

Small Wonders
Esther Leslie

Modern technologies, such as virtual reality simulators, make it possible for us to experience life as if we were something else, an organism able to fly, a creature unaffected by gravity, an entity with the compound vision of a bee. Such experience of life through the sensorium of another is a hi-tech version of the imaginative adventure that Franz Kafka detailed in *Metamorphosis*, one hundred years ago, in 1915. Gregor Samsa, who wakes up one morning as a beetle, comes to experience the world in insect terms, fatally in his case. Kafka's fiction, as Walter Benjamin speculated, inhabited the same universe as that of the new physics, as represented by Arthur Stanley Eddington, whose explorations in quantum mechanics asserted anecdotally the apparent impossibility of human existence, perceived on a quantum level. To enter a room, he notes, 'I must shove against an atmosphere pressing with a force of fourteen pounds on every square inch of my body. I must make sure of landing on a plank traveling at twenty miles a second round the sun ... I must do so while hanging from a round planet headed outward into space, and with a wind of aether blowing at nobody knows how many miles a second through every interstice of my body. ... The plank has no form or substance. To step on it is like stepping on a swarm of flies. Shall I not slip through?'¹

It is a wonder that we manage to inhabit the world. The world fits us, if we adhere to certain rules. But we each have a world for ourselves. Some of us can slip through cracks, dive confidently under the surface of water, or cling to the edges of rocks. Others crash into the sea. But is not just us here in this world. Or rather this world is a flexible fluid thing. For some living things with which we share the planet, but of whom we may be barely aware, what flows is sticky, what is impenetrable and holds itself against us, can be passed though or appears as a lattice work.

The scientist and the artist only appear to inhabit themselves different worlds, with different rules and modes of life. Both are drawn by wonder and curiosity. It has long been the work of film to imagine other worlds and to swoop us like birds or dive us like sharks through air and water. Film has also long been a tool of science and its quest to understand life in all its forms. This moving art was mobilised to ask what makes movement move? From the earliest days, microphotography combined with film to provide images of cells or bacteria in movement, as a part of life, not frozen photographic images or drawn approximations. Microscopic filming, filmic enlargement, is proof of the liveliness of minutia, a document of the subvisible in all its activeness. Of course, it also allowed for the manipulation of movement, to slow down processes for further analysis, or to speed it up, to play with rates and scales. On film, the modes of life of other lifeforms came into view, and that which remained otherwise the private witnessing of the scientist became a proof, a truth of our planetary co-habitants.

Katie Goodwin's film interweaves found images, from private archives of people at play and from the science lab, with a scientist's anecdotal reports of experiments and their motivation. A drama of discovery – what happens when a flagellate becomes an amoeba – becomes a drama of witnessing; and each of us is projected into a defamiliarised moment of wonder at how each of us, from baby, learning to crawl, to man trying to climb, manages to live in the worlds created by and for us. How do any of us - artist, scientist, amoeba, baby, adult - master the electrical forces of the world and come up with a solution?

¹ Arthur S. Eddington, H.G. Callaway, *The Nature of the Physical World: Gifford Lectures of 1927*, Cambridge Scholars Press, Newcastle, 2014, pp. 336-7.