



2013

Climate Geoengineering and IWU's Ethics Bowl

Jake K. Bates
jbates@iwu.edu

Recommended Citation

Bates, Jake K. (2013) "Climate Geoengineering and IWU's Ethics Bowl," *The Intellectual Standard*: Vol. 2: Iss. 2, Article 2. Available at: <http://digitalcommons.iwu.edu/tis/vol2/iss2/2>

This Article is brought to you for free and open access by The Ames Library, the Andrew W. Mellon Center for Curricular and Faculty Development, the Office of the Provost and the Office of the President. It has been accepted for inclusion in Digital Commons @ IWU by the faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Illinois Wesleyan University

From the SelectedWorks of The Intellectual Standard

October 2013

Climate Geoengineering and IWU's Ethics Bowl

Contact
Author

Start Your Own
SelectedWorks

Notify Me
of New Work



Available at: <http://works.bepress.com/theintellectualstandard/26>

Climate Geoengineering and IWU's Ethics Bowl

Jake Bates

In its sophomore season of competition, Illinois Wesleyan's Ethics Bowl team qualified for the Intercollegiate Ethics Bowl hosted in San Antonio, Texas on February 28. In spite of technical difficulties and flight delays, the team returned to campus having won the first annual Spirit of the Ethics Bowl award, an honor recognizing sportsmanship which was voted on by opposing teams. Ethics bowl competition centers around a set of cases featuring ethical dilemmas and quandaries published by the Association for Practical and Professional Ethics. It is structured so that a presenting team has ten minutes to answer a question regarding any one case, noting relevant ethical theories and examples; then an opposing team has five minutes to respond to the presenters' answer; the presenting team has another five minutes to address the opposition's response; and finally a panel of three judges has ten minutes to ask additional questions to the presenting team. This year's national competition addressed ethical cases ranging from the DREAM Act and exotic animal hunting to copyright infringement and climate geoengineering. This essay will address the case and question of climate geoengineering, including some of the ideas mentioned in the opposing team, University of California, Santa Cruz's presentation, in IWU's rebuttal, and ideas not brought up during the competition.¹

The case drew attention to the issue of man-made climate change, and attempts to dampen its severity with "techniques for engineering Mother Nature."² These geoengineering techniques vary widely in their methods and effectiveness, but their goal is to modify the planet's environment with available technology in a way that preserves and protects the ecosystem from worsening climate change. The project specifically mentioned was the UK-funded and researched Stratospheric Particle Injection for Climate Engineering (SPICE). This technique involved pumping water

1 If you are interested in learning more about the Ethics Bowl and how you can participate, contact Coach Emily Kelahan at ekelahan@iwu.edu.

2 "Case 4," Association for Practical and Professional Ethics 2013.

molecules into the atmosphere in hopes of deflecting radiation, thereby producing a cooling effect. The project was put on hold before implementation in 2011 due to worldwide concerns about the climatic, scientific, political, and ethical implications of the technology. The question asked of competitors at the Ethics Bowl was, “Are climate geoengineering techniques such as SPICE ethical?”

The opposition took a utilitarian approach to the question, answering that the morality of a geoengineering technique is dependent upon three criteria and that SPICE, specifically, was unethical according to these principles. Utilitarianism is a common standard of morality among influential philosophers and in ethics bowl competition which states that the most moral outcome is that which maximizes benefits and happiness for the greatest number of those affected. In a context involving the global climate and ecosystem and both current and future generations, it is clear that countless humans and animals would be affected by an attempt at geoengineering, and so the options for addressing climate change should be considered carefully. The UCSC team contended that, with such widespread effects, a geoengineering technique would only be ethical if it was effective, sustainable, and internationally agreed upon.

Effectiveness is likely the most obvious of these criteria. An ineffective geoengineering technique would waste time and resources while not mitigating the issue of climate change, so few (if any) people stand to benefit from one. Without a doubt, the benefits would be dwarfed in comparison to the costs, and so it would not be ethical in a utilitarian framework. From UCSC’s perspective, SPICE then would fail even this first criterion, because its long-term effects are largely un-researched and unknown, and there are several viable alternatives to SPICE’s specific method which are better researched and more effective.

A “sustainable” geoengineering technique was defined by the opposition as one which does not require further resources or research. Such a strict definition of sustainability led the team to dismiss SPICE as an ethical option again, but may be the first point of more widespread contention. Broader definitions would suggest that a technology is sustainable if it “maintains its own viability” or is “able to be supported with basic necessities and sufficient funds.”³ Sustainable agriculture and hybrid or electronic

3 *Random House Dictionary*, 2013.

automobile technologies are examples of techniques which require resources and continued research, but are more sustainable than the current status quo which is exacerbating climate change. In the case of any geoengineering technique, additional research involving empirical evidence of its costs and benefits would be desirable. Otherwise, unintended and unpredicted consequences may worsen climate change and its effects on the world while more effective and sustainable technologies are unnoticed.

International agreement was posited as the third criterion in determining the morality of a geoengineering technique because of the technology's inherently worldwide impact. The UCSC team clarified for the judges that they would expect a majority of not only state leaders, but also national, tribal, or community interests to agree on implementing any geoengineering project for it to be ethically sound. SPICE, a project of the UK, was not internationally legitimized this way and so it also failed to meet this qualification. International legitimacy is a more peculiar and obviously tempting criterion for a moral geoengineering technology, especially within a utilitarian framework. Democratically determining whether or not those who are affected value the benefits of a technique more than the costs and risks associated with it is a relatively easy way to concretely determine how many people will perceive their selves as better off. Yet, achieving such an agreement could be extremely impractical given varying values and desires, and still leaves the concerns of animals and future generations unaccounted.

International consensus may not, in fact, be a necessary condition for a climate geoengineering project. Consider the SETI Institute, committed to a Search for Extraterrestrial Intelligence. SETI technologies are currently being used to search for and communicate with extraterrestrial life and have been funded entirely by private contributors rather than any national or international organization. The discovery of, and more especially communication with, extraterrestrial life would absolutely affect current and future generations of humans worldwide, possibly positively but possibly negatively. Still, the SETI Institute has not been branded as an immoral undertaking. It is at least plausible that private contributions could create and sustain an effective climate geoengineering project. This could prove more practical and quicker than reaching an international agreement. An effective, sustainable, and quick solution for mitigating climate

change should not be dismissed as immoral only because it lacked official public support.

The issue of urgency was addressed in the IWU team's response and is of particular interest to the problem of climate change. Research has indicated that runaway climate change could lead the earth's ecosystem past a "point of no return." In other words, climate change could worsen to a point where a positive feedback loop continually alters the climate and external forces can have no impact on it. There is little scientific consensus regarding whether or not our planet has passed this point or how close it may be, but it is widely understood that man-made climate change is a pressing concern and should be addressed with earnestness. Illinois Wesleyan's team reasoned that because climate change is an imminent worry, the quickness of a geoengineering technology bears some weight in its ethical consideration. This can be seen within a utilitarian framework in that a quicker solution will benefit the world sooner and longer than a delayed one.

UCSC's team was skeptical that climate change on Earth was so close to a point of no return and reiterated alternative solutions that have been researched, but added that personal endeavors to live more sustainably can make an impact and can be considered ethical. Because the transportation industry and the meat industry contribute to the leading causes of climate change, riding a bike more often and reducing meat consumption are effective and sustainable ways to help mitigate the problem. These and similarly environmentally friendly actions will make a beneficial impact, at least for the people willing to try them, and thus they are ethical ways to deal with climate change on a personal level.

There are surely more criteria which may matter in approaching climate geoengineering from a utilitarian standpoint, and there are plenty of alternative standpoints to approach the issue from. Ethics bowl has proven to be a wonderful forum for Wesleyan students to discuss, with each other and with students nationwide, a variety of important and interesting topics and to view them from many different perspectives. After a taste of the national competition, IWU's team is looking forward to competing with a vengeance against tight competition next fall.