



1 From left to right: Ben Sachs, Sarah Rugheimer, David Wilkinson, Alasdair Cochrane, Mark Coeckelbergh. (Ash Watkins)

Humans, aliens and the big ethical questions

What happens when an astrobiologist, a theologian, a political theorist and a philosopher discuss the ethics of human–alien encounters? **Ben Sachs** reports.

The 2018 Edinburgh International Science Festival featured an event called “Get Your Hands Off Me You Damned Dirty Alien!” While the title was a bit of a joke – alluding to the sci-fi classic *The Planet of the Apes* – the topic was not. I put together this panel to learn about the ethics of human–alien encounters from an astrobiologist, a theologian, a political theorist, a philosopher and an audience of the scientifically curious. It did not disappoint.

The premise of the session was that we could be on the cusp of a revolution in thought to rival the Copernican revolution. Copernicus forced humanity to grapple with the theological implications of the fact that we are not at the centre of the physical universe; the discovery of intelligent life off Earth would force us to face not being at the centre of the ethical universe. In other words, what happens when we discover that humanity does not sit at the top of the ethical hierarchy? This would surely shake us out of our complacent, centuries-long tendency, in the west at least, to develop our ethical concepts and theories against a backdrop of presumed ethical, and technological, intellectual and cultural, superiority. But what new ethical model would take its place? What new ethical model *should*

take its place? What would we owe to the aliens, and what would they owe to us?

The intelligibility of this premise rests on two assumptions. First, there has to be intelligent life on other planets. Fortunately, there is a broad consensus among scientists in this field that this is indeed likely. I began the event by screening a video montage, edited by Ella Edgington, of scientists explaining why it would be surprising if there were no intelligent life outside Earth, including Neil DeGrasse Tyson telling Larry King that “it would be inexcusably egocentric to suggest that we were alone in the universe”. The montage also featured iconic movies and TV programmes presenting models – funny, inspiring, terrifying – of how those future human–alien encounters will go.

Secondly, we have to assume that we might discover the existence of such life – or it might discover us. This is where the first panelist, astrobiologist **Sarah Rugheimer** (University of St Andrews) came in. She played the essential role of distilling how astrobiologists go about determining which exoplanets (planets orbiting stars other than our Sun) could host life. She explained, for instance, the idea that we are looking for a rocky planet in the Goldilocks zone relative to its star – not too close, not too far away. In addition, she explained how we detect heat signatures from a distant planet, which reveal key information about which chemicals are abundant in the planet’s atmosphere and, by extension,

whether the organic chemical reactions that are life’s calling card are taking place on its surface. Rugheimer also injected a dose of reality, clarifying that we are much likelier, at least in the short-run, to detect microbial as opposed to intelligent life.

Rugheimer was followed on stage by theologian **David Wilkinson** (Durham University) who, conveniently, also has a PhD in theoretical astrophysics. Although western religions, especially Christianity, are well known for periodically repressing scientific inquiry and undermining the public’s access to the scientific facts (e.g. the prosecution of Galileo), Wilkinson reminded the audience that that is only

half of the story. There is also the strand of Christianity that teaches that the way to understand God is to understand Nature, and on that basis enthusiastically champions scientific research. The question of whether there is life on other planets is of immense interest to Christian theologians, Wilkinson explained, as it would open up questions about the centrality of humanity to God’s plan and whether the religious path to salvation could be the only one.

Next up was **Alasdair Cochrane** (Sheffield University), a political theorist who began with the proposition that human–alien encounters are already happening. Non-human animals, he claimed, are aliens in our midst, with minds almost as unknowable to us as would be the minds of intelligent beings from other planets. This led into a discussion about what we can

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learn about potential human–alien interactions from how we humans interact with sentient animals – and what we can learn about our treatment of sentient animals from how we would want aliens to treat us. Cochrane proposed that if we want to be dealt with justly by a race of technologically and intellectually superior aliens, we had better begin reconfiguring our relations with sentient animals. We would do well to cease dealing with them on the basis of power – treating them in whatever manner our superior intellect and technology will allow us to get away with – and begin instead treating them as beings with a stake in their own lives, which they surely are.

Finally, philosopher **Mark Coeckelbergh** (University of Vienna and DeMontfort University) spoke about the problem of incorporating aliens into our ethical thinking. Broadly speaking, he explained, we can take a more objective or more subjective approach, each of which presents its own perils. The objective approach is more common. Applied to aliens, it would involve identifying their relevant properties, such as consciousness, and reasoning about the implications of those properties for their ethical agency (what do they owe us?) and ethical patienthood (what do we owe them?). The problem with this is that we would need to know more about aliens than we might be able to learn, and it requires keeping a sterile intellectual distance from them. The subjective approach involves taking seriously the experience of imagining, perceiving and engaging with aliens, then thinking about the ethical contours such a relationship would establish. But this approach threatens to render the aliens too familiar to us, such that we lose sight of their alien-ness. Coeckelbergh proposed an ethical methodology combining the best of both.

After the individual talks, the panelists took part in the question-and-answer session. At first I acted as moderator, peppering the panelists with questions of my own devising and indicating which panelist(s) I wanted to answer which question(s). I then gave the floor to the audience.

What did we learn?

Now the important question: What did we learn from the event? Although each of the panelists is a scholar and an independent thinker, certain themes developed during the question-and-answer period.

First, and most importantly to my mind, there was a conviction that these ethical questions should be taken seriously. There was no hint of scepticism and no suggestion that our ethical concepts are irrelevant to extraterrestrial affairs. Rather, the

Ask the audience

The audience was given the following background information and asked to answer the question below before and after the discussion.

Background: The first sentence of the Universal Declaration of Human Rights proclaims the “inherent dignity and equal and inalienable rights of all members of the human family”. In other words, it proclaims that all humans have dignity and rights that they cannot lose.

Question: Could the existence of a superior form of life elsewhere in the universe make this proclamation untrue?

choice of answers	before	after
yes	16%	29%
no	72%	68%
I'm unsure	12%	3%

collective presumption seemed to be that these questions have answers, though those answers will be hard to find. Of course, it is possible that the panelists were simply being courteous, but I am inclined to take at face value their willingness to engage, not to mention their willingness to travel, for this panel discussion.

“We need to think clearly about the ethical relevance of superiority”

Second, there was broad agreement that we cannot make progress thinking through the ethical contours of possible human–alien encounters until we begin to reflect more critically on the idea of superiority. On the one hand, we have to acknowledge that superiority is always relevant to a dimension – some feature, function or activity. As humans, we are susceptible to chauvinism in choosing which dimensions to emphasize. On the other hand, we need to think clearly about the ethical relevance of superiority, where it exists, not least because the most plausible scenario for an encounter between humans and intelligent alien life involves the alien life form being superior in a variety of ways to humans.

Third, and finally, there was a sense that we should push back against the predominantly gloomy tenor of most speculation about future human–alien encounters. Literature, film and television shower us with apocalyptic visions of alien attacks, which surely reflects collective anxiety about our tenuous position at the top of Nature’s hierarchy. What is less emphasized is the potential upside to discovering intelligent alien life – it might be our deliverance! Maybe the aliens will give us a pain-free shortcut to solving our global warming problem. Perhaps they will even show us

how to achieve peace and harmony. And there is the less quantifiable, but no less important, benefit of satisfying our cosmological curiosity. The majority opinion on the panel seemed to be that we should continue to search for alien life.

And what did the audience make of all this? At the start of the event, and again at the end, we polled the audience using the Edivote system, kindly provided by the festival organizers. We gave our audience information about the United Nations Universal Declaration of Human Rights and asked how they thought the discovery of superior alien life would change it. The responses before and after the debate are shown in the box, “Ask the audience”.

One lesson is that most members of this audience believe that the possible existence of a superior alien race poses no threat to human rights and dignity. But the more interesting lesson, for me, is in the difference between the first and second polls: people’s ethical beliefs – even about bedrock ethical principles – are not fixed and can be influenced by dialogue. It also suggests that the revolution in ethical thinking might indeed be in the offing, as the overwhelming movement between the first and second polls was in the direction of increasing scepticism about the fixed place of humanity in the moral universe. This is an exciting result. It indicates that just as we are surely headed for scientifically interesting times as astrobiological research gathers pace, we are also headed for philosophically interesting times.

There are more questions than answers – this, if anything, is an undeniable take-home message of the event. The good news is that, if this experience is any indication, there is a strong appetite among the public to engage with these questions. We had about 70 people in attendance and they seemed energized by the experience of spending 90 minutes thinking and learning about the topics addressed.

Of course, I was lucky. The Edinburgh Science Festival presented the perfect opportunity to attract an audience of interested people, and I was able to assemble precisely the panel that I wanted. Be this as it may, I encourage readers to find ways to bring people together to think collaboratively about these issues. I certainly intend to continue to do so. ●

AUTHOR

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