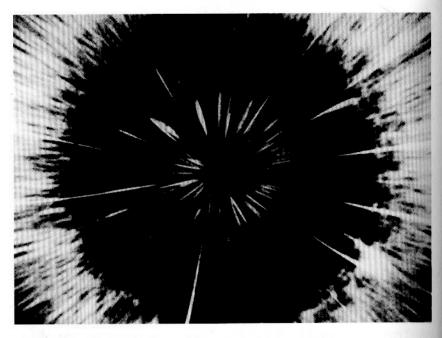
Music of the Spheres [1977] was based on our solar system, the sun in the center and the planets at different distances around it.

MacDonald: Did sound develop in analogous ways?

Belson: Sometimes, yes. While I was doing the soundtrack for Chakra, I came across a list of the sounds people have reported hearing when in deep meditation, traditionally about ten sounds. The first is what they describe as the sound of the honey-intoxicated bee. Then there's the sound of a motor and the sound of a bell, the sound of a flute, and the sound of thunder. I just went right down the list, exactly as listed in the book, and put those sounds on the sound-track to accompany the chakras.

I worked that way for ten or fifteen years, but eventually I did stop. During that period I felt the need to put images together in some meaningful order. In a way, I'm in the opposite camp now. I don't want there to be *any* ideas connected to my images, and if there *are* any there, if anybody sees any, those are entirely in the eyes of the beholder. There is meaning in my newer films, certainly, but if I were to speculate on what they might mean, it would be no better, no more accurate, than what *you* might speculate. I have no inside information about them. Even in the earlier films, when I did have specific meanings in mind, I *never* insisted that anybody else see them that way. The films were always meant to stand on their own. Actually, the films are not meant to be explained, analyzed, or understood. They are more experiential, more like listening to music.

People are always asking me how I make my images. Actually, I derived my imagery from many different sources. When I was working on the films, I was always experimenting with anything I thought might produce the kind of imagery I was interested in, anything from lasers, optical printing, liquid crystals to the facilities of an entire TV broadcasting studio. I tried everything. It probably doesn't show, but I didn't want it to show. I tried to be pretty ruthless about eliminating any images where the means by which the imagery was obtained was obvious. I didn't want the viewer to be more aware of the process than of the event taking place on the screen. That's one reason I've never cared to dis-



From Jordan Belson's World (1970).

cuss my techniques in any detail. I like a convincing illusion. Idle curiosity about how I produce the images can only spoil the experience of the films, as far as I'm concerned. But I will say I used a lot of different source material, there was no *one* way. Although there is a dominance of a certain kind of imagery, I've always tried to include as many different elements as possible. Mine is a composite imagery.

MacDonald: Many viewers probably think you make your films with hightech procedures. That was certainly the sense I had when I first saw Allures.

Belson: Well, Allures was no-tech, but I have used some electronic technology. When I worked with Stephen Beck on Cycles, his synthesizer was advanced for that time. While I am generally antagonistic to high-tech methods, I admit I would gladly use all that technology if it were conveniently available to me, but high-tech image-making equipment is so outrageously expensive and goes out of date so quickly that you have to be part of a commercial enterprise to use it at all. Many fine artists and technicians are doomed to work only on commercial projects that someone else wants, which is not the same thing as producing works of art on your own.

I remember the first time I was invited down to Silicon Valley to some big research center, a huge operation with rooms full of gigantic computers, each the size of a refrigerator. As I walked down the aisle, I could actually feel the com-

puters sucking information out of my mind. I subsequently realized that that's what they're built for, to draw information to themselves. The operators tend to become extensions of the machines. They don't realize it, but they're like robots. You have to think like a machine, you have to become a machine to some extent.

It's not that I don't like computers. In fact, I consider computer art to be the wave of the future. God knows where it's going to go from here. It's hard to believe what they can do already. But those areas were closed to me. My best bet was to work with simple mechanical and optical means that I could handle myself, and to stress individuality, creativity, and artistic finesse. That was the only way I could justify making films. Of course, you can't ignore the course of events. As a matter of fact, I feel somewhat obsolete: the drive of history just keeps moving on, and pretty soon you realize that you're outdated, old-fashioned, technically archaic, when at one time, not so long before, you might have been "state of the art." The avant-garde becomes the rear guard.

MacDonald: I wonder if that combination of Op Art and spirituality that betame known as psychedelic art at the end of the sixties, an approach synonymous with San Francisco, wasn't to some extent inspired by your work, Allures in particular, which was widely seen.

Belson: Probably it was just the zeitgeist. The Beat era, which here in San Francisco was centered in this neighborhood [North Beach], had already established a tradition of performances of jazz and poetry in the various local bars. Films were shown on occasion, in the bars or on the glass fronts of the bars, and sometimes out in the street. Some events would be well-publicized, and a big audience would show up. Poetry would be read, jazz would be played, and films would be projected. I personally never organized such events, but I allowed my films to be shown.

Allures came along a little later though, and by that time I shied away from the bohemian life around me. I needed to earn a living.

MacDonald: How did your collaboration with Beck on Cycles develop?

Belson: Steve was a brilliant young electronics engineer, who I met when he was an artist-in-residence at the Center for Experiments in Television here in San Francisco. I found him to be a compatible personality. And I was particularly interested in his synthesizer. We decided to do a film together. Cycles is without a doubt 50 percent his, if not more: he's entirely responsible for the soundtrack. To pay for Cycles, Steve made a grant application to the AFI [American Film Institute]. At that time, as recent as it is, film and video were still separate mediums. There was almost no crossover. Our intention was to make a film that was equally film and video, that would combine some of the unique qualities of both.

Cycles is comprised of one sequence repeated twelve times, each time with electronic and cinematic variations. For me, it was another film in which I took an already existing metaphysical concept and tried to illustrate it. The text that we based our continuity on was a book by Sri Yukteswar, the teacher of Yogananda. Sri Yukteswar was a disciple of traditional Indian teachings, but

well aware of modern science. His book, *The Holy Science* [Los Angeles: Self-Realization Fellowship, 1974], gives the physical universe a philosophical context. In that book, Sri Yukteswar has a graph of a grand cycle containing all the different periods that human development on Earth goes through. It's been too long since I read this book to tell you the specifics, but I do remember the graph divides history into periods of ten thousand years, each of which has a different level of spiritual development. According to this system, we are in a very low period right now in terms of spiritual development, though we are presumably coming out of it. In *The Holy Science* the characteristics of each individual cycle are explained.

Here, again, truth is not the issue, only the use of an attractive metaphysical concept. Each segment of *Cycles* represents a period in the cycle of human development. I would never tell anybody to look at one of my films for any kind of precise information or spiritual teaching, even though I, myself, may have derived inspiration from sources like this. So to whatever extent it is useful to know where I got my inspiration from, I pass that along.

MacDonald: Your films are more expressions than teachings.

Belson: Exactly. Expressions of ideas and experiences that were meaningful to me. I am neither teacher nor scholar.

MacDonald: How long did you and Beck work together on Cycles?

Belson: About two years, I think. It was a rather complicated process. Back then, Steve Beck's direct video synthesizer was one of the few instruments with which you could actually generate images, and it could also do many things to images fed into it. That instrument is what attracted me to Steve in the first place. I've always been attracted by electronic imagery, but it's been my downfall in many ways. I've done a lot of work that hasn't aged very well, because I couldn't resist working with electronic imagery before it was really perfected (although I haven't seen these films for a long time; they may be better than I remember). Cosmos [1969] has a lot of early electronic imagery in it that I went through an inordinate amount of trouble to get. I had to rent the facilities of an entire television broadcasting studio in order to get the "key-in" effect I wanted.

MacDonald: The imagery of Cycles seems very familiar from your earlier films. Is it fair to say that you suggested the particular type of images, and Beck helped you articulate those with new sound, and new video texture and color?

Belson: If I recall correctly—it's almost twenty years ago now—I put together about a forty-five-second film sequence: there was a ring of fire, and a wave that breaks, and droplets that descend, et cetera—a basic sequence. We took that sequence and other film material and Steve's synthesizer to the film lab that I worked with, where they could film (kinescope) from a video screen. The synthesizer is, or was, about the size of a small piano, so taking it was no simple matter. We ran my forty-five-second continuity through Steve's synthesizer and he would transform it in various ways, while we were looking at it. Using the lab's camera, we recorded as many variations on the sequence as we

could. We ended up with twenty or thirty really interesting versions of the original composition. Then we chose twelve versions appropriate to the *Cycles* concept. We were able to augment the electronic variations with representational film imagery, whatever seemed required. For example, there's a forest fire, some electric sparks, some imagery of my street with the TransAmerica pyramid building in the background. We added in those images in the proper places, using a long scroll-like chart to keep track of what we were doing.

Cycles has a rather spectacular ending, the dance of Shiva. Steve had taped a dancer previously and had electronically enhanced the imagery to represent Shiva as Creator, Shiva as Sustainer, and Shiva as Destroyer. I thought the merging of his imagery and mine at that point in the film was particularly effective.

MacDonald: How have you supported yourself over the years?

Belson: Well, usually in a commercial art capacity of some sort. All during the Vortex years, I worked half-time as an engraver at an old-fashioned factory called Bemis Bag Company. I loved that job. I engraved rubber plates for printing on difficult surfaces like burlap. I was so good at it that they allowed me to work there half-time instead of full-time, which the labor unions for some reason always insisted upon—enslaving you for a whole day and ruining your life entirely. So that helped. Previous to that, I had worked in an advertising agency, as an idea man, or "whipping boy," as they called it. They fired me for sadistic teasons, nonconformity or something of that sort. I teamed up with Henry Jatobs: we formed a production company to produce television commercials. People were willing to pay for motion graphics.

MacDonald: Do you remember commercials you did?

Belson: Not really—oh, there was one commercial for MJB Coffee—but it was so off-the-wall that they only showed it a few times. Later, we and a third partner tried to hire ourselves out as graphic designers. Eventually we gave it up and after Vortex I got a job at an envelope company designing letterheads and logos. I did that for two or three years. In fact, I was working there when I got my first grant from the Ford Foundation, and I was seriously torn between wanting to stick with the job, which I'd worked hard to get and keep, or taking the grant. Making films was becoming a bit of a nightmare as far as earning a livelihood goes.

MacDonald: How much did you make from your films?

Helson: In those early days, there was no market for films of that sort. There still isn't actually, certainly not enough to live on. Except for grants, I always had to support myself. After the grants started coming, I did finally give up working at regular jobs and devoted myself entirely to the films, but it was a marginal existence at best. I gave up my last regular job around the time of Namadhi.

I lived simply and didn't cultivate any gross materialistic needs. An ordinary person probably couldn't live on what I managed with. I didn't really need too much, but even that was hard to get. Eventually I got to the point where I was

earning a fairly steady amount of money for my film work. I had a number of films out, and the distributor, Pyramid, had a wide circulation in schools and universities. They used to send me monthly computer readouts of rentals and sales, and some of those readouts were four or five feet long! There'd be unexpected names, like IBM, buying or renting the films. That went on for about ten years, so I had a fairly steady income, though it never exceeded four or five thousand dollars a year—barely enough to scrape by on. Occasionally I would sell some material to producers making educational films or scientific films. I never really promoted my work. The promotion was pretty much generated by the films themselves. For a while there I did think I was the focal point of the World's consciousness. I was getting letters from all over. People were writing articles, dissertations, lectures, and books about my films. Now I'm looking back and wondering what happened.

MacDonald: You've also done special effects work for commercial films. Belson: Yes, commercial producers bought some of my material for the science-fiction films Journey to the Far Side of the Sun [1969] and Demon Seed [1977]. I don't know if you know it, but I am the Demon Seed!

MacDonald: How did your material get into that film?

Belson: I don't know much about the director, Donald Cammell. He's British, I believe. He co-directed Performance [1970] with Nicholas Roeg, and I remember seeing a picture of him as Osiris in a Kenneth Anger film, possibly Lucifer Rising [1974]. Somehow he managed to get a shot at making a Hollywood film. I didn't actually work on that film (although I did design a sequence they didn't use), I just gave Donald permission to go through my footage and use what he wanted. He and his team made a valiant effort to use my material to express the developing emotional states of a giant computer out of control. Of course, it was very hard for them to do the film they wanted; because of the financing, they had to succumb to influences from other powers in the studio—a standard Hollywood story, I guess.

My most important experience of working commercially in special effects was for *The Right Stuff*. I was included in the crew very early in the production—practically right from the start. The entire film, which was made in San Francisco, took about two years and forty million dollars to complete.

MacDonald: How much material did you make for The Right Stuff?

Belson: I shot twenty thousand feet of film, about the length of an ordinary feature. Of that, they used about three minutes.

MacDonald: What happened to the rest?

Belson: I have a lot of it here. I had an understanding with Philip Kaufman that when the film was over I could have the workprints or what was left of them. They are in deplorable condition, all chopped up and gummy with tape and crayons and stuff, but there are long sequences in perfect condition that have probably never been projected. Someday I hope to put that material in order. It's a big headache because 35mm takes up a lot of room, which is some-

thing I don't have very much of. But it was rather unusual for me to get the material back because that's not the way they do things in Hollywood. Usually when a film is over, everything—workprints, originals, audio—is put in storage in Los Angeles. I don't know what happens to it after that. It all burns up in aome big conflagration later, I suspect. But Kaufman was decent about it, let me have my material before they hauled everything away.

MacDonald: Did you have much say in how they used what you did for them, or did they do what they wanted with it?

Helson: That's pretty much it. I was kind of a wild card. The main special effects for the film were done at a place here in San Francisco called Colossal Films. A special division called USFX there was created to do nothing but effects for *The Right Stuff*. Kaufman brought me in as a separate artist, and I suspect Colossal resented that. They weren't very cooperative, and there was a lot of internal friction between the director and the effects department.

It all started when a few years earlier Kaufman had come over to my studio. He was being considered to direct the first Star Trek movie [Star Trek—The Motion Picture, 1979]. When he came over, that project was in the developmental stage and he was collecting ideas. I showed him my films, and we had a very enjoyable conversation. As it turned out, he did not direct Star Trek, and I didn't hear from him again until he was developing The Right Stuff. When he had brought me into the project, they hadn't acquired the financial backing that they needed to actually go into production. The producers had put up the money to get the script written and developed, and they were waiting for someone else to come in with the big money.

I suggested to Kaufman that I make a 16mm film with a lot of my effects mixed with Right Stuff-type material, so he could see if my work would be useful or not. I made the film quickly and called it The Astronaut's Dream [1981]. I used a lot of NASA material, rockets taking off, things of that sort, mixed with my material. It came out quite well. I even got a soundtrack together. Kaufman would show it to people who came by the office at Zoetrope. It was a high hit. If nothing else, it entertained the visitors and made them think that something really interesting was happening there.

Hy that time I was pretty solidly in with the movie, and I was at the office when the word came that financing had been finalized. Everybody gave a big theer, and Kaufman said, "We're rich!" It turned out to be true. I imagine everybody connected with the film made a lot of money. I made more money than I'd ever made in my life—eventually, a thousand dollars a week, and those weeks would go by so fast that I almost didn't have time to cash the checks! For me, making the money was one of the most exciting parts of the whole experience, and I imagine this is true for most people working in commercial film, because in other ways the process is very frustrating.

MacDonald: What exactly is your contribution to the finished film?

Helson: There's a sequence when John Glenn is in outer space for the first time.

In orbit he saw a phenomenon NASA named "the fireflies," and Kaufman wondered whether I could simulate that. I gave it a try and managed to come up with an effect that worked, so Kaufman was inclined to keep me around to do other effects. By the way, it turned out, as I discovered when I finally saw NASA footage of "the fireflies," that what I had imagined was exactly what the real fireflies actually looked like. I also did most of the views of Earth from outer space. Also, Mach one, Mach two, and rushing effects outside the XI cockpit, and starfields.

Filming in 35mm and seeing my work on the big screen was a surprisingly important experience for me. 16mm was always a little too small. I wouldn't want to make too much of it, but coming as it did towards the end of my film career, I regard it as a peak experience. I still think about it. I suppose in some respects it has something to do with the movie mystique conditioned into me since childhood, but it's odd because when I was making my own films, I was never aware of any connection to the movies. I had even stopped going to the movies.

MacDonald: When?

Belson: In the mid-sixties. I've never been back. Well, I did go back once to see 2001 [1968] and later to see Demon Seed. Both terrible experiences, with rowdy, noisy audiences, popcorn, et cetera.

MacDonald: In your recent work—and the more recent, the more true this seems—you've become less involved with focus and concentration within the frame and more involved with the *field* of the frame. Sometimes you hint at circularity: something will be moving through the frame in an arc that implies a much larger cycle, but it's not your focus anymore.

Belson: Right. Eventually I abandoned the intense centralized imagery for more of a spatial landscape-like sensibility. Central and noncentral seem to alternate; the most interesting is when they combine.

MacDonald: When you did Northern Lights [1985], did you study the northern lights?

Belson: Not exactly, though I had certainly seen the aurora borealis in photographs many times. I don't remember what inspired me to do that film. After I put it together, I saw that it seemed to be alluding to the aurora borealis all by itself, so I gave it that title. Since finishing the piece, I've seen new aurora footage that makes me realize how close I was to what the northern lights actually look like.

MacDonald: As I studied the Creation compilation [an anthology of effects compiled for a PBS documentary, Creation of the Universe (1985)], and Samadhi and Other Films, it struck me that each of your films is a single, complete work, but it's also raw material for the next work.

Belson: Sure. That's the way I've always worked. I would add, subtract, recombine and constantly reshape and transform the material. Seven or eight layers of imagery is not unusual. Sometimes a complete transformation is possible, electronically or otherwise. An example of what I mean: I was looking at

one of my films (on tape) through a crystal ball the other day. Everything was transformed. Because of the curved glass, forms that moved from side to side on the screen now moved from the bottom to the top. There were very dramatic, three-dimensional-looking arches in space, and movements curving and diminishing off into the distance quite convincingly that were not there before. It was, essentially, a new film.

The same thing is true with soundtracks. I'm constantly trying to find the most effective combination of sound and picture. Images that don't look good with one kind of music might look very good with another. Recognizing that all these possibilities exist leads to a certain amount of indecisiveness and inconclusiveness, but on the other hand it leaves the process open for improvement. The imagery is more malleable than you might think. All along, I was constantly tearing my films apart and rearranging them.

Actually, it is a bit confusing because I grew up thinking that a work of art, once it's finished, is sacrosanct, and should not be touched or altered. I used to believe that, but it's definitely no longer true for me.

MacDonald: In fact, we realize now that even if you don't go back and revise films, they're decaying anyway; they're changing on their own.

Belson: Oh, thank you for that comforting thought!

MacDonald: In your most recent films, Fountain of Dreams [1984] and Thoughtforms [1987], you create a strange composite energy in the frame. Things are moving from right to left and from left to right at the same time. It's as if forces are pulling in opposite directions even though they're part of a single frame of experience. Instead of separating out the yin and yang, it's as though you show them intertwined.

Belson: Yes. One of the electronic experiments I'd like to try involves having those opposite forces meeting and then twisting around each other into a single shape.

MacDonald: I've often thought that films that center the image—whether it's Chaplin being in the very center of the frame, or Griffith centering actors within a symmetrically masked frame, or Fischinger causing circles within circles to come toward you from the center of the frame, or the circle mandalas in tillures changing color—are about the spirit (or, at least, reflect a belief in the spirit) while films that use the frame as a kind of porous space through which things move—the Keaton films, for example, where Keaton is often moving through the frame or things are moving toward and past him through the frame, and Thoughtforms—are more fully about the material world. Obviously that's a problematic reading . . .

Helson: But you are definitely on to something. I do believe centered, symmetrical imagery pertains more to the spirit.

MacDonald: But your later work is just as spiritual as your earlier work, don't you think?

Belson: Well, what I'm reaching for in these recent films is a combination of the two, an equal degree of inner and outer. I am essentially an artist of the inner image and have been for a long time, even before I realized it. Eventually, I began to have experiences where I could actually see visions with my inner eye that you could legitimately call an inner image. This imagery was centered, circular, symmetrical—although there are amorphous inner phenomena as well. Most primary forms in nature and in the universe are symmetrical and circular. The planets, the solar system, a galaxy—they're all circular, spherical, and symmetrical

MacDonald: Although as you move through them, you realize that there are layers upon layers. Your later works' complexity and multi-layeredness is like a different perspective on the same mystery.

Belson: Right. I'm involved with the kind of imagery that has been dealt with in Tibetan art and in some Christian art of the Middle Ages: the windows in Gothic cathedrals, for example. Such circular and symmetrical shapes have always been associated with the quest for spirituality, even to the extent that some people believe that such shapes, mandalas or the designs inside Moorish mosque domes, can precipitate spiritual feeling. It's probably true. There is something magical about circles.

After seeing one of my films, a psychiatrist and professor at one of the local colleges sent me an essay about the soul by the Renaissance astronomer Kepler, who speculated that human consciousness was circular in nature and is derived from the spherical form of the universe itself. If you slice through a sphere at any point, you get a circle. That circle is derived from the sphere, but it doesn't have the dimensions of the sphere itself. In Kepler's view, human consciousness is like a slice of the cosmic consciousness. Kepler maintained that the human soul has retained that circular nature: he calls it a *punctum* (*punctum* means "centerpoint" in Latin). I'm not sure whether he thought of it as a physical organ or whether it was something insubstantial, but real nevertheless. He describes it as circular with a small opening in the center.

MacDonald: That sounds like a lot of the imagery in your earlier work.

Belson: I've known about the punctum since around the time of Samadhi and have consciously made it a part of my work. The first time I actually saw a punctum inside myself, I knew I was dealing with something very real. There is an inner sun and it can be perceived, but you have to take the time, and you have to have a method. You cannot just say, "I'm going to see it now." You've got to learn how to reverse the senses so that essentially you're looking "in" instead of "out." Meditation, done regularly, is one of the ways of doing this.

Actually, Kepler went further. He explained that the glow, and other phenomena connected to the outside edge of the *punctum*, pertain primarily to physical life, outer life. And phenomena connected with the inner perforated center of the disc are a function of the inner consciousness. This has informed a lot of my thinking. In my life and my art I've always hoped for a perfect fusion of those two realms.

Astronomy has been another of my main influences. Back in the sixties I had this photograph of a beautiful galaxy, perfectly shaped, seen on edge—a dark ring with a glowing nucleus. I put this photograph where I could see it frequently, and as a result I entered into many, many meditations on this galaxy. It thought me a lot about the universe and human life. A galaxy seems to be a living organism of some kind, with a nucleus and vital organs-spherical star chaters that are slightly separate from the main body-which may be vital ormans, though you may not recognize them as organs because of their gigantic lt is also possible that some galaxies are male, and some female. Somehow they're in communication with each other, and they mate in some way, give birth to smaller galaxies which eventually grow larger. Galaxies seem to have individual personalities and temperaments. There are wild and crazy malaxies, and there are peaceful, serene galaxies. Teeming with life of every kind, they appear to be spinning through space like frisbees, perhaps laughing as they go, with us along for the ride. Not necessarily true, but thinking about them has provided me with a galaxy-based consciousness instead of an Earthbased awareness, some sense of the Big Picture.

[During the process of interviewing Belson, I spoke with Stephen Beck about Cycles.]

MacDonald: I'm curious about your memories of the Cycles project.

Beck: I moved out here to San Francisco in 1970, to be an artist-in-residence at the then new Center for Experiments in Television, which was associated with KQED, the public television channel in San Francisco. They had started the center with support from the National Endowment for the Arts, which was a fairly young organization in those days, and the Ford and Rockefeller Foundations. They offered me an incredible opportunity to continue developing my direct video synthesizer.

At KQED, I did TV shows, and I did performances and installations with my synthesizer. Not being in New York, I didn't get early recognition with the first wave of video people, like Nam June Paik, but before long I got invited to do shows and be part of MoMA events. It was an exciting time for me. Later, I gained access to videotape and started working with video as a compositional form.

While I was still at the University of Illinois, I had become a fan of the underground movies that were shown at the campus during the late sixties, usually on Friday and Saturday nights.

MacDonald: Are there particular films you especially remember?

Beck: The underground film shows had quite a mixture of things. There was the poetic work of people like James Broughton. And there were the visualists, as I called them at the time: James and John Whitney—I remember *Lapis* [James Whitney, 1966] and *Permutations* [John Whitney, 1967]—and the films

by Oskar Fischinger, Len Lye, Scott Bartlett, and Jordan Belson. It was pretty exciting. A couple hundred people would show up, and for a dollar or fifty cents we'd see two or three hours of fascinating independent film.

I saw a lot of resonance between the non-objective films and the visual experiments I was doing. I made some films of my own at Illinois, filming imagery generated on an oscilloscope screen by an audiotape. Ronald Nameth, a film professor there at the time, and I filmed thousands of feet of oscilloscopic film. I'd sure love to get my hands on a few of the films today. I think they wound up in India.

Recently, I've been very interested in Mary Ellen Bute and her film Abstroniques [1954], which was also made with an oscilloscope. Of course, at the time I didn't know about Mary Ellen, and I didn't realize I was following in a tradition.

Before I left Champaign, I had started to do light shows and performances using the oscilloscope films and other optical devices. Those were the days when our technology led the world, and we were doing beautiful things with technology, like going to the moon. But conversely the very same technology was being used in a very destructive and negative way in Vietnam, for which we're still paying.

Being at that time totally in love with technology (and being a musician as I was, and still am), I felt there ought to be some way of using technology in the service of art and beauty. I was formally an electrical engineering student, but I worked my way through school at Illinois by helping to build the electronic music studio, and I hung out with artists and musicians, and started collaborating on performances with some of the musicians there. The idea of the video synthesizer developed out of light shows and the music synthesizers I was building.

Before there was such a thing as computer graphics, the question was, "How could you make an image without a camera?" For my own aesthetics the question was, "I've seen these things inside my mind's eye since I was two or three years old. How do I visualize them?" Later I learned there were such things as phosphenes and eidetic imagery, and wanted to recreate those images using optical light as a medium. And I was fascinated and astounded by what television was technically, and yet how limited it was conceptually. I got the idea to develop a video synthesizer technique and invented circuits that let me modulate the light on a color television screen. I proceeded to build circuitry, mostly analogue circuitry (this was still the precomputer, predigital era), rewiring a color television set so I could feed it my own signals. At first, I fed music into the circuitry to see what it would look like. Friends would come over; we'd get high, and watch the stuff and everybody would go, "Wow, this is great!" And then we'd show it to other people, who weren't high, and they'd also go, "Oh wow, this is great!"

Of course, John Whitney was doing work with the digital computer at IBM, but that wasn't a real-time process. It was essentially point and line graphics generated out of vector display, like an oscilloscope, and filmed one frame at a

time. Even those big IBM computers could take a long time to generate the next frame of an animation. I wanted to do more work with color and surface and form, texture and chiaroscuro, and I wanted to do it in real time—just put my hands on these controls and produce images, like playing an organ or piano.

About a year after I came out here permanently in 1970, Jordan Belson called me up. I was delighted. Of course, I had seen Jordan's films and was quite impressed with their composition and flow. I went over to his apartment, and we struck up a friendship. I'd visit him often, maybe once a week. We'd have long conversations about all kinds of subjects. He shared his library with me, a considerable library on mystical subject matter. I was very excited and influenced and motivated by what I saw in his films, and he was eager to try and work at KQED. He came over to the studio and I showed him some of my early compositions: a piece called *Point of Inflection* [1970] and another called *Cosmic Portal* [1971]. And he really liked them. Since I was doing electronically very similar things to what he was doing filmically, it was as if we had a rapport already established.

I think the real reason we hit it off was because we were both less interested in how you made these images, than in what they mean, where they come from, and what their psychological and metaphysical implications are. When I used to present work, the question that irritated me the most was, "How did you do it?"—instead of "Why did you do it?" or "What is this all about?"

At a certain point, we started saying, "Wouldn't it be great if we could do some sort of collaboration." I was intrigued with film as well as video, because in working with video you learned right away that there were horrendous limitations. You just couldn't control brightness and contrast and color in video, and there was really no such thing as a VCR. And editing videotape was still tedious and expensive. You had to go into the studios and work with the big equipment and the technicians. It was difficult to create even a simple fade. With film you could just sit there with your little Moviola and there was your film, all gorgeous and beautiful, laid out so that you could vary your approach and work at your own pace.

Jordan and I started speculating about how you might permute and mix film and video images. He was very eager for me to run some of his films through the video synthesizer. I could hook up video cameras to the synthesizer and acan photographic imagery, process it in various ways, and then record it on videotape. So we did some experiments like that. I've still got a couple on one-linch videotape (we did them on two-inch videotape and later I dubbed them to one-inch). We were both very interested in a work that would be a true combination of electronics and optical cinema and a blending or balancing of our agon. Directing had been very personal for each of us.

It was suggested to me that if I were to apply for the AFI independent filmmaking grant in 1973 with a good project, I might be lucky enough to receive the award. So we put together our idea for the project, and in fact they awarded us the grant. I think it was the first of their projects that ever involved video. Video art was a radical idea at the time for funding organizations. Our project was unusual in another sense also. In 1973, MoMA invited forty or fifty video artists to the Open Circuit Conference to talk about what was happening in this new medium. I outraged people at that conference by showing film as well as video. It was like heresy. The film people were suspicious of video, and the video people didn't want to have anything to do with film. Of course, I was interested in breaking down those barriers, and this project was a blow to these separatist camps.

So the AFI funded the project on a conceptual basis, and then we had to come up with the actual project. About that time, a good friend of mine, Howard Klein, the arts director for the Rockefeller Foundation (and a wonderful human being: he personally helped dozens of individual artists by giving them grants to pursue their work), and a student of Yogananda, presented me with *The Holy Science* by Sri Yukteswar. It was serendipity: the message finding the messengers.

On page twelve of the introduction to *The Holy Science*, there's a chart on the yugas, the cycles of life—and boom! There it was: the script for the film, all diagrammed!

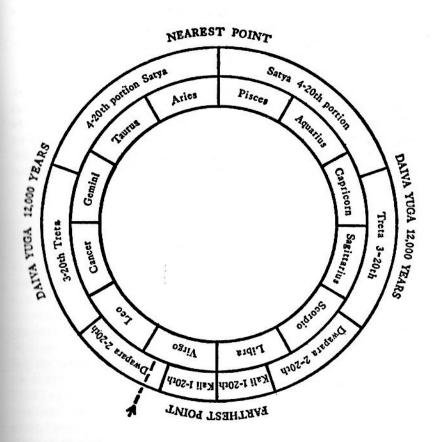
Of course, the concept of cycles in the film relates to the film reel, which itself is a powerful icon. In video there's also a circular form: the spectroscope displaying the color signal. All in all, there are a number of aspects to this theme of cycles.

MacDonald: Were you and Jordan equal partners in all phases of the process? Beck: It's very complex. I was bringing Jordan knowledge of electronics and physics, and he was bringing me knowledge of metaphysics. He was exactly twice my age at the time and while some might assume there was a master/teacher relationship, it wasn't like that. We were synergetic, that's all.

From the start we had agreed that the final work would be as much of a fusion of film and video elements as we could possibly make it, and that when it was finally done, we would release it both as a 16mm film print and as a videotape. The process developed like a board game. We'd each put our image down on "the board" and wait for the other's "next move," slowly building up a sequence. And there were hours and hours of conversation and exchange. One day I went over to Jordan's place. We had been struggling with the problem of theme and variation, the nature of the motifs we would use. Jordan showed me twelve icons that would represent the key elements of the basic theme. This led to seven or eight pages of drawings. We drew on musical staff paper, to reemphasize the concept of musical approach. These basic icons were edited together on 16mm positive, and we would modify each element, evolve it with successive passes through the video synthesizer.

One element that was of particular interest to me was the human form. We used the video synthesizer to transform it and reveal its other dimensionalities. Jordan was known for purely abstract, non-objective imagery. You would rarely see anything representational in his work. So our collaboration also involved a combination of representational and photographic elements within a larger non-objective context.

DIAGRAM



Virgo is the sign opposite Pisces. The Autumnal Equinox is now falling in Virgo; the opposite point, the Vernal Equinox, is perforce now falling in Pisces. Western metaphysicians, who consider the Vernal Equinox to have chief significance, therefore say the world is now in the "Piscean Age."

The Equinoxes have a retrograde movement in the constellations; hence, when the Equinoxes leave Pisces-Virgo, they will enter Aquarius-Leo. According to Swami Sri Yukteswarji's theory, the world entered the Pisces-Virgo Age in A.D. 499, and will enter the Aquarius-Leo Age two thousand years later, in A.D. 2499.—
(Publisher's Note)

The diagram of the yugas in Swami Sri Yukteswar's The Holy Science.

I composed the soundtrack after the film was edited visually. The sound-track was a collage of elements. It's hardly what you would call a musical track, although there are musical passages within it: a few bars are lifted from one of the movements of Holst's *The Planets*; and there are phrases of local musicians, and various electronically synthesized sounds. The overall sound structure is based entirely on the visuals.

MacDonald: How long did it take you to put the visuals together?

Beck: We worked on it for well over a year, pretty intensely most of the time. One of the advantages of personal filmmaking is you can take as much time as you like, though you don't want to take too much time because ideas need to be hatched and born before they become overripe. Cycles took longer than we thought it would and longer than the budget covered. Altogether it was probably eighteen months from the official formal start of the project until the final prints were released.

In September of 1990, I had the good fortune to travel with a delegation of American film/video makers, critics, and scholars to Riga, Latvia, where we met with a corresponding delegation from various film centers in the alreadyrumbling Soviet Union, for a week of screenings, papers, lectures, and dissussions. The focus of the meeting (jointly sponsored by International Film seminars, the organization responsible for the annual Robert Flaherty Semiin the Latvian Cinematographers Union, the Union of Cinematographers of the Noviet Union, and the American-Soviet Film Initiative in Moscow) was The Legacy of Vertov and Flaherty in Soviet and American Documentary." It was clear from the films presented by both delegations, however, that for this event, "documentary" had been defined broadly enough to include a wide tange of approaches, including some that, at least in the West, would be consubject part of the history of avant-garde filmmaking. The Riga event revealed at least one notable irony: the younger Americans tended to admire the formal inventiveness and political commitment of Vertov and to see Flaherty as comparatively reactionary, while the "Soviets" tended to see Vertov as a puppet of the now-discredited Communist regime and to admire Flaherty's individualisthe spirit (see Patricia Zimmermann, "Strange Bedfellows: The Legacy of Verinv and Flaherty," Journal of Film and Video 44, nos. 1-2 [Spring/Summer 1993], a special issue devoted to the Riga event). And for me, there was one major surprise: that recent "Soviet" filmmakers, working in 35mm in estabtiahed Soviet film studios, had produced a number of films that, in the United states, could only have been produced by avant-garde filmmakers working in 16mm outside the industry.