



TRAINING TECHNOLOGIES

Science, Humans and Dogs in the Age of Positive Dog Training

by Ane Møller Gabrielsen

The practices of dog training influence the lives of numerous dogs and dog owners, but have not received much academic attention in terms of empirical studies. Both humans and dogs are shaped through these practices, but as the conditions are partly determined by already established networks, it is not simply a matter of the trainer's personal choice. In order to explore the entanglements of technology, gender, humans, and dogs in dog training practices, this article applies a material semiotic perspective inspired by John Law and Donna Haraway. Taking the changes towards "positive training" and the technology of clicker training as its point of departure, the article explores the emergence and effects of different training practices and the networks that provide their conditions.

Keywords: dogs, behaviorism, animality, material-semiotics, enactment

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Introduction

How should one train a dog? The different answers to this question tend to cause heated debate, possibly because dog training practices are by no means constricted to teaching specific behaviors at a training class. Dog training also aims at ensuring that a dog responds to a person's wishes and obeys commands in everyday life. In this way, decisions relating to how one should train a dog and how one should respond when a dog fails to follow orders form the basis of the dog–human relationship. As there is an estimated 500,000 dogs in Norway, alone (Norsk Kennel Klub 2012b), dog training practices impact the lives of a considerable percentage of the Norwegian population. Still, hardly anything is known about dog owners, their practices, or their dogs. This lacuna is not unique to Norway; dogs in general – and dog training in particular – have received little attention within academia and practically none within science and technology studies. The latter gap is particularly striking, as science and technology play important roles in dog training practices.

Historically, dog training has often implied a certain degree of force and punishment. But since the 1990s, European and American dog training has turned towards reward-based practices that are often referred to under the umbrella term “positive training” (Fisher 2009^[1]; Hiby et al. 2004^[1]; Irvine 2008^[1]). As the American behaviorist Karen Pryor writes in her book, *Reaching the Animal Mind* (2009^[1]):

Now we have a new way of dealing with animals. Out of real science we've developed a training technology. Like any good technology it's a system that anyone can use. The basics are easy to learn. It works with all animals (and that includes people). It's fast. What used to take months, the traditional way, can now happen in minutes. It's completely benign; punishment and force are never part of the learning system. And it produces real communication between two species. (Pryor 2009^[1], 2)

Pryor is known as the woman behind “clicker training” – a popular and widely used form of non-violent, or “non-aversive,” dog training. The above quote, in which Pryor claims that dog training is a technology, serves as the point of departure for this article. The combination of the terms “dog training” and “technology” may bring to mind electric shock collars and similar devices; but if technology is defined as “the organization of knowledge, people, and things to accomplish specific practical goals” (Edelbach et al. 1999^[1], xi), then dog training technologies must also include assemblages of tools,

techniques, and knowledge that are applied through practice in order to make dogs behave in a desired manner.

Further, Pryor states that new dog training technology is based on “real science”; that is, the behaviorist learning psychology that was developed by Burrhus Frederic (B. F.) Skinner in the 1930s. The route of Skinner's experimental science from the laboratory to modern-day Norwegian dog training practices will be the main focus of the first part of this article. What events took place in order for this to happen? What new relations needed to be established?

Finally, Pryor asserts that the new training technology can also be applied to humans. In other words, clicker training does not seem to presuppose a fundamental difference between humans and other animals. However, differences within humans are emerging. As I have argued elsewhere, there is an assumed gender divide in the choice of training methods (Gabrielsen 2016^[1]). The idea that something uniquely feminine leads women to choose “positive” training methods, such as clicker training, is compelling. However, instead of arguing that women are more likely to choose methods that do not involve pain and punishment due to their soft and feminine nature, I will explore the way in which gender has become part of the training network and is produced and performed through training technologies.

In other words, this article will focus on the entanglements of science, technology, humans, and dogs in dog training practices. How have different dog training practices come about and how have these various methods enabled the enactment of particular dogs and humans? The article is based on my PhD thesis, *Makt og mening i hundeholdets konfliktsoner* (“Power and Meaning in Conflicted Zones of Dog Keeping”) (Gabrielsen 2015^[1]), in which I explore different dog training practices and their effects in a Norwegian context. The material consists of Norwegian dog training literature, online texts from dog training websites, and interviews with dog owners and dog trainers. All of the quotes from this material have been translated into English from Norwegian. In the first part, “Translating Behaviorism,” I will focus on the science of behaviorism and the construction of a new Norwegian dog training network. In the second section, “Training Technologies as Performative Practices,” I will pay closer attention to the humans and dogs that emerge from specific training technologies.

A Material Semiotic Approach

Animals are no strangers to science and technology studies (STS), and especially not to actor-network theory (ANT), due to its notion of symmetry and its inclusion of non-human actors (Law 2009^[1]). One famous example of the inclusion of animals in this field is

Michel Callon's classic text about the domestication of scallops in St. Brieuc Bay (1986^[1]), wherein the symmetrical approach includes the scallops as actors, along with the fishermen and scientists. More recent works in ANT have abandoned the rather narrow

¹ Translated into Norwegian and published by Canis publishing in 2012.



focus on the construction of networks in favor of a more performative material semiotic approach, wherein entities are given form and meaning through enactment:

Active entities are relationally linked with one another in webs. They make a difference to each other: they make each other be. Linguistic semiotics teaches that words give each other meaning. Material semiotics extends this insight beyond the linguistic and claims that entities give each other being: that they enact each other. (Law et al. 2008^[9], 58)

In the material semiotic practice approach of the sociologist and STS scholar John Law, animals are understood as the effects of practices (i.e., heterogeneous patterned sets of relations extending beyond the site) (e.g., Law et al. 2012^[9]; Law et al. 2011^[9]; Law et al. 2008^[9]). As Law and Mara Miele state in their chapter "Animal Architectures": "[A]nimals are an effect of different, complex, and uncertainly related logics of materially heterogeneous practice. That is what an animal is in a performative theory of practice, nothing more and nothing less" (Law et al. 2011^[9], 59). Through these patterned sets of relations, the characteristics of both animals and humans emerge:

Animals are not in and of themselves furry, scaly, elusive, prone to sickness, endowed with a life-cycle, loyalty, and all the rest. They develop attributes such as these in relation to people who are also, and at the same time, being given form and endowed with relational qualities and attributes. In short, practices enact people and animals together. (Law et al. 2012^[9], 335)

It seems uncontroversial to claim that dogs are the effects of diverse and materially heterogeneous practices. For instance, the notion of "pure-breeding" hinges on a complex system of practices that includes dog showing, breeding, registering, microchipping, blood sampling, and so on. The effects of these practices are "pure-bred" dogs of various types. These dogs are modelled after breed standards that depict an imaginary ideal, but emerge as living, breathing beings. However, according to material semiotic practice theory, these living dogs are also enacted through practice – for instance, the practice of dog training. And it is quite obvious that this practice also does something: through the practice of training, a dog learns how to interact with its surroundings in ways that humans find adequate.

Translating Behaviorism

Clicker training is often presented as a scientific training method, with terms such as "operant conditioning," "conditioned reinforcer," "reinforcement frequency," and "stimulus control," frequently used in the literature (e.g., Egtvedt et al. 2006^[9]). The scientific origin of this training method is behaviorist learning psychology, which emerged at the beginning of the twentieth century as an attempt to position psychology as a "purely objective experimental

Both humans and dogs come into being through practice, but the conditions for what and whom are allowed to become are partly determined by established networks, and are not simply a matter of the trainer's personal choice. As feminist STS scholar Karen Barad notes, "[p]erhaps intentionality might better be understood as attributable to a complex network of human and nonhuman agents, including historically specific sets of material conditions that exceed the traditional notion of the individual" (Barad 2007^[9], 23). In order to map the networks that constitute the conditions for contemporary dog training practices, I will turn to the origin of material semiotics: actor-network theory. Inspired by the aforementioned text by Callon, I will describe the formation of a new dog training network using the notion of "translation": "all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or a force takes, or causes to be conferred on itself, authority to speak or act on behalf of another actor or force" (Callon et al. 1981^[9], 279). Callon divides these processes into four phases, or moments: "problematization," "interessement," "enrollment," and "mobilization." Through these phases, actors assemble networks by establishing themselves as indispensable, defining other actors, and speaking on behalf of these actors (Callon 1986^[9]). By examining the formation of new relations between elements – including dog owners, science, and dogs – I will explore the conditions for the current enactment of dogs and humans through dog training practices.

Law's approach to material semiotics does not distinguish between living beings and inanimate objects. However, it is usually the human subjects who ultimately define the terms for meaning-making, and the embodied consequences for both human and non-human actors are seldom given much consideration. In order to enrich my material semiotic analyses, I will apply the feminist philosopher of science Donna Haraway's concept of "becoming with" from her book *When Species Meet* (2008^[9]), as it captures the lived stakes of practices involving living beings: "If we appreciate the foolishness of human exceptionalism, then we know that becoming is always becoming with – in a contact zone where the outcome, where who is in the world, is at stake" (Haraway 2008^[9], 244, emphasis in the original). Further, "becoming with" also takes the embodied materiality of enactment into account: "Partners do not pre-exist their relating; the partners are precisely what come out of the inter- and intra-relating of fleshly, significant, material-semiotic being" (Haraway 2008^[9], 165).

branch of natural science" (Watson 1913^[9], 158). According to its founder, John B. Watson, psychology should only concern itself with two things: predicting a response to a given stimulus and identifying the stimuli that has caused a certain response (Teigen 2015^[9]). However, in the 1930s, Skinner claimed that organisms do not simply passively react to external stimuli. On the contrary, behavior often aims at achieving certain effects: organisms actively



operate on their environment in order to receive certain stimuli and to avoid others. Behaviors that lead to pleasant consequences are more likely to be repeated, and Skinner termed stimuli that increase the frequency of a behavior “positive reinforcers” (Skinner 1938^[6]).

Skinner was primarily interested in the potential application of behavioral psychology to human behavior, and believed that the principles he discovered were universal (Skinner 1963^[6]). However, his findings were generally derived from rat experiments, which occurred in purpose-built “Skinner boxes” in the laboratory. These experiments did not involve direct human–animal interaction, but when Skinner and some of his students were involved in training pigeons to lead missiles during World War II, they discovered that they were able to shape new and complex behaviors using a “conditioned reinforcer” (Skinner 1958^[6]). The principle behind the conditioned reinforcer originates in the Russian physiologist Ivan Pavlov’s famous experiments, in which he caused dogs to salivate by connecting seemingly neutral stimuli (a ringing bell) with food. This process was labelled “classical conditioning” (Teigen 2015^[6]). By associating a certain signal with food and using this signal to mark behaviors that resembled the desired ones, Skinner and his

students managed to train pigeons to perform complex behaviors such as playing ping-pong with each other (Skinner 1958^[6]).

Skinner described dog training using a conditioned reinforcer in his 1951 article, “How to Teach Animals” (Skinner 1951^[6]). Still, it was another science of behavior that would influence dog training. In the 1950s, the American behaviorists were challenged. While the behaviorist psychologists had been experimenting on animals in laboratories, European zoologists had been studying animal behavior in nature. In 1935, the Austrian zoologist Konrad Lorenz published his famous work on instinctive behavior in geese, and for this reason, 1935 has since been regarded as the year in which the science of “ethology” was born. According to the ethologists, ethology – and not behaviorism – was the real biological science of behavior (Burkhardt 2005^[6]). The European ethologists claimed that true knowledge of animal behavior could never be obtained from experiments with a couple of species in the laboratory (Tinbergen 1963^[6]), and they worked hard to distance themselves from what they condescendingly termed the “rat psychologists” (Burkhardt 2005^[6]). Their efforts were successful; by the beginning of the 1960s, behaviorism was more or less forgotten, while Lorenz received the Nobel Prize in 1973.

Dog Training as Applied Science

Ethology soon made its way into dog training; the first book on dog behavior for a general audience is said to have been Lorenz’s *Man Meets Dog* (Lorenz 2002[1949]^[6]). In this book, Lorenz claimed that the special bond between humans and dogs was the same as between a wolf and the pack leader, and explained how an owner could punish a dog the natural way by shaking it by the neck (Lorenz 2002^[6]). Lorenz’s ideas about dogs and wolves were further developed by his student, Eberhard Trumler, and were frequently reproduced in popular books on dog training. In Norway, these ideas remained present in much of the literature on dog training published between 1970 and 2000 (e.g., Nordenstam 1979^[6]; Steen et al. 1987^[6]; Trumler 1975^[6]). In this literature, the human family was presented as the equivalent of the wolf pack and the owner was guided to assume the position of pack leader in the eyes of the dog. In other words, the owner was to become a dog – or rather, to become a wolf. As Johan B. Steen and Erik Wilsson wrote in their dog training manual: “The more ‘wolflike’ we are able to act, the greater possibility of achieving calm and harmonious dogs that cooperate with us and are obedient because they view us as the most competent” (Steen et al. 1987^[6], 24). The best way to achieve this, they continued, was to display power in the shape of pain and punishment: “Some dogs need to be really shaken before they are willing to accept that they have lower status than the trainer” (Steen et al. 1987^[6], 131). The correction and punishment used in these training practices thus served a double function: correcting unwanted behavior and reinforcing the owner’s leadership by using language dogs were thought to instinctively understand – aggression, force, and dominance.

Although this type of dog training has been categorized as brutal and baseless by its opponents, it is grounded in the scientific knowledge of animal behavior generated by the twentieth century ethologists. In contrast to the behavioral psychologists at this time, the ethologists were concerned with innate instincts. Lorenz, in particular, highlighted aggression as a necessary instinct for survival (Lorenz 1966^[6]). The social organization of animals was understood in terms of aggression and dominance hierarchies, and although these assumptions have since been debunked and revised (e.g., Mech 1999^[6]), they represented the dominant scientific views of the time. Thus, ethology-based dog training techniques, with their references to wolves, dominance, and leadership, were attempts at training dogs according to the ethological view of nature. Although the principles of positive reinforcement were known, they were only considered adequate for teaching new behaviors. When obedience was the issue, only the proper display of leadership was thought to suffice (e.g., Nordenstam 1979^[6]; Steen et al. 1987^[6]).

In 1993, the domestic dog was reclassified as a separate species (*Canis familiaris*) from a subspecies of wolf (*Canis lupus familiaris*) (Wilson et al. 1993^[6]). Dogs were thus scientifically recognized as wolves. One might assume that this reclassification would have supported existing training practices. However, around this time, Skinner’s non-aversive reinforcement principles resurfaced in the dog training discourse. In other words, while biology reclassified dogs as wolves, wolves started to disappear from dog training.



In *When Species Meet* (2008^[1]), Donna Haraway lists Karen Pryor as the most important single person for spreading “positive” (i.e., non-aversive) training methods to both amateur and professional dog training communities (Haraway 2008^[1]). In the beginning of the 1960s, Pryor and her husband founded an oceanarium in Hawaii, where she was responsible for training dolphins. For this task, she received a training manual based on Skinner’s principles of operant conditioning, and she managed to teach the dolphins to perform advanced and complex behaviors on command (Pryor

2009^[1]). In 1984, Pryor tried to advocate the Skinnerian principles of positive reinforcement to the public through her book *Don’t Shoot the Dog*. While the book was not about dog training, the title attracted the interest of dog owners and Pryor discovered a potential market. In the 1990s, she and a dog trainer collaborated to give classes and lectures using a “cricket” – a toy that made a metallic “click” when pressed. Soon thereafter, they produced their own “clickers” for dog training, and clicker training was born (Pryor 2002^[1]).

Assembling a Positive Network

In 1998, Norwegian dog trainers Cecilie Køste and Morten Egtvedt founded the company Canis and launched a new dog training magazine of the same name (Køste et al. 2001^[1]). In 2001, they published a book, *Klikkertrening for din hund* (“Clicker Training for Your Dog”), based on Pryor’s principles, and in 2002, they published their own Norwegian translation of Pryor’s *Don’t Shoot the Dog* (Pryor 2002^[1]). These events marked the beginning of a new era in Norwegian dog training. According to the ethnologist Bjarne Sverkei, one of the rare scholars who has written about Norwegian dog training practices, the Norwegian dog training landscape of the 1990s was characterized by a division between “soft” and “hard” schools (Sverkei 1998^[1]). These schools differed in regards to level of force, but agreed on the importance of leadership and “natural” wolf behavior (Sverkei 1998^[1]). Still, Køste and Egtvedt were able to establish Canis as an important and powerful actor by forging new relations between people, technology, and dogs.

The process of translation requires actors to make themselves indispensable, define other actors, and speak on behalf of these actors (Callon 1986^[1]). Canis proved to be skilled in all three tasks. In 2003, the company launched an instructor training program, and by 2014, approximately eighty Canis instructors were running franchise branches of the Canis dog school in Nordic countries (Canis.no 2014^[1]). A professional Canis clicker training network was thus stabilized through formal agreements and financial transactions. However, Canis soon managed to create an even larger alliance by establishing a structure for dissemination that was also available to other actors. Through Canis Magazine, Canis publishing, and Canis.no, the company managed to enroll and mobilize dog training actors who opposed the brutal – but popular – methods of the “hard” school.

Canis Magazine aimed at being the leading dog magazine in the Nordic countries, and it featured articles written by academics and professionals (Køste et al. 2001^[1], 121). However, the biggest advantage of Canis was its dominance in another medium. Karen Pryor once commented that the rapid spread of clicker training in the 1990s was due in large part to the Internet (Pryor 2002^[1]), and Canis.no would go on to become the largest Norwegian website

for dog owners. On the website, Canis marketed its training classes, its books, and its magazine, but it also provided free articles about dog training and behavior, an expert panel that answered users’ questions, and an online discussion forum.

The most important part of the translation process was that Canis managed to enroll and mobilize dog owners. On the Canis.no web forum, a large number of “regular” dog owners managed, discussed, and disseminated knowledge about dogs, behavior, and dog training. According to online statistics, Canis.no was by far the most popular dog website in Norway in 2014, with more than 150,000 visitors and 800,000 page views per month². Canis also practiced what it preached: when users registered an online account, they would receive small rewards in the mail – usually clickers with the Canis logo. Further, taking part in discussions was rewarded with clickers or gift certificates for the Canis online shop. In other words, active participation was rewarded and reinforced, and knowledge was spread in the name of Canis through web and clicker technology.

Through the network, Canis not only came to represent clicker training and behaviorism, but it also became a node for all kinds of non-aversive practices under the umbrella term “positive training.” According to cultural theorist Mieke Bal, meaning is always open for interpretation when concepts travel between fields (Bal 2002^[1]). When “positive reinforcement” traveled from psychology to dog training and became “positive training,” it gained normative value. Skinner used the term “positive” simply to denote that something was added to the situation; but when “positive” is used in dog training, it denotes something desirable. From signifying the presence of rewarding stimuli, “positive” thus became a measure of a lack of “aversives,” and this was again presented as a positive thing for both dogs and owners. In this way, ethics and animal welfare became part of the positive training discourse. While Egtvedt and Køste pointed out that the use of aversives (i.e., pain and punishment) came with a range of undesirable side effects (e.g., fear, stress, and aggression), their main reason for avoiding them was their belief that aversives lessen the effect of rewards (Køste et al. 2001^[1]). In other words, they avoided aversives because they felt aversives

2. urlmetrics.no 15.03.2014.



were ineffective, not unethical: “Ethics is something you should keep in the back of your mind when choosing how to train their dog. But just as important is what is effective. We do not practice clicker training in order to be kind to dogs, we do it because it is effective” (Egtvedt et al. 2006^[9], 28). Still, Egtvedt and Køste managed to align their interests with and speak on behalf of a range of actors who

advocated non-aversive dog training due to ethical reasons, thus merging ethics and behaviorism. Although Canis founder Egtvedt explicitly stated that he was opposed to several of the “ethical” practices that were described as “positive” (Egtvedt 2006^[9]), Canis came to represent practices associated with animal ethics, and was thus also able to speak on behalf of dogs.

Producing Difference

In the process of translation, Canis soon managed to establish itself as the obligatory passage point (Callon 1986^[10]) – that is, “the position that defines and manages what is perceived as true knowledge about the field, and that becomes the translator of and for all the other actors in the network of relations that is built” (Johnsen 2004^[9], my translation). The field in question was not simply clicker training or dog training, but the entire domain of dog behavior. Although clicker training was presented as a generic training method that was not species specific, Canis.no published several online articles presenting new scientific knowledge about dogs and wolves. The main message of these articles was that dogs were not wolves, wolves were not the brutal savages we once thought they were, and, finally, humans were neither dogs nor wolves and should not try to behave as either (Gabrielsen 2015^[9]). Thus, the image of dogs changed from wild wolves to domesticated and peaceful beings, and the foundations of the traditional training practices were effectively undermined.

While the image of dogs was reconstructed through scientific information, the clicker training principles changed the relation between dogs and humans. In the first edition of *Klikkertrening for din hund*, the authors presented the so-called “training agreement.” The first paragraph of this agreement stated: “When the dog gives you what you want, you give the dog what it wants” (Køste et al. 2001^[9], 40). In other words, the dog was presented not as a wild animal that must be tamed and forced to submission, but as an active agent in a transaction in which the distinction between animal and human was less important.

While the boundaries between dogs and humans were blurred, new differences emerged. Currently, there is an interesting assumption of a gender divide in relation to dog training practices. As one of my informants explained: “The stereotypes are different; the discipline-oriented dog trainer is a large man with beard and army clothing, while the clicker trainer is a naïve little girl” (Kate, interview). Kate did not think that these stereotypes necessarily corresponded with reality, but others, such as the clicker training instructor Atle, did believe that such a gender difference existed:

[I]t’s amazing how many women are drawn towards “super positive” and reward-based training, and I think that it certainly has something to do with empathy and such, but perhaps it is just as much about physique. It’s much easier for me [as a man] to throw a dog around than it is for a little girl. (Atle, interview)

At first glance, there seems to be a glut of women participating in positive dog training. For instance, of the forty clicker training instructors teaching Norwegian dog owners today, only eight are male (Canishundeskole.no 2017^[9]). However, upon closer inspection, it turns out that women outnumber men more generally in dog training, at both professional and amateur levels, regardless of the methods used (Gabrielsen 2016^[9]). This is an interesting point, as modern dog training practices originated in the military and Norwegian dog training has traditionally been disseminated by men with experience in the army, the police, or hunting.

The increase of women in dog training is connected to a range of factors, including an increased focus on gender equality in Norway and the dog’s transition from “man’s best friend” to family member (Gabrielsen 2016^[9]), and is probably not due to the “softness” of positive training methods. First, there is nothing soft about clicker training; if anything, it can be interpreted as a rather positivist and mechanical practice characterized by strict observation, timing, and self-discipline on the trainer’s behalf. As one of my dog trainer informants explained:

[T]here are people who think they are doing positive training as long as they throw in a “good boy” from time to time, and of course, in a way they are, but at clicker training level, with the number of repetitions, timing, and frequency of treats, it is ... [makes the sound of a machine gun] ... you know, you are on a totally different planet. (Turid, interview)

Second, the clicker training promoted by Canis was presented as completely gender neutral. Biology, physique, and personality had nothing to do with the result, only competence, patience, and practice. As Egtvedt and Køste wrote:

Many say that good clicker training is an art. Well, there are some who claim that football is art too. But football, painting, music, and clicker training are first of all a matter of mechanical skills. That means that you do not need any special talents to learn dog training. You do however need to practice! The more you practice to train your dog, the better mechanical skills you will get. (Egtvedt et al. 2006^[9], 7)

However, Canis also defined what and who should be excluded from the new training network, such as the former “hard school” and its practices. These practices were categorized as “traditional



training” and presented an uninformed mixture of punishment and reward. When Canis defined and marginalized “traditional” dog training practices, it explicitly distanced itself from the typical “traditional” dog trainer, who in many cases happened to be male. Canis did not marginalize men, per se, but training based on an explicitly masculine discourse of alpha males and pack leaders, which was often advocated and managed by men with a certain type of experience (Gabrielsen 2016^[9]). As a result, several “old-school” dog trainers founded the organization Hundefaggruppen in 2009 in order to oppose clicker training and promote “traditional” training practices (Nordenstam 2009^[9]). They argued that it was exactly this marginalized experience that was necessary. As dog trainer John Henriksen exclaimed in one of his articles on the Hundefaggruppen website: “Leadership is something that must be taught by someone who knows it. People engaged with dog sledding, working dogs and hunting are especially known for long traditions and great success in this field. This is a practical skill that one cannot learn by reading” (Henriksen 2013^[9], 44, emphasis in the original).

According to its website, Hundefaggruppen was founded by “experts within obedience training, hunting dog dressage, working dog dressage, and dog sledding” (Hundefaggruppen.no 2012^[9]) – practices that are still associated with men and masculinity. The photos

on the website, hfg.no, show (mostly male) dog trainers posing with hunting dogs or packs of sled dogs. While Hundefaggruppen mainly appealed to people with experience in hunting and dog sledding, Egtvedt described the typical “Canis disciple” as “an intelligent dog owner who has read one or more of our books about clicker training, tried it with their own dog and had a revelation regarding the possibilities of training the dog through positive reinforcement and voluntary behavior” (Egtvedt, interview). In other words, Hundefaggruppen targeted people with practical experience in male-dominated areas, while Canis targeted educated people who liked to read about theory. Thus, the two organizations reproduced an existing gender divide in Norwegian higher education, where women have been outnumbering men since 2001 (Aftenposten 2011^[9]; Folkehelseinstituttet 2014^[9]). In this light, it is understandable that Canis advertisements often featured women succeeding at clicker training while several men watched with disbelief (Canis.no 2015^[9]). Hundefaggruppen, on the other hand, often presented clicker trainers as naïve young girls (e.g., Henriksen 2013^[9]). However, the assumed gender difference was an effect, and not a cause, of the new network. Canis and Hundefaggruppen reinforced the distinction between the methods by associating them with different discourses and groups of people, thereby both implicitly and explicitly gendering the practices.

Training Technologies as Performative Practices

So far, I have described the way in which Canis entered the Norwegian dog training arena and established a new dog training network by defining both human actors (positive dog trainers, educated owners) and non-human actors (non-wolf dogs), linking some together and marginalizing others (traditional trainers). Today, Canis is no longer a visible part of the Norwegian dog training landscape, but the effects of its previous activity are still present³. Canis’s slogan was: “We are changing the Norwegian dog community.” In many ways, the company succeeded at this mission. Non-aversive training has more or less become the norm in Norway: dogs are no longer simply perceived as wolves in dogs’ clothing, humans are not required to become pack leaders, and the previous distinction between “soft” and “hard” training has become one of “positive” versus “traditional.”

However, the network of relations not only affects the way in which dogs and owners are presented and perceived, but it also has concrete and material effects. The practices and technologies of dog training and the networks of materiality of meaning they are embedded in can be termed “apparatuses of bodily production” (Barad 2007^[9]) – historically situated assemblages that enable certain bodies and behaviors to emerge as relational effects. In the second part of this article, I will take a closer look at the effects

of actual training practices. In order to illustrate the differences between traditional training and clicker training, I will use examples from two influential Norwegian dog training books: Geir Nordenstam’s NYE Du er sjefen (“NEW You are the Boss”), from 2005^[9], and the 2006^[9] edition of Egtvedt and Køste’s Klikkertrening for din hund.

In order to teach a dog to sit on command, Nordenstam writes that a trainer should pull the leash up and press the dog’s hindquarters down while saying the command out loud. Correct behavior should be rewarded with praise, and after some repetitions, the dog should understand the connection between the command and the action. However, in order for the dog to learn, leadership must be in place. According to Nordenstam, it is crucial that the dog perceives the trainer as its “hero” and not as a “sissy” (2005^[9], 61). He warns against using treats as rewards, as doing so turns the trainer into a “sissy” and a “feeding machine” in the eyes of the dog. Further, the use of praise and cuddles should be limited in training situations, as frequent usage lessens its effect. Still, during training, praise – in combination with the right attitude – is important: “Give of yourself with body and soul when the dog performs the correct action instead of giving sausages or meatballs. Also: You should reek of confidence (2005^[9], 72, emphasis in the original).

³ Canis never hid the fact that it was a business selling dog training classes, magazines, books, and even dog training equipment through their online shop. This commercial aspect eventually became its downfall. In 2012, Canis established a giant store in Trondheim, Canis City, and in 2013, the company went bankrupt. Although the dog training schools and the magazine still exist, Canis, including Canis.no, is today only a shadow of its former self.



When the position of “hero” is fulfilled, the dog should never feel the urge to disobey; if it does, it must be corrected through verbal scolding or physical punishment (Nordenstam 2005^[9]).

The training techniques of clicker training are very different. According to Egtvedt and Køste, four criteria characterize “genuine” clicker training:

- 1) reward of desired behavior (positive reinforcement);
- 2) voluntary behavior (the dog should not be forced, pushed, or lured into performing the behavior);
- 3) use of a conditioned reinforcer (a clicker); and
- 4) focus on observable factors only (i.e., not on what the dog might be thinking) (Egtvedt et al. 2006^[9]).

All of these principles are from Skinner’s writings, where they derived from his experiments with pigeons and rats. The emphasis

on voluntary behavior means that instead of pushing or luring the dog into the correct position, a trainer must wait for the dog to sit by itself, then click and reward. When the dog becomes used to getting rewarded for sitting, the command is added. Finally, the dog will learn to sit when the command is given. Correct behavior is marked by the clicker, which means that the dog must first learn that the clicking sound means that a reward will follow shortly. The simple technology of the clicker, the conditioned reinforcer, allows the trainer to communicate the exact moment when the correct behavior occurs. Clicker trainers are advised not to use praise or cuddles as rewards during training, as these are thought to be of less value to the dog than food. Ultimately, though, the dog will decide what it is willing to work for, as the reward must have an actual reinforcing effect on the desired behavior. Failure to perform is not interpreted as disobedience and hence not punished in any other way than by a lack of reward. As a Skinner quote still featured on the Canis.no website states: “Organisms do not misbehave.”

Performing Gender

The question is not why women opt for “positive” methods, such as clicker training, because non-aversive methods have become the norm in dog training, and so have women. Still, there might be something to the assumption of gender difference. According to theories of gender as practice, gender is not something one has, but something one does according to cultural conceptions of what is considered masculine and feminine (Beynon 2001^[9]; Butler 1990^[9]; Connell 2005^[9]). This means that instead of assuming that men and women do things in certain ways because of their gender, we might acknowledge that masculinity and femininity are enacted in certain ways through various practices. And the practice of traditional dog training seems to be linked to masculinity. Like clicker training instructor Atle stated: “When you want it to be a bit tough, when you want some testosterone and action, then you go for the traditional methods”. He further said that: “I think it is easier for men to buy into the idea about leadership and dominance and that stuff, because it sounds so reasonable, you know” (Atle, interview).

Reasonable or not, traditional dog training practices might enable men to feel more comfortable in a field in which women are in the majority. Dog training has historically been a masculine space, but the people who manage dog schools, attend training classes, win competitions, and disseminate knowledge about dogs and dog training today are mostly female. As NOVA researcher Rannveig Dale writes, men entering spaces coded as feminine might discover that they lack symbolic capital due to the fact that the spaces are managed by and associated with women (Dahle 2004^[9]). This gendering of spaces might mean that men are less exposed to changes

that have occurred. One of my male informants told me, for instance, that he had attended a training class with his first dog about thirty years prior, but that he did not feel the need to do it again. “In these classes, you have to do this and that, and that is not for me. I do things the way I think is right, and I have done that since then. I follow my own common sense” (Truls, interview). The gendering of dog training might be one reason why men have not been exposed to new methods and thus have come to rely on “common sense” and the methods they were taught thirty years ago.

However, the gendering of dog training spaces might also be a reason why some men explicitly choose traditional practices over new ones. It has previously been shown that some men working in female dominated occupations emphasize the similarity between men and women, while others accentuate gender difference (Nordberg 2002^[9]). Performing the role of pack leader certainly appears as a good strategy for those who take the latter viewpoint. First, traditional dog training allows for the display of physical discipline and force. Second, the notion of leadership and the hierarchical dominance discourse it is embedded in are loaded with masculine symbolism that strongly resembles hegemonic masculinity associated with power and control (Connell 2005^[9]). Performing the confident alpha male thus becomes a powerful strategy for accentuating gender difference and masculinity. In other words, gendered assumptions might influence the application of science and technology through dog training practices, but dog training practices also influence the ways in which gender is performed and reproduced.



Enacting “Dogness”

Practices and the heterogeneous networks of matter and meaning in which they are embedded thus allow for specific performative interactions, wherein the actors are enacted as men and women, but also as humans and dogs. According to the sociologist Jessica Greenebaum, dog training methods reflect existing understandings of dogs (Greenebaum 2010^[9]), and traditional dog training and clicker training clearly operate with two different understandings of what a dog is. The methods, based on ethology and the idea of leadership, understand dogs as wild animals driven by instincts. Nordenstam writes, for instance, that “the dog’s pack instinct points toward the fact that it is advantageous for it to obey” (Nordenstam 2005^[9], 66). Køste and Egtvedt, on the other hand, make no attempt to understand how a dog’s instincts work. Rather, they claim that dogs, like all other organisms, behave according to the universal law of reinforcement:

It is a common misunderstanding that dogs do things “because we want them to”, “because it works for us”, “because we have leadership/is the boss” and so on. The dog works either 1) to achieve something it wants, or 2) to avoid something unpleasant. Other alternatives do not exist! (Køste et al. 2001^[9], 19)

However, if one thinks of animals as performative effects, then one might ask not what a dog is, but rather how dogs are performed, or enacted. According to a material semiotic practice approach, dogs are not “dogs,” in themselves, but become dogs through their meetings with humans. As feminist scholars Lynda Birke, Mette Bryld, and Nina Lykke argue, the “animality” – or “dogness” – of dogs might be understood as a performative effect that emerges as a result of dog–human relations:

If we speak of the “animality” of, say, a dog, we draw partly on multiple cultural representations of dogs and other non-humans. But we also infer an embodiment of the lifelong intra-action of dog with human: from its very first breath, a puppy is usually engaging in a combined doghuman world. (Birke et al. 2004^[9], 175)

In traditional training practices, the primary goal is a submissive dog that obeys its master without hesitation. Disobedience is understood as a challenge that must be dealt with, accordingly. Interestingly, several studies have demonstrated that dogs trained with aversives show an increased tendency for aggression, disobedience, and problem behavior (Arhant et al. 2010^[9]; Blackwell et al. 2008^[9]; Casey et al. 2014^[9]; Herron et al. 2009^[9]; Tillung 2006^[9]). In other words, it seems as if the wild and aggressive animal might be produced through the very same practices that are meant to tame it; thus, the wild nature of dogs might be a performative effect.

In clicker training, there is an implicit contradiction regarding the aim of the practice. On the one hand, the descriptions of clicker

training point towards complete human control over the body and the mind of the dog. For instance, when asked how much a dog could and should decide for itself, Egtvedt answered: “A well-trained dog can ‘decide’ everything for itself, since it ‘wants’ the same as the dog owner” (interview). Skinner, himself, dreamt of a society shaped by positive reinforcement, as expressed in his utopian novel *Walden Two* (Skinner 2005[1948]^[9]), and Egtvedt’s answer echoes this quote from the founder of the Walden Two community: “By a careful cultural design, we control not the final behavior, but the inclination to behave – the motives, the desires, the wishes” (Skinner 2005^[9], 246).

On the other hand, clicker training may produce a “clicker smart” dog:

Clicker training really starts becoming fun when you have been training for some months. You eventually get what we call a “clicker smart” dog. A clicker smart dog has really understood the game, it loves to train, it offers behaviours in abundance and is really creative. (Egtvedt et al. 2006, 18)

A clicker smart dog is a creative and smart dog that takes initiative and tries out new behaviors:

It will often take some time before the dog starts to try new things, but when it understands that you will click and reward when it offers behaviours, it will soon get a lot better at trying things on its own initiative. In a way, it is like getting better at playing “hunt the thimble”. Should I sit? Lie down? Not that either? Turn around! Yes! My goodness, how fun it is with dogs like this. (Egtvedt et al. 2006^[9], 14)

In practice, clicker training seems to lead to creative, rather than brainwashed, dogs. As one of my dog trainer informants noted, some clicker trained dogs get so creative that they actually became problematic for inexperienced owners (Turid, interview). Or, as a dog owner on the *Canis* online forum wrote in a discussion about stupid things users had taught their dogs:

The most stupid thing I ever taught Schenda is to play dead. Now, she does it whenever she feels that she does not get the attention she deserves and is entitled to. Like when we were going on a trip and were waiting at the train station for the next train and I was having a cigarette, suddenly I hear laughter and applause, and there she is, playing dead, falling to the ground again and again ... (Canis.no 2010)

According to the Hungarian dog biologist Adam Míklósi, different training methods provide different environmental conditions, which influence the way in which dogs think (Míklósi 2007^[9], 25). Because these thought patterns influence dogs’ behavior, different training methods enable different ways of doing “dogness.” Understood in



this manner, the “dogness” of dogs is not their essence, but something that is done – by dogs and humans, together.

In “The Actor-Enacted: Cumbrian Sheep in 2001,” Law and Mol emphasize that the meaning and existence of actors is created through mutual enactment (Law et al. 2008^[9]). In this regard, it is important to note that both training methods work. One can teach a dog to follow commands by rewarding correct behavior or by punishing incorrect behavior, and by working, both methods

may reinforce the behavior and the self-perceived meaning of the trainer. The pack leader, in many cases, is rewarded by an obedient dog that seems to respect the leadership, or by the satisfaction of a successful power display. Likewise, the clicker trainer’s careful observation of the dog is rewarded by a clicker smart dog trying to figure out how to get treats. The response of the dog thus enacts the dog trainer, and the two training methods provide different conditions for becoming with each other as “hero” and submissive pack member, or clicker trainer and “clicker smart” dog.

Shifting the Power

Anthropologist David Graeber once pointed out that violence is a way of influencing behavior that requires absolutely no understanding of the being one is trying to influence (Graeber 2006^[9]). Pain works without language and reasoning, and it is something that dogs, as well as humans, seek to avoid. Pain thus becomes a powerful training tool, and it has been used in many forms to bring dog behavior under human control. Effective reward-based training, on the other hand, demands more from the trainer. As Egtvedt and Køste write: “As a clicker trainer, you will get good at observing behaviour, reading the dog, dividing training into small units and slowly increasing the demands” (Egtvedt et al. 2006^[9], 18). In their clicker training book, tables guide trainers to pay attention to the dog’s behavior and to maintain steady progress. In addition to requiring large doses of practice, patience, and self-control, this meticulous attention to the dog potentially facilitates a new type of what philosopher Vinciane Despret terms “availability”: “With the notion of ‘availability’ the signs that mark the world and that mark the subject are redistributed in a new way. Both are active and both are transformed by the availability of the other. Both are articulated by what the other ‘makes him/her make’” (Despret

2004^[9], 125). This is not to say that dog and owner become equals; rather, the relationship is one of domination (Tuan 1984^[9]). Still, in order to do clicker training “properly,” humans must discipline themselves to become available and attuned to the dog’s responses, thus shifting some of the power from themselves to the dog. As Egtvedt and Køste write in the humorous paragraph “For the dog”:

Our owners have many things we want. They have treats, toys and other fun things. They control when we get to go for walks, run off leash, play with other dogs and pee on lamp-posts. They can even decide when we get attention and maybe a little cuddle. But this era is about to end! Clicker training has come to town, and it is our chance to finally take control of what we desire. (Egtvedt et al. 2006^[9], 10)

In clicker training, the dog decides what counts as rewarding and is allowed the agency to try out new behaviors in order to achieve desired results. Thus, this seemingly mechanical and positivist training practice potentially enables an animal–human relation in which the trainer is the one subjected to discipline.

Concluding Remarks

Skinner’s training principles emerged in the laboratory in the 1930s and reached Norwegian dog training practices around the year 2000, as a result of the dedicated efforts of Canis founders Cecilie Køste and Morten Egtvedt. By forging new relations between entities – including trainers, experts, dog owners, and dogs – through business agreements, clickers, and web technology, Canis thoroughly changed the Norwegian dog training landscape. Old differences in relations and interactions were erased, and new ones were produced. The old dispute between the instincts of ethology and behavioral psychology resurfaced, but this time as a distinction between punishment and reward, traditional and positive, and, finally, men and women.

Not only is gender produced and performed through these entanglements, but dogs are also enacted through these practices. The new assemblages of knowledge and training technologies not only change the way in which people view dogs, but they also change

the dogness of dogs, in terms of how dogs respond as concrete, material beings that enact specific humans. Further, power is redistributed in the new choreography of communication enabled by clicker training. With clicker training, it is not obvious who the trainer is and who the trainee is; who the subject is and who the object is; and who is in control and who is being controlled.

The choice of training method thus plays a crucial role in determining which dogs and humans are allowed to emerge from the contact zones of dog training. However, these choices can never be fairly described or understood without taking into account the relational webs of matter and meaning that stretch through time and space. Clicker training technology is embedded in a larger network of relations shaped by histories of encounters between a range of human and non-human animal actors (e.g., Pavlov’s dogs, Skinner’s rats, Pryor’s dolphins). And as the world is still being made, dogs and humans continue to enact each other through the technologies of dog training.



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