



Elements of Adolf Fleischmann's 1956 *Composition 71 N.Y.* recall his early work in medical imaging.

IMAGING

Medical modernist

Thomas Schnalke extols the dual genius of pathology sculptor and abstract artist Adolf Fleischmann.

He created stunningly lifelike moulages: wax models of the human body in states of disease, once used for training doctors. Later, he turned to art, rising in the 1950s to become a star of the US abstract scene with paintings featuring vibrantly hued geometric shapes. Adolf Fleischmann (1892–1968) had impacts on medicine and art that were equally powerful and strangely divided.

This year, two Berlin exhibitions (for which I have contributed to the catalogues)

will explore Fleischmann's oeuvre: *Surfaces* at the Berlin Museum of Medical History at the Charité (which adapts a joint presentation of the Museum of Concrete Art and the German Museum of Medical History, both in Ingolstadt) and the Adolf Fleischmann Retrospective at Daimler Contemporary Berlin. Whereas *Surfaces* is a survey of Fleischmann's varied life, focusing on medical works made between 1917 and 1927, the Daimler Contemporary retrospective concentrates on Fleischmann's artistic career in

Surfaces: Adolf Fleischmann — Crossover Between Art and Medicine

Berlin Museum of Medical History at the Charité.
28 April – 11 September 2016.

Adolf Fleischmann Retrospective

Daimler Contemporary Berlin.
30 April – 6 November 2016.

the United States, between 1952 and 1965.

The German-born Fleischmann trained as a graphic illustrator, then studied fine art in Stuttgart from 1911 to 1913. Heavily wounded in the First World War, he moved to neutral Switzerland in 1917 to work as a medical sculptor at Zurich's Surgical University Clinic. With the encouragement of the eminent moulage-maker Luise (Lotte) Volger and under clinic head and eminent surgeon Paul Clairmont, Fleischmann built up a unique collection of 400 surgical moulages over 10 years. These documented, in graphic 3D, trauma, pathological changes in the body, and therapeutic interventions visible on the patient's skin — such as wounds caused by strong electrical currents, swellings of the thyroid gland and side-effects of X-rays, such as skin atrophy. Impressive moulages of this kind will be on display at the Museum of Medical History.

Medical moulage-making, which had begun in cities including Jena, Germany, in the early nineteenth century, blossomed from the 1850s in the European medical centres of London, Paris, Vienna and Berlin. Around 1900, it spread around the world, coexisting with photography and other forms of graphic medical illustration until the 1950s, when the colour slide finally reached a satisfactory technical standard.

Creating a moulage involved taking a plaster cast of an area of the patient's skin and filling it with coloured liquid wax. Once detached, the wax shell was painted and finished from life to capture every nuance of form and colour, creating a perfect illusion for teaching. Although the process was clearly mimetic, the observational skill demanded was superb training for the artist's eye: in the topography of diseased and traumatized skin, Fleischmann could study organic form and detect graphic patterns and gradations of colour.

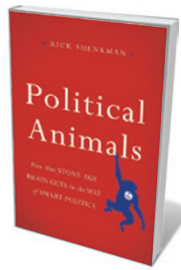
Although Fleischmann's moulages are unsigned, he did sign other works in his medical oeuvre, indicating that he felt they stood out visually and even artistically. These are 30 histopathological drawings of skin tissue, held at the Zurich Moulage Museum and largely overlooked. In Zurich between 1918 and 1927, Fleischmann used a microscope to make unprecedentedly subtle and accurate ink drawings of the dermatological evidence of diseases, such as the scaly skin disorder ichthyosis vulgaris, Hodgkin's lymphoma or the systemic autoimmune condition lupus erythematosus. He documented

the intricate details of complex structures and interactions of cells, nerves and veins, building his scientific understanding of visible organization and structure. As with the moulages, he reproduced form and colour; but with the drawings he also did more. There is a dynamical element in his mastery of line: the illustrations reveal a subtle movement, sublime gestures, the hidden contours under the skin. In these images, Fleischmann liberates himself as an artist.

He had been striving to become a fine artist, and to be seen as one, since the 1920s in Zurich. Here, he was able to absorb expressionist and cubist artworks, in particular those of Munich's Blue Rider group, which included Wassily Kandinsky and Franz Marc. But his path to acceptance was long and strewn with obstacles. The rise of Nazism and the Second World War forced moves to France, Spain, Italy and, post-war, back to Paris. Studying the work of artistic luminaries Robert Delaunay and Piet Mondrian, he finally arrived at his own distinct style in 1950. Settling in New York City two years later, he produced a stream of outstanding abstract paintings and prints that drew heavily on the urban elements of his new home.

Fleischmann only occasionally returned to medical imaging. However, there are hints of his microscopic drawings in several of

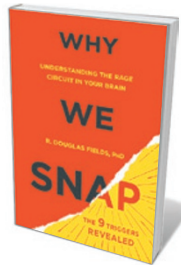
Books in brief



Political Animals: How Our Stone-Age Brain Gets in the Way of Smart Politics

Rick Shenkman BASIC (2016)

Politics often seems an arena for the irrational, in which drought can affect voting and candidates' egregious faults are ignored by die-hard fans. Journalist Rick Shenkman sees the cause as a poor fit between our Palaeolithic brains and today's knotted complexities. He liberally draws on psychology (from the likes of Daniel Kahneman) and political science to isolate four key failings among voters, including inept 'readings' of politicians. If democratic reform is to succeed, he argues, we must begin with self-reform.



Why We Snap: Understanding the Rage Circuit in Your Brain

R. Douglas Fields DUTTON (2016)

The tug of a pickpocket lifting his wallet spurred neurobiologist Douglas Fields to pin the man to the pavement — then motivated him to decode the brain's "rage circuitry". Synthesizing his own and others' research and scores of case studies, Fields argues that many apparently inexplicable cases of violent rage are down to a clash between hard-wiring in the brain's hypothalamus, amygdala and limbic system, and nine rage triggers, from life-or-death situations to threats to social order. He shows, too, how factors such as chronic stress can lower that flashpoint. Cogent and timely.



Menagerie: The History of Exotic Animals in England

Caroline Grigson OXFORD UNIVERSITY PRESS (2016)

Hyenas roamed medieval Oxfordshire, reveals zoologist Caroline Grigson in this incisive chronicle of exotic visitations to England's shores. These and other animals in Henry I's park were a precursor to the Tower of London menagerie, which by the thirteenth century boasted a polar bear that swam in the Thames. The acquisition of wild beasts, initially the whim of status-hungry monarchs and a by-product of exploration, later became a public obsession and a focus for natural historians such as Hans Sloane — while the flood of monkeys and apes prompted early stirrings of evolutionary thought.



Cure: A Journey into the Science of Mind Over Body

Jo Marchant CROWN (2016)

Science writer Jo Marchant probes the impact of mental states on physical health in this well-researched study of "mind-body medicine". There is much compelling science here, such as the emerging field of psychoneuroimmunology; and reminders of the negative effects of stress and poverty on health are salutary. However, the attention paid to often expensive alternative practices acknowledged by Marchant as unscientific sits oddly next to less controversial techniques — and the documented (and cheaper) benefits for low mood of a walk in the woods fail to feature.



Landskipping: Painters, Ploughmen and Places

Anna Pavord BLOOMSBURY (2016)

The bosky glories of the British landscape were 'born', culturally, in the eighteenth century, and soon celebrated by luminaries such as Thomas Gainsborough and William Wordsworth. Anna Pavord traces their paths, skipping across scapes and interweaving a supple narrative of her own experience of place from Wales to Cumbria. Adding earthiness to lyricism are passages by agricultural writers such as William Cobbett of *Rural Rides* (1830), who abhorred the enclosure of common land, and Arthur Young, who supported it. [Barbara Kiser](#)

MOULAGE MUS. OF ZURICH/UNIV. AND UNIV. HOSPITAL/PHOTO: BERNHARD STRAUSS



A moulage depicting skin damage from X-rays.

his late works of art, such as the oil painting *Composition 71 N.Y.* (1956), highlighted in the Daimler Contemporary show. Rounded motifs call to mind a microscope lens, for instance, and intricate grids of horizontal and vertical lines — combined with the 'flickering' appearance of the colours — give the pieces a visual dynamic. Perhaps this is why Fleischmann's artworks, although radically abstract in composition, appear so breathtakingly lively. ■

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