

COULD WE LEARN AN E.T. LANGUAGE?

If an extraterrestrial civilization had a language, would it have common features with Earth languages? Linguists explain why they think it's possible.

This past weekend an organization called Messaging Extraterrestrial Intelligence (METI) brought linguists and other researchers together in Los Angeles, California, to explore the question of whether and how we might communicate with an extraterrestrial civilization, if we should ever encounter one.

The workshop – called Language in the Cosmos – was organized by METI as part of this year's National Space Society International Space Development Conference (ISDC 2018). In the past, messages targeting possible extraterrestrials – for example, the 1974 radio message beamed to space from Arecibo, or the Pioneer plaque, or Voyager Golden Record – have typically been encoded with principles of math and science, with the hope that these are universal subjects. But this daylong workshop wasn't about that form of communication. It was about language.

For some decades, linguists have spoken of a universal grammar connecting the varied languages we find on Earth. The idea of a universal grammar is usually credited to **Noam Chomsky**, sometimes called the father of modern linguistics. **Douglas Vakoch**, president of METI, commented:

Chomsky has often said that if a Martian visited Earth, it would think we all speak dialects of the same language, because all terrestrial languages share a common underlying structure. But if aliens have language, would it be similar to ours? That's the big question.

At the METI workshop, two of the presentations were optimistic that extraterrestrial languages might have a universal grammar with virtually the same architecture that we find on Earth. Vakoch said:

That's a radical shift for SETI scientists, who have scoffed at the idea of creating interstellar messages inspired by natural languages.

Other papers from the workshop showed that even carefully built messages, such as the Voyager Golden Record, can easily be misinterpreted because the assumptions of humans and aliens might diverge wildly from one another.

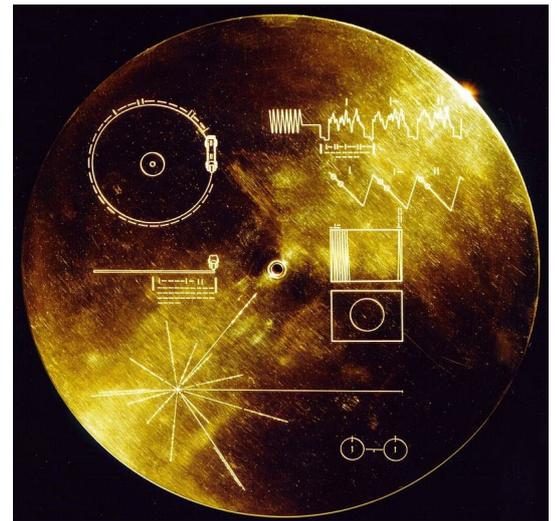
Prior to the workshop, **Sheri Wells-Jensen**, chair of the workshop and member of the Board of Directors of METI, wrote a very interesting series of blog posts at METI's website on this subject. She expressed the optimism of some linguists about using language to communicate with E.T.s:

*Unless all the beings on a distant planet are linked into some kind of hive mind, their language situation could be very much like our own. Why? There's some evidence that the way our bodies are built (standing erect with two hands to manipulate objects and our particular standard set of sensing organs) has a lot to do with what kind of language we speak. If that's true, we might be able to manage the language of aliens who are roughly humanoid, but the language spoken by sentient gas bags or intelligent snails would be forever beyond us. Despite arbitrary surface variation, human languages have an awful lot in common: **All languages have something like verbs and something like nouns. All have ways of talking about the past and about the future. All languages have pronouns. All have rules that we obey when making sentences.***

The TESS planet-hunter spacecraft – launched in April 2018 – will be scanning the nearest and brightest stars for signs of yet more exoplanets. What's more, NASA has given a high priority to the search for habitable exoplanets, although, in NASA's case, the word habitable most often refers to microbes and not to sentient beings like us.



Can you understand me? Video still via Thinking on YouTube



The Voyagers' Golden Record, launched in 1977.



Arecibo radio message as sent in 1974