Exploring the Roles of the Artistic Community

Mike Madden

Marine, Earth, and Atmospheric Sciences Department, North Carolina State University, Raleigh, NC, Atlanta CoPe Session, September 26-28, 2018, jmmadde2@ncsu.edu.

Preface

The arts are incredibly powerful and influential. The arts inspire people, spread awareness, and instill sacred, aesthetic values. For example, my long-time idol, photographer and director Stanley Kubrick, inspired people to not only pursue filmmaking, but also to study astronomy and the ethics of artificial intelligence through his *2001: A Space Odyssey*. Gene Roddenberry, the screenwriter and producer of *Star Trek*, inspired countless numbers of people to pursue aerospace engineering, computer science, cosmology, and other sciences. John James Audubon, Claude Monet, and Guy Harvey inspired people to study nature and pursue conservation efforts. Cristina Mittermeier, the National Geographic photographer who captured the iconic image of the starving polar bear in the frozen tundra, shocked the world and spread awareness of climate change. Philip Glass, the minimalist composer, was partly responsible for my study of global systems and urbanization through his work on *The Qatsi Trilogy*.

Idea in a Nutshell

With the examples I have provided above, it is evident that the arts can be incredibly powerful and useful for awareness, education, and community engagement. It is also evident, through my own travels, that artists are abundant in coastal communities. They affect local cultures, perceptions, and values, and likely understand the impacts of the phenomena that we, as scientists, study. It is critical that this community is not forgotten.

Thus, *I urge the NSF and UCAR to make strong, long-lasting connections with the artistic community for the purposes of broadening participation, educating the public, and generating awareness of coastal issues.*

To clarify, I define the "artistic community" as the following, and this list is by no means exhaustive: musicians, painters, sculptors, stage performers, authors, photographers, comedians, actors, filmmakers, directors, producers, architects, poets, children's book illustrators and writers, dancers, craftspeople, potters, glassblowers, graphic designers, fashion designers, and animators.

Specific, Differentiated Recommendations

I encourage the NSF and UCAR to explore the countless ways for which artists can contribute to our various causes. I shall provide a simple, incomplete, spur-of-the-moment list of recommendations, and challenge the NSF and UCAR to brainstorm methods of their own. After speaking to several members of the Coastlines and People (CoPe) scoping session at Atlanta, I was joyous to not only see their enthusiasm on the idea of artist involvement and incorporation, but I also got to hear their lively and animated recommendations.

1. Build partnerships/collaborations with local, state, and national art museums.
2. Hosting local, state, and national art contests.
3. Hosting scoping sessions with various artists to describe the current "state-of-the-coasts," and brainstorm ideas on community engagement, education drives, and other initiatives.
4. Host sessions with K-12 educators to discover ways to combine the arts and the sciences.
    a. Hosting mindfulness exercises on the beach, and having students draw, paint, or capture the aesthetic nature through any medium they choose.
    b. Observing the flora and fauna of the beach and conducting visual art exercises.
5. Identifying relevant materials regarding coastal issues for educators.
    a. For example, the books of Mary Pope Osborne.
        i. *High Tide in Hawaii* and *Hurricane Heroes in Texas*.
6. Asking stage performers to help scientists craft better presentations and stage presence.
7. Asking visual artists to help scientists craft better figures for public display.
8. Working with public radio and television stations.
9. Soliciting input from graphic designers, video artists, and audio specialists to improve our outreach materials (e.g., YouTube, Instagram, flyers).

The above list will undoubtedly grow if a concerted effort is made to solicit input from other scoping members, educators, artists, and more. The sky is the limit. Moreover, I recognize that gauging the level of impact from this initiative may be challenging. However, this concern should not prevent us from making strong and valuable connections with this community. The goal of this initiative is to broaden participation, and I believe this initiative would accomplish that.

Impact / Value

While it is a little cliché, I will convey the value of this initiative through a personal story. If I stepped into a time machine, and stumbled upon my high-school self, my younger self would

be rather surprised to know that I am now pursuing a doctorate in the atmospheric sciences at a major research university. At that time of my life, I literally had no interest in pursuing a scientific career. Granted, I did well in math and science classes, but I had no desire to pursue those topics further.

Rather, I was preparing for a piano performance career. I had a repertoire ready for submission. I had participated in the Missouri Fine Arts Academy and was well versed in music theory and conducting. I also had various interests in abstract art, performance art, and theatre. I even won a few awards for my performances and work.

Later, I stumbled upon nature-inspired artwork, like that from Vincent van Gogh, Georgia O'Keeffe, Walter de Maria, and the aforementioned works of Philip Glass, John James Audubon, and Claude Monet. This artwork inspired me to look deeper into the issues within nature and the environment. Coincidentally, there was an intense, media buzz on climate change in the late 2000s, and I became curious. I eventually discovered a new passion – atmospheric science. I credit this discovery to those works and pieces.

If that can happen to me, it can happen to others. *I strongly believe in the power of art to motivate, inform, and inspire people.* I encourage you to reach out to this important community.