

#SPACEWATCHGL OPINION: IN A HISTORIC FIRST, EIGHT NATIONS FORMALLY RECOGNIZE THE NEED TO PRESERVE HERITAGE IN SPACE

by *Michelle Hanlon and Anne-Sophie Martin*

On October 13, 2020, the civilian space agencies of eight nations – Australia, Canada, Italy, Japan, Luxembourg, the United Arab Emirates, the United Kingdom and the United States – announced that they had agreed to 12 Principles for Cooperation in the Civil Exploration and Use of the Moon, Mars, Comets, and Asteroids, known colloquially as the Artemis Accords. The Accords not only recognize the existence of



Image courtesy of NASA.

human heritage in space, but capture the parties' "intent" to preserve this heritage and "contribute to multilateral efforts to further develop international practices and rules applicable to preserving outer space heritage." This is the first time in history that the protection of human heritage in space has been included in an international agreement.

Of course, it must also be considered and emphasized what the Artemis Accords are not. They are not binding international law. They are not a treaty exacting obligations from Signatories. As indicated in Section 1 of the Accords, they represent "a political commitment" by each Signatory to implement the principles contained therein "through their own activities by takings, as appropriate, measures such as mission planning and contractual mechanisms with entities acting on their behalf." Furthermore, Section 2 specifies that "cooperative activities regarding the exploration and use of outer space may be implemented through appropriate instruments These instruments should [...] include appropriate provisions for implementing the principles contained in these Accords." That said, even as a political commitment, the Accords advance the discourse regarding many important legal aspects of space exploration.

The Artemis Accords were initially introduced in May 2020 as "a shared vision for principles, grounded in the Outer Space Treaty of 1967, to create a safe and transparent environment which facilitates exploration, science, and commercial activities for all of humanity to enjoy." And indeed, the framework of the Accords reaffirms the most important provisions of that seminal treaty, considered by many to be the *Magna Carta* of space. For example:

- Section 3 of the Accords mirrors the Treaty's Article IV, indicating that the Moon and other celestial bodies shall be used "exclusively for peaceful purposes."

- Section 4 of the Accords gives meat to Article XI of the Outer Space Treaty by committing the Signatories to transparency and sharing of scientific information.
- Section 6 of the Accords supports Article V of the Outer Space Treaty and recommit the Signatories to the Return and Rescue Agreement.
- Section 7 of the Accords recognizes the importance of the registration of space objects and commits the Signatories to meeting the obligations and responsibilities set forth in the Registration Agreement.
- Section 8 of the Accords reiterates the Signatories commitment to share scientific data, embodying both Article XI, and the requirement, captured in Article I of the Outer Space Treaty that States “shall facilitate and encourage international co-operation” in scientific investigation.

But the Artemis Accords go farther than confirming decades old treaties. They seek to bridge some of the gaps in those treaties that – while always present – have widened considerably, perhaps fatally, with the advancement of technology and the new reality that the resources of space, once only accessible by sovereign States, are now attracting non-State and commercial actors. Specifically, the Artemis Accords tackle space resource utilization (Section 10) and the parallel need to deconflict space activities (Section 11). Even there, they do not abandon the Outer Space Treaty regime. Section 10 emphasizes that utilization of space resources shall be “executed in a manner that complies with the Outer Space Treaty” while affirming “that the extraction of space resources does not inherently constitute a national appropriation under Article II of the Outer Space Treaty . . .” In doing so, the Signatories are transparently pronouncing their agreed interpretation of the non-appropriation provisions that are binding on all States Parties to the Outer Space Treaty.



*Illustration of Artemis astronauts on the Moon.
Image courtesy of NASA*

In discussing deconfliction of activities, the Accords rely heavily upon – and strengthen – Article IX of the Outer Space Treaty. First, Signatories agree to “respect the principle of due regard,” a concept that remains untested as a legal standard. Indeed, the only judicial interpretation of due regard we have in the international context at this point states that the standard “will depend upon the nature of the rights held by the . . . [operators], their importance, the extent of the anticipated impairment, the nature and importance of the activities contemplated by the . . . [operators], and the availability of alternative approaches.” (*Chagos Marine Protected Area Arbitration (Mauritius v United Kingdom)*, (Mar. 18, 2015), para. 519).

Second, and more important, the Artemis Signatories commit “to refrain from any intentional actions that may create harmful interference with each other’s use of outer space activities” (Section 11.4). This is one step farther, and stronger, than the Outer Space Treaty’s Article IX which does not prohibit harmful interference, but simply requires that States Party undertake “appropriate consultations” prior to proceeding with a relevant activity.

These are welcome steps forward as the reality of a vibrant space economy, with sovereign and commercial actors operating potentially in proximity with each other, looms ever nearer. However, a gap still remained. When considering due regard and harmful interference, the assumption is that objects are operational, that activities are ongoing. What does it mean to have “due regard” for an object that is inoperable and no longer serves a mechanical purpose? Can you “harmfully interfere” with a footprint? What if the footprint marks the first time a human being set foot on a celestial body other than our own Earth? None of the Outer Space Treaty, nor any of its progeny – whether in hard or soft law – has ever recognized or suggested that there are objects, perhaps even whole sites, in space that require special care, even though they are inoperable.

To rectify this oversight, the Artemis Accords include an entire section specifically addressing human heritage in space. Per Section 9.1:

“The Signatories intend to preserve outer space heritage, which they consider to comprise historically significant human or robotic landing sites, artifacts, spacecraft, and other evidence of activity on celestial bodies in accordance with mutually developed standards and practices.”

Moreover, Section 9.2 indicates that:

“The Signatories intend to use their experience under the Accords to contribute to multilateral efforts to further develop international practices and rules applicable to preserving outer space heritage.”

This simple provision fortifies one of the most important tenets of international law applicable here on Earth, and one that we must continue to strengthen as we build communities in space, namely that our cultural heritage helps us humans build kinship with each other. Even as we are divided here on Earth, 194 nations have executed the Convention Concerning the Protection of the World Cultural and Natural Heritage. That means nearly every nation on Earth agrees “that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world. . .” Why? Because even as we fight, even as hate seems to conquer common sense, we understand that we humans share a common history. Three million years ago, our common human ancestor stood up and walked on two feet. This amazing breakthrough freed up ancestral limbs for other pursuits – making tools, building fire, farming, drawing, understanding mathematics. From there, humans

spread around the globe adapting to new circumstances and environments, continuing to innovate and build an understanding of ourselves, our cosmos, our space.

Our Moon alone hosts the remnants of humanity's greatest technological achievement to date: the first human object to reach another celestial body with Luna 2 in 1959, the first soft landing on another celestial body with Luna 9, and the first humans to walk on another celestial body with Apollo 11. These are human achievements. Indeed, arguably, there is no heritage more universal than lunar landing sites on the Moon, which represent both a milestone in human evolution and development as well as the culmination of the work of humans throughout the world and throughout history. The human relationship to space is necessarily global and universal.

And now, at last, we have a path forward to assuring that they are recognized, protected, celebrated.

What's striking about Section 9 of the Artemis Accords is its breadth. It does not say that Signatories shall seek to protect each other's space heritage. It implicitly recognizes that all heritage belongs to all humans. Outer space heritage will be recognized regardless of what nation may have been responsible for its occurrence and wherever it may be located in space.

But it's not just about the past. It's about the future. Section 9 may well be the most important part of the Artemis Accords. We have shown, here on Earth, that we can come together in unity to protect cultural heritage. For the first time, a handful of nations have recognized that there is also cultural heritage in space. We can build on this agreement and draw other nations to the table to discuss the protection of heritage – why wouldn't 194 nations agree on the need to protect heritage in space just as we do on Earth? Opening discussion from a place of agreement – preservation of heritage – will speed the process needed to address the uncertainty inherent in the balancing proposition required by the concept of due regard. Not to mention the fact that it will help to preserve for generations to come the sites that create a seemingly bottomless well of inspiration for space entrepreneurs and dreamers.

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Photograph courtesy of the author.*



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