Lead into Gold, and other quests

I love fools' experiments. I am always making them.
Charles Darwin

Doubt everything and believe everything: these are two equally convenient strategies.
With either we dispense with the need for reflection.
Henri Poincaré

In a small alcove, hiding around the corner of the entrance into *Weird Science*, a peculiar and somewhat precarious looking assemblage stands perched on a pedestal. Maybe we notice it, maybe we don't. But it notices us. As we pass, a sensor alerts the sculpture and it sparks to life, glowing and vibrating at a hum just on the edge of our nerves. Shock, surprise, amusement … we scurry into the gallery space with *Bad Vibe* droning on in the background, reminding us that *we* made that happen, *we* triggered its response.

For every action, there's usually some kind of reaction. What is harder to determine is whether or not that reaction is equal and opposite as we have been led to believe it should be. Why this expectation? The axiom – for every action there is an equal and opposite reaction – has been adopted from its origins in the laws of physics to become a metaphor within popular culture. It approximates an explanation for human nature, justifying acts of vengeance and retaliation, granting a kind of fatalism to every defensive action or inexplicable act. It's an elaborate way of saying "tit for tat", and science has given us that language. *Weird Science* takes us to that textual and visual field of play between science and mainstream culture, dallying along the edges where the two collide and overlap in aesthetics and alchemy, weird science and Marcel Duchamp, and all possible systems of belief.

As much as this conversation is about science, it is anything but logical, sequential or straightforward. Chat lines are established across the gallery floor, between drawings that might be diagrams of molecular structure and digital images that appear to illuminate genetic sequencing, between elegant assemblages of found objects and strangely attractive constructions that are part junk pile, part *Heath Kit*. The atmosphere crackles with the poignant and whimsical play of ideas and images around science, even as we become aware that science is just one of the debates, and that each individual work in the exhibition is host to its own complex set of propositions.

It is a strategy that Westbury has deployed in previous exhibitions; presenting a multiplicity of ideas and conclusions involved with a central premise, then luring the viewer with subtle allusions and half-known truths to unravel the connections and questions embedded within. His 1991 exhibition, *Read Between the Lines* examined language and texts to consider how we read and the cultural forces that inform how we perceive information. *Savage Fields* of 1992 borrowed its title from sub-atomic physics and applied it to colonialism, to systems of cartography for the division and accumulation of territories. *Weird Science* presents a collection of work produced over the last ten years, continuing from previous investigations to gather influences and departure points from diverse sources from *Scientific American* to the *Fortean Times*. To use the word "continue", however, suggests that Westbury's art follows a clear and pre-determined trajectory of progress. His aim seems more non-linear, achieving above all a sense of balance, consideration and connectiveness much more in keeping his own worldview and beliefs.

In approaching these works, more specifically in writing about them, there is a certain frustration. The struggle to reveal Westbury's references and the layers of meaning within and between works seems to just feebly pick at the complexity of the whole – the most thorough of autopsies has never located a soul. *Constant motion (is the secret to keeping several balls in the air at once)* is derived from a diagram found in a science magazine, the title and treatment add additional potential meanings to the singular purpose of an atomic diagram. Similarly *States of Matter* charts the ever more invisible construction of a brick wall, progressing from the wall through molecular to atomic and sub-atomic structures. Is an invented diagram of an atom more or less real than the brick wall, considering that the brick is fake, fabricated plastic facsimile? The subject matter of the elegant drawing *Vial* is an object of science, a laboratory tool, but is also an homage to Marcel Duchamp, his ampoule of Parisian air. *Crystal Palace #1, #2 & #3* refers to the glass hall built for Britain's Great Exhibition of 1851, a showcase of the accomplishments of a nation at the height of its colonial, industrial and technological powers. The domes are magnificently crafted, but alongside beakers and vials, contain relatively absurd, non-functional, non-scientific items and detrius. The contents are science-like, but point as easily to the non-rational, the magical potions of alchemy and the significance of colours and certain numbers within a Taoist cosmology. *Radiometric Field* mesmerizes with motion, with

***Bad vibe* (2001)**

the dissonant rhythms of 81 different speeds of 81 different radiometers. Popular knick-knacks descended from "real" science, radiometers never actually proved the theory for which they were invented (the construction of light as particles, not waves) but became useful elsewhere.

The connections matter. The diagrams, experiments and quotations from the world of science are genuine. Westbury studies the material he borrows, is genuinely drawn to the beauty of these diagrams, engaged with the lives and work of scientists such as Francis Crookes and mathmaticians such as Henri Poincaré. Just as valid as the work of scientists, and perhaps more seductive, is knowing their sceptics[1]. Caught up in a war of words, scientists and sceptics (including cerealogists and ufologists) argue from different extremes of belief: "according to theory, it can't be therefore it isn't" versus "I believe it, therefore it must be." As Poincaré observed, either extreme is easy, both negate the necessity of reflection, of thought, of exchange. Both create the inflexible need to be right.

Each generation of scientist seems intent on dismissing its predecessors. Perhaps not outright, but the forward trajectory of science dictates that theories must be advanced, proven finite, replaced. Previous generations of scientists become viewed as limited, antiquated, laughable. In a scientific age, there is no one more laughable than alchemists and their quests for magical elixirs and the Philosophers' Stone, that powder that can transform base metals into gold. Alchemists had the unfortunate timing of being pre-scientific, of working in a time before their experiments and theories could be formally classified into chemistry, physics or biology, and of couching the terms of their queries in mystical and magical language. Westbury accords alchemy an unwavering validity; alchemy and its trappings appear outright in works such as *The Final Experiment*, *Lead*, *Gold*, *Pb > Au*, *Uroboros* and the *Prima Materia* triptych, and in subtle guises within others, such as *Pick Your Poison* and *Crystal Palace*. The appeal of alchemy is belief even in the absence of proof; belief in the possibility of things, the creation of experiments not to prove a theory but to find one, and the sheer purity of seeking questions based upon nothing but observation. A spiritual dynamic arises with the suspension of both disbelief and faith – an indifference to either places the emphasis on the process, on the asking of questions in the first place and the degree of contemplation on the possible answers. Process is the heart of the matter. It's possible to consider that Westbury's art comes into being because of a process that does not distinguish between all facets of life and work and creation, but holds them in balance, places them within an aesthetic field for contemplation.

Given the depth to which Westbury investigates his subject matter, that which fascinates him in the shared history of science and alchemy, there can be no surprise at the

***Crystal Palace* (detail) (2001)**

force of his engagement with the aesthetics of his process. As influenced by the history of art as the history of science, Westbury belongs to a lineage following from the work of Marcel Duchamp. Certainly, it was Duchamp that gave permission for every subsequent artist to use found objects, to create from them new objects by the transformative power of the artistic act, the conceptual intent of the artist. But Westbury's relationship with Duchamp goes beyond any surface affiliation. Less obvious, perhaps, is the importance of Duchamp's fascination with the science and mathematics of his time[2]. Prior to the first World War, the present chasm between science and mainstream culture did not exist. Burgeoning ideas of electricity, of atomic particles and of radioactivity could be held within the imagination, and conjecture, theorizing and experimenting were graspable human activities and not out of line with art, music, or literature. Then, it seems that science could find the answers to all that troubled and plagued human culture. One hundred years later, it is only too apparent that finding such answers is an impossible quest, and that science has created as many horrors as it has hoped to resolve. The *Device for seeing the world in a grain of sand* is a central work within the exhibition, not only for its inherent summary of premises and processes, but for its manifestation of the premise of *Weird Science*. A device can be built, theories can be developed, but in the end only difference views of the grain of sand can be seen. Science will never show the macrocosm, the infinite possibilities of a entire worlds of thought imagined in that grain.

The core of what engages Westbury seems grounded in the clash between the constrained, rational path of the Western world since the Enlightenment – a path of ever greater developments in science, technology, politics and economics – and opposing world views, in particular his own, informed and shaped by Taoist learning. Westbury stands on the edge of systems of knowledge and information, poking them to see what they really mean and how we are to reconcile them with our individual lives. It's all about process and possiblity. Of all the possible choices, what are we to believe?

Christine Sowiak
September 2001

1. The periodical *Fortean Times* savours the anomolies rejected or discredited by science, publishing "news, reviews and research on strange phenomena and experiences, curiosities, prodigies and portents," covering crop circles to conspiracies. The magazine maintains the scepticism of Charles Fort, who doubted scientific explanations as he observed that scientists argued according to their own beliefs rather than the rules of evidence, and that inconvenient data was suppressed, ignored, discredited or explained away. (Editorial statement from *Fortean Times: The Journal of Strange Phenomena*, number 148 (August 2001)).
2. There can not be a more thorough or fascinating discussion of this relationship than Linda Dalrymple Henderson's *Duchamp in Context: Science and Technology in the* Large Glass *and related works* (Princeton University Press, 1998).

Biography

Tim Westbury is an artist, musician and graphic designer, born in London, England and raised in Calgary and Winnipeg. He has a degree in Cultural Studies from Trent University in Peterborough, Ontario and a sculpture and printmaking diploma from the Alberta College of Art and Design. He was active at *Graceland*, the somewhat legendary former junkyard in southeast Calgary, during its heyday in the late 1980s and worked at the Banff Centre for the Arts for several years in both Visual and Media Arts, including the role of Assistant Curator of the Walter Phillips Gallery.

His work in a wide range of media has been included in exhibitions nationally since 1983, most recently at the Art Gallery of Calgary and emmedia.

In 1995 he moved with his family to Bragg Creek, where he currently lives and works.

Acknowledgments

I would like to thank several of the many people who have contributed, sometimes unwittingly, to making this exhibition a reality. Rob Wilkes and Dean Smiley both provided me with materials from far afield that eventually made their way into Device for seeing the world in a grain of sand. Deano and Eliska, my good friends at Atelier Glass Works, were kind enough to let me make use of some of their wonderful domes even before they did themselves. Daryl Williams, at Two Printers Inc., provided invaluable assistance and great expertise with the large format digital prints. Brent Armstrong most compassionately straightened me out about the correct electrical wiring required for the motion detectors. Catherine Crowston and Diana Sherlock asked some really good questions and contributed several insightful suggestions which I incorporated into the installation. The entire staff here at the Nickle Arts Museum have been incredibly supportive and helpful, especially Calvin Burns, John Hails and Katy McKelvey. Curator of Art Christine Sowiak has been exceptional to work with throughout the entire process of developing and staging this exhibition. Thanks to Mary Anne Moser, Grace, Jasper and Finn Westbury – for being there.

I would also like to dedicate this exhibition to the late Chris MacGee, Dennis Tourbin and Jeff Viner. Perhaps, as Sir Isaac Newton said (a scientist who acknowledged that he was still a bit of an alchemist), we are all just standing on the shoulders of giants.

Series

is an exhibition programme curated by The Nickle Arts Museum in response to the dynamic and accomplished community of artists living and working in Calgary. An ongoing survey of contemporary art, the programme focusses on artists whose dedicated practices are recognized within local and national communities. Exhibitions in *Series* present new work by the artist, or contextualize the work around themes that are prominent and integral to the artist's practice.

It is the intent of *Series* to promote the work of Calgary artists through solo exhibitions of their work, and to encourage a dialogue between the artists and our community. To approach and expand this dialogue, brochures are produced both to explore the artists' work and its context, and to serve as a record of the exhibition.

series

***Radiometric Field* (1995)**

Artist's Statement

The Philosopher's Stone is nothing more or less than that which was to enable man's [sic] imagination to take a stunning revenge on all things.

André Breton

If I have ever practiced alchemy, it was in the only way it can be done now, that is to say, without knowing it.

Marcel Duchamp

In his 1959 Rede Lecture, C.P. Snow first coined the phrase the "two cultures" to describe a widening gulf he recognized between the scientist and the non-scientist in modern Occidental society; this schism does not at first glance seem to have narrowed significantly in the intervening years. New technologies, the offspring of scientific research and development, play a central role in the lives of non-scientists around the globe at a growing speed. Recent medical and technical advances have made lives longer and in many respects easier. Science has gradually come to be a better explanation than religion for the way that things are for many people, yet it seems that a certain kind of a spiritual void has developed in tandem.

Perhaps science is changing though. Several of the bold metaphysical connections first popularized twenty years ago in Fritjof Capra's seminal *The Tao of Physics* (and the less well-known *The Stone Monkey* by Bruce Holbrook) are now being borne out by research within the official scientific community. Some recent research apparently suggests that perhaps even the speed of light may not be the universal constant it has long been accepted as. "Thought experiments" are a widely accepted tool in the field of quantum computing. Projects like the development of chaos theory, theoretical investigations of the existence of parallel universes and the search for a Theory Of Everything, among others, seem to undermine the stereotypically "logical" basis of scientific investigation. That anomalous activity and behaviors are necessarily becoming an acknowledged component of some scientific study seems to point back historically to both the motivations and activities of its very earliest practitioners, before the "two cultures" split. Perhaps what we are seeing is simply that however much science may seem to advance civilization, humanity never has and likely never will be content to live illuminated by the cold light of reason alone.

This installation arose from a long-standing conceptual interest in the dominance of scientific thought and its attendant rationalism in Eurocentric culture. I am especially interested in investigations and experimentation pursued outside the strict confines of the scientific method. There are several artistic precedents for this interest. Alfred Jarry's invention of an imaginary science he termed "pataphysics" and Marcel Duchamp's ongoing pursuit of "a reality which would be possible by slightly distending the laws of physics and chemistry" are two well-known examples. I have also been influenced recently by the work of scientists Francis Crookes (who invented the radiometer), Paul Feyerabend and scientific skeptic Charles Fort.

Tim Westbury
September, 2001

List of Works

unless otherwise noted, all works are courtesy of the artist

Mixed media works:
HoT MetaL, 1996
Cornucopia, 1992
Just halfway from coal, 2001
Radiometric Field, 1995
Device for seeing the world in a grain of sand, 2001
a) projector, b) refraction table, c) condenser
Bad Vibe, 2001
Up to a point, 1998
Crystal Palace #1, #2 & #3, 2001
(with the assistance of Atelier Glass Works, Calgary)
Baseline, 1997
collection of Mary Anne Moser
The Final Experiment (by W.P. Cornish), 1883
Big Bang, 1997
Counter, 1997
States of matter, 2000
Pick your poison, 2001
Quincunx, 2001
collection of Dean Smiley
Constant motion (is the secret to keeping several balls in the air at once), 1999
How atoms combine to form molecules, 1997
Spin, 2001
Uroboros, 2001
Lead, 2001
Gold, 2001
Not knot, 2001
Bright idea, 2001
Strange attractors, 2001
Pill (better living through chemistry), 2001
Sutra, 2001

Digital prints:
Twist, 1999
Theories of Everything, Versions 1 & 2, 2001
Vial, 2001
Pelican, 2001
Prima Materia triptych, 2001
Pb > Au, 2001
Bottleneck, 2001
Waves and/or particles?, 2001

Credits

EXHIBITION CURATOR
Christine Sowiak
CATALOGUE IMAGES
Tim Westbury (cover), John Hails
PRINTING
Sundog Printing Ltd, Calgary, Alberta

My first and loudest thanks must go to Tim Westbury for producing *Weird Science* for The Nickle Arts Museum. The sixth exhibition of *Series*, this exhibition has been as delightful to work towards as it has been rewarding … and very much the same can be said about working with Tim. I can only admire his balance of intellectual rigour, professionalism and humour, and appreciate the experience of working with him. Thanks as always to everyone at the Nickle for helping with all aspects of *Series*, and especially to Calvin Burns for his assistance with the installation of this show. Thank you as well to Ann Davis, our Director, for her leadership. Finally, The Nickle Arts Museum gratefully acknowledges the ongoing support of the Alberta Foundation for the Arts and the University of Calgary.

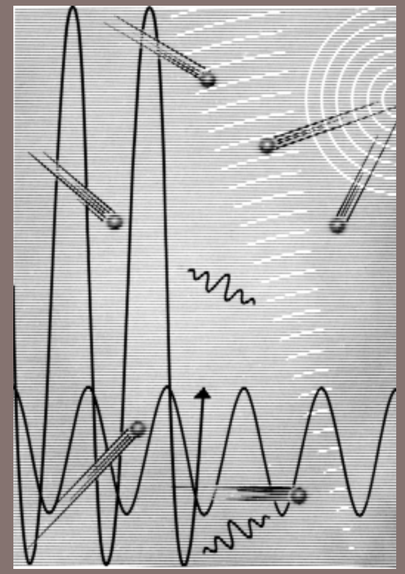
–Christine Sowiak

Tim Westbury
Weird Science
7 September – 20 October 2001

The Nickle Arts Museum
University of Calgary
2500 University Drive NW
Calgary, AB, T2N 1N4
http://www.ucalgary.ca/~nickle

UNIVERSITY OF CALGARY
The Alberta Foundation for the Arts

tim westbury



***Waves and/or particles?* (2001)**

weird science