

## *A Conscientious Objection*

This dilemma occurred some years ago when I was in high school. I was taking a biology course from a teacher I greatly respected. He was passionate about his subject; he took pains to teach it well; and I was doing well in the class.

Toward the end of the year, however, I became distressed over an upcoming project that would involve a dissection. While I will not argue about the pros and cons of animal experimentation, I felt then (and still do) that gathering up thousands of frogs, cats, fetal pigs, etc. for high school students (many of whom will go to college and study history or interior design) is simply a gross waste of life. At the very least, I believe that an honest conscientious objection such as mine constituted a reasonable justification for the teacher's assigning a substitute activity for the dissection project.

To say he disagreed with me would be putting it mildly. He was insistent that dissection was a mandatory part of the class and that if I refused to participate, my current grade of A would become a C. He also informed me that he was under no obligation from the school to accommodate me or my objections, claiming that "morals have no place in my classroom."

Fortunately, the school administrators were more understanding, once my irate mother called. They insisted that my teacher would have to prepare an alternative assignment for me or any other student who did not wish to participate in the dissection. He went along, but only after telling me he was doing so against his will. I also remember a remarkable threat: that if he so much as caught me or any other dissenter wearing a leather belt, he would fail us.

Ultimately, two other students and I completed the alternative assignment—which was more than twice the workload of the dissection project—and I kept my A for the course. But my relationship with the teacher was never the same. I could no longer respect him as I once had. I felt he had ignored my values and my rights and had only yielded from force and with bitterness.

On the other hand, a dilemma like mine raises the larger question about the limits of conscientious objection among science students. Suppose a student refuses to do an assignment because he (or his parents) objects to certain anatomical drawings in his textbook, or that he does not wish to participate in classes on reproduction, or learning about the construction of the atomic bomb? How might one discriminate between ethically reasonable versus unreasonable objections to certain material in science curricula?

## *Expert Opinion*

In some states, students enjoy a legal right to exemption from animal dissection exercises under state statutory law or administrative policy. Resources for students and their parents regarding legal rights to exemption are available from the Humane Society of the United States<sup>1</sup> and the National Anti-Vivisection Society.<sup>2</sup>

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<sup>1</sup> Humane Society of the United States, *Animals in Education*, <[http://www.hsus.org/animals\\_in\\_research/animals\\_in\\_education/](http://www.hsus.org/animals_in_research/animals_in_education/)>.

<sup>2</sup> National Anti-Vivisection Society, *Alternatives in Education*, <[http://www.navs.org/site/PageServer?pagename=ain\\_edu\\_dissection\\_hotline](http://www.navs.org/site/PageServer?pagename=ain_edu_dissection_hotline)>.

Assuming students do not enjoy a legal right to exemption, how should teachers and school administrators respond to the ethical issues posed by the dilemma contributor? Two options are considered here: eliminating animal dissection exercises from K-12 science curricula altogether or continuing the use of these exercises but granting exemptions to conscientious objectors.

### *Elimination of Animal Dissection Exercises*

Assuming that, as a matter of biological-scientific literacy, school children ought to acquire basic knowledge about animal anatomy, can and should the *mode* of instruction be revised to eliminate animal dissection exercises and employ alternatives? Effective and affordable alternatives are increasingly available. These include charts, slides, dissection manuals, 3D models, simulators, manikins, preserved materials, computer emulations and simulations, films, photographs, video, interactive video, Internet presentations, and virtual simulators.<sup>3</sup> Employing these alternatives would sacrifice some depth of knowledge that can only be attained by animal dissection.<sup>4</sup> But, if there are ethical concerns associated with the “transportation, holding, and killing” of “six million vertebrates” per year in the U.S, as estimated in 2004 for use in animal dissection exercises,<sup>5</sup> should we consider substituting good if not perfect alternatives?

In a diverse society, we will disagree about the moral significance of harm to animals and the weight it should be given in our analysis. But even as the debate persists, our laws, policies, and practices indicate broad acknowledgement across diverse worldviews that harm to animals is morally significant, can be justified only for worthy purposes, and should be minimized. For example, while most of us continue to use animals for food and clothing, laws and polices prohibit pointless acts of animal cruelty and neglect and regulate the use of animals in research. Current regulations governing animal research aim to ensure that animals are used only for worthwhile purposes; measures are undertaken to minimize suffering, imposition on quality of life, and premature loss of life; and consideration is given to methods that can accomplish the research goals without the use of animals.<sup>6</sup>

Given currently available alternatives to teaching students the basics of animal anatomy and given the moral significance and extent of the harm to animals caused by current practices, there is reason to consider whether we should eliminate animal dissection exercises in some

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<sup>3</sup> A.J. Smith & K. Smith, “Guidelines for Humane Education: Alternatives to the Use of Animals in Teaching and Training,” *Alternatives to Laboratory Animals* 32, Supplement 1, 29-39, 2004, at pages 32-33.

<sup>4</sup> A.J. Smith & K. Smith, “Guidelines for Humane Education: Alternatives to the Use of Animals in Teaching and Training,” *Alternatives to Laboratory Animals* 32, Supplement 1, 29-39, 2004, at page 34.

<sup>5</sup> A.J. Smith & K. Smith, “Guidelines for Humane Education: Alternatives to the Use of Animals in Teaching and Training,” *Alternatives to Laboratory Animals* 32, Supplement 1, 29-39, 2004, at page 30.

<sup>6</sup> See, e.g., “U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training,” Public Health Service Policy on Humane Care and Use of Laboratory Animals, Office of Laboratory Animal Welfare, August 2002. Available at <http://grants.nih.gov/grants/olaw/references/PHSPolicyLabAnimals.pdf> (accessed November 1, 2008). See also policies and laws governing animals and research at <http://grants.nih.gov/grants/olaw/olaw.htm>.

school science curricula. If we cannot justify the use in light of the pedagogic purposes of the exercises, then continued use would amount to a “gross waste of life.”

### *Exemption from Animal Dissection Exercises*

The dilemma contributor obviously believes that his or her right to adhere to his or her values should have been honored, willingly and respectfully. But the contributor recognizes that students in a diverse society hold diverse values and puzzles about how we might distinguish “ethically reasonable” from “ethically unreasonable” objections. The ethical questions surrounding conscience claims involve a tension between the scope of individual liberty when motivated by conscience and the scope of authority of those institutions that make it possible for diverse individuals to live together in peace, flourish, and enjoy a maximum range of liberty. The questioner claimed and eventually was granted an “ethical right” to conscientious exemption. But the questioner anticipates the resulting chaos if all members of a diverse student body could claim conscientious exemption from any and all science curricular requirements. So, how might we distinguish “reasonable” from “unreasonable” claims?<sup>7</sup>

We must resolve the tension between 1) *the scope of individual liberty motivated by conscience* and 2) *the scope of institutional authority necessary to bind together a diverse community* so that its members can live in peace, flourish, and enjoy a maximum range of liberty. When a claim for exemption is based on dissenting beliefs that are *widely held* and the exemption *would not undermine the purposes of the curricular requirement*, granting the exemption is a sensible, practical way to resolve the tension. For example, state legislatures have granted exemptions for underage use of wine as a sacrament in violation of state laws prohibiting underage drinking; the sacramental use of wine is widely engaged in and the practice does not implicate the health and safety concerns underlying underage drinking laws. Even if dissenting beliefs are not widely held, if compliance with the curricular requirement would *substantially burden* the student’s conscience and exemption would not undermine the purposes of the curricular requirement, granting the exemption also makes sense given the serious harm to individual conscience entailed in enforcing the requirement. So, for example, state legislatures have also granted exemptions for the sacramental use of peyote even though only a very few religious believers engage in this practice and given that sacramental use does not implicate the health and safety concerns underlying criminal prohibitions of peyote.

In the dilemma contributor’s case, engaging in an exercise that would contribute to a “gross waste of life” would likely impose a substantial burden on the contributor’s conscience. This would seem to justify an “ethical right” to exemption given the ready availability of good-enough alternatives. Also, in light of the current-day availability of alternatives, widespread requests for exemption by students who object because they find dissecting animals to be repulsive—even if they cannot explain how engaging in the exercise would substantially burden their conscience—might be warranted as well. Doing so would avoid the practical difficulties of enforcing a requirement that is widely objected to and would grant that repulsion is

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<sup>7</sup> The framework suggested here draws on the U.S. Supreme Court decision in *Employment Division, Department of Human Resources of Oregon v. Smith*, 494 U.S. 872 (1990).

sometimes, although not always, a marker of moral discomfort even if the person experiencing the repulsion cannot immediately articulate the moral objection.

So, if biology teachers continue to require animal dissection exercises because they believe the pedagogic benefits justify the use of animals in this way, it would make sense to tell students *at the outset* of the animal anatomy portion of a course that the teacher believes that these dissection exercises are the best way to learn the material and to explain how the animals used in the exercise have been procured to answer any concerns students might have, for example, about the treatment of the animals in transportation or their preparation for use in dissection. The teacher could then add that students are entitled to perform alternative assignments if they find the exercises offensive or in violation of their moral beliefs.

### *The Ethics of Other Conscientious Exemptions*

In some cases, as with animal dissection exercises, conscientious objectors will claim exemption from the *mode* of teaching truths about the natural world. In other cases, they may claim exemption from exposure to the *content* of these truths. The fundamental tension between the scope of individual conscience and of institutional authority is implicated in both cases, but the latter poses more difficult challenges to the ethical framework for resolving this tension because, if the exemptions are granted, the objectors might not realize some or all of the pedagogic purposes of the curricular requirements.

Exposure to human anatomical drawings or instruction in the biology of human reproduction without explanation of the significance of sexual behavior in a religious context might substantially burden the conscience of some. In both of these examples, the objection is partly to mode and partly to content. So some of the pedagogic purposes of the curricular requirements might be met by alternative modes of instruction, for example, descriptions rather than depictions of anatomy or the substitution of instruction in reproduction in the home or a religious institution.

With respect to learning about the construction of the atomic bomb, the objection would run almost entirely to content. Instruction in the content might substantially burden the conscience of those who believe it is unethical to teach truths when knowledge of these truths has in the past and might in the future contribute to consequences that the objector believes are profoundly immoral. Alternatives for the objector might require substitution of different content, for example, a historical account of a different scientific and engineering feat.

At least in the case of requirements that would impose a substantial burden, given the corrosiveness to the educational experience of compelled compliance, exemptions might be granted even if realization of the pedagogical purpose for the objectors can only be *partly* achieved. This approach to determining the reasonableness of claimed ethical rights to exemption would seem especially important in the public school setting. If rights to exemption are not honored in public schools, this may increasingly drive individuals to private schools in which worldviews are shared and conflicts are unlikely to arise. Honoring these rights in public schools preserves the possibility of an educational meeting place for students with diverse worldviews, where teachers and learners can model reasonable accommodation of conscientious objectors, and where objections, such as those of the questioner, might prove to be the leading edge of revising prevailing views of how science should be taught.

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