

WORDS  
SALA ELISE PATTERSON

In conversation with a space archaeologist.

Humans have left about 34,000 objects in space. Some are predictable (satellites), others not (discarded zip ties, and Elon Musk’s personal Tesla Roadster). Dr. Alice Gorman is a space archaeologist who is fascinated by this “space junk” and what it tells us about humanity and our future. Gorman began her career studying Aboriginal archaeology in her native Australia. Contemplation of the sky one night in 2002 led to an epiphany: Space is full of orbital junk with an archaeological record and heritage value. These days, Gorman goes by Dr. Space Junk. In her new book, *Dr Space Junk vs The Universe: Archaeology and the Future*, she allows us to consider the final frontier through a different lens.

SALA ELISE PATTERSON: What meaning does archaeology take on in space?

ALICE GORMAN: The same thing it would on a site that was one million years old. I look at how humans interact with objects and environments and observe large-scale patterns of behavior and change over time. I’m interested in what it is about space, technology and the different environments of, say, being in microgravity in Earth’s orbit that shape the way humans move and the relationships they have with objects and technologies. It’s about understanding human behavior in space but also looking at what goes on in space as a way of getting a new perspective on how humans operate on Earth.

SEP: Is the common perception that humanity will have a fresh start in space confirmed by what you are observing?

AG: This belief that space will erase the inequalities and conflicts we see on Earth is charming, but people don’t act differently in space. I’m looking at the International Space Station, for example, and how things have been constructed without

female bodies in mind. There is a relationship between the type of architecture you live in and the social relations that are produced. I’ve not seen any indication that people are thinking outside the Western capitalist nuclear family [model]. So, taking the archaeological perspective, I don’t see any indications that it’s going to be better in space.

SEP: Do humans treat space with respect?

AG: The assumption I’ve seen expressed is a very 15th-century view that non-living systems are resources for humans to use and have mastery over. There’s a completely different sensibility now around the idea that the resources on Earth only exist for human use. There hasn’t really been, until recently, any consideration of space as an environment with some kind of value in its own right that has a right to exist outside of human use.

SEP: How are we thinking about environmental protection when it comes to space?

AG: The dominant approach to looking at space junk is less about the impacts on the space environment and more about the impacts on humans using it. My archaeological perspective instead asks: What is this new space environment? What is the combination of all the stuff humans have put up there with all of the preexisting conditions, natural objects and cosmic dust? We can only answer by getting samples of that dust, working out how much of it is human stuff, how it’s changing, what Earth elements are creeping into the dust of outer space, and by tracking changes to the environment over time. Looking at how human materials are contributing to a completely different type of space environment as a creative process is a different perspective that is very interesting to me.

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