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- 1 In the introduction to his 2012 volume, *Animal Cities: Beastly Urban Histories*, historian Peter Atkins observes that urban animals have generally been considered as belonging to one of four categories: (i) 'useful animals', for traction or meat; (ii) 'those which can be enjoyed', such as garden song birds; (iii) 'those which are desirable', for example companion animals; and finally (iv) what he describes as 'species which have transgressed, such as rats, cockroaches and pigeons, and are judged to be vermin because they are "out of place" in the city' (Atkins, 'Introduction', 3). The house-fly might seem an obvious candidate for Atkins's fourth category. This is certainly the impression given by a flurry of articles, pamphlets and books on the subject, published on both sides of the Atlantic in the decade before the First World War (Austen; Fitzsimons; Hewitt, 1910, 1912; Howard; Lefroy; Ross).¹ With titles such as *House-Flies and How They Spread Disease*, *The House-Fly as a Danger to Health*, or *The House-Fly, A Slayer of Men*, this body of work—penned for the most part by entomologists and public health officials—all shared a common aim: to frighten the public into giving up what was seen as a dangerously complacent conception of the insect as a mere summer nuisance—'an irritant to elderly gentlemen and an object of interest to babies', as one put it (Hewitt 1912, viii). According to Fitzsimons's *The House-Fly, A Slayer of Men*, a particularly shrill American work of 1915, 'the presence of five hundred cobras scattered throughout the city would be as nothing compared to the awful, the appalling danger and risks incurred by the presence of the common House-Fly'. The author went on to call his readers to arms:

Man congregates, House Flies breed at too rapid a rate for them to successfully cope with. So long as man provides suitable breeding grounds for flies, just so long will he be plagued with them. The Angel of Death will continue to strike down innocent

babies, bonnie children, youths and maids, men and women, so long as we are content to tolerate the House Fly in our midst. Arise! Combine, organise your forces. Then unite as one man, and smite hard and long. Do not tarry by the wayside while this terrible fly menace hangs over you like the Sword of Damocles (Fitzsimons 4, 47–8).

- 2 British authors were less melodramatic, but the underlying message was the same. As British Museum entomologist Ernest Austen put it in 1913, the house-fly should 'be regarded as a dangerous enemy, which should be destroyed and kept in check by every possible means' (Austen 8).
- 3 These Edwardian anti-fly campaigns have been widely studied, notably by historians of epidemiology and public health, who emphasise to varying degrees the impact of scientific progress in germ theory, of new interventionist public health departments, and the lessons of the Boer War and other overseas military campaigns during the decades on either side of 1900. What is less clear, however, is whether, as Anne Hardy claims, 'flies were popularly disliked and regarded as a nuisance *well before* they became scientifically associated with germs and the transmission of disease' (Hardy 74: my emphasis). This is certainly a plausible thesis. As J. F. M. Clark observes in his *Bugs and the Victorians* (2009), 'As creatures that swarmed on wounds, faeces and rubbish, and alighted on eyes, mouths and food, and visited corpses and carcasses, house flies could hardly evoke warm and fuzzy sentiments. . . . The fly was long regarded as a filthy and potentially lethal pest' (Clark 219). To back up his point, Clark quotes from journalist Henry Mayhew's remarks in volume three of his path-breaking work of social investigation, *London Labour and the London Poor* (1861):

The active fly, so frequently an unbidden guest at your table² . . . , whose delicate palate selects your choicest viands, at one time extending his proboscis to the margin of a drop of wine, and then gaily flying to take a more solid repast from a pear or a peach—now gambolling with his comrades in the air, now gracefully carrying his furred wings with his taper feet—was but the other day a disgusting grub, without wings, without legs, without eyes, wallowing, well pleased, in the midst of a mass of excrement (Mayhew 24; Clark 219).
- 4 Were Edwardian commentators mistaken then when they complained that house-flies had 'hitherto been endured with too much equanimity' (Lefroy 1)? And are certain researchers similarly mistaken when they argue, that, to quote one, Steven Connor, 'Between 1890 and 1920 the reputation of the fly *changed entirely*: from being an annoying, but harmless, sometimes even cute nuisance . . . [into] the subject of ruthless campaigns of extermination' (Connor 108: my emphasis)? Evidently, these different opinions cannot all be right. The problem is that we have very little detailed knowledge about attitudes to the house-fly in Britain before 1900, although Connor's more general cultural survey, called simply *Fly*, gives some valuable pointers.
- 5 This chapter will attempt to throw light on this question by examining expert opinion on, and popular attitudes towards, the house-fly during the period from c.1870 to 1914. Attention will be focussed particularly on middle-class attitudes to the insect. The presence of the house-fly in the home was an unwelcome reminder to middle-class Victorians that despite their best efforts (and those of an army of servants) to construct the domestic space as a pristine refuge from the external forces of disorder, pollution and dirt, there was no escaping this atavistic symbol of filth and disease. We shall see in the first part of this chapter that the preoccupation with flies needs to be seen in the context of a broader shift in attitudes, already underway by the 1850s; one which came to see

animals, and animal-based waste, as constituting a threat both to public health and to the quality of life in urban spaces. While in many respects the middle-class home was seen as representing an impregnable barrier to those forces of urban disorder, pollution and dirt, the fly was a visible symbol of the limits of that conception.

- 6 The second part of the chapter will explore the variety of attitudes to the house-fly in Britain in the 1870s and '80s. While the advice manuals of the period continued to concentrate on the damage done to both food and furnishings by these pesky insects, increasingly emphasis was placed on the health risks posed to the home's human occupants; a function of contemporary developments in medical and biological science. In particular, the gradual spread of awareness about the germ theory of infection led to a new conception of the house-fly as the air-borne carrier of potentially lethal disease. It is important to recognise, however, that alongside these hygienist discourses there continued to exist older, more benign, attitudes to the house-fly, which saw it as essentially inoffensive—as it had been portrayed in Mary Hewitt's celebrated poem of 1829, 'The Spider and the Fly'—or even as a symbol of English pluck and ingenuity.
- 7 The third part of this chapter will consider the clash of these two conceptions, and the secularist and evangelical forces at work in late-Victorian society seeking to advance the cause of each. Finally, in the fourth and final part, we turn to the outcome of this clash at the turn of the century; a period which witnessed the triumph of the hygienist case. More generally, we shall see in the following discussion that the debate on the house-fly shines a revealing light on broader contemporary attitudes to science, medicine, and to the animal world, as well as on the cultural—and spatial—parameters of Victorian conceptions of 'cleanliness' and 'dirt'.

The Fly as Spatial and Categorical Disturbance: Health and Hygiene in the Victorian Town

- 8 A recent monograph by Jane Hamlett on material relations, domestic interiors and middle-class families in England during the second half of the nineteenth century noted that 'A major way in which the outside world entered the [Victorian] home was through the presence of visitors' (Hamlett 43). Hamlett is clearly referring here to the kind of visitors who were invited into the middle-class home by their human occupants, or at least welcome there, for whom there was an elaborate set of rituals to observe (Flanders 277-82). However, there were other visitors bringing the outside world into the Victorian home, and we shall see presently that when they walked into the parlour (at the invitation of spiders or otherwise), they were no sticklers for etiquette. In this way, the house-fly had the potential to confound the popular conception of the middle-class home as a safe refuge from the forces of danger and chaos beyond its doors (Forino 98). Thus, the fly made itself, in Connor's words, 'the embodiment of spatial and categorical disturbance, bringing places that should be kept apart into promiscuous proximity with each other' (Connor 15. See also Talairach-Vielmas & Bouchet 2). In short, a classic candidate for the kind of cultural hostility to matter out of place explored by anthropologist Mary Douglas in her pioneering 1966 work, *Purity and Danger*.
- 9 By the middle of the nineteenth century, disgust and anxiety in the face of the dirt and smell of the urban environment had become a central feature of middle-class identity in the country's larger towns and cities. This needs to be linked to the emergence of the

urban middle class in early Victorian England as both a socio-economic and a political force. It was this group which would spearhead a new, morally-inflected activism in local government, though the forces of *laissez-faire* did not give up ground easily. In London, notably, it was manure and excreta which crystallised fears and provoked calls for action. Indeed, by the 1850s, it had become axiomatic in middle-class opinion that the city's waste products and smells had to be removed before they caused disease (Jackson ch. 3–5). This position led in turn to a growing conviction that food-producing animals along with industries based on animal by-products had no place in modern urban life. Ironically though, this increasing hostility to the urban presence of polluting animal wastes and smells coincided with a substantial increase in the number of horses in Britain's cities proportional to their population, and a growing demand for animal-based foods (Atkins ch. 2–4). For it was above all the rocketing urban horse population that was responsible for animal waste—with, according to one estimate, more than 2m tons a year deposited in the Capital by the 1890s (Atkins 66). Moreover, the residential and commercial pattern of the late-Victorian town meant that stables were often in close proximity to both private dwellings and places where food was stored and prepared (Cloudsley-Thompson 128; Morgan 119).

Attitudes to the House-Fly: Continuity and Change in the 1870s and '80s

- 10 This brings us back to the house-fly, *musca domestica*. Victorian Britain's most common urban fly laid its eggs principally in horse manure and rotting organic matter, and its numbers seem to have peaked in the last decades of the century—probably as a result of a growing number of breeding sites (Clark 217; Hardy 64). As we noted earlier, flies had a well-established reputation for their nuisance value in the home by this period: irritating its occupants and soiling those gilt picture frames, leather books and wallpaper which were the pride of the middle-class interior. Advice manuals of the period carried tips for housekeepers and servants to keep away this 'unbidden guest' from both food and furnishings. *Cassell's Household Guide*, for example, advised its readers in the 1880s to brush picture frames with a solution made from boiled onions, and leave saucers of sweetened green tea as fly traps (*Cassell's* vol. 3: 57, 180). Disinfectants and insecticides like carbolic acid, Persian powder, eucalyptol and sulphur were also recommended; more acceptable, judged *Cassell's*, than 'those horrible fly-papers, which catch the poor insects alive, cruelly torturing them while starving them to death'. Readers were advised to protect food with muslin or wire gauze, but for larger cuts of meat, a dusting of flour, ginger or pepper was favoured to keep away the pesky intruders (Flanders 88; *Cassell's* vol. 3, 80; Beeton 726, 1049; Jack 91; *Dundee Courier* 1884; *Essex Standard* 1884).
- 11 Such advice was a constant throughout our period, but it existed alongside other attitudes to the house-fly, which, crucially, were changing in the last decades of the nineteenth century (Connor 108). An increasing tendency to see the insect above all as a vector of disease was one of those changes. The association was already being made explicitly in some quarters by the 1870s. In an early example from 1871, *The Lancet*, commending a speech by Liberal MP and biologist Sir John Lubbock on the subject in the House of Commons, referred to the insects as 'winged sponges speeding hither and thither to carry out the foul behests of Contagion' (*Lancet* 1871, 270. See also *Lancet* 1873a; *Lancet* 1873b). We find scattered references in the same decade to the need for

housekeepers to dispose carefully and regularly of domestic rubbish to limit fly-borne disease. A paper given at the 1875 meeting of the National Association for the Promotion of Social Science, for example, referred to the 'serious evil . . . produced by means of the offensive nature of the matter deposited in dust-bins; the contents of which, in the majority of cases, are allowed to remain till they become fever-nests, not only to individual households, but to the whole neighbourhood'. The author went on to urge both housekeepers and the Board of Health inspectors to take a lead in ensuring the safe and regular disposal of household waste (Baines 605).

- 12 With germ theory in its infancy, the threat from air- or fly-borne disease appeared worryingly vague, and led, as an 1876 article from *Chambers's Edinburgh Journal* complained, to 'endless suggestions regarding cleanliness in dwellings, ventilation and sanitary appliances'. 'We are to keep in mind', the author went on grimly, 'that we are environed by an invisible foe, ever ready to take advantage of any neglect on the score of health' (*Chambers's Journal* 1876, 147). In this respect, house-flies were just one agent of infection among many, and the list of likely suspects was long. They included, as sanitary reformer Professor Douglas Corfield told an audience in 1877 at the Royal Society of Arts: pathogens conveyed by the air; those spread by horses, sheep, and cows as well as by rats; bacteria present in sewage and excrement, and lurking in water, milk and on clothing. Among the 'communicable diseases' transmissible by such means, Corfield pointed out, were smallpox, scarlet fever, diphtheria, cholera, typhus and typhoid (*Lloyds Weekly News*).
- 13 Some remained unconvinced. One commentator complained in 1889 that the public was being unnecessarily scared by doctors, and insisted that 'the greater number of insects that are around us . . . do not want to meddle with us, unless we arouse their hostility' (*Young England*). Indeed, the British house-fly was regularly attributed a number of positive character traits, including pugnacity, pluck, ingenuity and cheerfulness. Foreign flies, in contrast, tended to be portrayed as making the lives of British travellers a misery (*Young England*; *Newcastle Weekly Courant*; *Star St Peter Port*; Horner 168; *Standard*).

Secularists and Popularisers

- 14 There was evidently some concern in scientific and reforming circles in these years that the diffusion of views of this kind would result in the public not taking seriously the health risks posed by the house-fly. This can be seen in the 1871 Commons speech by Sir John Lubbock, referred to earlier. In it, he castigated the scientific 'errors' and 'ambiguities' present in elementary school text-books, citing one which claimed that the 'swift and zigzag flight' of the house-fly kept the air 'warm and pure' (*Lancet* 1871. See also Clark 217-8). These remarks need to be seen in the context of a long-standing conflict between rival conceptions of the natural world, pitting the secular scientific naturalists of the post-*Origin of Species* period—like Lubbock—against a large cadre of self-educated, mainly middle-class, popularisers of science who, as Bernard Lightman and others have shown, played an important role as interpreters of science for the growing mass reading audience of the period (Lightman 1997, 2007; Cantor; Cantor & Shuttleworth; Fyfe; Fyfe & Lightman; Henson *et al.*).
- 15 For many of these popularisers, the natural world was shot through with religious meaning, and their writings often looked back to an earlier tradition of natural theology, offering new audiences a vivid glimpse of the wonders of Divine Creation (Lightman 2010,

37). According to a number of authors working in this tradition, the house-fly offered a text-book example of how the marvels of God's design extended to even the most humble and seemingly insignificant creatures; part of that familiar 'simple, homely, and smaller life which surrounds us' (Owen).³ Such writing was seen as a valuable means of transmitting scientific knowledge and moral values to a non-specialist audience; particularly to a working- and lower-middle class readership considered to be in urgent need of both a basic understanding of science and moral guidance from their social superiors. Young readers in particular were urged to show hospitality and charity to the house-fly. In one 1870 article, an explicit parallel was made between helping a drowning fly and helping 'a brother floundering through the difficulties of life's first tasks' (Tristram 348). The author of a similar article, this time from 1889, observed that God 'is thorough in the smallest things of His vast creation. As much wisdom and power is displayed in the creation of the despised house-fly than in the structure of the mighty elephant'. It was, he added, 'but a small step from wonder to worship' (*Children's Friend* 68–70).

- 16 Eager to counter the charge that flies served no useful function in Creation—save, on occasion, as instruments of Divine displeasure—the popularisers seized on a scientific theory which gained some currency in the 1870s and '80s, that house-flies in the maggot stage fed on 'putrescent' and 'disgusting' matter present in the environment; and that, once on the wing, they consumed microscopic 'floating germs and spores' in the air. Indeed, it was claimed, 'But for these innumerable and apparently insignificant agents, poison and pestilence would be borne on the wings of every breeze'. Their loss would thus 'entail in some ways, perhaps scarcely imaginable by us, a distinct, possibly a serious, loss' (Horner 168; Harris 627, 629).
- 17 On the basis of such reasoning, an 1875 article from *Chambers's Journal* urged that the housekeeper, 'instead of killing off the flies with poisonous preparations, . . . [should] make her premises as sweet and clean as possible, and then, having protected food with wire or other covers, leave the busy flies to act as airy scavengers' (*Chambers's Journal* 1875, 832. See also Hope; *Scotsman*; *Young Folk's Paper*). Was this not, stated another article published the same year, evidence that the house-fly was a 'maligned insect'; a newly-discovered link in that 'curious and necessary chain of destruction which exists in animal nature'? (*Once a Week* 40–1). Some proponents of this theory were keen to distance themselves from any theological considerations, and stick to hard science (Horner 169; *Scotsman*), but for others, like the author of an 1887 article in *The Girl's Own Paper*, was it not 'manifest, indeed, that they [flies] have a special place in the order of the world, and [that] the Creator, who has given them structures so wonderful in organisation, has also appointed them to fulfil their own particular share in the economy of nature'? (Harris 629. See also *Peter Parley's Annual*).

'No Filth, No Flies': the Triumph of the Anti-fly Campaign (1900–1914)

- 18 Our reading of the evidence lends support for Clark's assertion that 'natural theological explanations of the house fly were not widespread by the turn of the twentieth century' (Clark 218). It was thus by now quite acceptable, in some quarters at least, to consider that God's creation could contain a creature like the house-fly 'which honours nothing but its own worthless self' (*Women's Signal*). By 1900, indeed, it would appear that most

Britons agreed with *Punch* that the insect was a 'freebooter', 'totally devoid of any virtuous instincts' (*Punch*); or, as a letter published in *The Liverpool Mercury* had put it the previous year, that 'the only purpose in life [of] flies' was 'to destroy man's comfort, and that of animals, and to render the world less agreeable than it would be otherwise' (*Liverpool Mercury* 1899a). An editorial in the same paper published ten days later called on modern science to find a way of eradicating 'this survival of the plagues of ancient Egypt' (*Liverpool Mercury* 1899b).

- 19 Such efforts were already underway in fact in university entomology departments and local government public health offices by this date, though their findings would not come to the attention of the lay public until the early years of the new century (Hardy 66-9). It is difficult in fact to measure the extent to which the argument had effectively been won by this period. Certainly, even before the launch of the anti-fly campaign in Britain in the early 1910s,⁴ the research of entomologists and public health officials was being widely reported in both the scientific and popular press, and the message hammered home repeatedly that, as a 1910 article from *The English Illustrated Magazine* put it bluntly, 'if a house is clean, no flies can breed there. No filth, no flies' (Crofts 374).⁵ However, the same author also berated the 'many people otherwise intelligent . . . who to this day discount the importance of the germ theory of disease, or maintain that the conclusions of the scientists are alarmist' (372). If such sceptics among the general public were 'many' at this point, they have left little evidence of their opinions. The new generation of experts on the subject was keen to dispel what a 1907 editorial in *The Guardian* described as 'the old optimistic biology which could not conceive anything existing which did not exist for some good' (*Guardian*). Such views persisted no doubt in evangelical circles into the Edwardian period, albeit probably on a much smaller scale than formerly. Such views may also have left their trace in a more widely-held view, noted by *The Times* in June 1913, that . . . from babyhood we have been accustomed to consider flies as necessary familiars, and as not altogether unentertaining companions and playmates rather than as enemies. . . . [E]ven against our instincts, we have acquired towards them a certain feeling of friendly toleration which forbids enthusiasm to respond too promptly to the proclamation of a jihad for their extermination (*Times*).
- 20 For the *Times* editorialist, 'ordinary sanitary measures' were sufficient to deal with the house-fly, but the newspaper made it clear that in 'urban areas' where flies were numerous—probably an implicit reference to the working-class districts of London's East End—'constant pressure' from the authorities would be needed to keep flies in check, something that Henry Mayhew had been urging fifty years earlier.⁶ The 'friendly toleration' of the house-fly clearly had its limits—both geographical and social.

BIBLIOGRAPHY

ATKINS, Peter, ed. *Animal Cities: Beastly Urban Histories*. Farnham: Ashgate, 2012.

AUSTEN, Earnest E. *The House-Fly as a Danger to Health: Its Life-History and How to Deal With It*. London: Longman, Green & Co., 1913.

- BAINES, Mary Anne. 'Some Unsuspected Sources of Infectious Diseases and the Need of Domiciliary Sanitary Inspection', *Transactions of the National Association for the Promotion of Social Science* (1875): 605–06.
- BEETON, Isabella. *The Book of Household Management*. London: S.O. Beeton, 1861.
- [BMJ]. 'Insects, Dirt and Disease'. *British Medical Journal* (1913): Jan. 11th, 87–88.
- CANTOR, G. N. *et al.*, eds. *Science in the Nineteenth-Century Periodical: Reading the Magazine of Nature*. Cambridge: CUP, 2004.
- CANTOR, G. N. & Sally SHUTTLEWORTH, eds. *Science Serialized: Representations of the Sciences in Nineteenth-Century Periodicals*. Cambridge, MA: MIT Press, 2004.
- [CASSELL'S] *Cassell's Household Guide to Every Department of Household Life*. 4 vols. London: Cassell, Petter & Galpin, 1884–6.
- [CHAMBERS'S JOURNAL 1875]. Anon. 'The House-Fly'. *Chambers's Journal of Popular Literature, Science and Arts* (1875): Dec. 25th, 832.
- [CHAMBERS'S JOURNAL 1876]. Anon. 'The Germ Theory'. *Chambers's Journal of Popular Literature, Science and Art* (1876): Mar. 4th, 147.
- [CHILDREN'S FRIEND]. Anon. 'The House-Fly'. *The Children's Friend* (1889[?]): 68–70.
- CLARK, J. F. M. *Bugs and the Victorians*. New Haven & London: Yale University Press, 2009.
- CLOUDSLEY-THOMPSON, J. L. *Insects and History*. London: Weidenfeld & Nicolson, 1976.
- CONNOR, Steven. *Fly*. Animal Series. London: Reaktion Books, 2006.
- CROFTS, E. Whitfield. 'House Flies. The Disseminators of Disease and Epidemics'. *English Illustrated Magazine* (July 1910): 372–76.
- DOUGLAS, Mary. *Purity and Danger: An Analysis of the Concept of Pollution and Taboo*. London: Routledge, 1966.
- [DUNDEE COURIER]. Anon. 'A Crusade Against Flies'. *Dundee Courier*. Aug. 8th 1884.
- [ESSEX STANDARD]. 'Flies'. *Essex Standard*. Aug. 23rd 1884.
- FITZSIMONS, F. W. *The House Fly: A Slayer of Men*. London: Longman, Green & Co., 1915.
- FLANDERS, Judith. *The Victorian House. Domestic Life from Childhood to Deathbed*. London: HarperCollins, 2004.
- FORINO, Imma. 'Kitchens: from Warm Workshop to Kitchenscape'. *Domestic Interiors: Representing Homes from the Victorians to the Moderns*. Ed. Georgina DOWNEY. London: Bloomsbury, 2013. 91–110.
- FYFE, Aileen. *Science and Salvation: Evangelical Popular Science Publishing in Victorian Britain*. Chicago: U of Chicago P, 2004.
- FYFE, Aileen & Bernard LIGHTMAN, eds. *Science in the Marketplace: Nineteenth-Century Sites and Experiences*. Chicago: U of Chicago P, 2007.
- [GUARDIAN]. [Untitled], *The Guardian*. Oct. 7th 1907.
- HAMLETT, Jane. *Material Relations: Domestic Interiors and Middle-Class Families in England, 1850–1910*. Manchester: Manchester UP, 2010.
- HARDY, Anne. *Salmonella Infections, Networks of Knowledge, and Public Health in Britain, 1880–1975*. Oxford: OUP, 2014.

- HARRIS, W. H. 'Flies', *The Girl's Own Paper* (1887): 627-9.
- HEWITT, C. Gordon. *The House-Fly: A Study of its Structure, Bionomics and Economy*. Manchester: Manchester UP, 1910.
- HEWITT, C. Gordon. *House-Flies and How They Spread Disease*. Cambridge: CUP, 1912.
- HENSON, Louise et al. eds. *Culture and Science in the Nineteenth-Century Media*. Aldershot: Ashgate, 2004.
- HOPE, Edwin S. 'About Some Insects'. *Young Folk's Weekly Budget*. June 8th 1878.
- HORNER, J. 'The House Fly'. *Our Corner* (1884): Sept., 167-72.
- HOWARD, L. O. *The House Fly, Disease Carrier*. London: John Murray, 1912.
- JACK, Florence. *The Woman's Book of Household Management* (1911). Stroud: Tempus, 2007.
- JACKSON, Lee. *Dirty Old London: The Victorian Fight Against Filth*. New Haven & London: Yale UP, 2014.
- JONES, Richard. *House Guests, House Pests. A Natural History of Animals in the Home*. London: Bloomsbury, 2015.
- KEENE, Melanie. 'Familiar Science in Nineteenth-Century Britain'. *History of Science* 52.1 (2014): 53-71.
- [LANCET 1871]. 'The Fly in its Sanitary Aspects'. *The Lancet*. Aug. 19th 1871. 270.
- [LANCET 1873a]. 'The Pestiferous Fly', *The Lancet*. Jan. 25th 1873. 156.
- [LANCET 1873b]. 'The Fly in its Sanitary Aspects' [Letter], *The Lancet*. Nov. 15th 1873. 724.
- LEFROY, H. Maxwell. *The House-Fly Campaign*. London: Zoological Society of London, 1915.
- LIGHTMAN, Bernard. "'The Voices of Nature": Popularizing Victorian Science'. *Victorian Science in Context*. Ed. Bernard LIGHTMAN. Chicago: Chicago UP, 1997. 187-211.
- LIGHTMAN, Bernard. *Victorian Popularizers of Science: Designing Nature for New Audiences*. Chicago: Chicago UP, 2007.
- LIGHTMAN, Bernard. 'Science and Culture'. *The Cambridge Companion to Victorian Culture* (2010), Ed. Francis O'GORMAN. Cambridge: CUP, 2010. 12-42.
- [LIVERPOOL MERCURY 1899a]. 'Houseflies, Bluebottles, etc.'. *Liverpool Mercury*. Aug. 14th 1899.
- [LIVERPOOL MERCURY 1899b]. [Untitled]. *Liverpool Mercury*. Aug. 25th 1899.
- [LLOYDS WEEKLY NEWS]. 'Prevention of Infectious Diseases'. *Lloyd's Weekly News*. April 29th 1877.
- MAYHEW, Henry. *London Labour and the London Poor Volume 3*. London: Griffin, Bohn & Company, 1861.
- MORGAN, Nigel. 'Infant Mortality, Flies and Horses in Later-Nineteenth-Century Towns: A Case Study of Preston'. *Continuity and Change* 17.1 (2002): 97-132.
- [NEWCASTLE WEEKLY COURANT]. Anon. 'The Fly and His Ways'. *Newcastle Weekly Courant*. Sept. 30th 1893.
- [ONCE A WEEK]. Anon. 'Those Nasty Flies'. *Once a Week*. Sept. 25th 1875. 40-1.
- OWEN, Jean A. 'Lessons from Nature'. *Girl's Own Paper*. Oct. 15th 1898. 37-38.
- [PETER PARLEY'S ANNUAL]. Anon. 'Some Insects'. *Peter Parley's Annual* ([?] 1883).

- [PUNCH]. Anon., 'Studies in Small Zoology. The House Fly'. *Punch*. Aug. 28th 1900.
- ROSS, Edward Halford. *The Story of the House-Fly*. London: John Murray, 1913.
- [SCOTSMAN]. Anon. 'The House-Fly' [Letter]. *The Scotsman*. Aug. 16th 1880.
- [STANDARD]. [Untitled]. *The Standard*. Oct. 12th 1886.
- [STAR ST PETER PORT]. Anon. 'Flies'. *The Star St Peter Port*. July 17th 1883
- TALAIRACH-VIELMAS, Laurence & Marie BOUCHET, eds. *Insects in Literature and the Arts*. Brussels: Peter Lang, 2014.
- [TIMES]. 'House Flies and Disease'. *The Times*. June 7th 1913.
- TRISTRAM, H. B. 'About a Fly'. *Good Words for the Young*. May 1st 1870. 347–54.
- [WOMAN'S SIGNAL]. 'Archdeacon Farrar on the Lord's Prayer'. Aug. 23rd 1894.
- [YOUNG ENGLAND]. 'Pugnacious British Insects'. *Young England*. Oct. 1st 1889.
- [YOUNG FOLK'S PAPER]. Anon. 'The Common House-Fly'. *Young Folk's Paper*. Aug. 22nd 1885.

NOTES

1. On this literature see Clark; Connor; Hardy.
2. The phrase comes from William Kirby and William Spence's influential four-volume *Introduction to Entomology*, first published in 1815–26, and republished throughout the century (quoted in Jones 91). J. F. M. Clark describes this work as 'the standard text [of the period] on entomology in Britain and throughout parts of the Empire' (Clark 14).
3. For the general point about the value of 'familiar' science, see Keene 53-71.
4. Hardy dates the literary campaign in the U.K. to 1912–13, a little later than its US counterpart (Hardy 74).
5. For the same point, see BMJ.
6. This reference to 'urban areas' comes just after a discussion of the recent decline of the fly population in the West End of London. This socio-economic distribution of flies was a fact confirmed by contemporary researchers (see Hardy 70). On this point, see also Atkins ch.2.

ABSTRACTS

The house-fly was an inescapable part of everyday life in Victorian England, and its presence in the home was an unwelcome reminder to middle-class Victorians that for all their efforts to construct the domestic space as a pristine refuge from the external forces of disorder, pollution and dirt, there was no escaping this atavistic symbol of filth and disease. Despite improvements in public health in the second half of the nineteenth century, the preoccupation with flies in late-Victorian England intensified rather than eased. This reflected in part changing environmental conditions conducive to the proliferation of flies, but also new attitudes, particularly among middle-class urbanites, towards the organisation of public space, and the place of animals within it. This in turn reflected contemporary developments in medical and biological science; along

with broader attitudes to 'cleanliness' and 'dirt'. This article will examine the roots of the 'house-fly danger' in late-Victorian England, exploring contemporary debates in both the scientific literature and the popular press, and will discuss the surprisingly diverse ramifications of public concern about these insects. It will be argued that the growing hygienist focus on flies as airborne carriers of disease co-existed, particularly in the earlier part of the period, with older more benign, attitudes to the house-fly, linked to the theories of natural theology.

La mouche domestique fait partie intégrante de la vie quotidienne dans l'Angleterre victorienne. Symbole atavique de la crasse et de la maladie, elle est présente dans les habitations des classes aisées, malgré le souci exprimé par ces dernières de concevoir un intérieur bourgeois protégé des forces extérieures du désordre, de la pollution et de la saleté. En dépit des avancées en matière de santé publique en Angleterre pendant la deuxième moitié du XIX^e siècle, on se préoccupe de plus en plus des effets néfastes de la mouche domestique. Plusieurs facteurs sont à l'origine de ces inquiétudes. D'abord la croissance de la population urbaine victorienne contribue à la prolifération de mouches de toutes sortes. Ensuite viennent des avancées en matière de connaissances médicales et scientifiques, ainsi qu'une nouvelle conception de l'espace urbain chez les classes aisées, où la place des animaux est de plus en plus circonscrite et contrôlée. Cet article aborde les racines de la « menace de la mouche domestique » en Angleterre à la fin du XIX^e et au début du XX^e siècle. Il examine notamment l'évolution et les retombées des débats autour de la question, dans la presse et dans les revues scientifiques à cette époque. Nous verrons que le discours hygiéniste autour de la mouche domestique, qui voit en elle un vecteur dangereux de propagation des maladies, coexiste, notamment au début de notre période, avec une autre conception de l'insecte – plus ancienne, plus bienfaisante également – liée aux théories de la théologie naturelle.

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Mots-clés: histoire britannique du XIX^e siècle, études victorienne, histoire sociale, histoire urbaine, histoire des animaux, animal studies, histoire des insectes, mouche domestique

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