

Sacred Geometry and Secular Science

Loyola University Museum of Art, Chicago, Illinois
28 July 2012 until 28 October 2012

Bill Viola: Reflections

Villa Panza, Varese, Italy
12 May 2012 until 30 October 2012

world's problems. He held up a fork and said, "No. It's not the technology, it's the intention of the person. If I have hatred in my heart I can kill you with this fork, but if I have love in my heart I can feed you with it."

You've designed a meditative video game; what does that involve?

Since 2005, I've been working on an experimental video game called *The Night Journey* with Tracy Fullerton and her team at the Game Innovation Lab at the University of Southern California in Los Angeles. We are trying to use the medium to allow people to learn how to negotiate their inner world. The game is inspired by the writings of mystics such as Rumi and St Catherine of Siena. The player explores a darkening landscape, trying to delay nightfall to make a personal journey towards enlightenment. My prior video works are used as source material for interludes in which players encounter a special place for reflection.

Why are you drawn to the Renaissance?

It combined the two factors that have most defined my life — art and technology. There was an unprecedented influx of new technology into Europe, and an entire civilization was changed by artists — not old masters, but young punks. Michelangelo was 24 when he sculpted the *Pietà* and Masaccio was 23 when he created one of the first works incorporating accurate linear perspective. Older painters didn't even think it was art, but the young guys just ran with it; the same thing has been happening with digital devices. When I lived in Florence in Italy post-university, I walked past Michelangelo's *David* every day on my way to the video studio. What I saw in the *David* was perfection created by an artist who at the same time saw and sculpted with his inner eye. The camera for me represents not the objective recording of reality, but a way to see with my inner eye.

What is the relationship between art and science?

They are like a couple sharing the same dance floor but hearing different versions of a song. I've been thinking about the difference between knowledge and mystery. Knowledge is the accumulation of information that can be codified systematically. It is important because it can reach conclusions and terminate arguments, but there's something else underneath. Mystery is the gap in our knowledge, an infinite plane that ends



In Bill Viola's *Ocean Without a Shore*, a wall of water symbolizes the threshold between life and death.

Q&A Bill Viola

Video maestro

Bill Viola creates immersive video installations that focus on extreme emotions and primal human experiences such as birth and death. On the eve of the Sacred Geometry and Secular Science exhibition at the Loyola University Museum of Art in Chicago, Illinois, the artist talks about meditative video gaming, Renaissance "punks" and the power of mystery.

Why video?

In 1969, I enrolled in art school intent on studying painting and sculpture — until I saw this beautiful glowing image on a television set. Since that moment, I have been on a non-stop wild ride as the medium has continued to change. We're still at the beginning of the digital era, which I feel will



be as profound as the Industrial Revolution. It will ultimately entail the merging of man and machine, a complete recreation of the species.

How do you feel about technology?

Ambivalent. It can bring extraordinary visions, and tools for the advancement of science and culture or, as with the atom bomb, annihilate entire populations. At an audience with the Dalai Lama in 2005, I said that video was responsible for many of the

in darkness. After a scientist wins a Nobel prize, they go forward into the darkness again. As an artist, I don't want to get to the end, I want to get to the point of mystery. It's the reason to keep moving, sensing, but not knowing, what lies just beyond our reach.

Tell me about your contribution to the exhibition at Loyola.

The Last Angel, created in 2002, is one in a series of works created under water, experimenting with combining forward, reverse and slow motion, even turning the image upside down. On a large plasma screen mounted vertically on the wall, a calm underwater scene is patterned by shafts of light. Drawn by the light, a human form coalesces from within an infinite ocean and falls towards material existence in the world below, leaving a luminous explosion of churning turbulence in its wake. The accompanying sound amplifies the disturbance.

Why does your work often depict emotional extremes?

Extreme emotions give us the opportunity to 'go too far'. The history of art, as well as science, would not be possible without

"Art and science are like a couple sharing the same dance floor but hearing different versions of a song."

someone breaking the rules. Forays into the 'forbidden zone' of serendipitous encounters and random chance events are an essential part of what I do. In 1999, using the new high-resolution flat screens, I embarked on *The Passions*, a series that arose out of the profound experience surrounding the death of my father in 1998. I needed to slow things down to comprehend what I was experiencing. I found that a two-minute recording stretched over ten minutes increased the depth and intensity of what I was seeing and enabled me to come to terms with those emotions.

What do you hope your legacy as an artist will be?

To inspire a positive thought, an emotion, a gesture, a memory or a vision in a young person. One of the most moving things I have ever seen was an exhibition of palaeolithic tools at the Museum of Man in Paris. There I saw a reindeer antler with three small scratches in a perfect row. That was one of our ancestors saying, 'This is me, I was here and I exist'. I get goosebumps just thinking about it. That's what we're doing with cars and space travel, with all our tools and images. Just leaving something behind so that we can go forward. ■

INTERVIEW BY JASCHA HOFFMAN

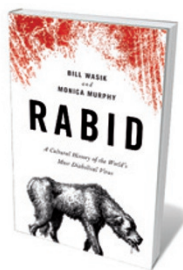
Books in brief



Is American Science in Decline?

Yu Xie and Alexandra A. Killewald HARVARD UNIVERSITY PRESS 240 pp. £33.95 (2012)

In the heated debate over the state of US science, alarmists say there are too few young high-flyers; others, too many. Enter sociologists Yu Xie and Alexandra Killewald, whose nuanced view is backed up by able number-crunching. The United States, they found, is still a scientific superpower: the workforce has grown, and numbers of new graduates at all levels of higher education are rising. But the future is less certain: the number of US doctorate holders taking up academic posts is in decline and earnings are stagnant, for instance.



Rabid: A Cultural History of the World's Most Diabolical Virus

Bill Wasik and Monica Murphy VIKING 240 pp. £16.59 (2012)

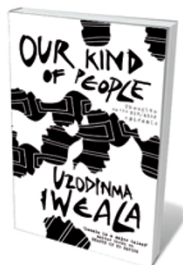
The raw liver from a drowned puppy, pounded cocks' combs: Pliny the Elder's 'cures' for the bite of a dog with rabies are risible. But this fearsome, bullet-shaped lyssavirus — nearly 100% fatal in untreated cases — remains as real to us as to the ancients. In their intriguing cultural history, journalist Bill Wasik and veterinary surgeon Monica Murphy tear through the history, science and legends surrounding rabies to reveal how it has inspired artists from the Brontës to Goya, and flummoxed generations of physicians — until Louis Pasteur, who worked with live rabid dogs, finally conquered the monster.



The Nature of Nutrition: A Unifying Framework from Animal Adaptation to Human Obesity

Stephen J. Simpson and David Raubenheimer PRINCETON UNIVERSITY PRESS 260 pp. £34.95 (2012)

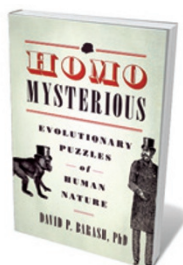
Nutrition has a central and complex role in biology, yet the science is patchy. Obesity specialist Stephen J. Simpson and nutritional ecologist David Raubenheimer present a theoretical approach to understanding nutrition through the lens of ecology and evolution. Viewing nutritional behaviour in that context, they say, enriches our take on health and lifespan. Their approach could inform practical applications such as treating disease or optimizing livestock feed.



Our Kind of People: Thoughts on the HIV/AIDS Epidemic

Uzodinma Iweala JOHN MURRAY 240 pp. £17.99 (2012)

Medical doctor and novelist Uzodinma Iweala reports from the AIDS frontline in Nigeria — home to the world's third-largest population of people with HIV. But this mix of history, Iweala's own work and interviews is no trawl through abject suffering; instead, it depicts Africa as a continent where people don't just "slow-dance with adversity". Through the testaments of survivors and movers-and-shakers — medical staff, sex workers and 'ordinary' people — Iweala challenges the Eurocentric association of Africa with disease and disaster, which, he says, harms Africans' sense of identity.



Homo Mysterious: Evolutionary Puzzles of Human Nature

David P. Barash OXFORD UNIVERSITY PRESS 344 pp. £18.99 (2012)

Evolutionary psychologist David Barash takes a crack at the enduring enigmas of human evolution. Starting with what we don't know, he strides boldly into a jungle of hypotheses. It is an entertaining exploration through sexual phenomena such as concealed ovulation, breasts and the menopause; art, where explanations such as Steven Pinker's "cheesecake for the mind" feature; the roots of religion, from the "God gene" to feel-good neurochemicals; and, finally, our big brains and the vast reach of human intelligence.