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Puppy Love: Domestic Science, "Women's Work," and Canine Care

Tom Quick

Abstract The health and well-being of pets became a significant matter of medical and scientific concern during the first decades of the twentieth century. Addressing the case of dogs, this article contends that this circumstance was not primarily a consequence of developments internal to veterinary practice but rather emerged from the broader-based domestic-science movement. The elaboration of scientifically oriented approaches to dog care signals the incorporation of pets within a maternal ideal that emphasized care and efficiency as domestic virtues. Via consideration of canine milk foods, women-led canine medical institutions, canine-concerned domestic workers, and rationalist approaches to kennel design, the article demonstrates that dogs should be placed alongside such established objects of domestic scientific reform as children, homes, and human bodies. Moreover, it shows that scientific reconceptualizations of dogs relied on an extensive network of (primarily women) laborers that included food producers, nursing staff, kennel attendants, and breeders. The article thereby contributes to a growing body of scholarship highlighting ways in which the domestic-science movement forged new scientific objects and practices around the turn of the twentieth century. By the 1930s, dogs were routinely being upheld as exemplars of the kinds of homely existence made possible by scientifically informed approaches to domestic living.

hat makes the dog a "domestic" animal? Despite their long-standing status as *domesticated* beings, historical associations between dogs and modern forms of *domesticity* remain, as historical geographer Philip Howell has recently highlighted, poorly understood. Somewhat surprisingly given the very long history of canine domestication, recent work by Howell, Katherine Grier, Sarah Amato, Ingrid Tague, and others suggests that the positioning of dogs as participants in family life is a relatively recent phenomenon. Moreover,

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¹ Philip Howell, *At Home and Astray: The Domestic Dog in Victorian Britain* (Charlottesville, 2015), 11–20. See also Kay Anderson, "Animal Domestication in Geographic Perspective," *Society and Animals* 6, no. 2 (January 1998): 119–35.

² Howell, At Home and Astray; Sarah Amato, Beastly Possessions: Animals in Victorian Consumer Culture (Toronto, 2015), chap. 2; Ingrid H. Tague, Animal Companions: Pets and Social Change in Eighteenth-Century Britain (Philadelphia, 2015), chap. 3; Laura Brown, Homeless Dogs and Melancholy Apes: Humans and Other Animals in the Modern Literary Imagination (Ithaca, 2010), chap. 3; Katherine

historians are coming to recognize that the pre-domestic dog was a very different beast to that which came to inhabit the middle-class homes of Britain and the United States during the nineteenth century. The emergence of scientifically informed breeding practices at this time accelerated the differentiation of dogs into the distinct "breeds" we recognize today.³

This article builds on this historiography to consider one way in which dogs became domestic at the start of the twentieth century. The above-mentioned discussions center alternately on the cultural positioning of dogs in homes (as well as less overtly familial institutions) and the instantiation of biologically stable breeds that fit with middle-class mores and predilections. In contrast, I pay closer attention to the emergence of a particular ethos regarding the cultivation of dogs (and dog health) in general: that of "domestic science." I show how dogs came to be enrolled in the new sciences of the home that developed during the closing decades of the nineteenth century. Though conceptually located in homes, domestic science constituted an abstract body of knowledge that promised to accord scientific status to tasks historically associated with women. Domestic scientists sought to reform such "women's work" as feeding bodies, ensuring sanitary living conditions, and upholding social norms. These sciences, when applied to dogs, helped constitute a significant change in the status of animals within homes. Where prior pet-keeping practices had tended to uphold patriarchal hierarchies and human-animal distinctions, the newly scientifically domesticated dog of the early twentieth century increasingly became the purview of a more autonomous (and avowedly "feminine") realm of care and affection. Domestic science thus contributed to a longer-term reevaluation of relations between human and animal lives and natures.

The domestic-science movement has been portrayed as first and foremost a moralizing discourse that translated middle-class assumptions regarding women's proper social roles into universal prescriptions for domestic conduct.⁴ This perspective has appeared most prominently in discussions of the late nineteenth century emergence of professional approaches to the teaching of food preparation and hygiene. Historians have shown how, with the development of laboratory-centered conceptions of nutrition during the nineteenth century, food began to be incorporated into state-centered concerns in which women's familial duties were construed as contributing to the cultivation of a healthy national population.⁵ Anxieties regarding

C. Grier, Pets in America: A History (Chapel Hill, 2006); Kathleen Kete, The Beast in the Boudoir: Petkeeping in Nineteenth-Century Paris (Berkeley, 1994); Hilda Kean, The Great Cat and Dog Massacre: The Real Story of World War II's Unknown Tragedy (Chicago, 2017).

³ Michael Worboys, Julie-Marie Strange, and Neil Pemberton, *The Invention of the Modern Dog: Breed, Blood and Modern Britain* (Baltimore, 2018); Harriet Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age* (Cambridge, MA, 1987), chap. 2.

⁴ Catherine Manthorpe, "Science or Domestic Science? The Struggle to Define an Appropriate Science Education for Girls in Early Twentieth-Century England," *History of Education* 15, no. 3 (September 1986): 195–213; Deborah Dwork, *War Is Good for Babies and Other Young Children: A History of the Infant Child Welfare Movement in England, 1898–1918* (London, 1987), chap. 5; Dena Attar, *Wasting Girls' Time: The History and Politics of Home Economics* (London, 1990); Vanessa Heggie, "Domestic and Domesticating Education in the Late Victorian City," *History of Education* 40, no. 3 (May 2011): 273–90.

⁵ Emma Spary, Feeding France: New Sciences of Food, 1760–1815 (Cambridge, 2014); David F. Smith, ed., Nutrition in Britain: Science, Scientists, and Politics in the Twentieth Century (London, 1997); Harmke Kamminga and Andrew Cunningham, eds., The Science and Culture of Nutrition, 1840–1940

degeneration among the lower classes were projected onto women, whose scientific ignorance was claimed to be a primary cause of the feebleness of modern (and especially urban) citizens. Reformers and legislators hoped that by offering scientifically informed classes in such subjects as hygiene and cookery, this concern could be remedied.⁶ Similarly, alimentary and sanitary products came increasingly to be marketed as scientific. Advertisements promised that the acquisition of manufactured goods would allow home-keepers and carers of children to ameliorate the "natural" inadequacies of their bodies and ensure the biological purity of their living environments.⁷ Nutrition science thus helped instantiate a conception of domestic duty as a commercial, home-focused, but nevertheless scientific endeavor that revolved around the maintenance of a healthy population. Notably, unlike contemporaneous agitation for women's professional and political recognition, domestic-science reformers did not significantly challenge the historical ideal of "separate spheres" that had prevailed among the middle classes of the nineteenth century.

While acknowledging the relative conservatism of domestic science, historians have in recent years shown how it also facilitated an assertion by women of newfound authority over homes and their inhabitants. Most prominently, attention has been drawn to scientifically informed approaches to child-rearing. Though initially formulated by psychologically and pediatrically concerned men, early child-observation studies were often conducted by women in their homes. Moreover, since middle-class women were assumed to possess a natural propensity to maternal affection and were also accorded responsibility for their children's early education, they were understood as ideally positioned to direct infants' upbringing according to scientific psychological principles. At the turn of the twentieth century, women actively participated in the construction of new approaches to child-rearing in which children's development increasingly came to be guided by the contentions of developmental science. Nor were the creative aspects of domestic science confined to children. Reformers promoted physiological ideals of bodily function as means by which

⁽Amsterdam, 1995); Elizabeth Neswald, David F. Smith, and Ulrike Thoms, eds., Setting Nutritional Standards: Theory, Policies, Practices (Rochester, 2017).

⁶ Laura Shapiro, Perfection Salad: Women and Cooking at the Turn of the Century (New York, 1986); Nancy L. Blakestad, "King's College of Household and Social Science and the Origins of Dietetics Education," in Nutrition in Britain: Science, Scientists, and Politics in the Twentieth Century (London, 1997), 75–89; Elizabeth Bird, "High Class Cookery': Gender, Status and Domestic Subjects, 1890–1930," Gender and Education 10, no. 2 (June 1998): 117–31; Joan E. Parker, "Lydia Becker's 'School for Science': A Challenge to Domesticity," Women's History Review 10, no. 4 (September 2001): 629–50.

⁷ Gabriella M. Petrick, "Purity as Life': H. J. Heinz, Religious Sentiment, and the Beginning of the Industrial Diet," in "Food, Technology, and Trust," special issue, *History and Technology* 27, no. 1 (March 2011): 37–64; Nancy Tomes, *The Gospel of Germs: Men, Women and the Microbe in American Life* (Cambridge, MA, 1998), chap. 6.

⁸ Joanna Bourke, "Housewifery in Working-Class England, 1860–1914," Past and Present 143, no. 1 (May 1994): 167–97.

⁹ Hilary Marland, *Health and Girlhood in Britain, 1874–1920* (Basingstoke, 2013); Sally Shuttleworth, *The Mind of the Child: Child Development in Literature, Science, and Medicine, 1840–1900* (Oxford, 2010), 286–88; Carolyn Steedman, "Bodies, Figures and Physiology: Margaret McMillan and the Late Nineteenth Century Remaking of Working Class Childhood," in *In the Name of the Child: Health and Welfare, 1880–1940*, ed. Roger Cooter (London, 1992), 19–44; Cathy Urwin and Elaine Sharland, "From Bodies to Minds in Childcare Literature: Advice to Parents in Inter-War Britain," in Cooter, *In the Name of the Child*, 174–99.

one's own health and well-being could be cultivated and maintained. ¹⁰ Finally, historians have shown how women architects redesigned living environments with the aim of maximizing the "efficiency" of domestic work. ¹¹ Domestic science thus contributed to the creation of new living practices in which personal growth and bodily health began to appear as signifiers of individual, economic, and spiritual well-being.

This creative aspect of the domestic-science movement, this article demonstrates, was not confined to children, individual human bodies, or living environments, but encompassed animals as well. The movement thereby helped bring a new kind of domestic being into existence: the maternally loved, medically cared for, and scientifically maintained pet. As the most culturally prominent domestic animal in Britain at the time, dogs (and especially puppies) were most obviously enrolled within these newly scientific visions of home life. Attending to dogs throws new light on the extent to which domestic science helped refashion home and family life at the start of the twentieth century. The home-centered lives of the majority of women who engaged in domestic science were not always confined to designing and maintaining clean rooms and cultivating healthy human bodies; women also extended the bounds of domestic and maternal authority to encompass nonhuman beings. This extension of familial boundaries relied on new configurations of womanly work, leisure, and emotional expression.

As with the emergence of domestic scientific approaches to feeding families, the incorporation of dogs into the scientific home depended on commercial enterprise as well as experimental insight. Puppies and puppy feeding became significant objects of economic concern for manufacturers of pet medicine and food. Artificial milk foods developed and marketed with the aim of ensuring ideal nutritional conditions for human infants were one of the most iconic commercial corollaries of the domestic-science movement. Perhaps unsurprisingly given nineteenth-century associations between pets and children, British manufacturers sought to capitalize on the success of these products, developing a range of artificial milk foods for dogs. Consideration of the advertising associated with these items highlights the extent to which domestic science could be guided by commercial concerns rather than abstract scientific principles.

¹⁰ Ina Zweiniger-Bargielowska, Managing the Body: Beauty, Health and Fitness in Britain, 1880–1939 (Oxford, 2010), 136–44.

¹¹ Elizabeth Darling and Lesley Whitworth, eds., Women and the Making of Built Space in England, 1870–1950 (Aldershot, 2007); Elizabeth Darling, "A Citizen as Well as a Housewife: New Spaces of Domesticity in 1930s London," in Negotiating Domesticity: Spatial Production of Gender in Modern Architecture, ed. Hilde Heynen (London, 2005), 49–64; Mark Llewellyn, "Designed by Women and Designing Women: Gender, Planning and the Geographies of the Kitchen in Britain, 1917–1946," Cultural Geographies 11, no. 1 (January 2004): 42–60.

¹² Rima D. Appel, *Mothers and Medicine: A Social History of Infant Feeding, 1890–1950* (Madison, 1987), 5–16; Amy D'Antonio, "Shopping for the Ballin Baby: Infant Food and Maternal Authority in *Baby* Magazine," *Nineteenth-Century Gender Studies* 4, no. 1 (Spring 2008), http://www.ncgsjournal.com/issue41/antonio.htm, para. 12.

¹³ On pets and children, see Amato, Beastly Possessions, 63–67; Susan J. Pearson, The Rights of the Defence-less: Protecting Animals and Children in Gilded Age America (Chicago, 2011), esp. chap. 1. On relations between milk, cows, and domestic science, see Carla Hustak, "Got Milk? Dirty Cows, Unfit Mothers, and Infant Mortality, 1880–1940," in Animal Metropolis: Histories of Human-Animal Relations in Urban Canada, ed. Joanna Dean, Darcy Ingram, and Christabelle Setha (Calgary, 2017), 189–218. See also Dwork, War Is Good for Babies, chaps. 3 and 4; Peter Atkins, Liquid Materialities: A History of Milk, Science and the Law (Farnham, 2010).

Yet the intensification of concern with the health of young dogs was not the product of large-scale industry alone; it also required the active participation of an extensive network of women workers, including servants, breeders, owners, and carers. To explore how the new ideals of emotional and physical care signified by the development of canine milk foods were put into practice, I turn to the kinds of training and expertise that domestic scientists began to associate with canine well-being. The emergence of two new "womanly" occupations—the "canine nurse" and the "kennelmaid"—demonstrates the extent to which domestic science combined Victorian ideals of domesticity with new (remunerative, work-centered) gender roles. 14 Though discussion of the specific emotional experiences associated with animals at this time is beyond the scope of this article, I further highlight how new conceptions of "women's work" carried with them long-standing expectations around women's inherent capacities as (unpaid) affective laborers. 15 Finally, I address the architectural and technical conditions that accompanied the emergence of the domestic scientific dog. Like the living environments of their human counterparts, dog-specific accommodations (that is, kennels) increasingly became subject to a design ethos centered on the maximization of carer and canine bodily efficiency. By the end of the 1930s, a scientific vision of home-centered dog maintenance and care had begun to prevail among many (especially women) owners and breeders. This development was by and large a consequence of the sustained attention to animal health and well-being fostered by the domestic-science movement.

MILK FOR DOGS: NUTRITION AND THE IMAGE OF CANINE CARE

On the 16 September 1907, chocolate magnate George Cadbury's *Daily News* carried an advertisement for "Lactol," a new commercial milk food. ¹⁶ On the face of it, there was little that marked the product out from those already in existence. The Mongolian practice of preserving milk by leaving it out in the sun had been industrialized in Europe during the nineteenth century, and many different varieties of the foodstuff had been developed and marketed as aids to maternal care. ¹⁷ Yet those whose attention was caught by the ad would have noticed something different from other milk products on the market: this "new and wonderful" food was intended not for

¹⁴ Gerry Holloway, *Women and Work in Britain since 1840* (Abingdon, 2004); Anne Clendinning, *Demons of Domesticity: Women and the English Gas Industry, 1889–1939* (Burlington, 2004); Vicky Long, "Industrial Homes, Domestic Factories: The Convergence of Public and Private Space in Interwar Britain," *Journal of British Studies* 50, no. 2 (April 2011): 434–64.

¹⁵ On the emotional demands placed on women workers at this time, see Lucy Delap, *Knowing Their Place: Domestic Service in Twentieth-Century Britain* (Oxford, 2011); Christine Grandy, "Paying for Love: Women's Work and Love in Popular Film in Interwar Britain," *Journal of the History of Sexuality* 19, no. 3 (September 2010): 483–507; Selina Todd, "Domestic Service and Class Relations in Britain, 1900–1950," *Past and Present* 203, no. 1 (May 2009): 181–204; Judy Giles, *The Parlour and the Suburb: Domestic Identities, Class, Femininity and Modernity* (Oxford, 2004). On pet-keeping and sentimentality during the nineteenth century, see, for example, Kete, *The Beast in the Boudoir*, chap. 4, and Howell, *At Home and Astray*, chap. 5.

¹⁶ "Sherley's Dog Medicines," London Daily News, 16 September 1907, 11.

¹⁷ Gabriel McGuire, "Cultural Histories of *Kumiss*: Tuberculosis, Heritage and National Health in Post-Soviet Kazakhstan," *Central Asian Survey* 36, no. 4 (June 2017): 493–510, at 4–7; Appel, *Mothers and Medicine*, 5–16; D'Antonio, "Shopping for the Ballin Baby," para. 12.

children but for dogs. ¹⁸ Lactol was the first of an expanding range of proprietary milk-food products developed by dog-food manufacturers such as Spratts Patent, W. G. Clarke, and Spillers & Co. during the 1910s, 1920s, and 1930s. ¹⁹ A year after its introduction, the product was joined by Spratt's "Malt Milk." These two brands dominated the market until the 1920s, when Spratt's rebranded its product as "Puppilac," Lowe & Sons began to market "Vigor," and the West Country–based dog powder manufacturer Bob Martin began promoting "MartinMilk."

It is significant that Lactol was developed not by the biggest dog-food manufacturers of the early 1900s but by A. F. Sherley & Co., a firm specializing in canine medicinal products. In putting forward the new product, the company followed a long succession of medical companies that had identified maternal nutrition as an area with commercial potential. By the late nineteenth century, upper-middle-class British women had been identified as an increasingly significant section of the consuming population. A plethora of medical products now emerged that promised to supplement or completely replace mothers' milk. Moral prohibitions on wet nursing had left those whose own milk was insufficiently nutritious or bountiful facing the specter of the infant starvation that (it was increasingly understood) was rife among those below them on the social scale. Although wet-nursing continued to be relied upon, social and medical disapproval of the practice created a demand for alternatives.

New approaches to infant-food analysis and new appreciations of the nutritional requirements of children accompanied this trend. By the end of the century, medical professionals had developed sophisticated chemical criteria by which (they contended) artificial foods could be matched with the nutritional requirements of individual infants. Milk foods thus became a commercial embodiment of a longer-term trend in which food was evaluated in terms of both its chemical composition and the extent to which this composition could provide energy and materials for the construction and maintenance of human bodies.²³ The new sciences of nutrition contributed to the emergence of physiologically informed prescriptions not only on what children but also what their mothers should consume in order to retain and promote bodily health.²⁴

The development of commercial milk foods for dogs signals the emergence of the possibility that dogs might be included as participants in this scientific conception of maternal nutrition. Dog breeders had long been aware that a mother bitch's milk was not always sufficient to raise a litter of puppies, especially when that litter was large. As moral and medical concerns about wet-nursing had not crossed over to dog breeding, nineteenth-century breeders of pedigree dogs would keep another (usually less

¹⁸ "Sherley's Dog Medicines," London Daily News, 16 September 1907, 11.

¹⁹ On dog food manufacturers, see Grier, *Pets in America*, 277–91; Kean, *The Great Cat and Dog Massacre*, 84–98; Worboys, Strange, and Pemberton, *The Invention of the Modern Dog*, 176–82.

²⁰ "Spratt's," Bystander, 3 June 1908, 523; "Spratt's Puppilac," Our Dogs, no. 49 (1 October 1920): 483; "Vigor," Our Dogs, no. 51 (12 August 1921): 286; "Bob Martin's," Nottingham Evening Post, 18 September 1930, 8.

²¹ Appel, Mothers and Medicine, 5–16; D'Antonio, "Shopping for the Ballin Baby."

²² Appel, Mothers and Medicine, 53-56.

²³ Spary, Feeding France, chap. 6.

²⁴ Zweiniger-Bargielowska, *Managing the Body*, 136–44.

"well-bred") bitch on standby in case the valued mother could not provide adequately for her young.²⁵ There was some experimentation with other possibilities. For example, in his 1854 treatise on canine management, Edward Mayhew (brother of the renowned journalist Henry) recommended that bottles intended for human infants be adapted for puppies. Mayhew admitted, however, that in attempting to substitute cow's milk for that of dogs, "success has not always rewarded my care." Medicus," the anonymous medical columnist for the popular dog-fancy periodical *Our Dogs*, would later report, "The explanation lies in the fact that cow's milk differs somewhat in composition from bitches' milk ... If to cow's milk be added a small quantity of orange juice and a few drops of codliver oil, excellent results will generally be obtained." Lactol and the products that followed in its wake contributed to a broad-based extension of scientific approaches to human nutrition beyond human bodies, and onto those of animals more generally.

Advertisements for canine milk products drew inspiration from their counterparts designed for human babies. For example a typical full-page production of 1912 promoting Lactol had as its centerpiece a letter from a young woman owner, N. S. Gambrill, reporting on the successful rearing of five fox terrier puppies.²⁸ In her letter, Gambrill thanks A. F. Sherley & Co. for their product, and notes that her puppies enjoy it "immensely." The accompanying photographic illustration which the advertisement explains is one of two sent in—depicts the puppies in a group, framed by the protective embrace of their owner. The group is resting on a chair and footstool with their biological parent. Despite the presence of the brood bitch, Gambrill's right arm forms a barrier between the dog and her offspring. The puppies' condition, Gambrill writes, "speaks for themselves and their food" a statement in which any contribution made by the biological parent remained conspicuously absent (figure 1). In this advertisement, Lactol enabled Gambrill to take on the role of the mother of the litter, replacing the milk of the bitch with that of Sherley & Co., which was (its advertisements consistently claimed) "three times as nourishing as cows' milk."29 This format continued virtually unchanged up until at least the late 1930s. Puppies appeared with their human owners and on their own, but in almost all images, the bitch's presence was either minimized or had disappeared completely.

As well as citing personal testimony, Sherley & Co. were careful to emphasize Lactol's medical and scientific credentials. For example, ads prior to the First World War highlighted that the product was available not only from food suppliers but also commercial chemists and department stores, including Taylors' Drug Co., Parkes Drug Stores, Whiteleys, Harrods, and Boots.³⁰ Ads consistently included

²⁵ Medicus, "Notes for Novices: Puppy Management," Our Dogs, no. 47 (4 June 1920): 847.

²⁶ Edward Mayhew, *Dogs: Their Management, Being a Plan for the Treatment of the Animal* (London, 1854). 222.

²⁷ Medicus, "Notes for Novices: The Hand-Rearing of Puppies," Our Dogs, no. 84 (19 June 1931): 879.

²⁸ "Lactol," Our Dogs, no. 33 (26 July 1912): iv (back cover).

²⁹ For example, "Lactol," Our Dogs, no. 8 (21 January 1910): 130; Sherley's Dog Book: Being Their Famous Hints to Dog Owners, 12th ed. (London, 1929), 35.

^{30 &}quot;Lactol," Our Dogs, no. 36 (30 January 1914): iv (back cover).

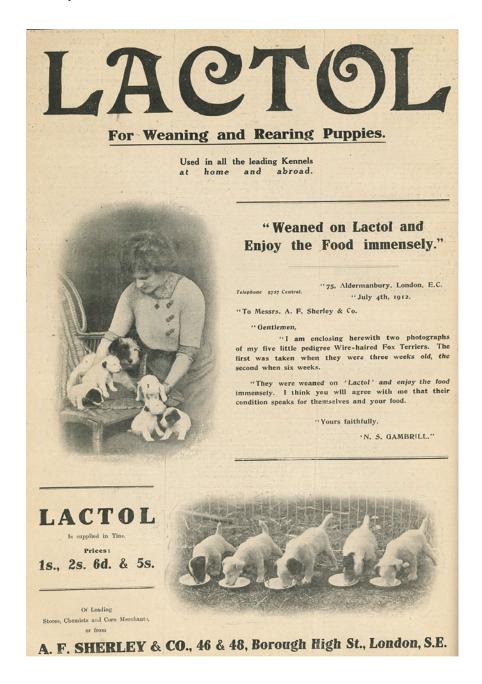


Figure 1—Advertisement for "Lactol," *Our Dogs*, no. 33 (26 July 1912), iv, back cover. Image courtesy of the Kennel Club Library, London.

"invalid dogs" among animals the food was suitable for. Nutrition science featured heavily in product descriptions. In a gesture towards the emphasis on chemical purity prevalent at this time, Lactol was described in 1910 as an "unadulterated

compound of casein, milk, sugar, cream and phosphates ... similar in taste, analysis, and appearance to the puppies' natural food."³¹ The 1920s saw the addition of the newly fashionable "vitamins" to this list. By this point, Lactol had gained in commercial significance. Whereas the 1920 edition of Sherley & Co's widely distributed Hints to Dog Owners only offered an advertisement Lactol on the inside of its back cover, the edition of 1929 (renamed Sherley's Dog Book) included a lengthy discussion of the potential health risks of poor feeding and weaning techniques. This discussion positioned Lactol as a palliative food that puppies "love ... some even preferring it to their mother's milk."³² As the principal provider of medical consumables and ephemera to the British dog fancy, the company could count on customers' association of their food with the health of young dogs.

The proliferation of Lactol and similar foods contributed to a more general reconceptualization of dog feeding as a scientific endeavor. Ads for Spratt's Malt Milk, Vigor, and MartinMilk all emphasized their chemical nutritional credentials. MartinMilk, for example, claimed that it contained "the essential vitamins and health-giving proteids" for "bad doers and dainty feeders" as well as for young dogs.³³ Some claims verged on the implausible. Virol Ltd., which launched its eponymous food in 1914, darkly warned in its promotional literature that dogs "are exposed to the incessant attacks of the microbes which cause disease," noting that "these microbes are everywhere." Only by increasing the white blood cell count of one's canine charge could disease be prevented—a physiological effect of which Virol was uniquely capable.³⁴ Such rhetoric spilled over into the dog advice literature of the period. Mrs. Leslie Williams, a toy dog breeder whose treatise on puppy rearing carried advertisements for Lactol on its end pages, bemoaned the practice of underfeeding mother bitches and puppies ("infants") in an effort to minimize their adult size. Williams noted that the only results of such practices were to increase the prevalence of rickets and other ailments.³⁵ Medicus, having only rarely touched upon the nutritional requirements of dogs prior to the First World War, regularly returned to the topic during the 1920s and 1930s, acting as an arbiter on the relative nutritional virtues of commercial products and cheerleading the adaptation of fashionable foods such as orange juice and whole wheat to canine requirements.³⁶

The long-standing status of dogs as ideal subjects for nutritional studies of foods intended for human consumption made the boundaries between human and canine

^{31 &}quot;Lactol," Our Dogs, 28 (21 January 1910): 130.

³² Hints to Dog Owners: A Guide to the Treatment of Dogs in Health and Sickness, 8th ed., (London, 1920); Sherley's Dog Book, 35.

^{33 &}quot;MartinMilk," Our Dogs, no. 83 (17 April 1931): 177.

^{34 &}quot;Virol," Our Dogs, no. 36 (2 January 1914): 23.

³⁵ Mrs. Leslie Williams, *The Puppy Manual: A Guide to Rearing Puppies from Birth to Maturity*, 3rd ed. (London, 1913), 11–12.

³⁶ For example, Medicus, "Notes for Novices: "Whole Wheatmeal Feeding," *Our Dogs*, no. 89 (18 November 1932): 528; Medicus, "Notes for Novices: The Latest about Vitamins," *Our Dogs*, no. 93 (1 December 1933): 653; Medicus, "Notes for Novices: Yeast for Dogs," *Our Dogs*, no. 112 (12 August 1938): 507. On the health benefits accorded wholemeal bread at this time, see Ina Zweiniger-Bargielowska, "Not a Complete Food for Man': The Controversy about White versus Wholemeal Bread in Interwar Britain," in *Setting Nutritional Standards: Theory Policies Practices*, ed. Elizabeth Neswald, David F. Smith, and Ulrike Thoms (Rochester, NY, 2017), 142–64.

dietetics particularly fluid.³⁷ For example, the description of rickets in Edward Mellanby's now-classic Medical Research Council report of 1921 emphasized that symptoms in puppies and children were much the same: "As in children, the animal often becomes more lethargic and listless ... interest of ... the puppy in all its surroundings disappears ... and there is a great diminution in its small movements. Often the animal loses its desire to bark, and in this respect resembles a 'good' child with rickets."³⁸ While Mellanby's words were of course intended to establish the analogy in the opposite direction (i.e., from puppies to children), the effect went both ways. His pronouncements were closely attended to and reported with great respect by writers on canine nutrition.³⁹ Thus dogs were uniquely placed vis-à-vis the extension of nutritional practices and ideals established among humans to domestic animals. Indeed, their long-standing status as consumers of family leftovers meant that elision of the dietetic requirements of humans and dogs met with little resistance.

Lactol, then, along with a wide range of dog-food products that appeared between around 1910 and 1930, both relied on and contributed to a set of ideals and practices associated with the science of nutrition. Though not as a rule conducted by women (Harriette Chick and May Mellanby being significant exceptions in Britain), nutrition studies were understood to have most practical relevance to those charged with maintaining the domestic realm. The portrayal of dog feeding as an activity of the same order as the feeding of children recalls the Victorian patriarchal domestic ideal, in which commonalities between pets and children were often emphasized. It were the proliferation of advice literature on the incorporation of science into home life heralded a growing interest among a range of women in the domestic possibilities of natural knowledge. Lactol and similar products sought to capitalize on this interest, and, in the process, contributed to the longer-term emergence of new conceptions of domesticity guided by scientific truth rather than patriarchal moral probity. In this respect, scientifically fed dogs represented the emancipatory possibilities inherent in the domestic-science movement.

It would, however be premature to claim that advertisements for canine food products were the primary cause of, or even an initial motivation for, the inclusion of dogs within the scientific domestic ideal. Such an assumption would efface the day-to-day work that this process relied upon. The rest of this article is concerned with bringing this work to historical attention. As will be demonstrated, the adoption of nutritional rhetoric by canine food and medicine manufacturers both followed and depended upon a more general reconceptualization of "women's work" as

³⁷ Elizabeth Neswald, "Food Fights: Human Experiments in Late Nineteenth-Century Nutrition Physiology," in *The Uses of Humans in Experiments: Perspectives from the 17th to the 20th Century*, ed. Erika Dyke (Leiden, 2016), 170–93.

³⁸ Edward Mellanby, "Experimental Rickets," Medical Research Council Special Report 61 (London, 1921), 8.

³⁹ For example, Medicus, "Notes for Novices: Milk as Puppy Food," *Our Dogs*, no. 83 (17 April 1931): 171; John W. Patton, "A Study in Commercial Dog Foods," *Veterinary Medicine* 27, no. 5 (May 1932): 204–9, at 205; A. Green, "Dog Foods and Recent Nutritional Research," *Veterinary Medicine* 28, no. 12 (December 1933): 506–7.

⁴⁰ Rima D. Appel, 'Science Gendered: Nutrition in the United States, 1840–1940," in *The Science and Culture of Nutrition*, ed. Harmke Kamminga and Andrew Cunningham (Amsterdam, 1995), 129–54.

⁴¹ Amato, Beastly Possessions, 63–67.

something that could be acknowledged through remuneration as well as social status, and of dogs as animals appropriate for women both to own (as pets) and to take advantage of the labor of (as breeding animals).

CARING FOR THE CANINE: WOMEN DOG OWNERS AND THE CANINE NURSES' INSTITUTE

By the early twentieth century, it had become acceptable for British women to own a wide range of dog types. In many ways, this development was unprecedented. Though lap dogs, or "toys," had been associated with aristocratic women since the Middle Ages, other types of dog were historically considered "manly" creatures, and it had been men that had been most prominent in their breeding and maintenance. During the nineteenth century, a wider range of women began to move beyond the exclusive image of the aristocratic toy owner to appropriate dog keeping and breeding more generally as an explicitly feminine activity. Increasing numbers of women, often of an upper-middle-class background, began to engage in ostentatious displays of dog ownership. Toy breeds such as pugs, Chihuahuas, and Pekingese now made frequent appearances alongside women in parlors, at social functions, and at restaurants as well as at formal dog exhibitions. The latter years of the century saw women begin to adopt larger, more traditionally "masculine" breeds. As Sarah Amato has shown, organizations such as the Ladies' Kennel Association created opportunities for women to redefine their roles within the dog fancy.⁴³

Much of women's interest in dogs during the early twentieth century was expressed in terms of the increasingly prominent middle-class culture of feminine consumption and display. This centered on consumer discernment, particularly of luxurious and fashionable goods and services. He Fashion-conscious dog owners were routinely depicted in magazines and the daily press as buyers of dogs as luxury items in the same way as they might consume any other leisure-oriented good. Advertisements for Lactol and similar products played up such depictions and were often explicitly directed at the "delicate" constitutions reputedly possessed by toys. The new foods informed by nutrition science thereby relied on the emergence of specifically feminine approaches to dog keeping and breeding that, despite having their origins in the Victorian domestic ideal, increasingly centered on a culture of conspicuous consumption and fashionable sociality. The popularity of such foods was not then simply a symptom of the changing gender profile of dog owners: it also marked the establishment of new approaches to care and maintenance of dog population as a whole.

Like the new generation of women beauty-parlor owners beginning to make their presence felt on London's Bond Street, women breeders, frequently housing dogs in

⁴² Brown, *Homeless Dogs*, 67–70; Worboys, Strange, and Pemberton, *Invention of the Modern Dog*, 49–50.

⁴³ Amato, Beastly Possessions, 73-86, 92-102.

⁴⁴ Erika Diane Rappaport, *Shopping for Pleasure: Women in the Making of London's West End* (Princeton, 2000), especially chap. 1.

⁴⁵ Sarah Cheang, "Women, Pets and Imperialism: The British Pekingese Dog and Nostalgia for Old China," *Journal of British Studies* 45, no. 2 (April 2006): 359–86, at 373–36; Amato, *Beastly Possessions*, 43–44; Kete, *Beast in the Boudoir*, 84–89.

their own homes, catered to the needs of their fashionable clients.⁴⁶ Though few breeders can be said to have made large amounts of money through the sale of dogs, the practice undoubtedly presented a means by which women might attain a degree of financial independence.⁴⁷ The expanding participation of women in dog breeding also reminds us that domestic science presented some with opportunities (however slight) for workplace participation beyond the home. Increasingly prevalent portrayals of occupations such as teaching, nursing, and cooking as appropriately "womanly" helped constitute new forms of connection between science, medicine and domesticity.⁴⁸ These connections in turn contributed to the enrolment of dogs within veterinary, generative, and nutritional scientific ideals. While Williams's above-mentioned treatise contrasted the "sour tempers" and "dirty habits" of puppies bred in kennels with the mannered bearing of puppies lucky enough to have "clever house dogs" (tutored by women) as parents, it also condemned the "old-fashioned plan of rearing" in which owners and breeders forced puppies onto a "sloppy foods" diet of "bread and milk, milk puddings, porridge and so on." Such a regime, Williams claimed, would result in anemia, worm infestation and, ultimately, loss of life. "Rational diet," on the other hand, helped build "firm tissues" and warded off illness. 49 Williams conveyed her breeding knowledge to fellow toy enthusiasts, presenting it as relating specifically to these "feminine" dogs. Nevertheless, the sentiment implicated dogs more generally.

Domestic science simultaneously relied on and helped shape medical and physiological knowledge in regard to both human care and that of dogs. The emergence of specialized "small animal" veterinary practice during the interwar years has long been acknowledged by historians of the profession. Most frequently, this development has been characterized as a response by (invariably male) veterinarians to the threat posed to their businesses by a technology-driven decline in the horse trade—an assumption that Andrew Gardiner has shown to be problematic as far as the interwar period is concerned.⁵⁰ Closer examination of the roles of women as consumers of dogrelated goods and services demonstrates, however, that the emergence of smallanimal practice was also motivated by the new position that animals were coming to hold in western economies. The emergence of pet-centered practices signifies a shift from a patriarchal culture in which animals were valued primarily for their utility and economic potential (as hunters, for example, or as guardians of property) to a somewhat more gender-balanced one in which their ability to provide companionship and emotional support became more significant. The emerging concern with pet health thus reflected cultural as well as economic and professional change. The most prominent veterinary symbol of this shift as far as early twentieth-century

⁴⁶ On beauty-parlor owners, see Jessica P. Clark, "Pomeroy v. Pomeroy: Beauty, Modernity, and the Female Entrepreneur in Fin-de-Siècle London," *Women's History Review* 22, no. 6 (April 2013): 877–903.

⁴⁷ Advertisements in the voluminous Christmas annuals of *Our Dogs* hint at the increasing prevalence of women breeders as well as the growing range of dogs bred by them. Compare, for example, *Our Dogs*, no. 8, supplement, 15 December 1900, and *Our Dogs*, no. 29, supplement, 16 December 1910.

⁴⁸ Juliana Adelman, "Invalid Cookery, Nursing, and Domestic Medicine in Ireland, c. 1900," *Journal of the History of Medicine and Allied Sciences* 73, no. 2 (April 2018): 188–204.

⁴⁹ Williams, *Puppy Manual*, 4, 19–20.

⁵⁰ Andrew Gardiner, "The Dangerous Women of Animal Welfare: How British Veterinary Medicine Went to the Dogs," *Social History of Medicine* 27, no. 3 (August 2014): 466–87, at 467–68.

dogs were concerned was the foundation of new and self-consciously feminine institutions devoted to canine health and well-being.

In March 1908, the Canine Nurses' Institute was established at 45 Barrington Road, Brixton, the home of metropolitan socialite Mrs. E. Leuty Collins.⁵¹ Like the beauty-parlor owners of Bond Street, Collins was highly conscious of her position in fashionable society. In the course of promoting her institute, she held events at royal residences and emphasized her connections with fashionable ladies and the Ladies Kennel Association.⁵² In so doing, she cultivated an image of the institute as a respectable organization devoted to needs of wealthy clientele without time to care for an ill pet.53 How to Save Our Dogs (1914), in which Collins set out her vision for the institute, announced her adherence to a well-established set of beliefs and values associated with upper-middle-class dog owners, including the conviction that their animals possessed ("spiritual") intelligence.⁵⁴ The institute, with Collins at its head, would provide care for the burgeoning population of canine pets resident in the homes of the well-to-do. Collins's vision went beyond the consumer-as-individual-centered imperative underlying beauty parlors. The institute heralded the emergence of new occupational opportunities for women: How to Save Our Dogs included contributions from J. MacRae Frost, a veterinary surgeon and reputed "canine specialist" who proclaimed canine nursing as "new and honourable profession" for ladies.⁵⁵

As well as providing services to the formal dog fancy, the institute was to act as a means by which women interested in a career attending to the medical needs of dogs would attain a professional discipline. The "canine nurse" would be closely modeled on the respectably feminine figure of the hospital nurse. Collins and her associates presented nurses as embodying a conservative set of assumptions regarding gender roles within medicine. Canine nursing was, like human nursing, an occupation to which women—and not men—were constitutionally suited; MacRae Frost contended that men "lack the requisite sympathy, patience, and gentleness of touch and manner of the woman." Like human nurses, canine nurses were to remain under the supervision of male medical superiors, be trained by them, and defer to

⁵¹ E. Leuty Collins and Mrs. Victor Campbell, How to Save Our Dogs (London, 1914), 65.

⁵² "Court and Society," *Sunday Times*, 9 May 1909, 15, 18; "New Importations," *Dogdom* 10, no. 8 (October 1909): 598; "London Notes," *Dogdom* 12, no. 1 (March 1911): 10–12; Collins and Campbell, *How to Save Our Dogs*, inside front cover, 4, 84–85, inside back cover. See also E. Leuty Collins, "A Connoisseur in Curious Pets," *Windsor Magazine* 14, no. 4 (September 1901): 429–34.

^{53 &}quot;Nurses for Dogs," Daily Mail, 27 August 1909, 5.

⁵⁴ Collins and Campbell, *How to Save Our Dogs*, 31–41, 48–51. Collins's co-author, probably the wife of the arctic explorer who survived the ill-fated Scott expedition to the South Pole, does not appear to have had a hand in the day-to-day running of the institute, which is invariably associated with Collins alone in advertisements and press commentary. On the connection between spiritualism, feminism, and the anti-vivisection movement, see Howell, *At Home and Astray*, chap. 5; Coral Lansbury, *The Old Brown Dog: Women, Workers, and Vivisection in Edwardian England* (Madison, 1985), 91–95.

⁵⁵ Collins and Campbell, *How to Save Our Dogs*, 67 and 76; see also "Outside the Gates: Women's Work at Olympia," *British Journal of Nursing* 40 (11 September 1909): 224–25; "Nurses for Dogs," *Daily Mail*, 27 August 1909, 5; Frank Townend Barton, *Our Dogs and All about Them: A Practical Guide for Everyone Who Keeps a Dog* (London, ca. 1910), 3–6.

⁵⁶ Collins and Campbell, *How to Save Our Dogs*, 68–69; Eva Gamarnikov, "Nurse or Woman: Gender and Professionalism in Reformed Nursing 1860–1923," in *Anthropology and Nursing*, ed. Pat Holden and Jenny Littlewood (London, 1991), 110–29.

them whenever explicitly "medical" (veterinary) problems arose.⁵⁷ Nurses were moreover to wear uniforms of similar type to their human-concerned counterparts and fulfill similar (albeit dog-related) duties. This replication of established professional gender roles helped legitimate canine nursing as a respectably feminine occupation. Reporting on the new profession, the Daily Mail described Canine Institute nurses as "a band of highly trained young women, in neat blue uniforms and smart white caps and aprons embroidered with the letters "C. N. I." in bright scarlet."58 Nevertheless, not everybody was convinced. The Nursing Mirror mockingly noticed "an amusing similarity" in the rules for trainees of the institute and those to which employees of Guy's Hospital were expected to adhere. While it admitted that canine nursing might constitute a new profession, it nevertheless hoped that "the canine nurse, in her becoming uniform, will not be followed by the 'equine' nurse or the 'bovine' nurse in other becoming uniforms."⁵⁹ Collins persisted despite these dismissals, holding annual competitions among students and persuading fashionable women to hand out awards to her pupils.⁶⁰ In this way, embarking on a course of training at Collins's institute not only constituted a means by which one might learn the intricacies of canine medical care but also presented opportunities to attain recognition from the dog-fancying London elite. Collins insisted that the canine nurse would be no mere adjunct to the formal veterinary profession; she would be an active contributor to the early twentieth-century world of leisured social respectability, "able to converse with lady clients on any subjects connected with their pets."61 Thus the upper-middle-class social world of the dog fancy would be served by a cadre of women disciplined and organized by Mrs. Collins.

In fulfilling their duties, nurses were expected to adopt an approach to canine care informed by the "natural" capacities women were presumed to possess. This approach centered on satisfying not only dogs' immediate bodily needs but the emotional welfare of both dogs and owners. "Sensitive" pet dogs required different kinds of care than other nonhuman animals. How to Save Our Dogs thus emphasized commonalities between the needs of pets and of human children: "A sick dog," MacRae Frost observed, "can only be compared to a young invalid child ... A cheerful disposition and gentle sympathetic voice are quite essential to her [the canine nurse] as to the nurse in human practice."62 In addition to being able to ensure that a dog was not emotionally disturbed by its surroundings, nurses were to be capable of assuaging the anxieties of their human clients. For example, in whelping cases that did not require a veterinary surgeon, the nurse was to be "capable of taking over the entire management of the mother and puppies, relieving the owner of all trouble and anxiety."63 Such abilities were more than projections of MacRae Frost's or Collins's imaginations. Eminent dramatist George Robert Sims, as sketch columnist for the sports weekly the Referee, related in January 1913 how his "little dog Flash" had contracted an illness

⁵⁷ Collins and Campbell, How to Save Our Dogs, 78-79.

^{58 &}quot;Women Nurses for Dogs," Daily Mail, 12 June 1909, 3.

⁵⁹ "Nurses for Dogs," Nursing Mirror 7 (1 August 1908): 277.

⁶⁰ "London Notes," *Dogdom* 12, no. 1 (March 1911): 10–12; "London Notes and Events," *Dogdom* 12, no. 12 (February 1912): 730–31.

⁶¹ Collins and Campbell, How to Save Our Dogs, 69.

⁶² Collins and Campbell, 73. On the nineteenth-century equation of pets and children, see footnote 21.

⁶³ Collins and Campbell, How to Save Our Dogs, 71.

in the run-up to Christmas, turning the season into "a very anxious one" for a while. Though the services of "the greatest dog doctor in the world," Alfred Sewell, had been procured, prior commitments meant that a canine nurse had to be sent for. Decorations were put up without much enthusiasm until, thanks to the "splendid nursing" and "charming and romantic personality" of one Marion E. Shaw, "who for ten days and nights hardly left the sufferer's side," "the shadow of a domestic tragedy" was lifted from the writer's home. ⁶⁴ The nursing of dogs was thus not only a medical skill to be attained through a proper inculcation of scientific knowledge or clinical practice: it was also a contribution to a middle-class economy of care in which dogs featured as part of a broader set of interests in the welfare of friends, families, servants, and households more generally.

Food and feeding enjoyed a prominent place in the professional lives of canine nurses. The rules ridiculed by the Nursing Mirror stipulated that canine nurses, like their human counterparts, should themselves partake of food that was "plain and good."65 Similarly, the foods that institute representatives recommended for dogs accorded with those domestic scientists recommended for humans. Thus at a stall at the 1909 Crufts Exhibition, "a new food ... being introduced by Messrs. Spratts', called 'Weetmeet', made with whole wheat rather than refined flour, was being 'especially recommended by the canine nurses who were on duty ... at a special stall erected by the Institute."66 Nurses managed feeding regimes during whelping, when dogs fell ill, and when dogs (such as was often the case with toys) were found to be constitutionally unsuited to conventional feeding regimes. How to Save Our Dogs recommended "fortifying" products such as Bovril and Benger's (human) milk food for dogs afflicted with distemper, "Parish's Chemical Food" as a treatment of rickets, and Lactol, administered with Mayhew's adapted feeding bottle, for hand-rearing. An advertisement for Sherley & Co.'s product appeared at the back of the volume.⁶⁷ As the *Daily Mail* reported, "Canine diet has to be scientifically studied, the food properly prepared, and the sick dog's appetite tempted with invalid delicacies" during nurses' training.⁶⁸ Though they neither attained nor pretended to the dietetic and physiological authority of the veterinary men of the time, canine nurses, like their human-concerned counterparts, nevertheless asserted their competence on matters relating to canine nutrition. In so doing, they participated in a formalization of pet-related knowledge during the first three decades of the twentieth century.

Canine nursing is only the most prominent example of the economic and social opportunities that dog owning and breeding presented in this period. New modes of exchange and advertisement, alongside the increasing prominence of women in public life generally, encouraged women's entry into many different kinds of dog-associated endeavor. Women breeders, pet-shop and "dog-parlor" owners, and

⁶⁴ [George Robert Simms], "Mustard and Cress: Canine Nurses' Institute," *Referee*, 5 January 1913, 13.

^{65 &}quot;Professional Dog Nurses," *Dogdom* 9, no. 5 (July 1908): 335-36.

^{66 &}quot;London Notes from Our Special Representative," Dogdom 10, no. 2 (April 1909): 98.

⁶⁷ Collins and Campbell, *How to Save Our Dogs*, 11, 16, 24, 77, inside back cover. Similar advice and advertising appeared in Williams's *Puppy Manual*, 14, 17, 50, 52, inside back cover. On late nineteenth-century medicinal foods, see Lisa Haushofer, "Between Food and Medicine: Artificial Digestion, Sickness, and the Case of Benger's Food," *Journal of the History of Medicine and Allied Sciences* 73, no. 2 (April 2018): 168–87.

^{68 &}quot;Women Nurses for Dogs," Daily Mail, 12 June 1909, 3.

canine nurses all participated in the emerging economy of canine care.⁶⁹ Nor was this economy exclusively the preserve of women. The veterinarian W. Hamilton Kirk, for example, founded a "sanatorium" for dogs at Ruislip around the time Collins founded her institute. Advertised as a "country home for your dogs and cats in sickness or in health," the sanatorium provided leisure facilities and health-giving diets as well as the latest in canine surgery such as the fitting of artificial eyes.⁷⁰

THE DUTIES OF THE KENNELMAID: DOMESTIC LABOR AND SCIENTIFIC TRAINING

Though the Canine Nurses' Institute survived the First World War, it did not leave a significant institutional legacy. The market for urban dog care among the upper middle classes underwent considerable change in the postwar era, and the institute's role was in many ways usurped by the growth of a comparatively professionalized (and seemingly more combative) institution, the People's Dispensary for Sick Animals of the Poor, founded by the philanthropic and entrepreneurial Maria Dickin.⁷¹ Dog breeding and owning boomed at this time, with ever greater numbers of women becoming involved in dogs as a business as well as a hobby. In 1928, according to an article in the Nottingham Evening Post, around 70 percent of breeders in Britain were women.⁷² Regardless of the reliability of such statistics, the prewar years certainly saw a proliferation of advertising by women breeders.⁷³ This new generation brought with them approaches to dog care and management drawn directly from the scientific and domestic culture in which many of them had been immersed.⁷⁴ Moreover, the general expansion of commercial dog breeding was accompanied by an increased demand for labor associated with the care of dogs as breeding animals. For aspiring women professionals, the postwar years saw decreasing attention being paid to possibilities of nursing—and increasing investment in another occupation, the "kennelmaid."

If canine nurses were conceived of as participants in relatively high status, medicine-related activities, kennelmaids occupied a rather more ambiguous social position. Historically, the "kennelman" had been an important position in hunting and (later) larger commercial kennels.⁷⁵ Kennelmen were tasked with general care and

⁶⁹ On these, see Grier, Pets in America, 272-77.

⁷⁰ "Ruislip Dog Sanatorium," *Our Dogs*, no. 44 (1 February 1918): 93; "Sanatorium for Canine Patients: Artificial Eyes for Pet Dogs," *Perth Western Mail*, 15 August 1913, 24. On canine surgery at this time, see Andrew Gardiner, "The Animal as Surgical Patient: A Historical Perspective in the 20th Century," in "Animals and Surgery," special issue, *History and Philosophy of the Life Sciences* 31, nos. 3–4 (January 2009): 355–76, at 361–64.

⁷¹ Gardiner, "The Dangerous Women of Animal Welfare," 470–77. On the status of dogs during the First World War, see Philip Howell, "The Dog Fancy at War: Breeds, Breeding, and Britishness, 1914–1918," *Society and Animals* 21, no. 6 (January 2013): 546–67.

^{72 &}quot;Woman's Ways: A Career among Dogs," Nottingham Evening Post, 13 October 1928, 3.

⁷³ "The Breeding of Dogs: A Paying Career for Women," *Aberdeen Press and Journal*, 15 October 1928, 2; "The Possibilities of Dog Breeding," *Aberdeen Press and Journal*, 4 January 1929, 2. See also footnote 47.

⁷⁴ Zweiniger-Bargielowska, *Managing the Body*, 124–36.

⁷⁵ William H. Forsyth, "The Medieval Stag Hunt," *Bulletin of the Metropolitan Museum of Art* 10, no. 7 (March 1952): 203–10, at 206.

management of dogs in an estate or hunt kennel, including grooming, feeding, and day-to-day handling. By the early twentieth century, however, evidence began to appear that kennelmen, like domestic servants generally, were experiencing something of an identity crisis. A satirical 1910 article in *Our Dogs* distinguished between "kennelmen" and "handymen-kennelmen": the former was a relatively respectable "worthy who looketh after the well-being of dogs, assisted by a medicine-chest." In contrast, the latter had to balance dog keeping with "a turn at the garden," "work[ing] the kitchen mangle," and "taking master Fred to get his hair cut." These references to laundry work and child supervision, gesturing to duties traditionally reserved for female rather than male servants, highlight an increasing ambiguity in the gender roles that carers for dogs were expected to fulfill. The very identification of lower-status kennelmen as men could prevent them from adapting to the changing needs of middle- and upper-class dog breeding households.

Just as Collins believed that canine nurses' "feminine virtues" made them ideally suited to the care of dogs, women's entry into paid kennel work was predicated on their reputed gender characteristics. Indeed, the Canine Nurses' Institute appears to have played an important role as an educational institution for the first generation of kennelmaids, instigating a less onerous course of training than that required for nurses as well as a "kennelmaid's guild" in 1912.⁷⁸ In the interwar years, becoming a kennelmaid was portrayed as the first rung on a career ladder for young women interested in dogs.⁷⁹ For many commercial breeders this was a welcome development. In the 1910 edition of his guide to dog-keeping, Frank Townend Barton noted that "kennel maids often prove themselves equal to kennel men," suggesting that "the reason for this ... is found in the infinite pains that they so willingly bestow upon dogs," as well as "the patience inherent to womanhood."⁸⁰

Nevertheless, women who took up positions as kennelmaids experienced very different challenges regarding the definition and fulfillment of their duties than did either kennelmen or canine nurses. Whereas canine nurses appear to have enjoyed a certain degree of independence of operation in their professional lives (often, for example, working only as visitors to homes), kennelmaids, as their name suggests, were associated far more closely with the role of the live-in domestic maid.

Kennelmaids embodied many of the contradictory forces experienced by young women entering domestic employment at this time.⁸¹ There was a disjunct between the profession of kennelmaid as portrayed in popular press and the day-to-day experiences described by kennelmaids themselves. They were employed to take care of the "drudge" work for kennels—cleaning kennels daily, ensuring that dogs were exercised and fed, attending to any minor ailments, and keeping the animals well groomed.⁸² In many cases these tasks were assigned to conventionally domestic rather than specifically canine concerned servants. Nevertheless, for many women breeders and owners, general house staff were not to be relied upon for

⁷⁶ Gerald Sidney, "Canine Characters: The Kennelman," Our Dogs, no. 29 (25 August 1910): 510.

⁷⁷ Delap, Knowing Their Place, 85–86, 161–62.

⁷⁸ "London Notes and Events," *Dogdom* 12, no. 12 (February 1912): 731.

⁷⁹ For example, "The Possibilities of Dog Breeding," Aberdeen Press and Journal, 4 January 1929, 2.

⁸⁰ Barton, Our Dogs and All about Them, 2.

⁸¹ Delap, Knowing Their Place, 11-22, 63-66; Todd, "Domestic Service and Class Relations."

⁸² Barton, Our Dogs and All about Them, 2-3.

such tasks. Williams contended that "although servants may very well do the cleaning under one's own direction ... they are ... generally quite unreliable."83

In contrast with most service roles, the position of kennelmaid was portrayed as one that allowed women to enjoy the healthy countryside environment promoted by domestic-science reformers while gaining skills and experience in dog keeping and breeding. Like canine nurses, they were consistently depicted as "educated" girls: Carine Cadby, a kennelmaid writing in the Royal Magazine, portrayed herself as not simply as a hard-working subordinate to her mistress but almost her equal in matters pertaining to dogs.⁸⁴ Also like canine nurses, kennelmaids participated in the emergence of a scientifically informed economy of maternal care. In line with this change, it was expected that they would devote themselves to the dogs under their supervision in a similar manner to a maid tasked with the care of her mistress's child. And like domestic maids, kennelmaids often developed highly personal relationships with their employers. Indeed, the first significant portrayal of them in the British press—the so-called "Kennelmaid Case" of 1907 in which the defendant Miss Josephine Leslie was accused of defrauding her mistress—exemplified many of the established tropes of disloyal and manipulative servitude. 85 These included complacent home-keeping on the mistress's behalf and attainment of the position on a false pretext. The case, having gone so far as to draw in the financial celebrity Pierpont Morgan (of J. P. Morgan fame), concluded by convicting Leslie of having stolen £13,000.86

The conditions under which a kennelmaid worked could vary widely depending on the practices of her employer. Kennelmaids' status was generally viewed as somewhere above a conventional maid and below a governess in the domestic hierarchy, but many employers identified them with lower-class domestic staff and treated them accordingly. During the 1920s and 1930s, at a time of union agitation across the service trade, a lively correspondence on the appropriate behavior and treatment of kennelmaids appeared in *Our Dogs*. Like the house mistresses who engaged in the so-called "servant problem" debate, kennel owners proclaimed their own responsible behavior even as they decried that of others. ⁸⁷ In a comment highlighting both the status of the kennelmaid and the attitude that many took towards training them, one breeder asserted that employers should "aim to make the girls happy in their surroundings, and ... never ask them to do the impossible ... just like children, if you expect the best, they will not let them [sic] down ... I encourage them to consider me their friend and companion, and come to me with and doubts or confidences."⁸⁸

⁸³ Williams, The Puppy Manual, 16.

⁸⁴ Carine Cadby, "A Day in the Life of a Kennel-Maid," *Royal Magazine*, Autumn 1910, 43–45, at 45; "Our London Correspondence," *Manchester Guardian*, 12 May 1908, 6. On efforts to promote service work as a viable career for upper-middle-class women at this time, see Delap, *Knowing Their Place*, 105–8.

⁸⁵ On the portrayal of servants as criminals see Anthea Trodd, Domestic Crime in the Victorian Novel (Basingstoke 1989), 45–68.

⁸⁶ For example, "The Police Courts," *Times* (London), 15, 17, and 20 July 1907; "The Central Criminal Court," *Times* (London), 27 July 1907; "High Court of Justice," *Times* (London), 19 November 1907.

⁸⁷ Laura Schwartz, "What We Think Is Needed Is a Union of Domestics Such as the Miners Have': The Domestic Workers' Union of Great Britain and Ireland, 1908–14," *Twentieth-Century British History* 25, no. 2 (June 2014): 173–98.

⁸⁸ Keen Worker and Trainer to Our Dogs, "Kennel Pupils," Our Dogs, no. 82 (30 January 1931): 282.

Much discussion by breeders centered on kennelmaids' faults. One correspondent complained of having over a twenty-year period "over and over again" met "girls alleged to have been trained, and found that they know next to nothing, often not even the proper method of clearing a kennel." However, the same experienced correspondent deplored that "sometimes girls, irrespective of class, are relegated to the kitchen, or put out into cheap lodgings, and are kept week in week out doing the drudgery of the kennel and gaining no knowledge whatever."

Such concerns among kennel owners were matched by equally animated discussions among kennelmaids themselves, as well as their families, regarding the occupation and its pitfalls. One of the principal perceived dangers was finding oneself working not as a kennelmaid at all, but as a domestic maid. One unhappy father complained that a "lady" had written to a friend of his daughter to say that "the girl was to do kennel work, exercising ... housework, [and] have no salary." His own daughter had "just been offered a job where she would be required, in addition, to do house work, some cooking, 'help' with two children, take an interest in chickens, 'help' with washing, for a maid's wage of £1 per week! ... And one knows what the 'helping' means; one ends up doing everything."

Kennelmaids frequently alleged that breeders and owners offered poor pay (average wages in 1933 appear to have been around 10 to 15 shillings per week). They also referred to long hours—one correspondent cited 6.30 a.m. starts and 8.30 p.m. finishes, including Sundays. Though this example may have been extreme, six full days of thirteen-hour days per week seems to have been common. Moreover, living conditions could be deeply unsatisfactory. Another correspondent noted that many in her profession were "overworked, badly paid and fed, and seldom shown any consideration. Even their bedrooms are used as kennels." Hygiene was often unsatisfactory; another kennelmaid described how "one of my employers housed her workers in (there is no other term for it) a hovel which had no sanitation whatever. At two other places it was of the most primitive type, and at all three places the bedding was horrible and the food insufficient and of the poorest quality." Such remarks highlight the extent to which the rhetoric of domestic science could support women's multifarious calls for professional and personal autonomy; employers as well as employees could fall short of its standards.

Like canine nurses, kennelmaids were understood as naturally predisposed to cater for the emotional needs of both dogs and their employers. As one breeder put it, for those contemplating the career "an inherent love of animals is essential," as "dogs in particular know instinctively whether an individual is to be trusted or not, and act

⁸⁹ Fancier of 20 Years' Standing to Our Dogs, "Kennel Pupils," *Our Dogs*, no. 82 (23 January 1931): 213–14, at 213.

⁹⁰ Fancier, "Kennel Pupils," 213.

⁹¹ A Lover of Dogs and Fair Play to Our Dogs, "The Training of Kennelmaids," Our Dogs, no. 111 (27 May 1938): 684.

⁹² H. N. B., "The Wages and Hours of Kennelmaids and Kennelmen," *Our Dogs*, no. 92 (28 July 1933): 269; Another Kennelmaid to Our Dogs, "A Plea for Kennelmaids," *Our Dogs*, no. 77 (15 November 1929): 485.

⁹³ A Kennelmaid to Our Dogs, "A Plea for Kennelmaids," Our Dogs, no. 77 (8 November 1929): 413.

⁹⁴ A Sorely Tried Kennelmaid to Our Dogs, "Kennel Pupils," Our Dogs, no. 82 (20 February 1931): 491.

accordingly."⁹⁵ And for some kennelmaids, an ethos of care for dogs could trump all consideration of working conditions. A correspondent signing herself "A Happy Kennelmaid" insisted that "those who write so sorely about the hardships of the kennelmaids' lot cannot be true dog lovers, for love overcomes all things … love of the dog comes first, and unless this love does naturally come first, then, for the good of everyone concerned, give up the kennelmaids' life and cease grumbling."⁹⁶

Yet affective bonds worked both ways. For kennelmaids who were dog owners as well as dog carers, their love of dogs in general could come into conflict with love for their own dog in particular. One correspondent noted that although conditions were unsatisfactory in the kennel where she worked, she was "afraid to move on because the next job may be worse ... I am allowed to keep my little Pekingese with me, and he is all I have of my own now, I couldn't leave him behind, and my next employer might not allow a pet." Those agitating for better working conditions found themselves faced not only with a situation in which employers could often dictate terms but also with a deeply ingrained set of expectations regarding women's attitudes towards animals. For women workers, the historically feminine duty of domestic care continued to be understood as both unrelated to and more significant than matters of pecuniary or material interest.

By the mid-1930s, starting out as kennelmaid had come to be seen less as the first step on a career ladder and more as a paid-for training activity for young girls who wished to acquire some awareness of the scientific principles appropriate to dogs. The decade witnessed the emergence of "kennelmaid colleges"—generally large commercial kennels that promised to provide lectures, practical experience, and placements with veterinary surgeons to those willing to contribute tuition fees. Some breeders saw this phenomenon as simply a new way to exploit young women for cheap labor. 98 Yet such enterprises were undoubtedly successful, and gained in prominence as the decade wore on. One advertisement of 1938 described a kennelmaid's college at Ardross, Middlesex, as "the leading training centre for kennelmaids, canine nurses, and prospective kennel owners." The school offered what it called "a sound and thorough training to the seriously minded girl or woman who wishes to take up dogs as a career." Students would, as with the Canine Nurses' Institute, gain veterinary experience and skill in the day-to-day care of dogs; in addition, they would enjoy the services of a domestic staff including "a fully qualified hospital nurse." There was even the possibility of studying in the salubrious setting of the Côte d'Azure. "Ardross," the advertisement proclaimed, "is in touch with everything up to the moment in dogs."99

As kennelmaids increasingly came to adopt domestic scientific principles in their work, they also began to assert their authority in matters of canine care. As with canine nurses, food and feeding featured prominently among kennelmaids' concerns. For example, a suggestion by *Our Dogs* that dogs might do well if fed on processed fish meal (developed as poultry feed at this time) was met with decided skepticism

⁹⁵ A. V. Lloyd, "Kennelmaids: A Novel Calling for Women," Our Dogs, no. 70 (27 January 1928): 298.

⁹⁶ A Happy Kennelmaid to Our Dogs, "Kennel Pupils," Our Dogs, no. 83 (27 February 1931): 572.

⁹⁷ A Kennelmaid to Our Dogs, "Plea for Kennelmaids," 413.

⁹⁸ Fancier of 20 Years' Standing, "Kennel Pupils," 214.

⁹⁹ "Our Front Page Illustration: The Kennelmaids' College at Ardross, Ashford, Middlesex," Our Dogs, no. 112 (5 August 1938): 414.

from one correspondent, Juliette de Baïracli-Levi, who pointedly added "kennelmaid" after her name. Baïracli-Levi insisted that she "would never, no matter how good the analysis, feed commercial fish meal, at any rate to the kennel inmates whose health is most vital—i.e., puppies and brood bitches."¹⁰⁰ She was supported in her opinion by the medical columnist for the journal. Just as a good commercial breeder would ensure that her employees were adequately fed, the basic requisite of a good kennelmaid was her ability to feed dogs according to their scientifically defined nutritional needs. As already noted, kennelmaids were also expected to deploy medical knowledge. Kennel hygiene, canine feeding and medical care thereby began to be considered as part of the same scientific skill set, only attainable via commercially available lectures and courses or (better) professional training and contact with medically qualified practitioners. Thus one kennelmaid noted her own experience of a college in which trainees "took the whelping cases in turn, and held ourselves responsible for the welfare of the bitch and litter."¹⁰¹

During the 1930s, then, women not only participated in commercial dog breeding and its associated industries to a hitherto unprecedented extent but also gained authority as scientifically informed carers for dogs more generally. Despite their relatively lowly status, kennelmaids joined canine nurses as professional women who were recognized as possessing ("natural") maternal and affective abilities and (acquired) nutritional and otherwise scientific knowledge regarding dogs. Although both canine nursing and kennelmaid positions constituted means by which women might gain some measure of economic self-sufficiency, it is notable that neither profession seriously threatened (kennelmen notwithstanding) previously established occupations (such as veterinary practice) dominated by men. Domestic science constituted a means by which women were able to extend the bounds of female authority without directly challenging the convention of "separate spheres." In this respect, it enclosed dogs more thoroughly within a realm (the home) that had historically been understood as subordinate to masculine social and economic concerns. 102 Nevertheless, it should be remembered that at this time women were claiming greater control over and autonomy for their own lives in diverse ways. For example, some more radical women scientific reformers were beginning to actively redesign the domestic spaces in which women were expected to live and work. The final section of this paper shows how kennels as well as human homes came to be implicated in these architectural reforming aims.

HOME IS WHERE THE DOG IS: SCIENTIFICALLY ACCOMMODATING THE MODERN DOG

If milk foods were one of the most iconic products of domestic science in Britain, home shows were the sites in which the movement gained greatest cultural visibility. The instigation of shows such as the *Daily Mail*—sponsored Ideal Home Exhibition (1908–) constituted a new popular arena within which domestic scientific principles,

¹⁰⁰ Juliette Baïracli-Levy to Our Dogs, "Fish Meal for Dogs," Our Dogs, no. 102 (13 March 1936): 824.

¹⁰¹ A Kennelmaid to Our Dogs, "Kennel Pupils," Our Dogs, no. 82 (30 January 1931): 282.

¹⁰² Howell, At Home and Astray, chap. 2.

products, and services could be experienced and promoted. ¹⁰³ They thereby became places where different strands of the movement were brought together. Yet ideal home shows revealed the internal contradictions as well as commonalities of these strands. On the one hand, such shows were places in which a newly emerging suburban middle class could partake of established upper-middle-class trappings of respectability. At the same time, such shows promised that homes and home life would be radically transformed by the latest technologies: with the right products at hand, a housewife could, it seemed, manage her domestic duties quickly and efficiently without the need for traditional accoutrements such as paid assistance. Dogs, as their display and presentation as prizes at such shows demonstrates, became one means by which these contradictory visions of home life could be reconciled.

The presence of dogs at home exhibitions brought commonalities between new visions of popular home ownership and the upper-middle-class culture of the dog fancy to the fore. During the early 1930s, highly bred and monetarily valued dogs appeared at the Ideal Home Exhibition (staged at Kensington's Olympia) as well as less prominent events including the Manchester-based Brighter Homes Exhibition, sponsored by local newspaper the *Daily Dispatch*. Press representations of these shows emphasized the attendance of the great and the good, thereby incorporating aspiring homeowners into the upper-middle-class discourse of good breeding and respectability by association. At the opening ceremony of the Ideal Homes exhibition of 1932, Our Dogs "noticed" "two of the most distinguished lady canine experts ... Her Grace the Duchess of Newcastle and Lorna Countess Howe," and later remarked on the attendance of celebrity boxer Primo Carnera, who "professed himself an enthusiastic dog lover." 104 Dogs at the shows were similarly reported on in terms of their elite associations, whether with their owners or as canine "aristocrats" in their own right. For Our Dogs, the "great attraction" at the 1931 Manchester Brighter Homes Exhibition was "H.R.H. the Prince of Wales's Alsatian dog, Claus of Seale." 105 The previous year, the Daily Mail had highlighted that "championship dogs to the value of £2,000 to £3,000 are being shown daily" at the Ideal Homes Exhibition, "and the total value of the canine aristocrats shown ... will reach £50,000."106 The possibility that one might become the owner of an aristocratic dog, like the possibility of meeting one of the actual aristocrats who were trailed as VIP attendees, encouraged visitors to partake of a nostalgic simulacra of uppermiddle-class sociality that had been so important for the success of the Canine Nurses' Institute nearly two decades earlier.

Yet in addition to helping constitute this apparently more democratic vision of respectability, dogs were also enlisted into the didactic aims of such exhibitions as places of domestic science. In promotional articles, food manufacturers positioned

¹⁰³ Deborah Sugg Ryan, *Ideal Homes: Domestic and Suburban Modernism* (Manchester, 2018), especially chap. 4; Mark Whitehead, "Domesticating Technological Myth: Gender, Exhibition Spaces, and the Clean Air Movement in the UK," in "Spaces of Technology/Technologised Spaces," special issue, *Social and Cultural Geography* 9, no. 6 (September 2008): 635–51; Giles, *Parlour and the Suburb*, 109–12.

¹⁰⁴ A. G. Nichols, "The Ideal Homes Exhibition at Olympia," *Our Dogs*, no. 87 (8 April 1932): 97; "Ideal Homes Exhibition at Olympia, London: Carrera as Dog Lover," *Our Dogs*, no. 87 (15 April 1932): 165.

^{105 &}quot;Manchester Brighter Homes Exhibition," Our Dogs, no. 83 (15 May 1931): 464.

^{106 &}quot;Seen and Heard at Olympia: Homecraft Gossip from the Heart of Ideal Homeland," Daily Mail, 7 April 1930, 15.

themselves as responsible conveyers of nutritional wisdom to a presumably uninformed lay audience. Our Dogs again reported that visitors "at [London] Olympia ... will be given the opportunity of ... learning many useful things—that are not at present nearly as widely known or fully understood as they deserve to be-concerning the care of the dog, and the part that is played by this most faithful and intelligent four-legged companion and domestic pet in the proper realisation of the home ideal." ¹⁰⁷ If visitors wanted "advice about their dogs, or where to get the dog of their choice" at the 1933 London event, "the experts on Spillers' stand" were "there to help them." 108 Exhibitions were an opportunity for pet-food manufacturers to participate in the commercial culture of home-keeping. At the Scottish Ideal Home Exhibition in Glasgow, Spratt's emphasized "how the high standards of quality and useful excellence which distinguish Spratt's Meat-Fibrine Dog Foods are manifested in every other branch of Spratt's many-sided activities—in the Kennels and Appliances, the Dog Requisites and Remedies marketed by Spratt's ... [and] the transport, shipment, insurance, quarantine, and boarding of dogs." 109 Moreover, breeders profited from the promotion of their dogs as animals fit for the modern home. Our Dogs judged that by "the number of puppies sold" at the Manchester exhibition of 1932, Spratts was "rendering a great service to 'dogdom." 110

Participation in home exhibitions encouraged dog-food manufacturers and breeders to adopt new strategies of self-presentation. At the exhibitions, manufacturers portrayed themselves as exemplars of middle-class respectability and scientific domesticity as much as providers of alimentary produce, a trend most obviously manifest in the design of their stands. The contrasts between them reflected companies' differing interpretations of the modern domestic ideal. Thus in 1932, Spratt's stand in London was "beautifully designed in the Tudor style," reflecting their long-standing association with the elite dog fancy, whereas Spillers' stand of 1933 was "ultra-modern in design ... an eminent architect's conception of stand building in 2033 rather than 1933."111 Companies also highlighted the scientific nature of their manufacturing processes. Merrett's Ltd. of Cardiff gave a "practical demonstration of the method of manufacture" of their new "Rayrusks" (which occurred under "ultra violet rays") at the Crufts show of 1933."112 Dogs themselves (and especially puppies) were fully incorporated into these commodified visions. Thus at the London Ideal Homes Show of 1932, "Messrs. W.G. Clarke and Sons, Ltd., the manufacturers of the famous Melox Dog Foods," exhibited "a number of pedigree puppies of various breeds" and gave one away "every day as a prize in a simple competition." 113

¹⁰⁷ "The Dog's Place in the Ideal Home," *Our Dogs*, no. 78 (21 March 1930): 785. See also "Good News for Dog Owners," *Our Dogs*, no. 85 (2 October 1931): 20; "Brighter Homes Exhibition: Pedigree Dog Section, City Hall, Manchester," *Our Dogs*, no. 79 (9 May 1930): 319.

¹⁰⁸ "Spillers' Distinctive Display at the Ideal Homes, Olympia," *Our Dogs*, no. 91 (7 April 1933): 23. ¹⁰⁹ "Good News for Dog Owners," *Our Dogs*, no. 85 (2 October 1931): 20.

¹¹⁰ "The Brighter Homes Exhibition in Manchester: Dogs Still a Big Attraction," *Our Dogs*, no. 87 (15 April 1932): 164.

¹111 Nichols, "The Ideal Homes Exhibition"; "Spillers' Distinctive Display at the Ideal Homes, Olympia," *Our Dogs*, no. 91 (7 April 1933): 23.

¹¹² "The Exhibit of Merrett's Ltd., of Cardiff, at Cruft's Show," *Our Dogs*, no. 90 (24 February 1933): 502. See also "Merseyside Honours Spratt's," *Our Dogs*, no. 97 (3 October 1934): 31. On interwar connections between industrial work and domesticity, see Long, "Industrial Homes, Domestic Factories."

¹¹³ Nichols, "Ideal Homes Exhibition."

The performative capacities of dogs were thereby harnessed by food companies looking to expand into the newly significant economy of domestic consumption.

The prominence of dog shows at home exhibitions appears to have declined after 1933.¹¹⁴ The brief fashion for displaying dogs at these events nevertheless marks the fullest expression of their incorporation into scientific domestic ideals. The hugely successful Home Pets' Exhibition of 1934, organized by the *People* in aid of the London Hospital, demonstrates a continuing enthusiasm for exhibitions among pet owners of all stripes. This exhibition featured not only dogs but cats, rabbits, poultry, caged birds, and even a pet fox. In sharp contrast to the home shows, however, the biological capacities of animals were close at hand here: the event included a "chick factory" in which "a giant incubator which will hatch no fewer than 18,000 eggs during the three days." Depended upon less for their commercial image-making capacities, the bodies of the animals at this show could be allowed to appear as representatives of (of course still idealized) "natural" existence. The fascination of the reporter with the volume of eggs produced (rather than, for example, the chicks, or hens) nevertheless points to the pervasiveness of the productivist ideals of commercial manufacture at this time.

The idealization of homes as simultaneously sites of technologically enabled efficiency and places where "natural" relationships could be sustained fed into approaches to dog keeping more generally. Writing to *Our Dogs* in 1939, an anonymous correspondent signing as "A Kennelmaid" put forward a proposal for what she termed an "ideal kennel." Like the ideal parlors and kitchens that played such a significant role in 1930s domestic culture, this kennel was to be organized in accordance with what the writer referred to as "time-saving, rather than labor-saving" principles. ¹¹⁶ Such commentary referred of course to the time-and-motion studies around which reforming architects of domesticity such as Mrs. C. S. Peel and Elizabeth Denby had sought to center the design ethos of the period. ¹¹⁷ Like the ideal kitchens of the 1930s, the ideal kennel would maximize the efficiency of the work that went on within it.

"A Kennelmaid" expressed hope that her plan would enable the routine tasks of dog maintenance and care to be efficiently dealt with to make way for more fulfilling duties: "If cleaning and general routine can be disposed of as quickly as possible, the time saved will be used in extra exercising, grooming, individual feeding, show practice etc. All these things are apt to suffer in a badly planned kennel where valuable minutes are wasted." The kennel's centerpiece was a kitchen for preparing dog meals as well as the grooming and bathing of dogs. Further spaces spiraled outwards from the kitchen: a whelping room would be "placed next to the kitchen for obvious reasons," following which would be puppy kennels, with spaces for adult dogs beyond these. 118 The long-emerging scientific ethos of canine care thereby began to find expression in schemes for the organization of breeding dogs' living environments. The work of caring for dogs, like

¹¹⁴ "The Good Companions of Ideal Homes," Our Dogs, no. 91 (7 April 1933): 29.

^{115 &}quot;Greatest Gathering of Home Pets the World Has Ever Known," People, 9 December 1934, 9.

¹¹⁶ A Kennel Maid, "My Ideal Kennel," *Our Dogs*, no. 116 (18 August 1939): 484. The trend appears to have originated in the United States. See Grier, *Pets in America*, 304–12; Richard V. N. Gambrill (with J. C. Mackenzie), *Sporting Stables and Kennels* (New York, 1935).

¹¹⁷ Darling, "A Citizen as Well as a Housewife," 49–57; Llewellyn, "Designed by Women and Designing Women," 42–60.

¹¹⁸ A Kennel Maid, "My Ideal Kennel," 484.

that for the home more generally, would be alleviated by attending to and improving the material environment. Kennels would no longer be "intricate mass[es] of wire runs" but ordered and orderly places in which bitches, puppies, stud dogs, and kennelmaids could work together in harmony.

Despite its seeming originality, the "ideal kennel" proposal drew critical comments from fellow dog fanciers. Significantly, these centered not on the need to reform kennel design per se, but on the extent to which the writer had focused on alleviating the work of kennelmaids rather than catering for the needs of dogs. A Kennelmaid's most vehement critic, one Mrs. Normandy Rockwell, noted that she herself made "a hobby of planning houses, kennels and stables," and that the proposed scheme seemed to "be designed for the saving of the kennelmaid's legs" rather than creating a healthy environment. The square layout of the original plan, Rockwell contended, would mean that "half the dogs would be boiled alive in summer and the other half frozen to death in winter" and would create "air-stagnation." She could "imagine nothing more boring, and nothing more likely to teach a dog to sit and bark aimlessly from that boredom, for it to have nothing but yard and other kennels to look at," and suggested that this would "make for shyness [in the dogs] too." Rockwell then offered her own bucolic vision, which had more in common with the sales pitches of suburban estate agents than the schemes of domestic architects. 120 Individual kennels would be made of wood and placed on wheels so that they could be moved around a countryside paddock as the need arose. There would be separate areas, one for adult dogs and another for "puppies, bitches nursing puppies, and bitches in season." Visiting bitches would be hidden away from long-term residents behind a screen of trees. Notably, in a subtle departure from A Kennelmaid's concern with spatial organization and kennelmaid efficiency, Rockwell placed her faith in domestic appliances. Her quarters would contain not only a kitchen but a separate room for a hospital, and both would be have all the latest devices: in the kitchen, "a hired electric cooker, and kettle, sink with hot and cold water, cupboard, food racks, and such gadgets as anyone can plan for themselves. But not a meat safe [as A Kennelmaid had suggested] with its attraction for flies, but a refrigerator." The hospital would have an attached surgery and be equipped with electric light and heat. 121

These different visions of kennel construction highlight the tensions at play in the new domestic scientific ideal of dog-keeping. On the one hand, A Kennelmaid's design demonstrated keen awareness that dogs demanded time and effort from their carers and that the need to provide sufficient, regular food and exercise as well as appropriate shelter could be strain on at-times meager resources. Rockwell's vision, in contrast, placed its faith in tools that promised to reduce the effort that caring for a dog required. Ultimately, however, both Rockwell and A Kennelmaid accorded in their belief that canine care was something that should be guided by scientific principles. Just as the redesign of spaces in which lower-middle-class housewives were expected to work was part of a broader commitment to scientifically informed care of the family, the scientific redesign of kennel architecture would

¹¹⁹ A Kennel Maid.

¹²⁰ Peter Scott, The Making of the Modern British Home: The Suburban Semi and Family Life between the Wars (Oxford, 2013), 108–27.

¹²¹ Mrs. Normandy Rockwell, "Another Ideal Kennel Plan," Our Dogs, no. 116 (25 August 1939): 551.

create a better life for domesticated canine inhabitants. Similarly, by introducing the latest household gadgets to the practice of dog-keeping, both dogs and their carers would begin to enjoy (by implication at least) the same personal freedoms as those being promised to lower-middle-class consumers. These plans, then, must be understood as part of a broader trend in which domestic science was coming to influence home life in all of its aspects. In addition to positioning science as a guiding light in matters of care, moreover, it encouraged those who adopted its principles to establish a greater degree of control and authority over the spaces in which they lived. The scientifically domesticated dog was not only an intellectual creation: it also symbolized the potential for personal liberation that this historically highly specific vision of womanhood seemed to hold at the start of the twentieth century.

CONCLUSION

Consideration of the ways in which domestic science contributed to the creation of new objects of moral and material reform has focused exclusively on human homes and lives. By attending to the ways in which the movement encompassed nonhuman animals (especially dogs), this article has shown that domestic science was a more ambitious project than has hitherto been appreciated. While industrialists (in the shape of food and medicine manufacturers) and media organizations (in the shape of home-show sponsors) may have been important for the ongoing viability of the movement, the reconstitution of domestic dogs as scientifically and medically cared for animals was primarily due to the efforts of women entrepreneurs, home workers, and pet-keepers. These women sought to balance existing expectations regarding their capacities as emotional laborers and moral guardians with the implementation of new forms of learning based on the findings of nutrition, hygiene, time and motion studies, and other associated sciences. Canine nurses, kennelmaids, breeders, and owners transformed dogs into scientifically constituted beings suited to the same principles of care as human family members. Domestic science, as the above discussion demonstrates, was not only a significant moment in the reformation of human family life. Nor was it simply a short-lived (and relatively conservative) mode by which women gained greater domestic autonomy. The movement also helped cultivate an ethos of scientific care that extended beyond human bodies to encompass animal life more generally. In this latter sense, it constitutes a critical moment in the formulation of present-day attitudes and beliefs regarding both human and animal health and well-being.