(un)common partnerships for a common purpose: focusing on art/science relationships in the study of environmental art

} introduction

"Perhaps the value of collaboration is that through it we may liberate each other from the institutional modes of thinking that narrow us, rediscovering... that the gaps among the arts and sciences tend to be full of life." – Jeff Kelley¹

The Environmental Art movement began in the 1960s as a reaction against conventional gallery and museum practices. Since then it has become an important genre within Art, and many contemporary artists are re-envisioning our relationship to the natural environment, educating society about environmental problems, and even reclaiming and remediating damaged environments, often via collaborations with scientists.² Despite both the numerous collaborations between artists and scientists on these issues and the general emphasis on interdisciplinary discourse within the academy, few connections exist between the sciences and the creative arts in university programs. This project entails constructing a cross-listed course in Art and Environmental Studies that focuses specifically on collaborations between artists and scientists and doing the research on such collaborations as they exist outside the academy to make the course transformative, timely and effective.

This project will promote sustainability within new areas of the curriculum, create more visible bridges between culturally polarized fields of study, open up additional possibilities for interdisciplinarity, and assist in demythologizing the roles of artists and scientists in society. In addition, the project seeks to allow students and me to collaboratively explore the following question: Can

¹ Jeff Kelley, "Common Work," in *Mapping the Terrain: New Genre Public Art*, ed. Suzanne Lacy, (Washington: Bay Press, 1994), 139 - 148.

² Don Krug and Jenny Siegenthaler, "Changing Views about Art and the Earth," Greenmuseum.org, <u>http://www.greenmuseum.org/c/aen/Earth/Changing/index.php</u> (accessed September 15, 2009).

cooperation between scientists and artists in addressing environmental issues positively challenge the conventional methodologies and practices typical to both disciplines and enable a deeper engagement with the environment? The implications of this research are far-reaching, both for Elon and beyond.

} project overview

The Environmental Studies department plans to revise its current curriculum and I have been asked to be involved in its re-design, as well as offer a core course option within the BA track. In my preliminary research I have found very little presence of the creative arts in Environmental Studies programs in higher education institutions in the United States, including in programs that are interdisciplinary. Therefore, this is an exciting opportunity for curricular innovation—a way to help bridge the gap between the creative arts and the sciences by focusing on a partnership between these conventionally polarized disciplines. Rather than offer a traditional art course in an environmental context -- which would, like typical art classes, focus on the perspective of the artist -- I have suggested to ENS that the course examine Environmental Art specifically from the perspective of artist/scientist research teams. While the numbers of artists and scientists collaborating on environmental projects is increasing, no model exists for engaging in this kind of work in undergraduate curricula. Thus, the CATL Scholar Fellowship would grant me the necessary time and resources to gain insight into what is needed to pursue this interdisciplinary work with undergraduate students. It is my hope that this project might eventually serve as a model for interdisciplinary study of Environmental Art at the undergraduate level.

For over ten years, my own artistic scholarship has focused on the intersection between artistic and scientific inquiry. Drawing philosophical connections between seemingly disparate languages, my work has largely been community- and ecologically-driven and has served to undermine distinctions between traditionally held polarizations between subjectivity and objectivity, emotion and logic, interpretation and truth, art and science. My practice as a scholar and artist has always greatly informed my pedagogy and in 2008 I served as an Elon Sustainability Faculty Scholar, working to integrate dialogues on sustainability into the foundations curriculum in the Art department. Helping to create more visible bridges between culturally polarized concepts and fields of study, while broadening the interdisciplinary dialogue on sustainability and the environment within the undergraduate curriculum, would be an exciting extension of my work of the last ten years and my work as a Sustainability Faculty Scholar.

There are three definitive parts to this project. First, I plan to work with students to determine the necessary tools for art/science collaborations. We will analyze the completed work of relevant collaborative environmental projects, including interviewing teams to isolate practical considerations that face scientists and artists working together and to identify protocols for successful collaboration. We will also seek and investigate sites in the region to carry out projects. The second part of the project is the design and re-design of a course that would provide collaborative opportunities for nascent artists and scientists to find innovative ways of understanding and conveying ideas about the environment. The content of the course itself would much depend on the earlier research, though the kinds of projects students might develop may include earthworks, land art, ephemeral installations, ecoventions, and educational displays. I would examine what was successful in the first iteration of the course to reflectively re-design it based on the experiences of the students involved the first time it is taught. Because the results of this project would reveal a great deal about art/science collaborations and would ideally contribute to the creation of a model for this kind of interdisciplinary work at the undergraduate level, for the third part of the project I plan to present this research at national conferences. This could include conferences on teaching and learning, such as ISSOTL, and art conferences that have included panel discussions on art/science collaborations at the professional level, such as SECAC and CAA.

} rationale and implications

3

However we combine them, Art and Science are loaded categories; they sometimes seem locked in an awkward embrace. – Michell Whitelaw³

Although the predominant perception of the artist is as maker of beautiful objects, the ecologically- and environmentally-oriented projects that artists and scientists develop push significantly beyond the aesthetic. For example, Detroit-based sculptor, Mel Chin, collaborated with a senior research scientist at the United States Department of Agriculture to detoxify a section of a landfill in St. Paul, Minnesota using a special group of plants that extract heavy metals from the soil. This partnership enabled the research and testing of a new "green remediation" technology to advance from laboratory to field. In another example, New York-based public artist, Mierle Laderman-Ukeles, constructed a "visitor center" at a marine transfer station (where garbage is loaded onto barges prior to being dumped in a landfill) to provide a window into the garbage removal process and to educate visitors on the social and ecological issues of waste management. Finally, in Time Landscape of New York City, Alan Sonfist, within a 25'x40' corner in Greenwich Village, worked with botanists and ... to replant the pre-colonial forest that once inhabited Manhattan Island, raising questions about the urban versus natural environment. These are just a few examples among many that weave environmental and social responsibility into the making of art and stimulate new discourse on art/science relationships. Students in the course will draw from the models of artists like these: their projects will be field-based and sitespecific and respond to the ecological issues and questions embodied within the site, but on a smaller scale.

For Art, such collaborations help to re-establish the communal dimension in the discipline. In *Connective Aesthetics, Art After Individualism* Suzi Gablik underscores that "much of new art focuses on social creativity rather than on self-expression and contradicts the myth of the isolated genius–private,

³ Mitchell Whitelaw, "Beyond Boundaries, Theory" (paper presented at New Constellations: Art Science and Society, Sydney, Australia, March 17 – 19, 2006).

subjective, behind closed doors in the studio, separate from others and the world."⁴ However, the myth still largely pervades within society and within academic environments as well. Even locations of art departments are often on the fringes of university campuses, reinforcing the stereotype.⁵ This isolation, according to Gablik, has "crippled art's effectiveness and influence in the social world."⁶ A partnership between Art and Environmental Studies would well reflect trends in the discipline, while also helping to alter the perception of the role of artists within society.

For ENS, the presence of Art in the curriculum would be unique, making Elon's program a model for other interdisciplinary programs. Because the program prides itself on providing students with "a broad perspective on environmental issues across the spectrum of the liberal arts" and reinforcing that environmental problems "are not isolated and take a collaboration between a lot of different disciplines to solve,"⁷ the ENS faculty regard the absence of the creative arts as a problem that needs resolution. Art's contribution in the curriculum would expand the interdisciplinarity of the program and help to contribute to a more holistic perspective on environmental issues.

Elon already serves as a strong university model for sustainability and environmental awareness within its day-to-day functioning and green building practices. The recent hiring of a sustainability coordinator and more assertive conservation initiatives across campus are further evidence of this, as well as CATL's new Sustainability Scholars program, which endeavors to enhance focus on sustainability within courses across the curriculum. This project would help to strengthen Elon's commitment to sustainability and conservation practice by reinforcing inter-curricular dialogues on environmental

⁴ Suzi Gablick "Connective Aesthetics, Art After Individualism," in *Mapping the Terrain: New Genre Public Art*, ed. Suzanne Lacy, (Washington: Bay Press, 1994), 74 - 87.

⁵ This is certainly the case at Elon, where the new art building on Haggard Avenue is a significant distance from main campus, and only recently, after three years, is it even be represented on the campus map.

⁶ Suzi Gablick "Connective Aesthetics, Art After Individualism," in *Mapping the Terrain: New Genre Public Art*, ed. Suzanne Lacy, (Washington: Bay Press, 1994), 74 - 87.

⁷ Sharon Spray, "Environmental Studies, Sustainability, Stewardship, Leadership," promotional video on ENS department website, Elon University.

issues. The interdisciplinary discourse unto itself would also be innovative, serving to break down the invisible barriers that exist between art and science—barriers that are alive and well on university campuses.

} proposed timeline

year one

Fall semester: conduct research with undergraduate students; work with Janet McFall to locate sites in North Carolina where collaborations can unfold. I will be looking to gain insight, through this research, into what kinds of projects students can realistically complete within a one-semester course, and identify appropriate student learning objectives. *Winter term:* based on data gathered during the Fall semester, develop a pilot version of the course. *Spring semester:* offer a pilot version of the course.

year two

Fall semester: work with some of the students who took the first iteration of the course to evaluate the effectiveness of the pilot course, and explore ways to better allow students to meet the course goals. I imagine that effectiveness will be partly self-reported by students as well as measured by general success of the projects (which unto themselves will identify problems and goals) and their community impact. I will work with two or three students on course revisions based on the insight gained from the pilot course; *Fall and/or Spring semester:* present results from the course at *SECAC, CAA,* and/or *ISSOTL. Spring semester:* teach the course a second time; work with students on a *SURF* presentation.

} budget

I plan to use the annual CATL Scholar funds for:

- stipends for student research assistants
- travel funds for conferences
- funds for travel to regional sites to develop projects
- misc course materials