BIO ART
life in the Anthropocene

post-human futures | symbiotic machines | biotech species | the plastisphere

SymbioticA | Thingworld | Gordon Bennett
If you happen to see Australian artist Helen Pynor near an art gallery carrying a large plastic cooler box, she’s probably not fetching the white wine and canapés for a private view. But it would nevertheless be worth joining her as she enters the darkened space in front of an expectant audience and lifts out two fresh, clean and white-marbled pig hearts. They will have only moments ago have been obtained from an abattoir, picked by the artist from among the routinely spilled viscera still pulsating on the floor. The work she is about to perform, surrounded by an immersive, 5-channel video of an underwater meeting of organ transplant recipients in a historic swimming pool, is entitled *The Body is a Big Place.*

A collaboration with Melbourne-based artist Peta Clancy and sound artist Gail Priest, it first appeared in 2011 at Performance Space in Sydney, received an Honorary Mention at Prix Ars Electronica in Linz in 2012, and was then performed at Science Gallery Dublin and Galerija Kapelica, Ljubljana in 2013. It has also been exhibited at the National Taiwan Museum of Fine Arts, Taichung and the Baltic Branch of the National Centre for Contemporary Arts in Kaliningrad, Russia in 2013.

Together with Clancy and accompanied by a medical scientist, Pynor cable-ties the hearts by their severed aorta to a tall, circulatory apparatus with transparent pipes, flasks and spiralling glass tubes above two large funnels. To this she adds flagons of blood which loops dynamically up and down to fill the suspended organs, spilling out through their open pulmonary arteries. One of the hearts starts twitching spontaneously and, with blood streaming across her exposed forearms, Pynor takes the electrodes of a defibrillator and sets the heart pumping in a steadier rhythm, the pulsing scarlet fountains collected for recirculation in the funnels below. It is a strangely dignified and reverent affair, though in some ways heir to the gruesome public demonstrations by Giovanni Aldini (1762-1834) of ‘galvanism’, or the muscular stimulation of corpses by electrical currents, which helped to inspire Mary Shelley’s 1818 novel *Frankenstein.* Although Pynor and Clancy used an established method called Langendorff perfusion, it is uncommonly used on pig hearts, so there is an element of research experimentation. Pynor has since been approached by scientists outside the project for her advice on pig heart perfusion for their laboratory protocols. For their initial Sydney performance, Pynor and Clancy used a clear solution called Krebs buffer as the perfusate, but blood instead not only adds a certain gothic appeal, but also keeps the hearts going for longer. In the Ljubljana performance last year, one of the hearts kept soldiering on for some 20 hours, compelling Pynor and Clancy to stand vigil through the night.

Of great fascination to audiences, children in particular, the scene is reminiscent of the famous 1768 painting *An...*
Headache
Press brown paper soaked in vinegar against the forehead
Experiment on a Bird in the Air-Pump by Joseph Wright in the National Gallery, London. Wright’s narrative masterpiece shows a range of emotional responses to the luminous spectacle of mortality going on at its centre, where an itinerant scientific lecturer demonstrates to a genteel family group the effect of evacuating the air from a glass globe in which is trapped a white cockatoo – a luxury pet in those days. As the bird sinks in distress and the two little girls in the painting become distraught, the lecturer puts his hand upon the lid of the globe. We do not know whether the air will be readmitted and the bird spared, or the lid merely tightened and its fate sealed. One of the major themes of Wright’s work is the advent of science and technology, reflecting a time when Enlightenment rationalism was confidently marching across territory previously held by religion, not least the apparent processes of life and death (the doomed cockatoo could be a reference to the white dove symbol of Christianity’s Holy Spirit).

The possibilities of resuscitating apparently dead bodies was of considerable scientific interest in Wright’s time. Similarly, in Pynor and Clancy’s work, the message is that life can fight back, and that living and dying are less polarised than we might conventionally think. Death is, in Pynor’s words, an “extended moment”. Medical science and its legal and ethical frameworks are still charting the complex borderlands between the animate and the inanimate, as Pynor is finding out from her extensive reading of research papers in the fields of resuscitation and transplantation. Citing the feminist scholar Elizabeth Wilson, Pynor argues that consciousness is more distributed throughout the body than is commonly understood in modern Western culture, which tends to stress only the brain as the seat of the mind. Both the guts and the heart, for example, are plentifully supplied with neurons and of course very much connected with our feelings. Among the growing number of organ transplant recipients (over a hundred thousand per year worldwide) there are frequent reports of an altered sense of self following the procedure. Notwithstanding the power of The Body is a Big Place as a performance, and the iconographic resonance of the heart as a subject, the work’s aim is principally to question prevailing perceptions of human identity as unitary and based on definite internal hierarchies – perceptions that of course reflect our social order.

A biologist by initial training, Pynor strives to investigate and represent how such intangibles as culture and history interact with organisms. In her practice she uses body tissue as artistic material in extraordinarily original, elegant and lyrical ways. “Are those entrails?” asked my late stepfather-in-law when, a few years ago, I showed him some of Pynor’s series of photographic works Liquid Ground. The works, which had been shown as part of her exhibition Breath at GV Art gallery in London in 2011 and at Dominik Mersch Gallery in Sydney, did indeed show guts, but as they are seldom if ever seen. They were not sprawling or hanging, but drifting underwater, diaphanously trailing from white dresses and shirts like the tentacles of a magnificent jellyfish. “I had no idea when I dropped this organ into water that this would become so fabric-like; it becomes like a garment in itself”, Pynor told me in the course of a series of long and absorbing conversations about biology, culture, history and art, and the liquid medium of the body. “Suddenly there’s a dialogue between the materiality of the organ and the materiality of those fabrics, which surprised me.”

Pynor is not the only woman to have made art from offal. Israeli artist Sheffi Bleier’s menacing photographs, Organ Gardens (2007), for example, invoked the opulently hanging fruits and game of Netherlandish still life painting. For Pynor, however, body parts are not so much about art-historical references, than materials whose artistic significance and utility only becomes apparent in the light of bio-ontological questions. “I was interested in a visual language that could describe the body as both a physical and cultural entity, so clothes become a symbol for culture and experience. But in this series their appearance resonates with visceral details in the organs so they’re almost extensions of the organs and vice versa.” Pointing out some of the fine details of her large photographic works mounted on glass, she shows how the frayed edges of the slits in the dresses appear to merge
with the buoyant webs of connective tissue around the organs. Caressing tendrils, filaments and strands, or clouds of disseminating fluid (as in the series Milk, based on Australian Aboriginal medicinal plants, 2008–9), are motifs in some of her work. Sensuous and entrancing, they represent the interplay between the natural and the social realms – what Pynor calls “entanglements” or “porosity”.

Pynor was raised in a bush suburb of Sydney. “Growing up in Australia exerted a very powerful influence”, she told me. “The land, water, light, plants and animals were compelling and vivid, and this experience of place continues to be a dominant reference for me.” She took her first-class degree in biology at Macquarie University in 1987 before embarking on a scientific career. She also enrolled in an art photography course and then turned full-time to art, taking another undergraduate degree at Sydney College of Arts, The University of Sydney in 1993. Then, after successful exhibitions in cities including Sydney, Melbourne and Paris, she gained her PhD at the same institution in 2010. Her thesis, on the intersections of Darwinism, art and feminism, weighed up the implications for art of the ‘new materialist’ approach of feminist philosophers and scholars such as Elizabeth Grosz and Elizabeth Wilson, and the philosopher of science Susan Oyama. The merciless genetic determinism of many twentieth-century biological accounts, based on a view of individual genetic inheritance as fixed, has been problematic, to say the least, for feminism. However, recent insights provided by such growing sub-disciplines as evolutionary-developmental biology (also known as Evo-Devo) have shed new light on the complexities of the genome and our affinities with other species, and, in the case of the fairly new field of epigenetics, the susceptibility of the genes to environmental factors within individual lifetimes.

“One of the reasons I was so fascinated by epigenetics”, Pynor says, “is that it seemed to offer a biological mechanism by which cultural experience is inscribed physically and molecularly in the body, and even inter-generationally”.

“I wasn’t very conscious of my scientific background when I started art-making”, she continues. “Art was almost something that I pitched against my scientific background. My early work was full of references to the biological and the body, but I wasn’t in a theoretical sense bringing those areas together. What I needed to do in the early days was actually empty out the science. I had to re-shape the way that I thought and produced, and let a much more intuitive process hold reign for a while. But I was still working in things like human hair, sheep intestinal membranes, and so on, and I went about resolving technical problems in quite a scientific way. It wasn’t until I wrote my thesis that I formalised the link to re-engage it more deeply, fully and critically by way of art. Her work with Clancy on The Body is a Big Place took her practice and thinking onto a newly ambitious level, and now she is about to embark on a prestigious residency at the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden, where she will be working with research group leader Dr Jochen Rink on the capacity for cells, tissues and whole organisms to reorganise and regenerate. There, she will be further “confounding the clear separation of living-dead and material-consciousness”, from the laboratory bench, examining cellular processes with the latest microscope techniques, as a basis for conceptualising, making, picturing and performing. Whether this will mean a fundamental change to her practice remains to be seen, since she has long understood the common speculative, observational and experimental aspects of both science and art. “I’m not always trying to be clear”, she tells me: “I just work with the lexicon that appeals to me . . . I start with images in my mind but the work always turns out completely differently. The materials, the objects, and the living entities I work with show me things and over time I’ve had to learn how to look and listen.”

Dr Marius Kwint is an art historian and Reader in Visual Culture at the University of Portsmouth, UK. He was guest curator of the critically acclaimed and highly popular exhibition Brains: the Mind as Matter at Wellcome Collection in London in 2012, and at the Museum of Science and Industry in Manchester in 2013.

Helen Pynor is represented by GV Art gallery in London and Dominik Mersch Gallery in Sydney.