

Discovery of Oxygen

Anticipation

"Ultimately, even science only gets beyond the superficial connection through an act of anticipation ... This may simply consist in the so-called heuristic assumptions, which present a picture of the whole matter, still not in detail, but purely in outline". Ernst Bloch, *The Principle of Hope*. "Who has never felt a nasty itch, looking at a beautifully glazed, luxuriantly curved vase, at the thought of smashing it to bits with a single blow of one's stick? This temptation, raised to its full heroic bitterness – that nothing in life can be relied on unless it is firmly nailed down – is a basic feeling embedded in the sobriety of science; and though we are too respectable to call it the Devil, a whiff of burned horsehair still clings to it." Robert Musil, *The Man without Qualities*. "Scientific progress – like historical progress – is never more than the first step, never the second, the third, or $n+1$." Benjamin, *Konvolut "N"*, *The Arcades Project*.

Framing

My own discovery of "Discovery of Oxygen" coincided by chance with a viewing of a 1992 David Mamet television film, *Water Machine*, at the heart of which is a slow pan of a visionary machine running solely on water, not unlike Cullen's four "experiments". In the same connection I recall MacKendrick's 1953 film, *The Man in the White Suit*. Both films have as their premise the fanciful idea of the solitary, misunderstood scientist who invents an answer to the consumer's dream. For the British film, it was the suit that never got dirty or damaged. For the American film, it was the promise of a free fuel available to everybody – simplicity itself, primal, a utopian ideal for a New Society. In the British film the experiment was a failure – the white suit disintegrates after a day. Its failure is a failure of the utopia of science and industry to answer dreams. In the American film, while the water invention succeeds, it is the inventor who is destroyed. Society fails science.

Genus

Duchamp, Peter Fischli and David Weiss, Jean Tinguely and Niki de Saint Phalle, *The Man in the White Suit* (Alec Guinness, actually), Anselm Kiefer, *Batman*, Joseph Beuys, *Stockhausen*, Denise Kum (of $n+1$), Eva Hesse, *Dr Frankenstein*, Joyce Hinterding, *Griffin (The Invisible Man)*, Vladimir Tatlin, Peter Roche, Leon Narbey, *Dr. Jekyll*, Leonardo, *Stelarc*, *Bouvard and Pécuchet* (Flaubert), *Moholy-Nagy*, *Mime*, Marcel Broodthaers, Jannis Kounellis, Michael Petry (*The Chemistry of Love*), Janet Laurence, "Q" (James Bond), Peter Parker (*Spiderman*), *The Fly*, *Brains (Thunderbirds)*, *Dr Faustus*, *Ulrich (The Man Without Qualities)*, *The Green Ray* (Duchamp, Eric Rhomer, *Marvel Comics*, Warren Burt), *Jules Verne*, *Alfred Jarry*, *Galileo* (Brecht), *Prospero*, *The Alchemist* (Joseph Wright), *Primo Levi (The Periodic Table)*, *Umberto Eco (Foucault's Pendulum)*

Inversions

Think of Duchamp's studio: a coat rack on the floor; a snow shovel hanging from the ceiling. Think of Cullen's inversions: a table with legs in the air, a fish tank in space, a cardboard box that holds water. They both want to turn the world upside down with objects that are of no great significance. What might be considered essential to each object as properties of their own class is removed. That is, their identity as being-in-the-world has changed. In Kant there is an inherent contradiction between appearance and essence, asking the question himself: "How do our representations refer to objects?" As above, logicians and positivist philosophers have attempted to answer this question with concepts, classes and predicates. With these artists, however, logic, like the table, is overturned, despite the careful application of method. A new ordering of the world is argued for. I prefer the response of Swiss artists Fischli and Weiss, "None of our objects is innocent."

Object

Cullen's experiments with water and air play out a paradox: to see the sound, and to hear the movement. Used furniture aids the equation. Consider the silence of the chairs. They are no longer mute, but participate in corporeal sensations caused by vibration, rhythm and . Neither a strict installation (is there such a thing?), nor four autonomous artworks, the "Discovery" is part-sculpture, part-assemblage, part-controlled laboratory experiment.

Paradigm

That knowledge has involved revolutionary changes rather than evolutionary ones is the premise of Thomas Kuhn's concept of the paradigm. Pre-Lavoisier chemistry perceived the world as consisting of an abstract substance, phlogiston, expunged from materials when they are burnt. But Lavoisier's claim, which was to become the new paradigm for subsequent practice, expunged phlogiston from the received body of knowledge, and replaced it with a new element, oxygen. The paradigm concept relies upon the agreement of the scientific community to validate scientific truth. A consensus principle, if you like. But what if, like the fable of the Emperor's new clothes, they were wrong ? The history of science is no less one of amnesia than society's. Jenner did not discover the cure for small-pox. For most of this century the human chromosomal count of 46 has been miscounted. Most of the work for Watson and Crick's DNA discovery was done by Rosalind Franklin.

Project

Hitherto Cullen's installations have strived towards being utopian propositions. They have been interventions inside and outside of art gallery spaces, exploring systems of teaching and utilising architectural elements, everyday objects familiar to us all, diagrams and models to represent the world. Shifting one's experience and expectations of a space, they have postulated different ways of understanding that space, bringing into question the basis of received systems of knowledge: educational, architectural, museological, scientific, aesthetic. That he has used similar – if not the same – objects, ideas and working methods in successive installations recalls Voltaire who said, no doubt in a suitably didactic tone, that he would repeat himself as often as was necessary until he was understood. It also recalls the basis of experimentation: repetition with variation in a controlled environment. If the project is a reconsideration of objects, architecture and design, it is not with some endpoint in mind, but is more fragmentary, like a series of models evolving towards completion. Is there a similar pedagogical intent in "Discovery of Oxygen"? Maybe Cullen is proposing lessons for science: to discover an art in experimentation and promote aesthetic curiosity for the inquiring mind. Empirical science has given primacy to sense perception over other modes of cognition (eg. dialectical reflection, cultural differentiation). Our experience of "Discovery of Oxygen" centres on the work's material conditions: a controlled "experiment", the movement of fluid in space and time, certain basic principles of engineering and practical physics, in sum the application of the skills of homo practica. But this is the paradox. Cullen presents only the simulation of an experiment and the appearance of order. And it is exactly this aspect of the imagination that I like about his art.

Richard Dale