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COORDINATES FOR AN ALIGNMENT OF A JIGSAW

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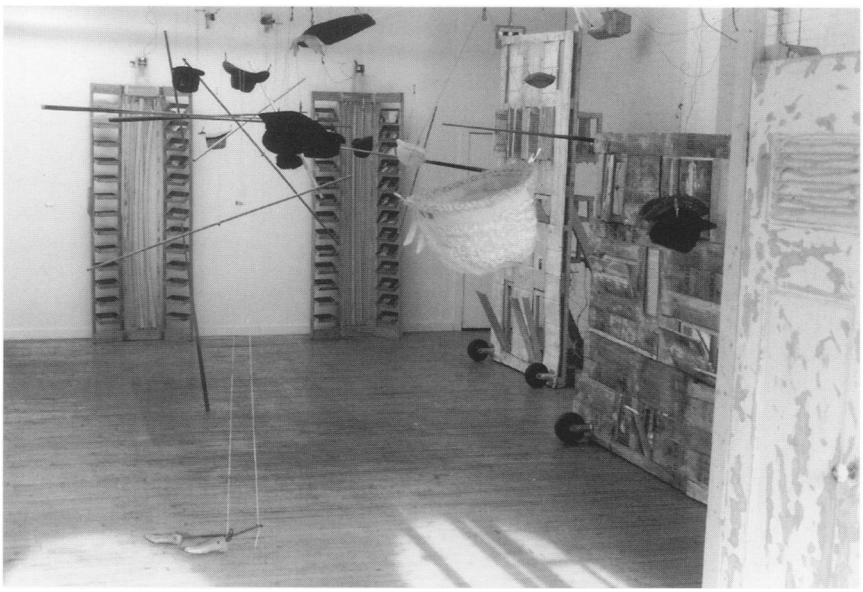

Fig. 1. Sue Rees, section of *Coordinates for an Alignment of a Jigsaw,* kinetic installation, Mobius, Boston, 1996. The installation is comprised of a number of elements, including: *Capped off at 6 per 60,* hats, pulleys, 6-rpm gear motor, motion detector, 1995/1996. A series of suspended hats move up and down at various intervals. *Lines and Pointers to Draw a Record: Part 2,* three billiard cues, eight metal rods, string, 6-rpm motor, motion detector, 1995/1996. A motor moves billiard cues by means of strings on pulleys; consequently rods are moved by the cues. *Reflections in the Mirror,* wood, mirrors, 26 boxes, motors, string, hardware, contact switch, 1994. Boxes move from horizontal to vertical positions via motors running at 6 rpm. *Creaking Shutters: Section 1,* wood, five motors, Lexan tubing, string, timer switch, 1995. *Creaking Shutters: Section 2,* wood, four motors, Lexan tubing, string, timer switch, 1995. Shutters open and shut by means of Lexan tubing and string via motors attached to the back of the structure rotating at various speeds.

When I appraise the work I have produced over the last few years, I find that various seemingly disparate threads are connected. These threads stem back to high school, where I studied science, and to college, where I studied architecture at the undergraduate level before concentrating on sculpture. Related to the sculptural work, and running concurrently, was work completed in a number of collaborations with composers and choreographers. A constant theme resulting from my background and interests consists of the redefining of space and time through the placement of objects, as well as the investigation of movement and its effect on the objects. At times I introduce a touch of absurdity, allowing inanimate objects to take on a figurative presence. I also research the use of various devices to transfer information from one place to another to create connections between seemingly disparate objects.

I decided to examine the above concerns in one installation, *Coordinates for an Alignment of a Jigsaw* (Fig. 1) [1], in which I juxtapose a variety of motorized objects, allowing connections and alignments to occur between the architectural characteristics of the site and the objects. The arrangement and number of the objects are influenced by the particulars of each site: dimensions, egress, presence of windows.

A frame construction containing four doors, entitled *Step through for Quarters,* is placed close to the entrance of the installation. Upon opening a door, the viewer causes (through contact switches) the triggering of a motor in a distance place, which the viewer sees in his or her peripheral vision. Two switches activate the motors of *Capped off at 6 per 60,* which consists of two rows of individually suspended, upside-down hats traversing the space. The hats move up and down vertically via a 6-rpm motor, hence the title. The work brings to mind images of bodies floating or bobbing up and down in the ocean. A third switch activates *Reflections in the Mirror,* a series of open-topped boxes containing mirrors moving from a horizontal to a vertical position via motors. The mirrors reflect light into the space. The light source is generated by a series of slow-moving, suspended aluminum arms that hold halogen lights behind pairs of ungrounded eyeglass lenses, which act as both watchers and light sources. When a viewer passes through the doors, the objects in the space he or she is about to enter are activated. Upon walking further into the space, the viewer becomes part of the action by activating motors and objects via motion detectors, at times unknowingly. One set of objects, entitled *Drop Dead,* utilizes vertical movement that parallels that of *Capped off at 6 per 60;* however, in this case, a slow, seemingly deliberate movement is combined with a sudden uncontrolled "drop." The objects are reminiscent of the human form; the noise from the dropped objects has a startling quality.

Rotational movement is also transferred into horizontal linear movements in the installation. In one case, billiard cues move slowly, via a 1-rpm

motor activated by a motion detector, and hit a series of suspended rods that respond with rhythmic movement. The longer the cues are activated, the more complex the rhythm becomes. Thus, the motions and sounds reflect the duration of the viewer's observations or movements.

I use timer switches with certain objects to generate a sustained rhythm in the space, such as in *Creaking Shutters: Section 1 and Section 2* (Color Plate A No. 2), which consists of vertical facades fronted by shutters. The shutters open and shut by means of plastic tubing and string and motors attached to the back of the structure. The two sections can be placed facing each other or adjacent to one another. The creaking of the shutters opening and shutting sets up a disjunctive narrative; the motors of each structure are on separate timer switches, allowing periodic synchronization.

The combination of the architectural and figurative elements in my work allows the viewer to become an integral component. Once the viewer engages the work, changes to it begin to occur and associations are revealed.

Note

1. The piece was first installed at Albany Center Galleries in November 1995; in 1996 it appeared at Mobius, Boston; No BIAS Gallery, North Bennington; and Thread Waxing Space, New York.

A Painter's Thesis: Quantum Physics as an Inspiration for Art

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Bell's theorem [1] shows that quantum mechanics cannot be interpreted in terms of local deterministic theory; it has been called "the most profound discovery of science" [2]. It proves that any reality can only be non-local [3]—i.e. that we live in a holistic universe in which the whole acts on the part and vice versa. This interconnectedness is my source of inspiration.

There are two reasons I was attracted to quantum physics. First, I found in it all the metaphors I needed to "explain" my personal, ontological adventure in art through painting. I was mostly fascinated by the fact that since at the microscopic level our observation of matter disturbs the observed phenomenon, we cannot be sure of what reality is per se. On the other hand, what strikes us most when we observe our universe, which is made of that same matter, is its beauty. Consequently, I feel that beauty means more for us than reality and that we have more certainties about beauty than we have about reality.

The second reason is the fact that, to me, quantum physics is both the scientific development that broke science's materialistic approach and the bridge between science and the human mind. This is also the feeling of some scientists: "The centerpiece of this new paradigm is the recognition that modern science validates an ancient idea—the idea that consciousness, not matter, is the ground of all being" [4].

This is the spiritual aspect of the matter: Einstein felt that science is a passion that requires the "state of mind of monks and lovers . . . looking for the universe of objective contemplation and understanding" [5].

Of course we cannot try to find precise common denominators between art and science; however, I find it challenging—and disturbing—to compare, at least in terms of inspiration, three paintings from the standpoint of authorship. Looking at the three paintings, the viewer may wonder whether there were one, two or three painters who created them, and from what origin(s)—scientific or artistic (literary)—the painters came. I hope you will find the answer interesting: the first two works appeared on the front and back covers of *Leonardo* **27**, No. 3 (1994). The first was one created by L. Alcopley, a rheologist; the second by Jacques Mandelbrojt, a quantum physicist; and the third one (shown in Fig. 2) by me, a simple artist who has no scientific background whatsoever, except for a fascination with the philosophical consequences of quantum physics. Is not the resemblance between the three paintings striking? [6] Connections such as these are why I feel that common investigations should happen between artists, scientists and spiritualists, as suggested partially by *Leonardo*'s vocation of documenting the fusion of art and science. I describe my personal effort toward this end—through beauty—in my home page on the Internet at the following address: <http://www-mitpress.mit.edu/Leonardo/rolodex/levrier.guy.html>. I am hoping to generate sufficient momentum among people of goodwill to obtain concrete results.

References and Notes

1. F. David Peat, *Einstein's Moon* (Chicago, IL: Contemporary Books, 1990) p. 112.

2. H. Stapp, *Nuovo Cimento* **40B** (1977) p. 191.

3. Nick Herbert, *Quantum Reality* (Garden City, NY: Anchor Books/Doubleday, 1985) p. 51. According to Herbert, "Arguing from quantum theory plus a bit of arithmetic, Bell was able to show that any model of reality whatsoever—whether ordinary or contextual—must be *non-local*. Bell's theorem has since been proved entirely in terms of quantum facts; no reference to quantum theory is necessary. In its most up-to-date version Bell's theorem reads: The quantum facts plus a bit of arithmetic require that reality be non-local. In a local reality, influences

Fig. 2. Guy Levrier, Untitled, oil painting, 100 × 81 cm, 1991. A case of convergence between two scientific minds and one purely artistic one: why does a simple painter paint like two scientists?