

# The Times of Our Lives

[Steven Connor](#)

A talk given at the symposium *How Insect Are We?*, part of *Pestival*, the Insect Arts Festival, Zoological Society of London, 3 September 2009.

Flies are in many senses our opposite, or our other. They dwell in, and live off our deaths. Every time a fly comes near, drawn irresistibly by the whiff of our sweat or our tears, and hoping (if they are a female fly, that is) for a freebie sip of protein, what has attracted them is the tiny, incipient smell of our decomposition, to which their sense of smell is fantastically well-attuned. We inhabit, or would like to inhabit, the world of fully-formed and self-subsisting entities. Flies inhabit the world of the formless and the decomposing. As maggots, they represent a kind of sickening dissolution of the body's forms and outlines, a kind of pure, blind, ravening multiplicity.

And yet they are also our intimate fellow travellers. Flies go everywhere with us. Very few creatures are as widely diffused throughout the globe as *musca domestica*, and we may speculate that it is because they have been hitching rides on us for millennia, that they have followed us, or more particularly our waste products and those of our animals. Wherever you see a fly, a human will not be too far away, and vice versa.

Flies are wont to prompt reflections on questions of scale, both spatial and temporal. It became a commonplace in popular biological writing in the middle of the nineteenth century to identify the fly as a kind of cosmic median, between the unimaginably large and the inconceivably small. The author of one such book, Leo H. Grindon, took the fly's measure relative to *monas crepusculum*, at that time the smallest identified living creature, and the earth's largest living creature:

The animal which holds the middle place in the scale of size, reckoning from the *Monas crepusculum*, the minutest to which our microscopes have yet reached, is the common house-fly. That is, there are as many degrees of size between the house-fly and the *Monas*, reckoning downwards, as, reckoning upwards, there are between the house-fly and the whale. (Grindon 1867, 122n)

Sometimes the fly suggested even larger perspectives:

It is commonly supposed that the telescope, in penetrating the unmeasured depths of space, and bringing into view systems of worlds, in which our sun with its planets is lost as a mere speck, gives us the most overwhelming conception of the grandeur of the universe, and of the infinite power and wisdom of God. But it may well be doubted whether the revelations of the microscope are not still more wonderful. The world beneath us is as great as the world above us. It is estimated that the common house fly occupies the central point in the scale of animated nature as far as our earth is concerned. (Anon 1857, 330)

The volatility of scale and switch of perspective from the lower to the upper world are particularly marked in considerations of flies, partly because of the fascination provoked by the fly's eye. The compound eye of the fly is actually rather an ordinary affair, on the insect scale. The fly's eye consists only of 4000 separate ommatidia, or light/dark sensors, compared to the dragonfly, which can have up to 30,000. These have also been called lenses, facets and, prettily, 'eye-pearls' (Hooke 1665, 178). Perhaps because it is the most familiar and frequently seen of the insects, it is the fly's eye that is emblematic of the radically different mode of entomological vision. Where the human eye requires magnification to see the fly, what it sees in the fly's eye is our miniaturisation. When Fred Saxby set out his instructions for 'how to photograph through a fly's eye' in 1898 (in fact his experiment used a cluster of lenses from a dragonfly's eye), he used as a focussing object a depiction of Queen Victoria, explaining 'is it not appropriate that the noblest and greatest monarch the world has ever seen should be the subject of a photograph through the most infinitesimal lens known to science?' (Saxby 1898, 189).

Precisely because the fly is tiny, frail and apparently negligible, it can insinuate itself easily into the presence of greatness. As the hinge or turning point in the great scale of being, flies bring about the copresence of contraries, allegorically folding different scales of things together. The Emperor Domitian was so addicted to killing flies in his chamber that if visitors asked whether he was alone, his attendants would say 'Ne musca quidem' – 'not even a fly'. Ulisse Aldrovandi, author of the first systematic work of entomology, wrote that 'The Lion surpasses all animals, in strength, spirit and body, but the tiniest midge in Mesopotamia subdues it' (Aldrovandi 1602, n.p.). The special bond between majesty and the minimal is suggested by President Obama's recent muscacidal exploit during an interview –

<http://www.youtube.com/watch?v=gzgOS8dbF64>).

Like other insects, flies also seem to embody anomalies of quantity and number. The eighteenth-century observer Henry Baker called the animalcules revealed by his microscope ‘those breathing Atoms, so small they are almost all Workmanship!’ (Baker 1742, 298). There is in fact a significant etymological conversation between the words atom and insect. An atom, literally that which is without a cut, signifies something indivisible. The English word for insect comes from Latin *in-* and *secare*, to cut, which is a more or less literal rendering of Greek *entomos*, meaning with a cut in the middle or on the inside. The segmented bodies of insects seem to compromise their unity. Insects, which were often thought to be the smallest possible living creatures, mere motes of life, keep on providing evidence of the further divisibility of the elementary, all the way down, far beneath the threshold of visibility. The atom is always subject to more anatomy, (literally, ‘un-undividing’), there is always more divisibility in the visible. The insect is not only the one in the many, but also the many in the one. In reality, flies hover between the conditions of the singular and the plural.

Even more impressive than the disparity between the size of the fly and that of other creatures is the disparity between the time-scale on which they live and our own. In reminding us that time flies, flies become the emblems of the time that flies from us: time’s flies. They are so close to the dead, so inimical to the quick, precisely because they are themselves quick, in the sense that they live fast and die young. One of the ways in which flies have folded together time-scales is in the spectacle of flies trapped in amber from millions of years ago. Robert Herrick was prompted by such a sight to this short meditation on relative grandeur:

I saw a Flie within a Beade  
Of Amber cleanly buried:  
The Urne was little, but the room  
More rich then Cleopatra's Tombe. (Herrick (1915, 269)

The fly focusses ideas about temporal, as well as spatial extension. The fly is often thought of emblematically as the creature of a day. This is why hangers-on and followers of fashion are often referred to as ‘flies’, as in Timon’s condemnation of ‘fools of fortune, trencher-friends, time’s flies,/Cap and knee slaves, vapours, and minute-jacks!’ (Timon of Athens, III.6, 53-7).

The shortness and apparent sweetness of the life of flies has often made them comparators for the heedless pursuit of pleasure and neglect of eternity by human beings. Flies appear in the sixteenth and seventeenth century in emblem

books as images of the risk of forfeiting eternal life and being consumed in the incendiary pleasures of an hour. Flies also appear frequently in 'Vanitas' paintings, like Barthel Bruyn the Elder's, *Vanitas*, to give piquancy to the lesson of the transience of human life. They also feature with intriguing frequency in religious paintings, sometimes in conjunction with saints and Madonnas, one assumes in order to point up the contrast between holiness and sin, a particularly beautiful example being Carlo Crivelli's, *Madonna and Child With a Goldfinch*. All of these associations, of sex, mortality and time, come together exquisitely in Frans van der Myn's *The Fly*, which freezes a moment of delicious ambivalence, in which the lady is either seeking to prolong the titillation provided by her guest's tiny toes on her milky skin, or, more likely maybe, drawing back her hand to dispatch it, Obama-style. The imminence of the fly's demise is precisely what lifts the painting out of time, concertinaing together transience and endurance.

Flies are one proof of the principle that has recently been enunciated euphoniously but untranslatably by the philosopher Michel Serres, who has on occasion adopted a fly as his personal emblem: 'Le dure ne dure pas: seul dure le doux' (Serres 2008, 115) – 'the hard desists; only the soft persists'. *E. coli* and *musca domestica* may well turn out to be in it for a longer haul than we.

And yet, the shortness of the fly's life-span is one of the most important reasons that we are beginning ourselves to synchronise ourselves with what Michel Serres has called the 'Grand Recit' of the evolution of life on this planet (Serres 2003, 13-75). Our understanding of genetics owes more to one creature than any other: the fruit fly, or *Drosophila*. The reason for this is that fruit flies reproduce so fast, and are so cheap and easy to procure – a milk bottle with a bit of rotting banana in it will gather hundreds of experimental subjects for nothing in a matter of hours.

The fruit fly research that has attracted most attention in recent years has been concerned with the duration of the fly's life. Michael Rose of the University of California at Irvine has selectively bred flies that live for 130 days rather than the 40 that is usual for fruit flies (Rose and Matos 2004). In 1998, Seymour Benzer at the California Institute of Technology discovered flies with a mutation that enabled them to live for 35% longer than normal: they named it the Methusaleh gene (Lin et. al. 1998). Even more surprising is the fact that, like David Cronenberg's fly-modified Seth Brundle, the greybeard flies seem also to be fitter than flies of normal longevity, flying up to five times faster and resisting conditions of stress and deprivation much better. However, there is a grim cost. It appears that the methusaleh flies are not able to maintain such

high rates of fertility as ordinary wild flies. Indeed, work at University College London has suggested that one of the most important factors in shortening the lives of flies is mating, or, more specifically, the stress of the elaborate courting ritual, which, for *Drosophila*, involves vibrating one wing at a time at a very particular frequency. It seems that some kind of invariant hedonic ratio is in operation: you can have sweetness, or you can have long life, but not both.

There has been in art, poetry, philosophy, science and even in religion, a secret, but profound identification between human beings and flies. It is precisely because they seem so much our other that we are so wont to make out in them our likeness.

## References

Anon (1857). Rev. of P.H. Gosse, *Life In Its Lower, Intermediate, and Higher Forms; or, Manifestations of the Divine Wisdom in the Natural History of Animals* (New York: Robert Carter and Bros., 1857), *Princeton Review*, 29, 329-330.

Aldrovandi, Ulisse (1602). *De Animalibus insectis libri septem*. Bonon. Apud Ioan: Bapt: Bellagambam.

Baker, Henry (1742). *The Microscope Made Easy*. London: for R. Dodsley.

Grindon, Leo H. (1867). *Life: Its Nature, Varieties and Phenomena*. Philadelphia: J.B. Lippincott and Co.

Herrick, Robert (1915). *Poetical Works*. Ed. F.W. Moorman. Oxford: Clarendon.

Hooke, Robert (1665). *Micrographia, Or, Some Physiological Descriptions of Minute Bodies Made by Magnifying Glasses*. London: Royal Society.

Rose, Michael R. and Margarida Matos (2004). 'The Creation of Methusaleh Flies By Laboratory Evolution.' *Methusaleh Flies: A Case Study in the Evolution of Aging*, ed. Michael R Rose, Hardip B Passananti and Margarida Matos (Singapore: World Scientific) 3-9.

Lin, Yi-Jyun, Laurent Seroude, and Seymour Benzer (1998). 'Extended Life-Span and Stress Resistance in the *Drosophila* Mutant *methuselah*.' *Science*, 282, 943-6.

Saxby, Fred W. (1898). 'How to Photograph Through a Fly's Eye.' *Knowledge: An Illustrated Magazine of Science*, 21 (NS13): 189.

Serres, Michel (2003). *L'Incandescent*. Paris: Le Pommier.  
----- (2008). *La Guerre Mondiale*. Paris: Le Pommier.