D. HIRST/SCIENCE LTD/DACS/PRUDENCE CUMING ASSOCIATES

In *The Physical Impossibility of Death in the Mind of Someone Living*, artist Damien Hirst makes no attempt to romanticize death.

ANATOMY

Flayed, pickled, plastinated

Ewen Callaway discovers compelling cross-currents in two very different displays of dead animals exhibited just a few kilometres apart.

A horse's head is sliced lengthwise into three sections and splayed a few centimetres apart. In another gallery, a 2-metre skinned shark hovers, its red blood vessels aglow. Each is the work of a controversial iconoclast, made rich by his grotesque creations.

I am, of course, describing anatomist Gunther von Hagens' thrilling exhibition at London's Natural History Museum (NHM), a menagerie given the same patented plastination treatments as his blockbuster *Body Worlds*. The show might spark envy from the British artist Damien Hirst, no stranger to dead fauna. His career retrospective is showing a few kilometres away at Tate Modern.

Von Hagens is at pains to define himself as a scientist, albeit one "with a sense of aesthetics". His *Animals Inside Out* is a collaboration between NHM and von Hagens' Institute for Plastination in Heidelberg, Germany (a branch in Dalian, China, is devoted to animal preparations). The show opens with a tribute to Richard Owen, the comparative anatomist who founded the NHM

and coined the term homology to refer to structures with common evolutionary origins, such as wings and arms.

It can be easy to see anatomy as art here. Cross-section slices of a crocodile, needlefish and other animals are mounted like paintings — but labelled like anatomy diagrams. The (more or less) whole animals are often artfully posed. A cat, with skin, muscles and two legs removed, lies on its side as if playing with a ball of yarn — and offering a view of its chest cavity. The stances of a pair of reindeer — one with legs outstretched as if mid-leap, the other poised as if about to jump — highlight the animals' musculature.

Von Hagens' most stunning treatments strip away skin, muscle and organs, leaving only vasculature, injected with coloured resin. Two horse heads, so thick with capillaries that they seem made of red foam, are placed opposite one another as if guarding the exhibition. A tiny piglet and a lamb, both 'peeled', stand face-to-face as if at a morbid petting zoo. The shark has a sinister grin as

it hovers above its large liver, which helps to keep it buoyant. My only quibble is that no species names are given for the animals — an odd decision at a museum that is a testament to Linnaean nomenclature.

Many of Hirst's best-known pieces are tame by comparison. *The Physical Impossibility of Death in the Mind of Someone Living* (1991), a 4-metre-long, formaldehyde-fixed tiger shark (*Galeocerdo*

Gunther Von Hagens' shark hovers, its red blood vessels aglow.

Animals Inside Out

Natural History Museum, London.
Until 16 September 2012, then on tour.

Damien Hirst

Tate Modern, London.
Until 9 September 2012.

cuvier), floats in its vitrine with skin like rumpled denim, misshapen fins and a gaping mouth revealing rounded, un-razor-like teeth. The iconic *Mother and Child Divided* (1993) features a cow and calf, each halved lengthways, hovering in four formalin-filled glass cases. The work bears a fleeting similarity to von Hagens' creations until you walk between the split carcasses. Instead of brilliant reds and purples, the wilted organs are a dull grey.

It is tempting to say that the British artist could learn a thing or two from the idiosyncratic German about preserving animals, but that would miss the point of these particular pieces: that death is ugly, awful, inevitable, and to doll it up is misguided.

In Hirst's hands death can also be beautiful. Butterfly wings have never been used to greater effect than in *Doorways to the Kingdom of Heaven* (2007), a triptych resembling a cathedral's stained-glass windows. *In and Out of Love* (1991) is a bright, humid room filled with hundreds of fluttering butterflies. As I watch, one seems dead, until a museum employee picks it up and lays it in a bowl of cut-up fruit. It lives!

Hirst isn't all about animals. Pills, cigarettes and jewels are major motifs in his art, and the exhibition's chronological presentation traces how his use of these objects has evolved. A single cabinet of pharmaceuticals and surgical equipment (*Sinner*, 1988) morphs into a room-sized pharmacopoeia (*Pharmacy*) four years later. By 2000, *Trinity — Pharmacology, Physiology, Pathology* is a room jammed with cabinets of gleaming silver surgical equipment, drug packaging and anatomy models.

But, a science-minded reader might ask, is it art? Here, intention and context are everything. Hirst's animals and objects are art because he says they are, and galleries such as the Tate Modern agree. Von Hagens, who purposefully chose the NHM as his venue, summed up his position in a 2007 interview: "I don't do Damien Hirst," he said. "I am an anatomist, not an artist." Von Hagens' dead animals look prettier than most of Hirst's, but that is the point. ■

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FICTION

New moral arbiters

Jennifer Rohn enjoys an epic novel about scientists, the media, ethics and society.

James Meek's novel about scientists and society, *The Heart Broke In*, tackles a big question: what does the rise of secularism in much of the West mean for ethical codes?

Some stories might suggest that rationalism should provide some kind of model. But Meek uses nuanced debate to build towards a very different climax. His mouthpieces are Bec, a malaria researcher; her computational-biologist lover, Alex; Bec's misbehaving ex-rock-star brother, Ritchie; and their friends, family and lovers. Meek, a former science correspondent for *The Guardian* newspaper, deftly handles the complex, day-to-day issues that scientists grapple with: the ethics of research; interaction with society; lab politics; and the struggle to make a mark in a difficult profession. *The Heart Broke In* is a realistic slice of life at the bench, reflecting both the admirable and the unflattering qualities of scientists.

Meek uses Alex's Uncle Harry, a militant atheist and famous cancer researcher, to explore whether science can replace God. Harry boasts of besting God by saving lives with his niche cure for one rare form of cancer, but develops a different type of tumour himself. Science can neither save him nor help him to accept the end of his existence.

In another plot strand, Bec romantically spurns Val, a militant Christian and the editor of a prominent newspaper. Val labels her an intellectual obsessive cut off from ordinary life, and tries to exact revenge by destroying her public reputation using the media weapons at his disposal.

Somewhere in the middle, Bec and Alex flounder. Bec is so devoted to her science that she allows herself to be parasitized by an African worm to study its protective effects against malaria. Alex is a dreamer whose hyped *Nature* paper on a 'treatment' for ageing ("SCIENTIST FINDS FOUNTAIN OF YOUTH!"), shrills the headline in Val's paper) transforms him into an unproductive media darling. In danger of becoming a one-hit wonder like Harry, Alex starts to realize that this might be the normal progression of a 'successful' scientific career — a suspicion confirmed when he interviews the brightest

minds in his field for a documentary. All typecast by one big breakthrough, they have spent the rest of their lives trying to recapture the glory, to little avail.

As their personal problems mount, the scientists emerge as refreshingly three-dimensional in a way rarely seen in fiction. Yet Meek also plays with the one-dimensional view of scientists so often taken by the media.

Val, for instance, sees scientists as arrogant, atheistic meddlers. Ritchie is conflicted: expressing surprise that scientists could actually be well dressed or have friends, while also holding up Bec and Alex as the paragons he will never be. Then, when the pair grow more famous than he is, he describes them sarcastically as white-coated secular saints. Bec's mother, meanwhile, fears her daughter's disapproval of her bizarre diets, and marvels that scientists get anywhere when they are "closed to new ideas".

Even the scientists flirt with stereotypes. Bec, for instance, berates herself because she can't recall how many times she had sex with Val — the kind of thing, she feels, that a scientist should be able to monitor. And Harry regales the young Alex with mythical descriptions of his work, from battles and breakthroughs to silver bullets and holy grails. Part of Alex's growth as a character is realizing that his profession isn't nearly as heroic as Harry makes out.

The Heart Broke In ends with almost everyone receiving their comeuppance. In the absence of a viable moral code, good and bad are enforced by naming and shaming in the press and social media — not by the desire to do no wrong, but by the imperative not to get caught. Science and religion have had their day, it says: the media, old and new, are the higher powers, with the ability to create and destroy reputations in predictable cycles. ■

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The Heart Broke In
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