In the company of wolves: Compensatory attachments and the human-dog bond

Dogs as sources of emotional support in modern industrialised contexts

What drives the remarkable intimacy between humans and dogs? Recent research in modern industrialised contexts has given us some important insights. We have discovered that dogs share many of our most critical emotional capacities. They are emotionally capable of forming strong bonds of love and affection, and can understand and empathise with many of our feelings (Nagasawa et al. 2015; Turcsán et al. 2015; Albuquerque et al. 2016; Kis et al. 2017). Dogs synchronise their stress levels with ours (Sundman et al. 2019), and even share a similar physiological reaction to crying babies (Yong and Ruffman 2014). A study of children in Spain, aged between six and 13, showed that they rated dogs as similar to humans on scores of cognitive and emotional capacities, such as intelligence and abilities to feel pain or happiness, for example (Menor-Campos, Hawkins, and Williams 2018). To them, dogs didn’t seem to be so different to humans.

Dogs can act in lieu of people as a source of emotional support in adults (as discussed in Chapter 5). They can even act in a way that is psychologically a little like parents as attachment figures. This means that, when we are with a dog with whom we are emotionally attached, the release of opiates like oxytocin and beta endorphin make us feel safe and calm (Kis et al. 2017; Beetz et al. 2012; Kis, Ciobica, and Topál 2017). They make us feel loved and cared for, provide a ‘safe haven’ and give us the confidence and self-esteem to approach any difficulties we face (Kurdek 2008; MacLean and Hare 2015). Dogs can have a significant impact on improving emotional wellbeing (Brooks et al. 2018). As we have seen in Chapter 5, this isn’t just important for individuals but for societies as a whole, as bolstering our sense of social safety through the emotional support of dogs both makes individuals more resilient, and fosters more social collaboration within communities. In Chapter 6, we discussed how a closer attachment to cherished objects seemed to have developed during the COVID-19 lockdown in the UK. Alongside many other pets, pet dogs were even more important, maintaining emotional wellbeing for many people (Ratschen et al. 2020; Shoesmith et al. 2021).
The support provided by dogs not only compensates for where social relationships may be deficient but also complements the support of people around us, even when supportive relationships are abundant. That dogs are not judgemental can sometimes mean that they are more effective means of emotional support in certain situations, for example. When having to complete a stressful or demanding task, it is often the company of a dog which is even more beneficial than that of a friend (Allen et al. 1991). That dogs share with us a beating heart and a capacity to care about us, to express affection and to show a certain level of empathy, can have a profound effect. Far from being a passive part of our lives or an object of functional use, dogs in modern societies certainly seem to be playing an important emotional role, and providing a means by which we are better able to cope with our own emotional vulnerabilities. They may fill a specific emotional void at the particular point it appears, but dogs also fulfill many of our basic emotional needs and respond to vulnerabilities that are part of our everyday lives. As we have seen in Chapter 5, dogs, or other sources of feelings of warmth, security and social safeness, don’t just make us individually healthier, but also make societies more collaborative and resilient. Much like comforting objects, discussed in Chapter 6, our close relationships with dogs in modern industrialised contexts tells us about a remarkable human capacity to find comfort, warmth and emotional safety outside of close human bonds. Much like our dependence on comforting objects today, our relationships with pet dogs also illustrates the additional needs for comfort and social support which our rather disconnected and isolated modern societies impose.

The process by which wolves came to be ‘tame’ is often seen as one which demonstrates the elevated intelligence of modern humans, and a new drive and capacity to control the environment, including animals, to our own ends. Could tame wolves or early dogs have, instead, been incorporated into human societies as a response to new emotional vulnerabilities?

Reappraising the domestication of wolves from the perspective of emotional vulnerabilities

Interpretation of the mechanisms underlying wolf domestication to date have tended to emphasise the practical or economic usefulness of either side of the wolf-human relationship. Wolves are seen as domesticated through being functionally useful for people (as described above) whose new elevated cognitive abilities paved the way for domestication, and people are seen as serving as a source of scavenged food for wolves (Jung and Pörtl 2018).

A re-appraisal of the archaeological evidence, in the context of our understanding of the evolution of our increasingly socially attuned and yet emotionally vulnerable minds, allows us to cast a new perspective on the so-called ‘domestication’ of wolves. Rather than elevated cognitive capacities, and economic drivers, it may have been human emotional vulnerabilities, alongside similar sensitivities in wolves themselves, which drove strong bonds between humans and wolves.

Archaeological evidence
Research into wolf domestication has tended to first focus on the timing of wolf domestication as the primary means of understanding how it occurred. The exact timing of the sustained domestication of wolves remains in debate, and the process almost certainly took many thousands of years. Genetic evidence, for example, suggests that there were very probably multiple points of domestication across Europe and Asia, as well as many instances of continued interbreeding between proto-dogs and wolves (Godinho et al. 2011; Skoglund et al. 2015; Caspermeyer 2017). In North America, for example, around half of grey wolves have a black coat coloration which came from interbreeding with populations of dogs arriving with humans into the continent (Bradshaw 2017). The earliest traceable genetic ancestor of modern dogs lived around 15,000 to 20,000 years ago (Druzhkova et al. 2013; Skoglund et al. 2015; Cagan and Blass 2016). However, the complexity of intermixing within the genetic record means that the first wolves came to live in close proximity to humans many thousands of years prior to this point (Freedman and Wayne 2017). Earlier proto-dogs living in close proximity to humans either left no direct descendants or the confusion created by high degrees of interbreeding with wolf populations makes their existence almost impossible to identify (Larson et al. 2012; Skoglund et al. 2015).
Potential evidence exists of morphological changes, typical of domestication (or, as we have seen in Chapter 4, something best described as increasing tolerance or tameness) occurring in wolves not long after modern humans entered Europe. Wolves, or perhaps even proto-dogs, dating to around 30,000 years ago in Europe, show a reduction in size and in snout length, for example (Germonpré, Lázničková-Galetová, and Sablin 2012). However, these interpretations remain somewhat contentious, as it may be difficult to differentiate such changes from morphologies which may have existed in contemporary wolf populations (Morey 2014; Boudadi-Maligne and Escarguel 2014; Germonpré et al. 2015). Nonetheless, a proto-dog from Razboinichya Cave in Siberia, dated to 33,000 years ago and similar to those in Europe, also shares many features with modern dogs, rather than wolves (Ovodov et al. 2011; Druzhkova et al. 2013). Entirely conclusive evidence may be difficult to find, but there is certainly suggestive evidence that wolves took up close relationships with humans not long after modern humans arrived in Europe.

It is what archaeological evidence can tell us about the nature of the relationship between humans and dogs that is perhaps the most interesting.

Perhaps surprisingly, there seems to be limited evidence that dogs perform a functional role, though this evidence might, of course, be rather difficult to find. Neolithic dogs from Siberia may show certain signs of being used as load animals through osteoarthritic changes in the limbs (Losey et al. 2011). However, these results remain speculative. Equally, these are late examples and, as we have seen, load animals tend to be a rather specialised breed. Specialised forms of dog don’t seem to appear until late in the archaeological record. The earliest possible example of a specific form of dog is that of Late Glacial small dogs found the South-West (Pont d’Ambon and Montespan) and North of France (Le Closeau), of which 49 examples date from 15,000 years ago onwards (Pionnier-Capitan et al. 2011). However, whether these dogs are notably smaller than wolves as a side effect of domestication or through some functional advantage of a smaller size which made life alongside humans more successful, such as for catching rodents or being less costly to feed, is difficult to determine.

Evidence for how people treated their dogs is more revealing. That the deaths of dogs or proto-dogs prompted certain rituals or practices gives us some indication of, at least, intense conflicting feelings towards dogs and, in many cases, what was likely to have been a sense of grief at their passing.

The act of burying a dog at death, or carrying out a particular ritual, much as we might for a human, almost certainly indicates an appreciation of the unique identity of dogs within human lives. Early proto-dogs or wolves, dating to around 30,000 years ago, found at Předmostí in the Czech Republic, for example, include one individual found with a large bone inserted between its jaws after death (Germonpré, Lázničková-Galetová, and Sablin 2012), potential evidence of a certain human drive to nurture this animal with food. Several contemporary proto-dogs also have holes which have been incised into the crania, which have been interpreted as a potential intention to allow their souls to be released into an afterlife (Germonpré, Lázničková-Galetová, and Sablin 2012).

Somewhat later in time, we see the appearance of dog burials. Dogs may have been buried as spiritual protectors or as beings with a humanlike soul, and we may never entirely understand the motivations for interring dogs as if they were humans. It is not uncommon for certain groups, such as the Aka, who usually accord little respect or dignity to dogs to, nonetheless, sometimes bury a particularly good hunting dog as a sign of respect for their contribution (Serpell 2016b). Nonetheless, many burials do appear to demonstrate the particularly significant role of dogs in people’s lives, a little like that of a family member (Morey 2006).

Probably the earliest accepted dog burial is that of a dog buried within a double grave of a 50 year old man, a 20 to 25 year old woman, and another dog, at Bonn-Oberkassel in Germany around 14,000 years ago (Morey 2010; Janssens et al. 2018). The site was excavated over a hundred years ago, making the precise dating of this burial, and the details of placement of the people and the dog, rather uncertain. However, it is not details of stratigraphy or orientation of remains which are the most significant element of this burial. Instead, it is that the remains document probably one of the earliest cases of apparent care that seems to have been given to a dog during a lengthy period of illness. The dog, a juvenile who died at about 27 to 28 weeks, suffered from canine distemper, as well as...
periodontal disease (probably related to associated immune deficiency). It was severely ill from 19 weeks onwards, and would have been unlikely to survive without considerable care, which has been interpreted as an indication of a close emotional bond with the people who must have looked after it (Janssens et al. 2018).

Dog burials become more common from the end of the glacial period. More securely dated dog burials have been recovered at the North American sites of Koster and Stillwell II in Illinois dating from around 10,000 years ago (Perri et al. 2019). Here, three dogs were buried in clearly demarcated pits, with a certain level of care. Dogs must have accompanied some of the earliest colonists into the Americas (Perri et al. 2021).

The practice of burying certain dogs at death is seen in many contexts (Morey 2006). Some of the most famous dog burials date to the Holocene. Perhaps the most well-known are those from the Late Mesolithic site of Skateholm in Sweden, dating to about 6500 to 5500 BP. These burials seem to fit with the perception of dogs as remarkably humanlike seen in animistic contexts (Larsson 1990). Within the large hunter gatherer cemetery at Skateholm, there are fourteen dog burials, each of which seem to indicate a dog with a certain status or personality who may have been significant at the time. In one case, a woman and dog were buried together, with the body of the dog situated above the women’s legs. In another case, a single dog was buried alone, and had been interred with more grave goods than other human burials, including flint flakes, red deer antler and a stone hammer. Red ochre was also often scattered over the dogs’ corpses (Larsson 1990; Morey 2010).

Robert Losey has interpreted dog burials by Holocene foragers societies in the cis Baikal as signs of dogs which were seen as having humanlike souls (Losey et al. 2011). Further potential evidence for care of an injured dog comes from this region, where a dog (or proto-dog/wolf) found at Ust’-Khaita and dated to around 12,000 years ago had suffered a puncture wound to the crania and scapula which had healed, possibly suggesting care from humans (Losey et al. 2013). In an animistic understanding of the world, typical of many hunting and gathering societies, certain dogs may have shown themselves to be humanlike and, thus, a humanlike treatment at death may also have seemed most appropriate. Perhaps for this reason, dog burials seem to be particularly associated with forager societies in the cis Baikal, rather than later pastoralists whose worldviews may have been less in-keeping with attributing a human agency to animals (Losey et al. 2013). A dog at Pad’-Kalashnikova, dating to around 6900 years ago, was individually buried in a sitting or crouched position, for example (Figure 7.8). Another, buried at Ust’-Belaia around 6800 years ago, was buried wearing a necklace of red deer teeth, as well as some antler and other faunal remains (Losey et al. 2013), Figure 7.9.

Figure 7.8: Prehistoric dog burial from Pad’-Kalashnikova. Image Copyright Losey et al, 2013: https://doi.org/10.1371/journal.pone.0063740.g006. Shared under the Creative Commons Attribution Licence CC BY 4.0.
Other burials apparently indicating much affection for dogs include that in a Natufian (pre or early agricultural) context at Ein Mallaha, in Israel. Here, the 11,000 to 12,000 year old burial of a puppy was associated with an elderly individual whose left wrist was partially under the forehead of the puppy, interpreted as denoting an affectionate relationship (Morey 2010).

Other canids also played an apparently emotionally significant role in people’s lives, even if this didn’t lead to full domestication. There are even cases where foxes have been buried in a humanlike way. An extinct fox was found buried alongside humans in the 2,000 to 3,000 year old hunter-gatherer Cemetery of Loma de los Muertos in Patagonia, for example, interpreted as indicating some particular emotional relationship, or recognition of the fox as somehow humanlike (Prates 2014). Similarly, a burial of a red fox, dated to 14,000 years ago, was also found alongside human graves in a pre-Neolithic context at ‘Uyun al-Hammam in Israel (Maher et al. 2011). These foxes may have been, at least in some understanding of the term, friendly towards humans. Whilst it is dogs who have particularly taken up a widespread role in our lives, canids in general share many emotional similarities and needs to humans as close relationships with foxes, as well as their ready domestication (discussed in Chapters 4 and 5) illustrate. There are often cases of orphaned foxes in recent times which develop a close relationship with humans. Clarence Birdseye, writing in 1955, describes adopting an orphan wild peruvian fox when living near Lima, for example, which he describes as being ‘as tame as any dog or cat’ (Birdseye 1956). The fox, named Susie, lived with Clarence and his wife for over eighteen months and was affectionate with them calling for them when needing assistance, though always remaining nervous of strangers. Other burial evidence suggests an even wider range of animals in close relationship with people. Most famously, cats develop close relationships without being ‘domesticated’. At the Pre-Pottery Neolithic site of Shillourokambus in Cyprus, an eight month old cat was buried with its presumed human owner around 9.500 years ago (Vigne et al 2004).

Artefacts can also provide important clues to human-wolf relationships. The depiction of dogs or wolves, or the use of their bones, in personal ornaments may also indicate a close relationship to humans. Wolf or dog teeth are commonly suspended as jewellery in the Upper Palaeolithic, far more frequently than those of food animals such as reindeer, or even of other carnivores (Germonpré, Lázničková-Galetová, and Sablin 2012). Wolves often carry particular important meanings to people in North American mythology (Pierotti and Fogg 2017), and the teeth of dogs themselves might potentially have been worn in reflection of their significance, much like human teeth were also suspended as jewellery during the same period.

Across the prehistoric world, dogs are also sometimes depicted within art. At the pre-Neolithic site of Shuwaymis in Saudi Arabia, for example, a rock art frieze depicts people hunting horses with several dogs, some of whom are on
leads (Guagnin, Perri, and Petraglia 2018). However, in Upper Palaeolithic Europe, in contrast, dogs are conspicuous by their near complete absence. Like humans, dogs are rarely, if ever, depicted and, if so, rather schematically, in contrast to the careful and evocative images made of animals such as horse and bison (Montañés 2018). Within the hundreds of images of other animals in the corpus of European Upper Palaeolithic art, only a few depictions of wolves exist. These include a cave art depiction of a wolf with a reindeer, dated to 11,000 BP, at Altxerri in Northern Spain (Sieveking 1979), one at Font de Gaume in Southwest France, dated to 17,000 years ago, as well as occasional depictions on plaquettes. This unwillingness to depict wolves or dogs, seen also in Australian Aboriginal art (Gunn, Whear, and Douglas 2010), may reflect an ideological discomfort with the imposition of otherness which depiction imposes (Bird-David 2006).

The timing and location of some of the earliest evidence of a close relationship between humans and dogs may also be a telling indicator of their role. As we’ve seen in Chapter 6, survival in Ice Age Europe and Siberia placed not only economic but also emotional pressures on human populations, conditions which also fostered a closer relationship to wolves. Whilst these relationships with wolves may have brought functional advantages such as load carrying or hunting in cold northern climates, these are only likely to have developed well after early domestication. Furthermore, it is in those contexts in which we see early evidence of potential inequalities. Early Upper Palaeolithic (Gravettian and Epigravettian) sites in Central and Eastern Europe, for example, demonstrate differential burial types, specialization in production and/or remains of monumental architecture which may indicate some level of ranking, even if seasonal or occasional (Wengrow and Graeber 2015). It is possible that dogs were some type of prestige possession (Germonpré et al. 2020), although elevated stresses imposed by ranked hierarchies (discussed in Chapter 5), on top of existing emotional vulnerabilities, may perhaps better explain their incorporation into human communities.

Archaeologists have tended to focus on the functional elements of the transformation of wolves into domestic dogs and on the precise timing of domestication. Much of the archaeological evidence tells a rather different and perhaps more important story, however, of the emerging and complex emotional bond between humans and increasingly tame wolves as each adapted to each other (Losey, Nomokonova, and Fleming 2018).