

# **Creating Fido's Twin**



A True Reflection, by Christine Merrill, American 20th Century, oil on canvas, 16 x18 inches.

Taken at face value, pet cloning may seem at best a frivolous practice, costly both to the cloned pet's health and its owner's pocket. At worst, its critics say, it is misguided and unhealthy—a way of exploiting grief to the detriment of the animal, its owner, and perhaps even animal welfare in general. But if the great pains we are willing to take to clone Fido raise the status of companion animals in the public eye, then the practice might be defensible.

Can Pet Cloning Be Ethically Justified?

### by Autumn Fiester

ommercial pet cloning—currently cats only—is now available from the firm Genetic Savings and Clone for the small price of \$30,000. In December 2004, a nine-week-old cat clone was delivered to its owner, the first of six customers waiting for the identical twin of a beloved pet.<sup>1</sup> "Little Nicky," as he's known, has stirred up a great deal of ethical controversy, with more to come as the firm expands to dog cloning sometime in 2005.

For many, the cloning of companion animals seems morally suspect in a way that the cloning of animals for agricultural purposes or for biomedical research does not. In judging the ethics of cloning animals that will be healthier to eat or will advance science or medicine, there is a natural argument to be made that the technique will serve the greater human good. But in the case of pet cloning, there is really no analogous argument, however wonderful the original "Missy," the mixed-breed dog whose owner funded the now-famous Missyplicity Project at Texas A&M to make pet cloning possible. Cloned companion animals will not significantly enhance general human well-being. In balancing the cost to animals against the possible benefit to humans, the ethics of pet cloning seems to be a simple equation: a concern for

Autumn Fiester, "Creating Fido's Twin: Can Pet Cloning Be Ethically Justified?" *Hastings Center Report* 35, no. 4 (2005): 34-39.

animal welfare equals an anticloning stance.

But what if there were benefits to animals, and what if these benefits outweighed the pain and suffering they endure from cloning research and procedures? Then there would be an argument in favor of pet cloning at least as strong as those offered for cloning conducted for agriculture or medical research. The idea of animals suffering for *animal* benefit makes a tidy moral case that just might justify the practice.

Of course, making this case will be a challenge given the serious anticloning objections raised by animal advocacy organizations and cloning critics. But the benefit to animals that I will consider is this: the practice of pet cloning-like advanced veterinary care such as transplants, neurosurgery, orthopedics, and psychopharmaceuticals-might improve the public's perception of the moral status of companion animals because it puts animals in the category of being worthy of a very high level of expense and concern. Something that warrants this level of commitment and investment seems valuable intrinsically, not merely instrumentally, and this change in the public's perception could have far-reaching benefits for all animals.

Of course, even if this controversial claim is true-that pet cloning might contribute to an increase in the public's esteem for companion animals-it can justify pet cloning only for those who already find some forms of animal cloning morally acceptable. My case rests on the premise that some types of cloning are morally justified by the benefits that will result from them. People opposed in principle to all forms of animal cloning-for example, because this type of biotechnology is "playing God" or because animals should never be used in research-will not accept this consequentialist starting point. The most straightforward way to make the point is this: we can talk about justifying pet cloning only on the assumption that animal cloning for clearly important ends—like medical or pharmaceutical advances—is morally permissible. If one rejects those types of cloning, the argument about pet cloning cannot get off the ground.

#### **The Anti-Cloning Case**

Critics of pet cloning typically offer three objections: (1) the cloning process causes animals to suffer; (2) widely available pet cloning could have bad consequences for the overwhelming numbers of unwanted companion animals; and, (3) companies that offer pet cloning are deceiving and exploiting grieving pet owners. ed to clone "CC" the calico cat, one hundred and eighty-eight eggs were harvested, eighty-seven cloned embryos were transferred into eight female cats, two of the females became pregnant, and one live kitten was born.<sup>4</sup>

Further, of the live clones born, many have experienced compromised health status or early death. In one study of cloned pigs, researchers reported a 50% mortality rate for the live offspring, with five out of ten dying between three and one hundred and thirty days of age from ailments including chronic diarrhea, congestive heart failure, and decreased growth rate.<sup>5</sup> A study published last year showed that cloned mice experi-

t is no longer appropriate to say to a grieving pet owner, "What's the fuss about? Just get another pet." News of an ill pet now engenders concern and sympathy.

Animal Suffering. Animal welfare advocates have been quick to point out the cost of animal cloning to the animals involved in the procedures.<sup>2</sup> A large body of literature documents high rates of miscarriage, stillbirth, early death, genetic abnormalities, and chronic diseases among the first cloned animals. These problems occur against a backdrop of what in cloning science is called "efficiency," the percentage of live offspring from the number of transferred embryos. The efficiency of animal cloning has typically been about 1 to 2 percent, meaning that of every one hundred embryos implanted in surrogate animals, ninety-eight or ninety-nine fail to produce live offspring.<sup>3</sup> Given the invasive techniques used to implant the embryos in the surrogate, these numbers represent a certain amount of suffering on the part of the donor animals: for every one or two live animals, one hundred eggs must be harvested and one hundred embryos implanted. In the experiments conductence early death due to liver failure and lung problems.<sup>6</sup> Another study showed that cloned mice had a high tendency to morbid obesity.<sup>7</sup>

Cloning scientists respond that both efficiency rates and health outcomes are radically improving, and that we can reasonably expect in the very near future to see fewer animals involved in the cloning process and better health status for the clones that are born.8 Although the process that produced "CC" was inefficient, there were no kittens born with compromised health status. Research on cloned cattle published last year showed that once the animals survived infancy, they had no health problems when compared with nonclones.9 Genetics Savings and Clone claims that it has pioneered a new cloning technique that not only improves the health status of clones but greatly increases cloning efficiency, achieving pregnancy loss rates on par with those of breeders.<sup>10</sup> Although information is limited, the company claims that six healthy kittens have been born with no deformities. If this proves to be true, then the animal suffering caused by the process is limited to that of the surrogate mothers. There aren't even any donor animals involved, since the company uses eggs harvested from ovaries purchased from spay clinics. And the suffering of the surrogates is surely not greater than that of cats who "donate" kidneys for feline kidney transplants, a practice that has not received widespread criticism on grounds of inordinate feline suffering.<sup>11</sup>

Unwanted Pets. A second objection to pet cloning is that there are millions of unwanted pets in the United States. How can we justify the creation of designer companion animals when so many wonderful animals languish in shelters? This is the main argument behind the Humane Society's anticloning position. Says Senior Vice President Wayne Pacelle, "The Humane Society of the United States opposes pet cloning because it is dangerous for the animals involved, it serves no compelling social purpose, and it threatens to add to the pet overpopulation problem. It doesn't sit well with us to create animals through such extreme and experimental means when there are so many animals desperate for homes."12 To be sure, the data on the number of companion animals euthanized in American shelters are sobering. The 2001 Human Society report on the state of animals in the United States found that four to six million dogs and cats were euthanized in shelters in 2001.13 These figures do not include the millions of stray animals in the country: the ASPCA estimates that 70 million stray dogs and cats live in the United States.14

But what is the connection between the sorry state of unwanted companion animals in this country and the anti-pet-cloning stance? Surely one cannot hold that no new animals ought to be intentionally created until all shelter animals are adopted. Anticloners would then have bigger fish to fry than pet cloning—namely, the breeders and puppy farms that produce millions of dogs and cats each year. By comparison, pet cloning, even if it becomes a viable industry, will produce only trivial numbers of animals.

Critics of pet cloning say that pet owners who are so devoted to their animal companions that they would spend thousands of dollars to clone one are precisely the type of adoptive parents who could save an already-existing animal's life through pet adoption, sparing one more dog or cat from euthanasia.<sup>15</sup> But why should a person devoted to a particular animal be more obligated than anyone else to save others of that same species? Being a parent doesn't obligate me more than childless folks to help parentless children. Critics will say this comparison is outrageous. We can't compare animals and children. But for the pet owner willing to clone a deceased pet, there is one analogy between a child and a companion animal: you can't substitute or exchange one for another. Pet owners grieving a lost animal see their animal as unique and irreplaceable, so they can't just go to a shelter and get any old animal as a replacement pet. Naturally, this invites the third criticism, which we will discuss below, that this clone isn't actually the original pet. But the point is that what these pet owners are after cannot be found in a shelter or purchased from a breeder.

What about the money involved? Isn't there something wrong with spending \$30,000 on an animal? Perhaps so, but the problem certainly isn't limited to pet cloning—think of race horses, for example. And if the charge is really that pet cloning is a frivolous use of money that could be better spent on noble causes, then this is just a universal attack on all luxury goods. It doesn't make pet cloning any morally worse than boatbuying.

**Exploitation and Deception.** But what about the concern that pet owners are being tricked into believing that they are getting Fido back, when in truth, Fido and the clone could be as different as any identical twins? There are two separate charges here: one is about false advertising or exploitation on the part of the cloning firm; the other is about the pet owner's self-deception.

Take the cloning firm first. Opponents argue that grieving pet owners are deceived by companies like Genetic Savings and Clone into believing that cloning is a way of resurrecting a deceased and beloved pet. They argue that the business of pet cloning assumes genetic determinism-that genes alone determine all physical and behavioral characteristicswhich is false. For example, criticizing the practice of companion animal cloning, bioethicist David Magnus argues, "The people who want this are spending huge sums of money to get their pet immortalized or to guarantee they're getting a pet exactly like the one they had before-and it's simply not possible."16 If pet cloning firms are contributing to this false belief, then they are engaging in a type of fraud and are certainly exploiting the grief of the devoted pet owner. Genetic Savings and Clone argues that they have an informed consent process that educates clients about the environmental and in utero factors that influence personality and behavior-maybe even physical characteristics. But whatever policies need to be put in place to make sure the owner has realistic expectations, how cloning firms market pet cloning and educate potential customers does not bear on the moral legitimacy of pet cloning itself. There is a clear need to regulate this emerging industry to ensure truth in advertising, but that could be achieved without eliminating the product.

As for the self-deception of the pet owner, this is a psychological, not an ethical concern. Again, Magnus:

I can completely sympathize with people who become so attached to their pet that they want to bring it back at any cost, but there is nothing that can bring that animal back. Attempting to do so is unhealthy. It's trying to pretend that death doesn't exist, which speaks to a larger symptom in our culture of not dealing with death. It's better to just move on.<sup>17</sup>

There are two responses here. First, if the customers don't feel betrayed or deceived (and indeed, they do not) and are satisfied with their investment and comforted by the clone's existence, then it is hard to get this psychological concern going. Second, this argument assumes that there is no good reason to clone a pet unless one *were* deceived<sup>18</sup>—and this is false. The bereft pet owner might know full well that the clone will be nothing more than a genetic twin, and the decision to clone might be merely an attempt to preserve something important from the original animal, rather than resurrect it. In the human context, we think of offspring this way. We say things like, "I am so glad my son had children before he died." For animals that were neutered at an early age, who have no offspring, it is perfectly rational to desire the genetic "starting blocks" Fido had, even under complete comprehension that this animal will not be Fido. Wanting to get as close as possible to the original animal is not irrational. In the absence of immortality, genetic identity is the next best thing.

## Pet Cloning and "Rising Status"

Now consider an argument in favor of pet cloning: pet cloning may change common views of what in philosophy is called the "moral status" of animals. The fact that companion animals are deemed worthy recipients of this level of effort and expense might encourage people to view animals as having intrinsic value and uniqueness.

The public's perception of the value of animals is not fixed. In fact, the public's estimation of animals' status is arguably rising fast. Getting at perceptions of animal status is difficult, but consider some of the following facts: a 2001 ABC News poll found that 41 percent of Americans believe that animals go to heaven,<sup>19</sup> and a May 2003 Gallup poll found that a full 33 percent of Americans are at least somewhat supportive of an all-out ban on medical research involving laboratory animals.<sup>20</sup> Attitudes among pet owners are even more interesting. For example, a 1999 survey by the American Animal Hospital Association found that 84 for animals that would have been euthanized a decade ago.

These figures represent what has been called the "pet as family" trend.<sup>28</sup> While it is difficult to empirically document that these figures correspond to an increase in status of companion animals, experts in the field believe they do. Robert Gilbert, associate dean for clinical programs at Cornell Hospital for Animals, describes pet owners' attitudes toward

What is happening to the public's attitude toward companion animals if specialized treatments seem like reasonable measures? Their expense easily exceeds the price of the animal, but few would tell a pet owner to cut her losses and buy a new pet.

percent of pet owners refer to themselves as their pet's "mommy" or "daddy," 63 percent celebrate the pet's birthday, and 72 percent of married respondents greet their pet first when they return home.<sup>21</sup> There are also more pet owners now than ever before; 62 percent of households in the United States own pets in 2005,<sup>22</sup> up from 50 percent in 1975.<sup>23</sup>

The dramatic shift in the status of American pets can also be seen in the resources devoted to them. Americans spent over \$30 billion on small animal companions in 2003,<sup>24</sup> a 10 percent increase over 2002 spending,<sup>25</sup> and two and a half times the spending levels of 1978 (in adjusted dollars, Americans spent \$11 billion in 1978 vs. \$30 billion today).<sup>26</sup> A large part of this figure represents a surge in veterinary service spending: Americans are spending more not only on routine care for companion animals, but on specialty care as well, reflecting a change in priorities and values. For example, pain management expenditures have increased 275 percent in the last six years.<sup>27</sup> Pet owners are now investing in pain control medicines

pets as somewhat like parents' attitudes toward children; when he started practicing veterinary medicine in 1977, "a pet was a pet."<sup>29</sup> Thomas Cusick, president of the American Animal Hospital Association, declares, "Pets are clearly becoming an integral part of the American family, enjoying much of the same attention, care, and treatment that is given to a child or spouse."<sup>30</sup>

There is also anecdotal evidence that those who don't own pets are beginning to acknowledge and adopt the changing attitudes of their petowning friends and relatives. It is no longer appropriate, for example, to say to a grieving pet owner, "What's the fuss about? Just get another pet." News of an ill pet now engenders concern and sympathy.

The argument I want to advance is that the treatment of companion animals by their caretakers alters what the public in general thinks about them. Attitudes toward companion animals are heavily influenced by the dominant view and mainstream practice (indeed it is the majority of Americans who currently have pets).

More specifically, I want to offer a hypothesis about one mechanism by which this kind of cultural change takes place, namely, that the routinization of certain practices and expenses on the part of pet owners normalizes that behavior, which affects the general view of what care animals deserve; and this in turn enhances the public's estimation of the value of companion animals because it encourages the public to view animals as entities worthy enough to merit this attention and care. One of the most significant influences on the public's perceptions is the effort expended to improve the health and extend the lives of companion animals. Pet cloning is just the extreme form of pet owners' attempts to extend the life (in this case, in the form of the genome) of a beloved animal.

Advanced veterinary care is the paradigm case. Veterinary services are the fastest-growing segment of the companion animal industry, increasing at an annual rate of 4.7 percent, with current expenditures pegged at close to \$8 billion.<sup>31</sup> As noted earlier, much of the spending increase is directed at services unheard of a few decades ago. Veterinary medicine has specialized into surgery, dermatology, ophthalmology, orthopedics, neurology, oncology, and even transplant surgery. At a price estimated to be between \$5,000 and \$15,000 (plus \$50-\$150 per month in immunosuppressant drugs for life), one's dog or cat can receive a renal transplant at one of the country's new transplant centers.32 Kidney transplants are still rare, but many other specialty services are not, including x-rays, psychopharmaceuticals, and insulin therapy.

As each new procedure or service is incorporated into veterinary care, pet owners' acceptance of the new standard of care alters the overall public's attitude toward those procedures. No longer seen as a bizarre or exorbitant waste of money and resources, the new procedure starts to seem entirely warranted. Think of the public's attitude toward now commonplace treatments, such as daily shots of insulin, arthritis medicines, corrective surgery for orthopedic problems, or antianxiety medicines. These expenses easily exceed the original price of the animal, but few people would now tell a pet owner to cut her losses and buy a new pet. What is happening to the public's attitude toward companion animals if these advance treatments seem like reasonable measures and expenses to protect animal lives and well-being? At a minimum, the normalization of advanced veterinary care indicates the public's recognition of the "irreplaceability" for the pet owner of one animal with some other. We no longer think of companion animals as disposable or interchangeable, despite the ready supply of homeless animals.

Of course, this argument may suffer from the classic "chicken or the egg" question: is the attention given to animals raising public perceptions of animals' status, or is the perception of animals' status rising independently of the actions of pet owners? In fact, it can go both ways. To the pet owner, the intrinsic value of the companion animal is already recognized, which is why she expends the resources and energy to treat the animal. To someone observing that practice, the effect is to affirm or alter the perception of value that companion animals have-or ought to have. So while only a handful of people may value their pets enough to go through the expense of an organ transplant, the effect of employing "pet organ transplants" is much more widespread. As this type of practice becomes reasonable, it becomes a statement about the intrinsic value and worth of its recipients.

It is plausible that pet cloning will have a parallel effect. Pet cloning makes the statement that one's companion animal is so important that it is worth trying to come as close as possible to preserving it by investing in a genetic twin. The hypothesis is that when pet cloning is seen as a rational, justifiable activity for pet owners as a response to the (impending) death of an animal, the societal effect—as with advanced veterinary care—will be to enhance the companion animal's position on the moral map through the public's recognition that these entities have high value.

One possible rejoinder is that the dignity and uniqueness of the original pet is degraded by an attempt to obtain a clone. Believing that we can replace a companion animal with its clone demonstrates that animals are, in fact, mere objects, not at all like children, and the effect of widespread use of pet cloning will be to downgrade animals' status, not raise it. But whether pet cloning will have this effect will depend on how society interprets it. A pet-cloning-as-mass-production view will undoubtedly reinforce the idea that companion animals are replaceable consumer goods, and this will have a deleterious effect on perceptions of their status. In the cloning-as-solace view as I have described above, however, companion animal cloning will be seen as a tribute to the value of the original animal. There are parents who desperately want to clone their lost children.33 Pet owners, mirroring their feelings, are making a statement about both the animal's immeasurable value and the level of loss and grief they feel at its death. Whatever one thinks of human cloning, no one argues that the parents who request it don't assign the highest possible worth to the deceased child; the sentiment to clone is a testimony to the parents' belief in the infinite value of that unique person. If this becomes widely understood, the cloning-as-solace interpretation may indeed win out.

If pet cloning bolsters even slightly a perception that companion animals have intrinsic value, then the positive consequences for companion animals will far outweigh the minimal suffering the animals undergo through the cloning process. The rising status of companion animals has already begun to translate into laws that offer more protection for them, including changes in the designation of pet owners to "animal guardians" in some areas.<sup>34</sup> If companion animals' status continues to rise, and if pet cloning contributes at all to that trend, then there is an argument for the moral legitimacy of pet cloning.

#### References

1. P. Fimrite, "Cat Has 10 Lives, Thanks to \$50,000 Cloning," *San Francisco Chronicle*, December 23, 2004.

2. See H. Bok, "Cloning Animals Is Wrong," *Journal of Applied Animal Welfare Science* 5, no. 3 (2002), 233-38.

3. A. Coleman, "Somatic Cell Nuclear Transfer in Mammals: Progress and Application," *Cloning* 1 (1999), 185-200. See also L. Paterson, "Somatic Cell Nuclear Transfer (Cloning) Efficiency," available at: http://www.roslin.ac.uk/public/webtables-GR.pdf.

4. T. Shin et al., "Cell Biology: A Cat Cloned by Nuclear Transplantation," *Nature* 415 (2002): 859.

5. A.B. Carter, "Phenotyping of Transgenic Cloned Pigs," *Cloning and Stem Cells* 4 (2002): 131-45.

6. N. Ogonuki et al., "Early Death of Mice Cloned from Somatic Cells," *Nature Genetics* 30 (2002): 253-54.

7. K. Tamashiro, "Cloned Mice Have an Obese Phenotype Not Transmitted to Their Offspring," *Nature Genetics* 8 (2002): 262-67.

8. *Nature Biotechnology* recently published a metareview of the health status of clones from prior studies, and it reports that 77 percent of cloned animals showed no developmental abnormalities throughout the period of follow-up, although the percentage of healthy clones ranged from 20 percent to 100 percent across the studies. J.B. Cibelli et al. "The Health Profile of Cloned Animals," *Nature Biotechnology* 20 (2002), 13-14.

9. C.Yang, X.C. Tian, and X. Yang, "Serial Bull Cloning by Somatic Cell Nuclear Transfer," *Nature Biotechnology* 22 (2004), 693-94.

10. M. Fox, "Company Says It Cloned Copy Cats," Reuters, August 5, 2004; Fimrite, "Cat Has 10 Lives."

11. Of course, the obvious objection to this comparison is that the kidneys are harvested to save the life of another cat, whereas the animals who suffer through egg harvesting and embryo implantation are not saving an existing cat but creating an entirely new (unneeded) one. But what is in question here is the amount of suffering—not the justification for it. 12. Humane Society of the United States, "Cat Cloning Is Wrong-Headed," February 14, 2002; available at: http://hsus. org/ace/13214.

13. P.G. Irwin, "Overview: The State of Animals in 2001," in *The State of Animals 2001*, ed. D.J. Salem and A.N. Rowan, (Washington, D.C.: Humane Society Press, 2001).

14. American Society for the Prevention of Cruelty to Animals, "Annual Shelter Statistics"; available at http://www.aspca.org.

15. The pet owners most likely to request a clone of a deceased pet are those who originally adopted pets from shelters, because these animals are often mixed-breed animals whose personality traits or other features cannot be generated by conventional breeding. It was the owner of a mixed-breed dog, "Missy," that funded the now-famous Missyplicity Project at Texas A&M, which resulted in the cloning of "CC" the cat. But the owner of Missy chose to invest \$3.7 million in trying to create Missy's twin; he did not invest the \$3.7 million in improving the lives of shelter animals, the original source of Missy herself. See http://www. tamu.edu/aggiedaily/press/02014cc.html.

16. M. Shiels, "Carbon Kitty's \$50,000 Price Tag," *BBC News*, April 27, 2004.

17. Fimrite, "Cat Has 10 Lives."

18. Magnus reaches this conclusion: "There is no good reason why anybody would do this." Fimrite, "Cat Has 10 Lives."

19. The Roper Center For Public Opinion Research, "Do You Think Animals Go to Heaven When They Die or Only People Go to Heaven?" ABC News/BeliefNet Poll (June 2001); available at http://roperweb. ropercenter.uconn.edu:80/cgi-bin/ hsrun.exe/Roperweb/iPOLL/StateID/CXw GMIyhSS673RNNenOz5\_uZT\_uw-VbGn/HAHApage/SelectedQs\_Link.

20. The Roper Center For Public Opinion Research, "Banning All Medical Research on Laboratory Animals," Gallup Poll (May, 2003); available at http://roperweb. ropercenter.uconn.edu:80/cgi-bin/ hsrun.exe/Roperweb/iPOLL/StateId/ C20XmmyYwFM72ocWchjh2obiYPb8— UeHc/HAHTpage/Study\_Link? stdy\_id=26427.

21. American Animal Hospital Association, Pet Owner Survey, 1999; available at: http://www.healthypet.com.

22. American Pet Products Manufacturers Association, "APPMA Survey Finds Pet Ownership Continues Growth Trend in U.S."; available at http://www.appma.org/ press/press\_releases/2001/nr\_05-02-02.asp.

23. C.W. Schwabe et al., Veterinary Medicine and Human Health, third ed. (Baltimore, Md.: Williams & Wilkins Co, 1976). 24. DVM News Magazine, "Pet Spending to Top \$37 Billion by '08"; available at: http://www.dvmnewsmagazine.com/dvm/c ontent/pringContentPopup.jsp?id=85154.

25. S. Aschoff, "Pet RX," *Floridian*, June 10, 2003.

26. Schwabe et al., *Veterinary Medicine* and Human Health.

27. Aschoff, "Pet RX."

28. J.E. Brody. "V.I.P. Medical Treatment Adds Meaning to Dog's (or Cat's) Life." *New York Times*, August 14, 2001: Section F; Page 4; Column 2.

29. J.E. Brody. "V.I.P. Medical Treatment Adds Meaning to Dog's (or Cat's) Life," *New York Times*, August 14, 2001.

30. American Veterinary Medical Association, "Survey Says: Owners Taking Good Care of Their Pets," *Journal of the American Veterinary Medical Association*; available at http://www.avma.org/onlnews/javma/ feb00/s020100d.asp.

31. DVM News Magazine, "Pet Spending to Top \$37 Billion by '08"; available at http://www.dvmnewsmagazine.com/dvm/ content/pringContentPopup.jsp?id=85154.

32. L. Copeland. "Transplant Offers Hope for a Tabby; With Kidney Comes 2nd Chance at 9 Lives," *Washington Post*, March 14, 1999. Also B. Bilger, "The Last Meow," *New Yorker*, September 8, 2003, at 46. Donor cats are taken from local shelters and research labs, and the owners of the transplantee must agree to adopt the donor (p. 49).

33. Offering a pro-pet cloning argument in no way commits me to a pro-human cloning argument, although I can understand the powerful sentiments that would drive a parent to desire the ability to clone a beloved child. The difference is that we can accept a sacrifice in animal lives (we euthanize them, we experiment on them, and we eat them) that we cannot accept in human lives. But if human cloning could be guaranteed never to result in a birth defect, stillbirth, or compromised health status of a child, the debate about human cloning would be quite different.

34. CBS Evening News, "Legal Relationship Between Pets and Their Owners," CBS News Transcripts, Aug. 7, 2000; B. Pool, "In West Hollywood, Pets are Part of the Family," Los Angeles Times, February 22, 2001; "Pet Owners in San Francisco become 'Pet Guardians," The San Diego Union Tribune, March 1, 2001; and "Students Make History by Helping to Draft & Pass Animal Rights Legislation," News from General Assembly, September 26, 2001; available http://www.rilin. at state.ri.us/leg\_press/2001/september/Denniganpercent20pets.htm (last visited Oct. 16, 2003).