correspondents abroad

Art, Forward Slash, Science

GWYNETH JONES

SYNESTHESIA . . . ONE DAY IN 1997 (SOON AFTER THE NATIONAL GALLERY ACQUIRED THE PICTURE), I WALKED UP THE FAMILIAR marble stairs, crossed the rotunda, and was confronted, for the first time, by George Stubbs's *Whistlejacket*, the stunning, naked portrait—no groom or rider, no landscape—of a chestnut Arabian stallion.[1] I smelled the stable, horse manure, and leather, and I had the thrill of knowing what was happening inside my skull. How the attention response had sent a cloud of fire leaping through my brain, tugging on associated traces, map on map of firing and partially firing neurons springing back into existence (never the same twice, yet continuous with my earliest childhood and the millions of years before that). Surprise and the power of the artist were making me read internal stimulus as external: recall had become once again perception (McCrone 194–217). This is an iconic memory for me. It holds, packed down and ready to unfold, both the direction my work has taken through my career and the context of that work: my own life and times; the history that made me; the Next Big Thing in science; and my privileged, difficult position as a science fiction writer, an arts graduate, and a woman.

In 1984 there was a revolution in science fiction. It involved a book called *Neuromancer*, by William Gibson, and a manifesto, compiled by Bruce Sterling ("Preface"), that declared (among other matters) that the rocket-ship fantasies of the 1950s were finally dead, the galactic empires played out.[2] From here on the only true science fiction was to be about the future of now; its hallmarks would be close extrapolation from the present, contemporary referents, political and emotional realism. Labels and brand names would be vital; style would be understood as content; appropriation—scratching, riffing, sampling—would be the palette. It was to be an impressionist literature, where there'd be no attempt (or as little attempt as possible) to smooth out and hide the real world behind the futuristic mask.

This was a dramatic change. Classic science fiction writers always lied. They set post–World War II visions of world-dominating empire and benign totalitarian control in galaxies far, far away. Writing about the re-

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alpolitik of their times, radicals like Ursula Le Guin set their Vietnam War or equal rights scenarios on imaginary alien planets. In the United States cyberpunk caused a furor. It especially upset people to see progress dethroned as a power for good: to have the future shown as uniform with the present, where globalization and advanced technology were not noticeably reducing the dark side of the human condition. For me, here on the island George Orwell had named, bitterly but accurately, Airstrip One, the cyberpunk message was a different liberation. I leaped to the task of creating the science/fiction of a European woman and an arts graduate, writing about the future of my now: my science-bothered, art-impregnated society; my world, the place where I live. I spent the next ten or fifteen years (along with my UK science fiction contemporaries; call us the cadre of 1984) trafficking across the divide between art and science, as I searched for the truth about gender-racial superiority, trying to uncover the deep structures of inequality in a science fiction series that became known as the Aleutian Trilogy (*White Queen*, *North Wind*, *Phoenix Café*). I was influenced by the radical science of Lynn Margulis,[3] by Claude Shannon and Warren Weaver on information theory,[4] by the dawning of evolutionary genetics—and equally fascinated by Jacques Derrida (esp. his collection *Writing and Difference*) and Roland Barthes (esp. his iconic *S/Z*). Science fiction writers develop their own strange mental musculature. People who think Derrida is a difficult writer should try attempting to get a grip on general relativity with nothing but a BA degree in the history of ideas and a dim memory of convent-school physics classes. I watched, thrilled as if I were observing a rare planetary transit, the tide of relativism that had risen from linguistics and from physics, from Einstein and Ferdinand de Saussure, as it swept through the disciplines, the poststructuralists unaware that they sounded just like the paleontologists, the historians measuring the irreducible plurality of truth as if straining the past through a lattice of quantum indeterminacy.

Potent ideas (like the frame of Alberti, like fitness selection), like good books, escape from genre. As the Aleutian Trilogy proceeded, mapping measures of humanity and alienness in a future Europe, I found myself increasingly drawn to narrative images: the common ancestor, the urcraft, where ideas about the nature of the world, technical skills, and poetics are fused. The movies were important, but the older visual narratives—framed pictures, postcards from the past—were closer to me, at least *seeming* to be the lonely creations of a single artist, without the mediation of a crew and cast. I looked into frames in the National Gallery to find meanings for what I was doing myself: Géricault's *Raft of the Medusa* (a cyberpunk revolution there), Renoir's *Les parapluies,* Caravaggio's *Supper at Emmaus*, Monet's water lilies. Monet's project of representing simultaneity, the same light everywhere, gave me the epigraph of the last book of my trilogy. (My comments on "older visual narratives" are largely based on Margaret Livingstone's *Vision and Art*.) It all went straight into my writing. Here's a sample of the art/science impulse at work. One of the empire-building humanoid aliens (they call themselves Aleutians from the accident of their landing spot) is browsing the Tate pre-Saatchi gallery, trying to explain to her native guide the superiority of Aleutian art forms, which are alive, which have a living, chemical communion with whoever approaches:

> "An Aleutian poem is . . . it's alive. When an Aleutian takes a wanderer cell from his skin and feeds it to a friend, he's saying *this is me, now. This is my state of being.* When I compose a poem I'm trying to do that with the world. When another Aleutian comes along, maybe generations later, and 'looks at my picture' the biochemical meaning of that moment of composition is shed from the picture and enters the viewer, becomes part of him. The picture is a communication-loop. What's captured and released again is not the same, but evolved by everything that's happened since, the whole information system that's involved in the new gaze . . . It's not at all the same."

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> She stared at *Les Parapluies,* the flower faces standing out like love-stories in the sober text of Renoir's narrative. Virtual particles of the dead artist's intention filled her air, entered her being.
>
> "I'm wrong. It is the same."
>
> (*Phoenix Café* 134–35; ellipses in orig.)

Synchronicity . . . At the end of the 1980s, chaos mathematics was the Big Thing in science. It was time to talk of butterfly wings and hurricanes, fractals and strange attractors. The number-crunching machines had reached critical mass: scientists would now be able to interpret the patterns in disorder. They would tackle raw, nonlinear natural phenomena instead of being restricted to a limited (though useful) set of special cases. As the Berlin Wall tumbled and the Soviet bloc disintegrated—miraculously, blessedly—without bloodshed, it seemed as if the barrier between art and science was going as well. Science had lost its limits and its certainties; artists had achieved equality with the men in the white coats; it was even possible for the women to stand alongside the men. We were all in the same boat, fishing for connections out of an ocean of boundless complexity, stringing them together by accidents of history, never knowing if we had the right answer, only knowing that something seemed to work. . . . This was the historical mood in which I wrote my trilogy. But before I'd finished, the wheel had turned again.

Today, the hopeful time is forgotten. The end of the cold war did not free us to tackle the awesome threat presented by our own success (forget the oil, we're running out of water!). The utopian achievements of the idealists who made me what I am (Eleanor Roosevelt, Clement Atlee) are falling into dust, and, coincidentally, science fiction has reverted to the galactic empires and rocket-ship fantasies. I've moved on to another project, a near-future story that reflects these times, but I'm still studying the narrative representation of the world, trying to understand my art form by looking back, out of the imaginary frame of the future.[5]

In Gibson's *Neuromancer*, self-conscious artificial intelligence was conceived as the emergent property of a network of networks, an idea that in 1984 was still way ahead of much real-world artificial intelligence research. In those days neuroscience was a black box, and probing the processes inside the gray matter was a branch of psychology. At the start of the twenty-first century there's still nobody who knows what consciousness is (maybe it's the wrong question), but we know the brain as a network of networks; we can watch the neuronal connections ignite, layer upon layer, skein upon skein. When I reached the finale of the Aleutian Trilogy, I had drawn the conclusion that information theory, which binds the visible and the invisible, the material and the immaterial worlds, would someday unlock the prison of gravity and isolation. It would be through inner space, through our ability to image the whole world in our minds, that we would cross the vast spaces between the stars. Now I'm back to the near future and inventing the route to that discovery. I'm still looking at pictures and movies. I'm also fascinated by computer games, as they grow toward complexity, and by those unborn confections known as virtual movies. Today I can know (in some limited sense, as a layperson) what happens when I pay attention. How long before someone will be able to solve the emotions that a hybrid movie-game is meant to arouse into neuronal code and deliver it to Electronic Arts as an e-mail attachment? And what strange vistas open up beyond?

I'm walking around the National Gallery (as I love to do), thinking about Marcel Proust's involuntary memory, thinking about neurology, about the digital revolution that has engulfed us all, and about Stubbs's *Whistlejacket.* I'm thinking that art and science do not run on parallel tracks. They come together wherever and whenever one finds the cutting edge, the growing point of human thought.

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Notes

[1] George Stubbs, 1724–1806, an artist and pioneering anatomist, published his *Anatomy of the Horse* in 1766, four years after he painted the portrait of the racehorse Whistlejacket. His anatomical drawing ranks with Leonardo's, and the dissection techniques he invented are respected today (Lienhard). Stubbs was aided in his often difficult and laborious dissections by a mysterious female assistant, whose name went unrecorded (Lane).

[2] The manifesto appeared in *Mirrorshades: The Cyberpunk Anthology*, edited by Sterling. The original movement was short-lived, held to have had its day in 1988, and the Sterling manifesto has since been superseded by a broader collection of opinions and declarations, but the volume is still one of the best-selling science fiction anthologies of all time, while *cyberpunk* and *cyberspace*—whoever came up with the terms—have passed into the modern lexicon.

[3] Lynn Margulis, a professor at the University of Massachusetts, Amherst, is the proponent, with James Lovelock, of the Gaia theory. Her early endosymbiotic hypothesis, which proposed (through suggestions about ancient symbiosis captured in the human cell, later proved in the laboratory) that Darwin's theory of evolution by competition is incomplete, was a key concept for much of the alternative, biocentered science fiction of the late twentieth century.

[4] A research mathematician at Bell Laboratories from 1941, Shannon conceived of information as a measurable physical quantity, like density or mass, expressed in on-off yes-no bits, irrespective of the content of a message: an immensely powerful insight and one of the foundations of our digital age. See Shannon and Weaver.

[5] My new books can best be approached through their Web site (http://www.boldaslove.co.uk).

Works Cited

Gibson, William. *Neuromancer*. New York: Ace, 1984.

Jones, Gwyneth. *North Wind.* New York: Tor, 1996.

———. *Phoenix Café*. New York: Tor, 1998.

———. *White Queen*. New York: Tor, 1993.

Lane, Jim. "10-24-98 George Stubbs." *The Jim Lane Collection*. 24 Oct. 1998. 3 May 2004 <http://users.1st.net/jimlane/>. Path: ArtyFacts; 1998.

Lienhard, John. "George Stubbs' Anatomy." *The Engines of Our Ingenuity*. KUHF, Houston. Episode 906. Transcript. U of Houston. 22 Mar. 2004 <http://www.uh.edu/engines/epi906.htm>.

Livingstone, Margaret. *Vision and Art: The Biology of Seeing*. New York: Abrams, 2002.

Margulis, Lynn, with Dorion Sagan. *Acquiring Genomes: A Theory of the Origins of Species*. New York: Basic, 2002.

McCrone, John. *Going Inside: A Tour round a Single Moment of Consciousness*. New York: Fromm, 2001.

Shannon, Claude, and Warren Weaver. *The Mathematical Theory of Communication*. Urbana: U of Illinois P, 1963.

Sterling, Bruce, ed. *Mirrorshades: The Cyberpunk Anthology*. New York: Ace, 1988.

———. "Preface to *Mirrorshades*." 1986. *The Cyberpunk Project*. Moscow Cyberpunk Club. 2 Mar. 2004 <http://project.cyberpunk.ru/idb/mirrorshades_preface.html>.

Stubbs, George. *Whistlejacket*. 1761–62. Natl. Gallery, London.

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