Evolution and the Anthropocene: science, religion, and the human future – do we communicate symbolically with other creatures, and is human-like intelligence on other planets inevitable?

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David Sloan Wilson:	00:25	(silence) (00:27)There's a line of reasoning which says that symbolic thought actually is not computationally difficult. The question is, when is it advantageous to think in terms of symbols, especially symbols that don't directly represent things that are out there? (00:42) So based on that line of reasoning, you could actually take some species at least, not just gorillas and chimps, but parrots as in Irene Pepperberg's African gray parrot, Alex, and teach them to think symbolically, more like us than their own kind. There's very little evidence that African gray parrots, or the other great apes are actually communicating symbolically among themselves, but their minds are smart enough and intelligent enough that if you know how to do it, you can actually get them to speak our language, our symbolic language, which is just amazing. Now whether they can write poetry or express sensitive thoughts, or whether they can just count and do things like that, we don't know. (01:25) On your second point, I think that if you imagine that life began on many planets, would they all lead to something like us? There's a kind of a yes or no answer to that. There's a big no answer, and Stephen Jay Gould was famous for saying, "We're an accident". And actually, Teilhard de Chardin said that, too. That's what I was amazed when I read The Phenomenon of Man, which wasn't so long ago. He said in some ways we're just another primate species, a very happy coincidence. A combination of things happened to make us, nothing special about that. But with the advent of cultural evolution, then we became a new evolutionary process, therefore as significant in our own way as the origin of life, okay? And so I think that what biologists know, what we can say, I think what you'll agree on, there is no guarantee that human-like intelligence, would ever come to be, many, many tens of millions of years passed and it didn't. (02:24) On the other hand, major transitions is another matter, because that is something I think that you can make a prediction, that you will get this shift in the balance between levels of selection. It's very rare. So, tens of millions of years passed without any social insects. So it's not easy for these disruptive processes to be suppressed, not easy at all. (02:47) But once it happens, you get this new higher level

organism, it just becomes ecologically dominant. And then the rest is very straightforward. And so I think that is something which, although you can't predict it in any precise sense, you could make a fairly robust prediction that you will get these higher level, these major transitions occurring on most planets in which there's life. (03:11) (silence)

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