

Extended Suicide With a Pet

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The combination of the killing of a pet and a suicide is a perplexing scenario that is largely unexplored in the literature. Many forensic psychiatrists and psychologists may be unaccustomed to considering the significance of the killing of a pet. The subject is important, however, because many people regard their pets as members of their family. A case is presented of a woman who killed her pet dog and herself by carbon monoxide poisoning. The purpose of this article is to provide an initial exploration of the topic of extended suicide with a pet. Forensic mental health evaluations may have a role in understanding the etiology of this event and in opining as to the culpability of individuals who attempt to or successfully kill a pet and then commit suicide. Because the scientific literature is lacking, there is a need to understand this act from a variety of perspectives. First, a social and anthropological perspective will be presented that summarizes the history of the practice of killing of one's pet, with a focus on the ancient Egyptians. A clinical context will examine what relationship animals have to mental illness. A vast body of existing scientific data showing the relevance of human attachment to pets suggests that conclusions from the phenomena of homicide-suicide and filicide-suicide are applicable to extended suicide with a pet. Finally, recommendations will be proposed for both clinical and forensic psychiatrists faced with similar cases.

J Am Acad Psychiatry Law 41:437–43, 2013

In psychiatry and related forensic fields, we seek understanding of human behavior and decisions related to death. Experts examine unique behavior and patterns associated with suicide, sometimes focusing on the method of suicide, the location of the attempt, the context, and the consequences of such acts. Simon¹ has even explored behavioral patterns in naked suicide. Many have sought to understand the association between mental illness and homicide-suicide.^{2,3}

Mental illness may lead an individual to injure or kill an animal. The combination of the killing of a pet and a suicide is a perplexing scenario that is largely unexplored in the literature. Although many forensic psychiatrists and psychologists may be unaccustomed to considering the significance of killing a pet, this area is important, because many people regard their pets as members of their family. Consider the following deidentified case, which was obtained with the consent of the decedent's husband and is presented here with Institutional Review Board exemption.

A middle-aged woman with a possible history of mild depression was in the midst of a marital separation from her

husband. She quit her job and isolated herself from family and friends. When her husband came home to discuss reconciliation, he found her dead. She had killed herself by carbon monoxide poisoning while sitting in her running car with the windows down in the enclosed garage. The couple's pet dog was found dead next to her in the car.

What will be characterized in this article as extended suicide has been largely referred to in the literature as murder-suicide, homicide-suicide, and dyadic death. I have chosen to refer to this act as extended suicide with a pet, because characterizing the killing of a pet as murder or homicide anthropomorphizes the act, is inconsistent with statutory language that reserves these terms for human life, and diminishes the gravity associated with the killing of a human being.

There is a dearth of information available on the topic of extended suicide with a pet. A search on PubMed/MedLine using the terms homicide, suicide, animal, and dog found one relevant article.⁴ This publication was an autopsy case report describing a 70-year-old retired butcher in Germany who used a nail gun to kill his wife and two dogs before committing suicide with a shot from the nail gun into his skull.⁴

A Google search with related keywords, however, revealed many news stories about homicide-suicides where a pet was killed during the crime.^{5–12} Although there are inherent limitations to relying on media accounts (e.g., standardization, bias, cultural

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Disclosures of financial or other potential conflicts of interest: None.

influence, and definitional variability) that raise concerns about validity,¹³ I will briefly present the cases found when researching this topic, to illustrate the heterogeneity of accounts described in the lay press.

In Minnesota, a husband and wife found dead in their home killed their dog before taking their own lives.⁵ In New Jersey, a 15-year veteran corrections officer shot and killed his wife, his dog, and then himself.⁶ In Florida, a man killed himself, his six-year-old daughter, and their dog in a minivan through carbon monoxide poisoning, allegedly because he was upset that his wife had remarried.⁷ In Massachusetts, a 61-year-old man shot and killed his wife and dog and then himself.⁸ In Idaho, a 56-year-old man shot and killed his wife, the family pet, and himself.⁹ In Phoenix, an 80-year-old man was believed to have shot and killed his wife, his 50-year-old son, the family dog, and himself.¹⁰ In Florida, a Rottweiler survived a fall from the Skyway bridge in St. Petersburg, Florida, when her owner jumped to his death; it is unknown whether the dog jumped voluntarily.¹¹ An online case study involving a woman and her Irish setter found dead in a pond was initially investigated as a suicide, but later was determined to have been the result of accidental drowning.¹²

The purpose of this article is to provide an initial exploration of the topic of extended suicide with a pet. Forensic mental health evaluations may have a role in understanding the etiology of this event and opining as to the culpability of individuals who attempt to or successfully kill a pet and commit suicide. Because the scientific literature is lacking, there is a need to understand this act from a variety of perspectives. I will first place this event in a social and anthropological context by summarizing the history of the practice of killing of one's pet, with a focus on the ancient Egyptians. Next, in a clinical context, I will examine what relationship animals have to mental illness. Finally, I will propose a theoretical framework based on the vast body of existing scientific data regarding human attachment to their pets and offer that conclusions from homicide-suicide and filicide-suicide are applicable to extended suicide with a pet.

Historical Perspectives

The importance of human-animal bonds has been clearly documented for thousands of years and across cultures.¹⁴ The practice of killing one's pet also appeared early in human culture. The ancient Egyptians kept many animals as household pets, including

cats, dogs, monkeys, and birds.¹⁵ Sometimes pets were buried in their owners' tombs,¹⁶ although historians speculate whether pets were killed when an owner died or were placed in the tomb after natural death.¹⁵ Dogs have been found buried in the same coffin with a person. Pictures of pets are often depicted on the walls of tombs, and wooden models of dogs have been found in some tombs. Mummified remains of dogs have been found near coffins. Ancient Egyptians also mummified birds for religious and ceremonial reasons.¹⁷ At the end of the 19th century, 19 tons of cat mummies were shipped to the United Kingdom from a cat necropolis at Bubastis.¹⁸ The procedures for preparing animal mummies was sometimes as sophisticated as those used for human mummification,¹⁹ further evidence that the ancient Egyptians treated animals with great respect. Radiological techniques have been used to verify the authenticity of animal mummies, casting aside any doubts.²⁰

These findings are relevant in the context that animals also had a special meaning in life, not just death. Animal cults were common in ancient Egypt, in which all members of a species were regarded as manifestations of gods and were accordingly revered, mummified after death, and buried in a nearby cemetery.²¹ One such cult worshiped the god Anubis, which was depicted as a dog, fox, or jackal.¹⁵ Unlike cult animals, votive animal mummies represented no intrinsic divinity but were purchased by pilgrims and placed in catacombs as gifts to the gods. Embalmed dogs are among the many animals that have been found in these settings. Ancient Egyptian burials often included animals as a meal offering or to provide company or a personal service to the deceased.²¹ In the late 4th through the early 5th centuries CE, however, the rise of Christianity brought a prohibition of pagan rituals and was associated with the destruction of traditional Egyptian religious sites.²¹

Evidence of artificial mummification has been found on every continent, especially in South and Central America.²⁰ Elsewhere, archaeologists have found a cave system in the high Himalayas (Western Nepal), in which one of the caves was used as a community burial chamber from ca. 400 BCE to 50 CE. In addition to the 30 mummified human remains, there were mummified heads of 11 goats and 2 sheep, and the body of an adult stallion that was believed to have been dismembered to fit through the narrow entrance of the cave.²²

Although the mummified animals are evidence of the historical significance of human-animal relationships, it must be noted that animals have also been badly abused by humans for hundreds of years. In 1866, the American Society for the Prevention of Cruelty to Animals was founded and led to the first laws to protect animals. Notably, these laws were also used to prosecute cases of child abuse long before child protection laws were enacted.²³

Clinical Perspectives

Animals and pets appear infrequently as specific criteria in The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR).²⁴ For example, one symptom of conduct disorder is that patients are physically cruel to people or animals. In the DSM-IV-TR, animals appear in the paraphilias as paraphilia not otherwise specified, where one example is zoophilia, which is defined as sexually arousing fantasies, sexual urges, or behaviors involving animals. Among the anxiety disorders, patients with specific phobia, animal type have marked and persistent fear that is excessive or unreasonable, cued by animals or insects.

Certainly, it is possible for other individuals with mental illness to have symptoms that involve animals, despite the lack of specific DSM-IV-TR criteria. For example, a psychotic patient could have delusions or hallucinations involving animals. A depressed patient could develop anhedonia and lose interest in caring for the pet, allowing the animal to die of neglect. An attack by a wild animal could serve as the inciting event for the development of posttraumatic stress disorder. A person with antisocial personality disorder may engage in inhumane behavior with animals (e.g., dog fighting) that is grounds for arrest.

Although the literature is scant, some researchers have examined the association of behavior involving animals with psychiatric disorders. Gleyzer *et al.*²⁵ found that a history of animal cruelty during childhood is significantly associated with antisocial personality disorder, antisocial personality traits, and polysubstance abuse. Weiss²⁶ reviewed the behavior of hoarding and found that hoarding animals may be explained by delusional disorder, early dementia, zoophilia, addiction, obsessive-compulsive disorder, and attachment deficits. In another study, LeBourgeois *et al.*²⁷ reported on cases of persons who have

malingered their pets' symptoms to their veterinarians to obtain medications for their personal use.

Elsewhere in the clinical literature, although not all study findings are consistent, pets have been found to have broad positive effects on one's health (e.g., Refs. 28, 29). Pets influence the course and functioning of multiple psychiatric disorders, including pervasive developmental disabilities³⁰ and anxiety in hospitalized psychiatric patients.³¹ Interactions with pets alter the tendency to focus negatively on oneself. Overall, a broad range of investigations have found that animal-human interactions reduce anxiety, depression, and loneliness, just as they enhance social support and general well-being (e.g., Ref. 14). At least one study showed, however, that the effects were not large enough to affect suicide rates.³²

Theoretical Perspectives

To understand how an individual in modern times could kill a pet, we must first begin with the premise that, in general, people love their pets. There are numerous reports of people's attachment to pets. In psychiatry, we often think of attachment in terms of the bond between a child and caregiver "designed to ensure the safety and survival of the child" (Ref. 33, p 59). Object relations theory, on the other hand, holds that drives (i.e., sexuality and aggression) emerge in the context of a relationship and are inseparable from the relationship.³³ These views provide the backdrop for a pet owner's relationship with the pet.

Pets can provide comfort and companionship. People name their pets, celebrate their pets' birthdays, and speak to them as family members. The Internet and social media websites are replete with pictures and videos of pets. Responses to a survey from one study showed that attachment to pets is high among never-married, divorced, widowed, and remarried people and childless couples, newlyweds, and empty-nesters and that never-married, divorced, and remarried people and people without children present are most likely to anthropomorphize their pets.³⁴

Numerous studies have illustrated that pets are regarded as friends and family members (e.g., Refs. 14, 35, 36). Owners pamper their pets, keep photographs of them, celebrate their birthdays, go to great lengths for veterinary care, and sleep with them. Pets are unconditionally receptive to human affection.³⁷

Pet ownership changes over the family's life cycle, with attachment to pets particularly high during the newlywed stage and rather low when the couple moves to the childbearing stage.³⁸ Pets serve as a source of social support providing a sense of continuity as families transition³⁸ and can facilitate adaptation to tumultuous life changes.³⁹

In addition, there is convincing evidence to support the idea that many people view their relationships with pets as similar to those they have with children. Pet owners treat pets like children by playing with them, talking to them in baby talk, referring to them as my baby, and holding and cuddling them as one would a baby.⁴⁰ Others have found that pets are instrumental to self-identity and may serve as surrogate children.⁴¹

The need for an animal's companionship becomes pathological, however, when a person's life lacks sufficient emotional fulfillment, as illustrated by cases of pathological mourning after the death of a domestic pet.⁴² For others, "Pets can serve as baby substitutes. Baby substitutes have merit. Many parents are unfit to raise children. Some people can pet a dog nicer than they can pet a child" (Ref. 43, p 549). Individuals who have a basic distrust of human attachments may also displace their attachments to a loving pet. This idea is exemplified by a quotation attributed to President Truman: "If you want a friend in Washington, get a dog" (Ref. 44, p 317).

Pets are also possessions that people own. A person's "fragile sense of self needs support" (Ref. 45, p 472), and that support could be obtained through possessions. Pet ownership may morph into self-extension or a process of incorporating objects into our extended selves. Belk⁴⁶ argued that people discard the possessions that form a part of the extended self at two different times in their lives: when the unextended self has grown in strength and extent or when possessions no longer fit the owners' ideal self-image. Therefore, there may be a psychological impetus for the discarding of a pet.

Accepting the premise that for some individuals pets serve as a substitute for children, we can then extrapolate ideas from research involving filicide to understand why an individual would kill a pet. The seminal work of Resnick⁴⁷ offered the following reasons for filicide: altruism, acute psychosis, unwanted child, accident, and spouse revenge. The altruistic filicide is murder committed out of love, to relieve the child of real or imagined suffering, and may occur

in association with suicide. Hatters-Friedman and colleagues⁴⁸ examined common factors in filicide-suicide and found that 20 percent of the mothers ($n = 2$) were separated from their spouses, and all the mothers were primary caregivers. The similarity between the maternal caregiver and the pet owner is again apparent.

Instead of viewing the pet as a child, perhaps the pet may be considered closer to an equal or a friend. Under this assumption, the phenomenon of an extended suicide with a pet might be similar to that of a suicide pact. In this framework, the person planning to commit suicide may view the pet as a willing participant who shares the desire to die. The assumption that the pet wants to die with his friend-owner is re-enforced by the psychopathology of the person and the nonjudgmental companionship of the pet. Quite simply, a person may not want to die alone, as was illustrated in the play, *Crimes of the Heart*,⁴⁹ which featured a woman who hanged herself together with her cat.

A final analogue previously described in the literature has some relevance to understanding extended suicide with a pet. Dietz⁵⁰ described the mass murderer category of the family annihilator. This person is "usually the senior man of the house, who is depressed, paranoid, intoxicated or a combination of these. He kills each member of the family who is present, sometimes including pets. He may commit suicide after killing the others, or may force the police to kill him" (Ref. 50, p 482). Clearly, this description is quite different from the case described at the beginning of the article, but it is included, given its forensic import in similar cases and perhaps in the cases found in the lay press.

Applying the Theory to the Case

The answer to determining what motivated the woman in the case example to commit suicide is neither simple nor singular. Her history of depression suggests the possibility of a recurrence of symptoms. The role of substance use was unknown. She was faced with losing her husband. Conner and colleagues⁵¹ suggested that interpersonal, stressful life events (e.g., partner relationship break-ups) are the most common precursors of suicide. Any humiliation or shame a decedent experienced may correlate with suicidality.⁵² As Mokros offered, "Acts of suicide are perceived as solutions to intolerable self-ridicule (pathological shame) and to the impossibil-

ity of reclaiming or achieving a sense of social place” (Ref. 53, p 1096). The woman in our case example had already isolated herself from friends and family. Her sense of self was supported by her only real possession, her pet dog. This is not to suggest that her relationship with her dog was at the expense of or a substitute for relationship with her husband, because an individual’s “attachment to a cat or dog does not reflect a lack of close human relationships” (Ref. 54, p 633). She may have killed her pet dog (i.e., a possession that formed her extended self) when it reminded her of the life she had had with her husband (i.e., a change in her ideal self-image). The patient’s husband reported that she could not abandon her dog: “Who would take care of him?” The suicidal mother, then, views her only remaining companion (i.e., her dog) as an extension of herself.

Alternative explanations can be formulated by clinicians and forensic experts in other cases. (Please note that these hypotheses were dismissed by the decedent’s husband in the current case.) For example, a spouse revenge filicide could apply if a decedent wished to bring suffering to the surviving spouse by killing the family pet. On the other hand, if the decedent believed that she would lose her pet to her husband, then perhaps she sustained a narcissistic injury from the rejection leading to the idea that if she cannot have the pet, nobody can. Finally, a decedent’s killing of a pet could be a manifestation of displacement of unacceptable impulses to kill the spouse. Clinicians and experts will have to test these hypotheses depending on the facts of the case.

Some of these theoretical explanations contradict what some have found in their clinical practice. Pets may provide a protective effect for alienated or despondent individuals who find meaning in their lives through bonds with their pets.⁵⁵ A sense of responsibility to provide care for their pets and not abandon them may serve as a protective factor against acting on suicidal ideation. This idea is similar to how a sense of responsibility to care for one’s children may also act as a protective factor against suicide.

Discussion

The case example raises interesting questions relevant to forensic psychiatry. Similar to challenges with understanding murder-suicide, the act of an extended suicide and killing of a pet is likely to leave questions unanswered, because the perpetrator is dead and, although it is impossible to assess her men-

tal health directly, in contrast to murder-suicide, close relatives have not been killed and may help shed light on the mental state of the decedent.

Another challenge for the forensic psychiatrist is determining how to communicate an understanding of extended suicide with a pet in either a report or testimony. Kapoor and Williams⁵⁶ have articulated the resistance some may have toward using a psychodynamic framework in forensic assessments. Relying on these “unproven” techniques and “understanding unconscious processes [however] may be the only means of making sense of an apparently senseless act” (Ref. 56, p 457).

The forensic psychiatrist may wrestle with these ideas in a variety of cases, including risk assessments, psychological autopsies, or insanity evaluations. In a risk assessment, the clinical or forensic psychiatrist must consider the ethics and law related to *Tarassoff*.⁵⁷ The management of risk is unclear if a patient or evaluatee discloses a desire or plan to harm an animal. Although the law does not establish a duty to protect relevant to animals, a plan to harm an animal may reflect underlying psychopathology. In addition, if the person has talked about hurting a pet as part of a suicide plan, perhaps that should be interpreted as a more ominous sign of risk (e.g., nihilism) or as a sign of concern that the pet would suffer if left alone with no one to care for it. Of course, giving a pet away would be a worrisome sign as well, no different from a situation in which a suicidal person gives away other possessions.

With slightly different facts than those of the case initially presented, there could be relevance in a psychological autopsy, which has been defined as “a systematic method to understand the psychological and contextual circumstances preceding suicide” (Ref. 51, p 594). These evaluations have been used in association with investigations to understand the psychosocial factors that contributed to the suicide and to assist in the determination of the manner of death in equivocal deaths: suicide, homicide, accidental, or natural causes.⁵⁸ For example, one could see using the death of an animal as some evidence that the death was more likely accidental, because the person loved his pet and would not have acted to kill it. That might change the outcome of a life insurance payment.

In the case of a person who is facing criminal charges including the killing of a pet, a forensic psychiatrist might be requested to evaluate the individ-

ual's state of mind. In this case, the principles of performing an insanity evaluation⁵⁹ serve as a foundation. Later, the expert would need to determine the significance of the killing of the pet.

A clinician may face these questions when providing counseling to a decedent's surviving family member. The psychodynamics of the case reported herein are interesting and leave many questions; for example, why did the woman not leave the pet for her husband to look after, and what does this say about her state of mind or their relationship? Further forensic and criminal investigation is necessary to determine whether the pet was killed by a second party, died accidentally, or truly was involved in an extended suicide. For most of these examples, a forensic expert should show prudence and obtain collateral information (e.g., speak to a surviving spouse and other family members, review any medical or psychiatric records, and obtain the records relevant to the death investigation).

Prevention and Recommendations

Risk factors for extended suicide with a pet may be different from those traditionally thought of for violence or filicide-suicide. Depressed, psychotic, and suicidal patients and those who abuse substances should be screened, not only for their safety and for the safety of those around them, but also for thoughts regarding their pets. Many patients may view their pet as a family member or a child. Therefore, the clinician must consider the pet's safety in a similar fashion. Additional information regarding risk to the animal may be gleaned if a clinician asks patients about the fate of their pets in the event of a possible suicide.

A threat to a pet could serve as the only sign that a patient is experiencing distress or other psychiatric symptoms. Such a comment on the part of a patient should not be minimized simply because it's just an animal. Appropriate measures would include a thorough psychiatric evaluation and risk assessment. Of course, threats to injure or kill a pet could stem from criminal or antisocial behavior, which would be handled by the clinician in a different manner.

Clearly, research is needed to explore the underpinnings of extended suicide with a pet. Despite widespread media coverage of anecdotal events involving (human) murder-suicide, the incidence is quite low (under 0.001%) and appears to remain stable.³ Studies could clarify the incidence of ex-

tended suicide with a pet, the risk factors associated with such behavior, and thoughts that people have before they harm their pets and attempt suicide. Further understanding will then translate into stronger forensic assessment and improved clinical management.

Acknowledgments

The example illustrated by the play *Crimes of the Heart* was provided by an anonymous reviewer, to whom the author extends his gratitude.

References

1. Simon R: Naked suicide. *J Am Acad Psychiatry Law* 36:240–5, 2008
2. Roma P, Pazzelli F, Pompili M, *et al*: Mental illness in homicide-suicide: a review. *J Am Acad Psychiatry Law* 40:462–8, 2012
3. Eliason S: Murder-suicide: a review of the recent literature. *J Am Acad Psychiatry Law* 37:371–6, 2009
4. Hagemeyer L, Schyma C, Madea B: Extended suicide using an atypical stun gun. *Forensic Sci Int* 189:e9–12, 2009
5. Anonymous: Mounds view couple killed dog before taking own lives. CBS Minnesota, January 30, 2012. Available at <http://minnesota.cbslocal.com/2012/01/30/mounds-view-couple-killed-dog-before-taking-own-lives/>. Accessed February 4, 2013
6. Knarr J: Cops: corrections officer commits homicide, suicide and dogicide. *The Trentonian*, October 24, 2008. Available at <http://www.trentonian.com/article/20081024/NEWS/310249999/0/SEARCH/cops-corrections-officer-commits-homicide-suicide-and-dogicide/>. Accessed February 4, 2013
7. Hamacher B, Lawson S, Ortega J: Man kills self, daughter, and dog in Davie murder-suicide: police. NBC 6, November 29, 2012. Available at <http://www.nbcmiami.com/news/man-and-child-found-dead-in-davie-house-police-181360071.html>. Accessed February 4, 2013
8. Vogler ME: Man, wife, dog found in what police call a murder-suicide. *Eagle-Tribune*, March 30, 2008. Available at <http://www.eagletribune.com/local/x1876426651/Man-wife-dog-found-dead-in-what-police-call-a-murder-suicide/print>. Accessed February 4, 2013
9. Anonymous: Homicide-suicide investigation in Eagle. *Idaho Press-Tribune News*, July 28, 2010. Available at http://www.idahopress.com/news/article_47e9d6a4-9a96-11df-8a96-001cc4c03286.html. Accessed February 4, 2013
10. King J: Double homicide/dog-icide/suicide to blame for four bodies found in Phoenix home. *Phoenix NewTimes*, October 22, 2010. Available at http://blogs.phoenixnewtimes.com/valleyfever/2010/10/double_homicide_dog-icide_suic.php. Accessed February 4, 2013
11. Wright T: Man survives plunge from Skyway bridge. *St. Petersburg Times*, May 31, 2001. Available at http://www.sptimes.com/News/053101/TampaBay/Man_survives_plunge_f.shtml. Accessed February 4, 2013
12. Verhoff MA, Suntz MH, Kohler K, *et al*: Accident or extended suicide with a pet: a case study. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology* (serial online) 2006. Available at http://www.anilaggrawal.com/ij/vol_007_no_001/papers/paper002.html. Accessed February 4, 2013
13. Goranson A, Boehnlein J, Drummond D: Commentary: a homicide-suicide assessment model. *J Am Acad Psychiatry Law* 40: 472–5, 2012

14. Walsh F: Human-animal bonds I: the relational significance of companion animals. *Fam Process* 48:462–80, 2009
15. Anonymous: The Animal Mummy Project in the Cairo Museum, 2000. Available at <http://www.animalmummies.com>. Accessed February 4, 2013
16. NOVA: The afterlife: an interview with Egyptologist Salima Ikram. Available at <http://www.pbs.org/wgbh/nova/ancient/afterlife-ancient-egypt.html>. Accessed February 4, 2013
17. Morgan LW, McGovern-Huffman S: Noninvasive radiographic analysis of an Egyptian falcon mummy from the later period 664–332 BC. *J Avian Biol* 39:584–7, 2008
18. Edwards HGM, Farwell DW, Heron CP, *et al*: Cats' eyes in a new light: Fourier transform raman spectroscopic and gas chromatographic-mass spectrometric study of Egyptian mummies. *J Raman Spectrosc* 30:139–46, 1999
19. Buckley SA, Clark KA, Evershed RP: Complex organic chemical balms of Pharaonic animal mummies. *Nature* 431:294–9, 2004
20. Jackowski C, Bolliger S, Thali MJ: Scenes from the past: common and unexpected findings in mummies from ancient Egypt and South America as revealed by CT. *Radiographics* 28:1477–92, 2008
21. Magee MJ, Wayman ML, Lovell NC: Chemical and archaeological evidence for the destruction of a sacred animal necropolis at ancient Mendes, Egypt. *J Archaeol Sci* 23:485–92, 1996
22. Alt KW, Burger J, Simons A, *et al*: Climbing into the past: first Himalayan mummies discovered in Nepal. *J Archaeol Sci* 30: 1529–35, 2003
23. Anonymous: Our 137 year commitment to the safety and well being of children. New York Society for Prevention of Cruelty to Children: Available at <http://www.nyspcc.org/nyspcc/history/> Accessed February 4, 2013
24. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC: American Psychiatric Association, 2000
25. Gleyzer R, Felthous AR, Holzer CE 3rd: Animal cruelty and psychiatric disorders. *J Am Acad Psychiatry Law* 30:257–65, 2002
26. Weiss K: Hoarding, hermitage, and the law: why we love the Collyer brothers. *J Am Acad Psychiatry Law* 38:251–7, 2010
27. LeBourgeois HW 3rd, Foreman TA, Thompson JW Jr: Novel cases: malingering by animal proxy. *J Am Acad Psychiatry Law* 30:520–4, 2002
28. Anonymous: The health benefits of companion animals. San Francisco: PAWS San Francisco, 2007. Available at <http://www.pawssf.org/document.doc?id=15/>. Accessed February 4, 2013
29. Brodie SJ, Biley FC: An exploration of the potential benefits of pet-facilitated therapy. *J Clin Nurs* 8:329–37, 1999
30. Martin F, Farnum J: Animal-assister therapy for children with pervasive developmental disorders. *Western J Nurs Res* 24:657–70, 2002
31. Baker SB, Dawson KS: The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatr Serv* 49:797–801, 1998
32. Helsing KJ, Monk M: Dog and cat ownership among suicides and matched controls. *Am J Public Health* 75:1223–4, 1985
33. Gabbard GO: *Psychodynamic Psychiatry in Clinical Practice* (ed 4). Washington, DC: American Psychiatric Publishing, Inc. 2005
34. Albert A, Bulcroft K: Pets, families, and the life course. *J Marriage Fam* 50:543–52, 1988
35. Hickrod LJ, Schmitt RL: A naturalistic study of interaction and frame: the pet as "family member." *J Contemp Ethnogr* 11:55–77, 1982
36. Walsh F: Human-animal bonds II: the role of pets in family systems and family therapy. *Fam Process* 48:481–99, 2009
37. Rynearson EK: Humans and pets and attachment. *Br J Psychiatry* 133:550–5, 1978
38. Davis JH: Pet ownership and stress over the family life cycle. *Holistic Nurse Practitioner* 5:52–7, 1991
39. Allen, K: Coping with life changes and transitions: the role of pets. Bellevue, WA: Pet Partners. Originally published in *Interactions* 13:5–6, 8–10, 1995. Available at <http://www.petpartners.org/document.doc?id=113>. Accessed February 4, 2013
40. Archer J: Why do people love their pets? *Evol and Hum Behav* 18:237–59, 1997
41. Turner WG: Our new children: the surrogate role of companion animals in women's lives. The Qualitative Report, March 2001 (serial online). Available at <http://www.nova.edu/ssss/QR/QR6-1/turner.html>. Accessed February 4, 2013
42. Keddie KM: Pathological mourning after the death of a domestic pet. *Br J Psychiatry* 131:21–5, 1977
43. Slovenko R: Commentary: Rx: a dog. *J Psychiatry Law* 11:547–68, 1983
44. Jay A [ed]: *Lend Me Your Ears: Oxford Dictionary of Political Quotations* (ed 4). Oxford: Oxford University Press, 2010
45. Tuan Y: The significance of the artifact. *Geogr Rev* 70:462–72, 1980
46. Belk RW: Possessions and the extended self. *J Consum Res* 15: 139–68, 1988
47. Resnick PJ: Child murder by parents: a psychiatric review of filicide. *Am J Psychiatry* 126:73–82, 1969
48. Friedman SH, Hrouda DR, Holden CE, *et al*: Filicide-suicide: common factors in parents who kill their children and themselves. *J Am Acad Psychiatry Law* 33:496–504, 2005
49. Henley B: *Crimes of the Heart: A Play*. Dramatists Play Service, Inc. 1982
50. Dietz PE: Mass, serial and sensational homicides. *B N Y Acad Med* 62:477–491, 1986
51. Conner KR, Beautrais AL, Brent DA, *et al*: The next generation of psychological autopsy studies. *Suicide Life Threat Behav* 41:594–613, 2011
52. Lester D: The association of shame and guilt with suicidality. *J Social Psychol* 138:535–6, 1998
53. Mokros HB: Suicide and shame. *Am Behav Sci* 38:1091–103, 1995
54. Cohen SP: Can pets function as family members? *Western J Nurs Res* 24:621–38, 2002
55. Hafen M, Rush B, Reisbig A, *et al*: The role of family therapists in veterinary medicine: opportunities for clinical services, education, and research. *J Marital Fam Ther* 33:165–76, 2007
56. Kapoor R, Williams A: An unwelcome guest: the unconscious mind in the courtroom. *J Am Acad Psychiatry Law* 40:456–61, 2012
57. *Tarasoff v. Regents of the University of California*, 551 P.2d 334 (Cal. 1976)
58. Ritchie ES, Gelles MG: Psychological autopsies: the current Department of Defense effort to standardize training and quality assurance. *J Forensic Sci* 46:1–3, 2002
59. Giorgi-Guarnieri D, Janofsky J, Keram E, *et al*: AAPL practice guideline for forensic psychiatric evaluation of defendants raising the insanity defense. *J Am Acad Psychiatry Law* 30(Suppl 2):S3–S40, 2002