

# Xenolinguistics, SETI, and Pre-Colonial Anthropology

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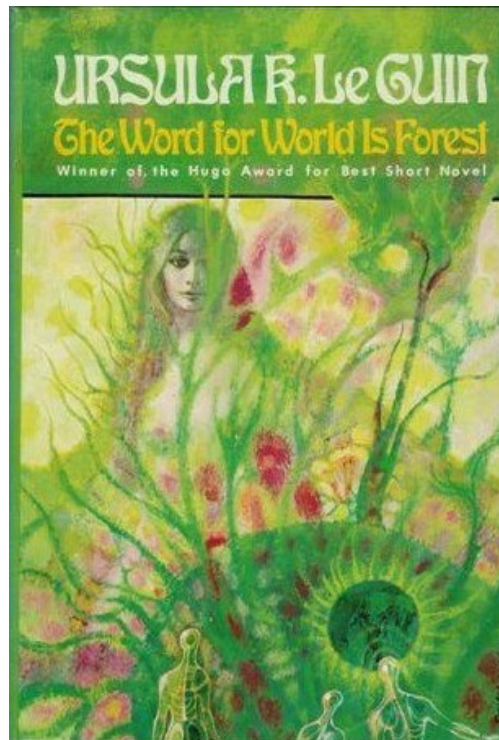
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I just finished re-reading Ursula K. Le Guin's *The Word for World Is Forest* (1976) in an old well-read family copy with the same cover illustration as this edition pictured here.



The book is part of what Le Guin **does not call** a “Hainish Cycle,” though some readers do. The Hainish books tell a series of stories set in an imaginary universe (or alternate/future history) where humans living on many worlds are beginning to establish inter-planetary relationships under guidance of the oldest inhabited world, Hain. Le Guin imagines that humans did not come from Earth originally, but were seeded as colonists on Earth and other planets by the human population on Hain. Genetic experiments resulted in populations of humans with different evolutionary characteristics. *The Word for World is Forest* takes place on Athshe, where the humans are furry, green, about 1 meter tall, and can dream while they are awake. The Athshean word for “world” is *Athshe*, which is also the word for “forest.”

The Athsheans live in tribal bands within the dense forests of their world. Colonists from Earth arrive and begin cutting down trees, mining, building settlements, and enslaving the indigenous Athshean people. There is no cultural framework for understanding this kind of violence and, in part, the story

revolves around how the Althsheans develop a response based on their distinct culture, worldview, and practices.

There are a few alien words in the book in addition to the word for world/forest. One, *sha'ab*, is the Athshean word that means both “translator” and “god.”

I'm now starting *The Dispossessed* (1974), reading the Hain books out of order, and in it came across a footnote defining an alien kinship term. This got me thinking about xenolinguistics. In the case of the Hain books, Le Guin is not using an alien language but instead a designed language she has created for her imaginary universe – like Star Trek's *Klingon*, or Tolkien's *Elvish*.

Reading about such designed and imagined languages online, I happened across a [Xenolinguistics course syllabus](#) from 2001, taught by Sheri Wells-Jensen at Bowling Green State University and found that Wells-Jensen also participated in the SETI Institute's November 2014 workshop “[Communicating Across The Cosmos](#).”

### XENOLINGUISTICS AND SETI

Thinking around this idea of communication with Extraterrestrial life, I come back to the question of communication here on Earth. We are surrounded by non-human animal and plant life here, and have directed a good part of our scientific effort at understanding that life in particular ways, but can we communicate with any of it? With any of them? The question of communication with life we may encounter in space will surely be assisted by increased efforts to communicate with life here on earth. There are projects working toward this end, for example Denise Herzing's work on [The Wild Dolphin Project](#) which approaches dolphins as ethnographic subjects to gather “information on the natural history of these dolphins, including dolphin behaviours, social structure, dolphin communication, and habitat.”

Ethnography of dolphins, this is worth thinking about and taking seriously, beyond the multispecies work and its focus on human/non-human interaction. Clearly we have multispecies ethnography as an emergent subfield in anthropology alongside anthrozoology, and both often take non-human animals seriously. But I still find a human exceptionalism built into much of the work. There's always a recognition of that exceptionalism, but in my view not enough effort to treat that exceptionalism as a serious problem. Why isn't anthropology making more of an effort to study non-human animal culture and to take it as seriously as human culture? Why is communication with non-human animals left to biology, ethology and other fields? I continue to find it surprising that when the question of communication with Extraterrestrial life comes up, I find psychologists, physicists, and astronomers having the discussion. At the SETI communication workshop, psychologist Albert A. Harrison presented on “[Speaking for Earth: Projecting Cultural Values Across Deep Space and Time](#).” The only social scientist currently employed at SETI is [Douglas Vakoch](#) who serves as Director of Interstellar Message Composition and works in psychology. I don't bring these examples up to cast any doubt at all on these excellent scholars and their qualifications, skill, or ability in the matter, but instead to ask: Where is anthropology?

If any discipline thinks of itself as dedicated to the question of “the other” – the matter of how to communicate across cultural difference, the question of what “the other” even is, and how that is constructed, and the issue of who speaks for humankind, it is certainly anthropology. Is this failure to engage with SETI simply a result of anthropologists not showing any interest?

As always it's not 'simply' anything, and there is a history of engagement. NASA historian Steven J. Dick has written a history of anthropological involvement with the search for extraterrestrial intelligence (Dick 2006) in which he describes the limited engagement to date as part of a broader problem of bringing social sciences and humanities into SETI (Harrison et al. 2000). But why did it take a historian at NASA to document this involvement, to ask about it? Why aren't anthropologists discussing this? Anthropology has engaged with space before and we are again now.

In the 1970s, a series of symposia at the American Anthropological Association meetings brought scholars together across disciplines to discuss possible cultures of the future. In 1974, the organizers focused this annual symposium on the question of extraterrestrial communities. The resulting papers were collected in the book “Cultures Beyond the Earth: The Role of Anthropology in Outer Space” (Maruyama et al. 1975). In 2009, a call for anthropologists to take outer space seriously as a field site was revived with new theoretical and methodological approaches when David Valentine, Valerie Olson and Debora Battaglia co-authored a commentary in *Anthropology News* titled “Encountering the Future: Anthropology and Outer Space” (Valentine et al. 2009). In 2012, anthropologists engaging with outer space presented their research in a panel titled “Alter(native) Visions of Futures and Outer Spaces” at the 2012 American Anthropological Association Annual Meeting in San Francisco. That same year, a special collection in *Anthropological Quarterly* brought together work by Abou Farman, Joseph Masco, Stefan Helmreich, Götz Hoeppe, as well as Olson, Valentine, and Battaglia (Valentine et al. 2012). With the aim of adding to this list and encouraging the next generation of scholars working on these issues today to meet and present their work, I am currently co-organizing a [panel on the anthropology of space](#) for the 2015 American Anthropological Association Annual Meeting.

### PRE-COLONIAL ANTHROPOLOGY

I suspect, however, the rare occurrences of engagement between anthropology and space sciences are a result of two perceived problems with the anthropology of space from the perspective of some anthropologists, the questions of *power* and *speculation*.

The trend in anthropology has been to ask questions about **power** – to look at inequality, uneven development, injustice, imperialism, colonialism, political economy. In part, this may be in the hopes of making amends for anthropology’s historical role in constructing racist ‘racial science,’ propping up empire, and serving as instruments of colonialism. There is a perception, misguided as it may be, that anthropological investigations of outer space are somehow ungrounded in material “real world” concerns. However just as Science and Technology Studies broadly engages with the questions of power, injustice, inequality, and such – anthropologists working on science and technology have also engaged with political economic frameworks in critical ethnographic studies of the connections between space science, nationalism, capitalism, colonialism, and disaster (e.g., Barker 2005; Redfield 2000; Valentine 2012; Vaughan 1996; Zabusky 1995). For a recent example, see the forthcoming book “Space and Race: The Politics of Inequality at Brazil’s Satellite Launch Center” by Sean T. Mitchell as well as his other publications (e.g., Mitchell 2013).

On the second matter, **speculation**, anthropology has spent some professional energy battling the idea that it is an unscientific science – that qualitative research is not empirical, that the literary tone of contemporary ethnography is overly reflexive, that post-modern approaches prevent anthropologists from saying anything, and such critiques. These echoes of the universalist/particularist back and forths of enlightenment/counter-enlightenment debates about knowledge may have pushed Boas to classification as a way of understanding, led Geertz to defend anthropology through comparison with Physics and other so-called “hard sciences,” and driven Lévi-Strauss to propose a structuralist periodic table of cultural elements. Today, this insecurity and discomfort with the ethnographic leads to defunding of anthropology, to increasing focus on applied anthropology qua corporate marketing research, and repeats of past treacherous and ethically suspect complicity with military projects.

Despite the persistence of this tension around whether anthropology is or can be a science at all, space sciences often engage in a kind of informed speculation. This is especially the case in astrobiology, as I’ve [written about previously](#), where informed speculation was also initially met with derision and a critique based on the charge that “this ‘science’ [of astrobiology] has yet to demonstrate that its subject matter exists” as Biologist George Gaylord Simpson argued in 1964.

Does the subject matter of xenolinguistics, of exo- or xeno-anthropology exist? And can we speculate about how to approach such alien subjects if we meet them? I wager most anthropologists would say no, we cannot. I disagree, and I think we can and we must in order to prepare anthropology for human

futures in space. Le Guin has done this, as an anthropologist working outside the discipline, through speculative fiction (as have many science fiction authors). Her speculation is, like astrobiology, informed by many things – it isn't conjecture without evidence but conjecture based on history, based on experience, on imagination, and evidence.

When LeGuin writes about colonialism on Athshe, she is writing with knowledge of the history of human colonialism in hand. Xenolinguistics draws on the same repository of experience when linguists translate or construct languages, and when they explore possibilities of communication with alien others. Linguistics has encountered and come to know new languages in the past, just as anthropologists have learned about emergent or previously unknown cultural forms. Psychologists like Vakoch and others engage in this same kind of informed speculation when they imagine communication with extraterrestrial cultures. This kind of speculation is the foundation on which we are building an anthropology of space which, as we look to a future in space, is a kind of new pre-colonial anthropology. The key, and the role for anthropology here, is to use our experience to say: Let us not make the same mistakes, commit the same violences we did in the past when we encountered new people, new languages, and new worlds. Anthropology can and must speak to this as humans move into space and potentially become those new people, speak those new languages and settle those new worlds ourselves.

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