Organisms We Examine
April Dodd

Our school's hallways reek of death.

In room 155, 32 cats are scattered in various stages of non-existence; that is, though they came into living with a certain amount of dignity and even beauty, they left the planet mangled by sadly well-intentioned hands.

In 178, senior anatomy students scramble turtles' brains with a needle and proceed to slice off the amphibian's shell and watch its heart beat until the brain totally ceases to function and the little legs crumple limply around the body.

School-based dissection has long been cavalierly accepted as a means of teaching youth the structure of a vertebra as a model for the human interior. Indeed, graduated students worldwide acknowledge that the overpowering odor of formaldehyde and the pathetic tension of a fetal pig's flesh just before being sliced are some of the most memorable sensory details of their high school experience (Sargent). Biology teachers condone the practice for the intensely hands-on experience it lends to otherwise disinterested pupils; administrators carefully budget the purchase of animals boasting "utterly humane" treatment before death. Some kids like wielding a scalpel and pulling apart pulsing blood vessels and tearing flesh marinated in chemicals. Others are wary of the task.

In 1987, the California Supreme Court supported a student who refused to dissect a frog in his freshman biology class (Morrison). With this began an avalanche of objection to the ubiquitous practice of dissecting. In 1999, Trulie Nobis objected on a moral basis to cat dissection in a human anatomy course at Monroe Community College in New York State. She was denied an alternative to the dissection and was told by counselors to "seriously reconsider

her medical profession." Ms. Nobis noted that the professor of the course had begun the year by stating that "there is no adequate substitute for the study of the human body itself" (Simmons). Recently, many state-based Boards of Education have ruled that all high schools must allow students to perform alternative assignments to dissecting; however, many teachers still insist that physical dissection of a lake toad is integral to every child's well-rounded education (Arvin).

Most companies that provide these animals happily label themselves as humane; most are also adamant that they do not accept live animals, which would indicate that these businesses do not perform any actual murder. However, the U.S. Department of Agriculture has confirmed that a number of reputable distribution agencies obtain cats and dogs by means of a "buncher"—a person who responds to Found Pet ads and delivers said pets to sites where they are injected with formaldehyde, knocked out, poisoned with chlorophyll, suffocated, or frozen to death. In one case, an Illinois high school girl who had recently lost her cat, a friendly calico called Bumpus, found her long-time family friend lying before her on a dissecting tray as a result of "buncher" activity (Swanson). Many of the animals that end up in a classroom are reared with dissection as their ultimate fate. These creatures are, for the duration of their short life, kept in unsanitary, crowded, and highly stressful pens. After the Department of Agriculture exposed such immoral treatment, many companies were forced to sign agreements ironically titled "Contracts of Humanity," which promised to allow frogs, pigs, and cats to live a healthy life and die of natural causes before being prepared for dissection. In response, several organizations conveniently outsourced their supply chains to Mexico. Perhaps the most horrific example of this problem-solving strategy involved beggar children of Mexico City, who were paid one dollar for each stray cat they captured. The cats were forced into a bag and drowned collectively as the children looked on. The sacks of bloated, soggy felines were then shipped to Tucson, where ignorant

school kids spent days shaving hair, taking samples of lung tissue, and examining the mammals' reproductive organs (Julians).

Animals subject to dissection are vulnerable to appalling callousness from the human race. But—though the human race may be yet unaware—dissection itself may be inflicting its own avenging harm on us. Formaldehyde has been identified as a cause of throat and lung cancers. Because animals are frequently obtained by underhanded methods, it is almost impossible to ensure that the creatures are free of transferable diseases, which may transmit to humans due to inadequate hand-washing—and let's face it. Few high school students follow the FDA's suggestion to scrub vigorously for at least 30 seconds with soap and hot water (Benos). Dissection, once the grand fad for lower-level exploration of mammalian structure, is now also being proven more and more irrelevant. As Professor Myers of Monroe Community College admitted, a cat simply is not the same as a human, despite possession of many similar organs. The four-legged stance of a feline puts distinctly different pressure on the spinal column; the nerve system is infinitely less complex (though, certainly, sufficient to acutely feel the pain of torture and death); the diet of a cat largely alters the functions of the stomach, liver, and bladder (CFA). As far as appreciation of the human systems goes, pupils are probably better off examining a well-constructed plastic model than sticking their fingers into the digestive system of a British Shorthair. Additionally, most high school students are less concerned with the anatomical design of the animal they are assigned to dissect than (as is the case with boys) delighting in the morbidity of the situation or (as is the case with girls) shrieking when some organ inexplicably squirts icky fluid on their favorite shirt. Even if the project lent perfect insight into physiological function, the average high school student is not prepared to deeply examine the information they are supposed to receive. As a final touch on the anti-dissection cake, the

practice of dissection has a very negative effect on the environment from which subjects are taken. Most notable is the capture of frogs from the wild, where they control the insect population. When the frog population decreases, insects increase, causing vegetation to decrease in turn; though the effect is a large-scale snowball, it is nonetheless a necessary counter-argument to those who maintain that dissection is justified because it supposedly “forces students to appreciate life” (Clearinghouse).

Dissection, which is horrendous for animals, potentially harmful for students, and largely ineffective for learning, has several utterly simple alternatives. One is online dissection, which not only averts moral objection, but is in large part much clearer, less intimidating, and certainly less putrid than live dissection. This option saves the lives of thousands of animals and controls the scenario under which dissection takes place. The spread of disease is prevented; students are urged to focus on the intellectual value of the activity rather than on the disgusting appeal of a shriveled, formaldehyde-soaked fetal pig; trustworthy, science-based programs benefit from online dissection, in contrast to often conniving, cruel industries of slaughter (Nassbaum). Also, plastic models of commonly dissected creatures are available. Like online dissection, this route not only saves money because the units are reusable year after year, but is also far more uniform than examination of an actual animal (Doone). The fact that dissection is brutal for the animals with whom we share the planet *and* largely unnecessary makes it a cause on the brink of complete reorganization. The practice should not flourish any more, since increasingly advantageous methods are now available.

Our hallways need not smell of death any longer.

Works Cited

1. Simmons, Eric E. "Animal Dissection and Student Choice." University of Rochester. 4 Mar. 2008. <http://mail.rochester.edu/~nobs/dissection>
2. Julians, Richard. "Cut Out Dissection." PETA. 4 Mar. 2008. <peta.com>.
3. Balcombe, PhD, Jonathon. Animals in Higher Education Problems. New York, New York: HSUS, 2000.
4. Sargent, Martin D. "Dissecting Tools in Schools." FDA. 2 Mar. 2008. <www.fda.gov>
5. Nassbaum, Sheryl L. "Froguts Receives Award from Learning Magazine." Froguts. 29 Feb. 2008. <froguts.com>.
6. Harrison, MD, Nancy L. "Beyond Dissection: Using Ethical Alternatives for a Better Education." Dissection Alternatives Headquarters. 3 Mar. 2008. <dissectionalternatives.com>.
7. Clearinghouse for Science Mathematics and Environmental Education Alternatives. Alternatives to Animal Dissection in School Science Classes. Columbus, OH: Clearinghouse Publishers, Inc., 2004.
8. Berman, W. Dissection Dissected. Atlanta, GA: The Science Teacher, 2002.
9. Morrison, AR. What's Wrong With Animal Rights? De Moines, Iowa: American School Board Journal, 2005.
10. Arvin, Laurel. "Suggestions for Adaptation of Dissection in Illinois Schools." Illinois School Board. 4 Mar. 2008.
11. Benos, Dale. "The Ups and Downs of Science Education." American Physiological Society. 4 Mar. 2008. <faseb.org/aps/animal>.

12. Doone, Lewis R. The Imaginary Scalpel. Los Angeles, CA: The Los Angeles Scientific Courier, 1999.
13. Swanson, Ron. “Students May Get To Cut Out Of Dissection.” US Department of Agriculture. 3 Mar. 2008. <www.usda.org>
14. “CFA Breeds.” Cat Fanciers Association, Inc. 3 Mar. 2008. <www.cfainc.org/breeds>