

# The Origin and Consequences of Canine Eugenics

JANUARY 20, 2015 **JASON MURPHY**

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Since before recorded history man has had at his side a noble squire of unwavering loyalty and sunny disposition. Kept not only for the useful work they could perform but also the companionship they provided, the humble canine has truly earned its title of “man’s best friend.” As mankind expanded and evolved to meet new challenges across the globe, so to was the nature of his canine companions altered. Humans selected those dogs who best performed the desired work and continued their lineage, the result of which was a great number of breeds each suited to a task or climate. This remained the status quo until the industrial revolution shook Victorian England to its very core. As the emerging middle class sought to establish its own social identity and pastimes distinct from those practiced by the lower and upper classes, dogs were increasingly kept solely as pets and no longer for their ability to work. As the practice expanded in both Europe and America, breed and kennel clubs were formed to control and regulate the breeding of purebred dogs. These clubs established breed-specific standards of characteristics which have radically altered the physical and genetic makeup of dogs as a whole over the last 150 years.

In May of 1877 America’s first ever dog show was held in New York City at what would later become Madison Square Garden. It was a massive spectacle, drawing 1500 contestants and featuring \$5000 in prizes (almost \$130,000 in today’s dollars) awarded to the winners.<sup>1</sup> This fantastic event was the culmination of a sea change in America which had its origins across the Atlantic. In the mid-1800s the industrial revolution had created the first middle class in a society where class structure was so rigid it may as well have been carved in stone. To maintain the distinctions between those on different rungs of

the social ladder, the bourgeois sought to establish a collective group identity which borrowed elements from both the upper and lower classes but which were distinctly their own. The English aristocracy had been breeding both horses and livestock for hundreds of years, but the middle class lacked both the physical and financial resources to engage in the practice. Instead they chose a less expensive animal, the familiar canine, and applied the same breeding practices in use by the aristocracy they sought to emulate.<sup>2</sup> Those breeding practices were in fact not much older than the middle class itself: until the late 18<sup>th</sup> century no concise effort had been made to develop groups of animals with specific characteristics. That changed when Robert Bakewell attempted to “enhance the strength of the Shire horse, the meat of the Leicester sheep, and the beefiness of the Longhorn cow” through formalized methods of intense inbreeding.<sup>34</sup> The legacy of Bakewell’s endeavors was the concept of the breed, how to maintain that breed, and the notion that animals of a particular breed and pedigree were superior to those without.<sup>5</sup> This notion was slow to catch on in the horse and livestock worlds, but would later have profound impacts on the breeding of dogs.

It only took until the end of the 1850s for interest in England’s newest pastime to come to a head. In June of 1859 the world’s first dog show was held, featuring sixty entries of pointers and setters. The following fourteen years saw a series of missteps and scandals, but public interest (reinforced not insignificantly by Queen Victoria’s love of dogs) remained strong enough to keep the pastime alive.<sup>6</sup> In April 1873 the British Kennel Club was established to correct the mistakes of the previous fourteen years and to serve as a regulatory and enforcement body concerning the breeding and showing of purebred dogs, now called dog fancy. One of the Kennel Club’s earliest attempts at regulation was an echo of Bakewell’s legacy, a compilation of the lineages of all purebred dogs under the club’s oversight.<sup>7</sup> This Stud Book was a matter of public record, and served as a means by which the quality of any particular canine could be measured based on the quality of its ancestors. This provided a yardstick by which dog fanciers could measure their relative status, and soon the quality of one’s dog was seen as a reflection of the quality and standards of its owner.<sup>8</sup> By the 1870s dog fancy had crossed the Atlantic and become

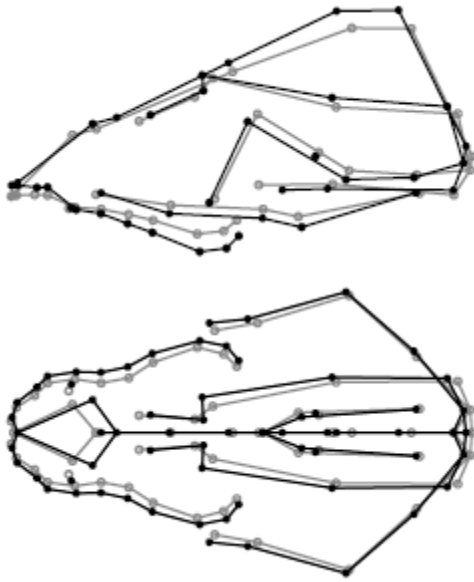
well established in North America, leading to the wildly successful Westminster Dog Show mentioned above which continues to this day. The pattern of events following England's first dog show repeated themselves in North America, leading to the establishment of kennel clubs and the publishing of a studbooks.<sup>9</sup> North America's first kennel club, the Westminster Kennel Club, was formally incorporated in December of 1877 with the stated goal, among other things, "to study and to improve the breed of dogs."<sup>10</sup> This concept of improvement set the trajectory for the dog world over the course of the next century.

By the third Westminster Dog Show held in 1879 the concept of pedigree had already become firmly entrenched in the dog fancier psyche. The New York Times article describing the event places particular emphasis on the quality of the entrants, noting their long and prestigious lineages.<sup>11</sup> In fact the title of the article, "Blue-Blooded Animals," aligns these champions with the supposedly superior ancestry of royalty and the ruling elite. Perhaps the more appropriate comparison would be to the inherited genetic maladies suffered by the blue-bloods, as Bakewell's legacy and the desire for continual improvement in dogs had already begun to take its toll. Only a quarter century after America's first dog show some in the fancy began questioning the close inbreeding required to maintain the characteristics now expected of show dogs. An article published in the London Kennel News in 1902 stresses the importance of a "cross out," breeding to a less-related lineage, to maintain the constitution of the line and lessen any inherited defects.<sup>12</sup> Unfortunately this advice seems to have fallen on deaf ears, and the continued breeding of dogs for exclusively show purposes led to expansive divergence between those show dogs and their working counterparts. A prime example of this phenomenon can be seen in the St. Bernard: once a noble working dog, the modern version has been oversized, had it's faced squished in, and bred for abundant skin.<sup>13</sup>



*Fig 1: Saint Bernard Dog, 1915 vs. Today*

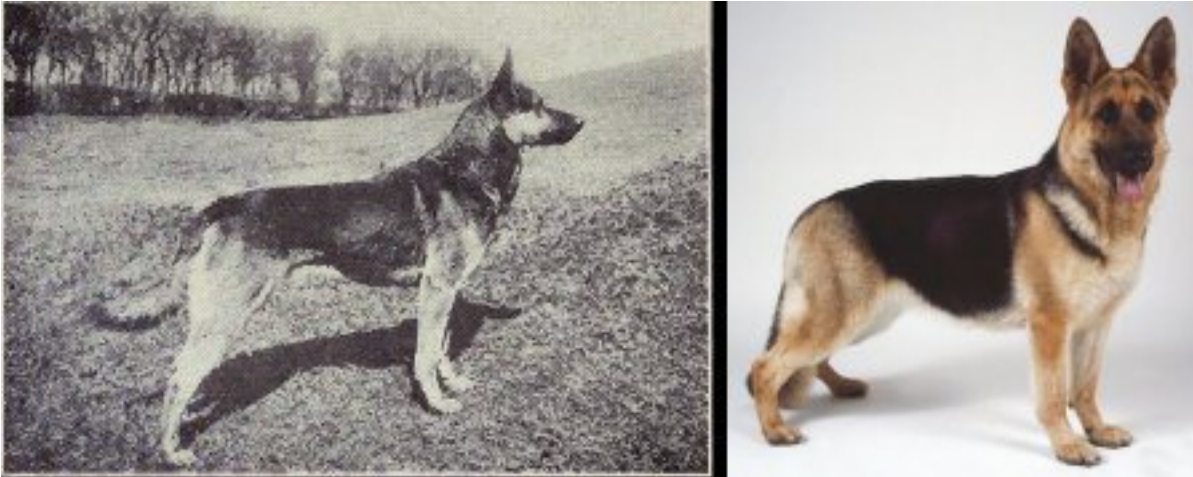
For conciseness, consider the heads of the two dogs in Illustration 1. The shortening of the muzzle, broadness and roundness of the head and the overall “very powerful and imposing” appearance are listed as desirable traits by the St. Bernard breed standard, which is the standard to which show dogs are judged. In fact, current research has found no reason for this change other than the artificial selection by man, guided by breed standards.<sup>14</sup> Perhaps the most astounding aspect of this transformation is the rapidity with which it occurred. These photographs are separated by only a century, yet the two have as much in common as housecats and leopards.



*Fig. 2: St. Bernard Skull. Grey lines show the historical skull shape, while black lines show the modern version.*

Though the modern St. Bernard is radically different from the version that may have been seen at the third Westminster Dog Show, it was not the breed standards of 1897 that produced the version seen today. The evolution of breed standard over the 150 years of dog fancy can be seen as an extension of the very conditions that created dog fancy in the first place. England's middle class valued dogs solely for their beauty and companionship and were unconcerned with the useful traits their ancestors may have had. This led to the creation of a parallel system of classifying dogs: the working class dogs, bred for their usefulness, were seen by those in the fancy as inferior to show-quality dogs which were bred to meet exacting standards of beauty. Of course over time this led to wide divergence between the working and show dogs, until those bred for show displayed almost none of the useful traits their ancestors had

possessed.<sup>15</sup> <sup>16</sup> The pace of this divergence accelerated rapidly after World War II, when the expansion of the American suburban population began demanding dogs en masse. These new suburbanites held Bakewell's opinion that purebreds were superior to those without pedigree, that being purebred guaranteed quality, and therefore the demand for purebred dogs exploded. To produce so many dogs that conformed to breed standards which had tightened under the jurisdiction of the kennel clubs, pedigree dogs were bred more often and more closely than ever before.<sup>17</sup> This was to have disastrous consequences for dogs as a whole, a legacy that plagues almost every breed of dog that exists today. The enduring result of the explosion in purebred dog breeding following World War II is a sad one, a tale of suffering endured on many levels by man's longtime companion. Initially, in order to meet the demands of America's strengthened middle class, puppy mills sprang up all across the United States. Not subject to any sort of regulation other than the breed standards to which they were trying to conform, the mills churned out animals whose lives were often miserable and short.<sup>18</sup> Those animals who survived, or perhaps came from another source, faced a problem that had been brewing since the earliest days of the fancy. Today, almost all purebred dogs suffer from some sort of genetic malady, and worse still most of these can be linked directly to breed standards. The German Shepherd Dog alone is predisposed to almost eighty genetic disorders, eighteen of which are directly linked to or exacerbated by conformation to breed standards.<sup>19</sup> Attempts have been made to reduce the severity of these disorders in some breeds of dogs, but have largely been met with derision by fervent adherents to the breed standards for, in eliminating the genetic legacies of their forebears, the pedigree of those lines has been polluted, and they lose the prestige associated with their breed.



*Fig. 3: German Shepherd Dog, 1915 vs. Today*

Over its 150 year history, dog fancy has evolved from a pastime exclusive to the middle-class into one that has touched lives across the globe. Emerging from the peculiar cultural system of Victorian England, the breeding of dogs for show spread from Europe to America and has remained massively popular ever since. Unfortunately this practice, guided by human vanity and desire for improvement, has largely been to the detriment of man's canine companions. Illness and genetic disorders are the result of a century's worth of breeding for beauty rather than skill, and dog fanciers continue to oppose measures to alleviate the problem. Through efforts to improve dogs in their eyes, fanciers have instead stripped away those qualities which first brought man and canine together. While he still maintains his unwavering loyalty and sunny disposition, man's best friend is now only a shadow of his former self.

#### Footnotes

<sup>1</sup>“The Westminster Dog Show,” *New York Times*, Mar. 28, 1877. ProQuest.

<sup>2</sup>Ritvo, Harriet. “Pride and Pedigree: The Evolution of the Victorian Dog Fancy.” *Victorian Studies* 29, 2 (Winter, 1986): 228.

- 3Derry, Margaret Elsinor. *Bred for Perfection: Shorthorn Cattle, Collies, and Arabian Horses since 1800*. Baltimore: Johns Hopkins University Press, 2003, 3.
- 4Ritvo, "Pride and Pedigree," 228.
- 5Derry, *Bred for Perfection*, 4.
- 6Derry, *Bred for Perfection*, 50-51.
- 7Jaquet, Edward William. *The Kennel Club: A History and Record of its Work*. London: Kennel Gazette, 1905, 3-7.
- 8Ritvo, "Pride and Pedigree," 229.
- 9Derry, *Bred for Perfection*, 58.
- 10"The Westminster Kennel Club," *New York Times*, Dec. 16, 1877. ProQuest.
- 11"Blue-Blooded Animals," *New York Times*, Mar. 30, 1879. ProQuest.
- 12"Hints About Breeding," *New York Times*, Apr. 20, 1902. ProQuest.
- 13Elegans, Caen. "100 Years of Breed 'Improvement,'" *Science and Dogs*. 29 Sept. 2012.
- 14Drake, Abby Grace and Klingenberg, Christian Peter. "The Pace of Morphological Change: Historical Transformation of Skull Shape in St Bernard Dogs." *Proceedings Of The Royal Society B-Biological Sciences* 275(1630), (Jan., 2008): 71-76.
- 15Derr, Mark. *Dog's Best Friend: Annals of the Dog-Human Relationship*. Chicago: University of Chicago Press, 2004, 199-200.
- 16Derry, *Bred for Perfection*, 61-65.
- 17Derr, Mark. *Dog's Best Friend: Annals of the Dog-Human Relationship*. Chicago: University of Chicago Press, 2004, 223-224.
- 18Derr, Mark. *Dog's Best Friend: Annals of the Dog-Human Relationship*. Chicago: University of Chicago Press, 2004, 223-224.
- 19Asher, Lucy; Diesel, Gillian; Summers, Jennifer F.; McGreevy, Paul D.; Collins, Lisa M. "Inherited defects in pedigree dogs. Part 1: disorders related to breed standards." *The Veterinary Journal* 182, 3



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##### Illustrations

Figure 1. Saint Bernard Dog, 1915 vs Today,

<https://dogbehaviorscience.wordpress.com/2012/09/29/100-years-of-breed-improvement/>

Figure 2. Historical change of skull shape in St. Bernard dogs. Drake, Abby Grace and Klingenberg, Christian Peter. "The Pace of Morphological Change: Historical Transformation of Skull Shape in St Bernard Dogs." *Proceedings Of The Royal Society B-Biological Sciences* 275(1630), (Jan., 2008): 71-76.

Figure 3. German Shepherd Dog, 1915 vs Today,

<https://dogbehaviorscience.wordpress.com/2012/09/29/100-years-of-breed-improvement/>