Lines upon Lines

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“Drawing is just a thought.” Placing an equal sign between the two essential elements of his work, this simple formula of Jean-Pierre Hébert’s (simpler, at any rate, than the computer code that coaxes his images into existence) expresses the germ from which its beauty and complexity emerges.

Born in Calais, France, in 1939, Hébert began drawing as a child. Inspired by a Mondrian exhibition he saw when he was eight, by age nine he was already taking drawing classes and filling the first of the sketchbooks he still keeps today. Even as he found further inspiration in the expressive simplicity of ancient Chinese calligraphy, the quiet geometries of Agnes Martin, the energetic ambitions of Hokusai and Max Bill, the poetic indeterminacy of John Cage, and the “open work” described by Umberto Eco, he drew. As he does today. If not for the title, this basic fact might be overlooked in a first glance at “Jean-Pierre Hébert: Drawing with the Mind.” The means employed are unusual enough that one’s concept of drawing might need a moment to catch up with them. Yet digital prints, engravings, watercolors, manipulated pulp, paper orbs, trays of quivering water, and coffee tables equipped with perambulating steel balls are in Hébert’s case all extensions of a protean desire to draw.

"I had always been drawing and studying others' drawings," Hébert explains. "I drew with pencils, leads, brushes, and watercolors; I explored the drawing galleries of European museums on every possible occasion; and I imagined drawings that were like riddles the viewer could read and solve, showing logic, chance, patterns, stories, surprises, elegance, personality. But I could not draw them because my vision was well beyond the precision and the steadfastness of my hand—beyond my patience, beyond my perseverance. These drawings remained impossible until I sensed that computations could help me design and master them as the solution of elegant geometry problems and that devices could draft them in all their perfection or complexity."

It was in 1959, as an engineering student on a summer job at IBM, that Hébert first learned a computer programming language, FORTRAN. The aim was practical, but the step was fortuitous in paving the way for the development of his work. During the sixties, he founded a computer systems consulting firm, and as his involvement with them continued, he began to think about how he might use computers to express his own ideas. He bought one of the first Hewlett Packard personal computers in the early seventies and, soon afterward, an HP pen plotter. Writing his own computer code (until recently he remained one of only a handful of artists to do so), equipping the drawing device with inks and tinctures it was

never meant to hold, and testing them on a variety of substrates, he began experimenting with producing drawings of geometric forms and patterns.

Hébert's affinity for unusual geometries goes back at least as far as his early enthusiasm for Mondrian. He has said that he prefers abstract imagery because he is pursuing an ideal of beauty. Throughout the seventies and eighties, as he explored what is now known as computational drawing, the algorithmic patterns and mathematical abstractions he employed spawned drawings that looked both like ideal Platonic forms and, more and more, like natural ones: that is because those patterns do not exist only in theoretical space but, though not obvious, also structure the natural environment at all scales. Hébert in his own way, through references to mathematics and physics, still draws the world. In 1983 he moved to the United States, and in 1985 settled in Santa Barbara, California. In 1989 his first solo exhibition, entitled "Sans lever la plume" ("Without Lifting the Pen"), opened at Galerie Chave in Vence, France. The images, as Elaine LeVasseur, curator of the current exhibit, describes them, "appeared to float and curve in three-dimensional space, and evoked a variety of cultural and natural iconography, from Islamic tile patterns and undulating fabric to spiraling seashells and water eddies."

The digital prints in "Drawing with the Mind" are an outgrowth of these earlier works, literally drawn in the imagination, translated into computer code by writing his own software, and then realized with a large-

format inkjet printer capable of far greater complexity and detail than any plotter. Whereas with the plotter a large drawing could take a week of continuous drafting, the images in the present show required a mere five hours to rasterize and as many to print a unique drawing before its file is retired. The drawings seem to foment at the edges of the page in unruly lines that, as they approach the center, resolve into elegant, billowing forms crisscrossed with rich interferences and moirés. Most of the characteristics of the lines and other major features are subject to finely tuned chance operations, one of which unpredictably drops dollops of what looks like reflected light onto or within the wavy forms.

Hébert's drawings begin as thoughts and, as they find ways to come into existence, tend to retain not only the ideal clarity and tenuous ambiguity that characterizes thought but also the quality of being drawings thinking about drawing. An open-ended quality is especially evident in the collaborative work Hébert relishes, and probably nowhere more fruitfully than in the creation of *Ulysses* with mechanical engineer David Bothman and sculptor Victor Dinovi. A kinetic sculpture and drawing tool initially inspired by Japanese raked sand or gravel gardens, *Ulysses* employs a magnetic mechanism to roll a steel ball through a tray of sand, its trajectory guided remotely (even via the Internet) by Hébert's computer. As the ball wanders at a meditative pace, it creates ephemeral drawings that must be raked away before others can take their place. Although the

piece grew out of the artist's interest in Zen Buddhism, it soon became the foundation for a burgeoning body of drawings.

Like its namesake, *Ulysses* is a drawing device of "many ways." As the group of works in the small alcove off the main gallery attests, Hébert, in further collaborations, has harnessed it to etch intaglio plates, till ghostly traces in wet paper pulp, and even to sketch polygonal spirals in earthy red watercolor on subtly ridged Japanese paper (formed on a reed screen) that somehow manage to have the shaky madness of drawings by Domenico Tiepolo. Hébert's work is unquestionably cerebral, but he has not abandoned the tactile potential of drawing's chief component. "My interest is the line—what creates it, how to render it, how to use it," he says. "The line fascinates me because it is the foundation of drawing and that of visual art; because the line is the thread in the weave of space."

It sometimes feels as if Hébert would, given the chance, inscribe lines on all the elements. The *Montgolfier Drawing* project, utilizing a smaller version of *Ulysses* to draw on Japanese paper spheres made by artist and papermaker Tatiana Ginsberg, in name at least aspires to the firmament (though, a work in progress, it is currently somewhat snarled in the treetops). His *Animated Metagons* resemble a pair of cosmic snails dreaming and undreaming their shells, never in the same form, and on a galactic scale. *Rolling Snowball*, another work in progress with David Bothman and a team of engineering students at the University of

California, Santa Barbara, would allow large-scale *Ulysses* drawings to be made in the sand of the beach or desert. Hébert has explored organic algorithmic drawing devices such as paint-dripping pendulums and bubble-blowing tools, and *Wet Lines*, in collaboration with multimedia artist MarkDavid Hosale, uses water as a drawing surface, one that is stippled, crosshatched, and rippled with lines created by nothing more high-tech than the sound frequencies made by chanting Tibetan monks and other music.

Even on paper, Hébert's drawings seem more fluid and elemental than ever. Still made up of narrow, wandering lines, where the drawings once resembled loosely woven fabrics sinking into the sea, the digital prints in the Software Noo Series, though bone dry, have the depth and gleam of water as it runs, swells, swirls, or simply pools—except where the interwoven lines grow so dense that they resolve into rich islands, almost a *crema*, of dusty printer ink.

Some of this newly complex simplicity may reflect the influence of Hébert's appointment, since 2003, as artist-in residence at the Kavli Institute for Theoretical Physics at UCSB and his exchange of ideas with the institute's resident and visiting physicists. "Both intellectually and spiritually, my main interests after art have always been nature, the cosmos, and the grand scheme of things, as well as how they happened and how they work," he has written. "I have felt that physics and

mathematics are a natural approach to these investigations. But at the same time, I have always given them a lighter bent that has been more poetic than scientific—more apt to capture the Pythagorean music of the spheres."

Hébert is a pioneer and an artist of unusual gifts. His works hum with the beauty of the human mind. If the mediums employed and paths explored give "Drawing with the Mind" the air of a retrospective, the remarkable fact is that it is the opposite: a mere "slice of a continuum," as curator Elaine LeVasseur, expresses it, a sample of the multifarious ways Hébert presently pursues his indefatigable interest in drawing—one that includes not only finished works but ideas in progress, ideas worth revisiting, and ideas that have suddenly evolved new levels of even more articulate beauty.