The role of METI in contemporary public and liberal arts education

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Conclusion
We scholars have an obligation to engage fellow citizens in deliberative discourse about our research, especially when our work could disrupt fundamental worldviews. With respect to astrobiology, one effective ingress is METI (Messages with potential Extraterrestrial Intelligence), also known as Active SETI (Search for Extraterrestrial Intelligence) or CETI (Communicating with Extraterrestrial Intelligence).

This poster highlights the importance of inclusion of diverse approaches when communicating about how to communicate. The practice of METI, which must be informed by insights from multiple academic disciplines as well as voices from multiple cultural perspectives, can in turn transform those disciplines and perspectives. Because this dual informative and transformative power of METI aligns with classical notions of liberal arts education and with democratic ideals for public education, it is worthwhile to present METI within multiple educational venues.

Multidisciplinary approaches
Scientists tend to approach the modes and contents of message composition through our own disciplinary lenses. For example, mathematicians assume similar perspectives. However, the sciences cannot be the sole method for how and what to communicate, because they are not the only way humans interpret the world. Simply transmitting digits of pi would establish that we are intelligent but would fail to convey any interesting peculiarities of our human condition. Good METI recognizes this; Freudenthal's Lincos starts with math before progressing to morality plays; the Voyager Golden Records culminate in architecture and music.

The most enduring descriptions are poetic. The Shield of Achilles in Homer's Iliad both contains the entire world and expresses individual actions and motivations. The most durable depictions are visual and tactile, such as Flaxman's attempt to construct Homer's impossible object. Therefore, the humanities and fine arts are invaluable to METI.

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Inclusive audiences
Every message to an unknown recipient reflects the presumptions of its makers. Carl Sagan visited the New York World’s Fair in 1939 and viewed the Westinghouse Time Capsule, which decades later inspired him to produce the Voyager Golden Record. No women were invited to include any statements in this monumental archive.

In order for METI to reflect more accurately the range of human experiences, more diverse perspectives and voices must be included in the formation and content of these messages.

Diverse pedagogies
To elicit perspectives from diverse audiences, METI education must occur in a wide variety of ways and venues, including courses at academic institutions, public outreach events, scholarly conferences, websites, and art installations.

I have taught METI courses at Carnegie Mellon and Bard High School Early College. In addition, I have delivered METI talks for the public at Assemble (arts and technology community, pictured above) and the Allegheny Observatory, and for specialists at the local Sigma Xi chapter, International Space Development Conference, the International Space Arts Workshop, and an earlier Astrobiology Science Conference.

Anyone with access to the Internet can engage in METI. Earth Tapestry, initially developed as a class project, enables users around the world to decide on the most essential aspects of our shared planet.

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Acknowledgments
I am grateful for collegial support at Carnegie Mellon, especially in the Mellon College of Science, Dietrich College of Humanities and Social Sciences, College of Fine Arts, and College of Engineering. Students in the Meaning Across the Millennia course and Science and Humanities Scholars Program, and Travis Rich and Kevin Hu (MIT Media Lab) worked on Earth Tapestry.