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Cultural Significance of our Moon

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Abstract

The Moon, our Moon, is not just an object of scientific curiosity. Our closest celestial neighbor holds tremendous value to our civilization and cultures, and each and every one these values transcend what science and technology portray our Moon to be; a dormant and lifeless celestial body that projects a "magnificent desolation". While our Moon holds secrets to our origins that are vital to our scientific understanding of solar system genesis and evolution, our Sun and Earth as well as what the future holds for our species and our biosphere, the nonscientific but culturally invaluable notions and deep spiritual, religious and emotional connections to our Moon are important to keep in mind at the outset of any lunar activity when we constantly evoke lunar exploration and settlement of a celestial body that has been orbiting planet Earth since the early formation of our solar system and the birth of planet Earth itself. Some cultural implications of our Moon are presented.

Keywords: Moon, Culture, Civilization, Religion, Symbol



"What was most significant about the lunar voyage was not that men set foot on the moon but that they set eye on the earth" – Norman Cousins

Figure 1. Words uttered by crew of Apollo 8 as the capsule emerged from the backside of the Moon were spiritual. Taken aboard Apollo 8 by Bill Anders on Christmas eve, Dec 24th, 1968 this iconic picture shows Earth peeking out from beyond the lunar surface as the first crewed spacecraft circumnavigated the Moon. [credit NASA]



Figure 2. Buzz Aldrin invoked a spiritual experience before he set out to make those bootprints. First human footsteps on our Moon. Astronaut Buzz Aldrin walks on the surface of the moon near the leg of the lunar module Eagle during the Apollo 11 mission, July 20, 1969. Mission commander Neil Armstrong took this photograph with a 70mm specially equipped Hasselblad lunar surface camera. [credit NASA]

Introduction

Our Moon, the Moon of planet Earth, is special. The evolution of planet Earth and life are inextricably linked to our Moon. Our biosphere and our species evolved as our Moon orbited our planet. Recurring geological phenomena, tidal and seasonal patterns, biorhythms are all suspect to, or have been attributed to lunar orbital motions.



Figure 3. Our Moon is physically small compared to Earth but has enormous cultural and inspirational value as seen in our literature. [credit NASA]

Our Moon is one of the first objects that our children recognize and repeat (to inform us of their ability to observe, discern and recollect, perhaps?) as they train their eyes on the closest, brightest disc that adorns our night skies. Perhaps the innate, deep-seated, crosscultural and transcendental emotions of Wonder and Awe are ignited during those formative years?

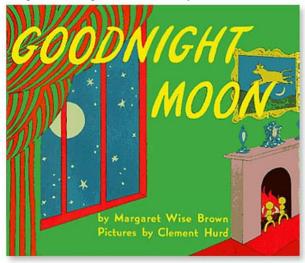


Figure 4. Goodnight Moon is a well-known children's book that parents and caregivers read to them at bedtime.

In the United States, Goodnight Moon is a well-known young children's book that parents and caregivers read to loved ones at bedtime. [Figure 4]



Figure 5. The Sun and the Moon evoke fascination as the largest visual objects in our skies, though the Moon is the only one we can see directly without damaging our eyes.

Though our Sun is the giver of energy and life and dictates daily life around the globe (Ra in Egypt or Ra-vi in Sanskrit) our Moon is the object that is imprinted in our psyche very early in our lives. Hence the fascination with our Moon begins early and continues to impact our lives in ways both understood and still to be. [Figure 5]

The Moon appears as a symbol on many national flags and the crescent Moon is a widely recognized symbol.



Figure 6. Exhibitions like Luke Jerram's Museum of the Moon promote the Moon in various ways and venues including at St.Peter's church in Dorset, UK.(INSITU)

Museum of the Moon has been co-commissioned by a number of creative organisations brought together by Luke Jerram and Norfolk & Norwich Festival. These include: Greenwich+Docklands International Festival, Brighton Festival, Without Walls, Cork Midsummer Festival, We The Curious, Lakes Alive, Provincial Domain Dommelhof, Les Tombées de la Nuit, Rennes and Kimmel Center for the Performing Arts. The artwork has also been created in partnership with the UK Space Agency, University of Bristol and The Association for Science and Discovery Centres. The artwork is part of the European INSITU network. [Figure 6]

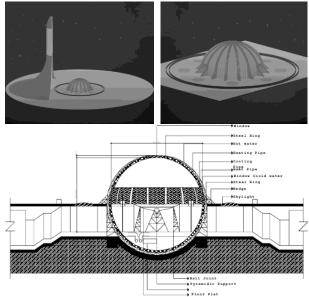


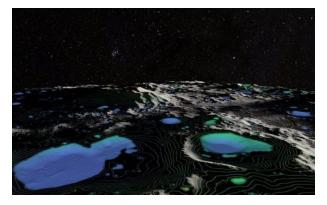
Figure 7.abc In the millennial Architecture+Engineering Space Architecture studio at USC, a graduate student, with local Imam consultation, proposed a concept for a mosque on the Moon.(credit Khalid Al Jammaz)

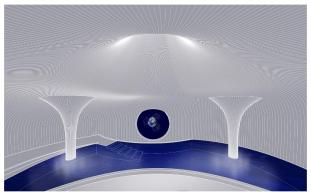
Great religions of the world, Islam in particular, hold the Moon in high esteem. In the millennial Architecture+Engineering Space Architecture studio at USC, a student with local Imam consultation, proposed a concept for a mosque on the Moon. [Figure 7]

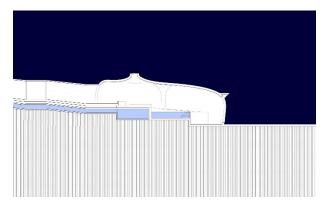


Figure 8. Lunar Tourism architectures, and Humanity Complexes including a Retirement Facility and Cultural Center on the Moon have been proposed in the past.

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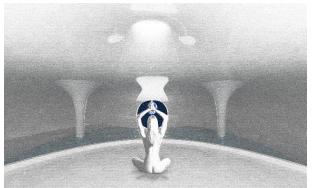


Figure 9 a,b.c,d. In the 2017 Space Architecture Seminar in the USC School of Architecture a student proposed a Lunar Bath & Spiritual Nexus using polar water ice resources. [credit Pornpavee Mungrueagsakul]



Figure 10.a,b.c. The European Space Agency commissioned an artist, Spanish artist Jorge Mañes Rubio who proposed a lunar temple be located in the south polar region of the Moon. [credit ESA]

Solar and lunar eclipses are transitory events that are purely based on orbital geometries of the Sun, the Moon and planet Earth. Almanacs from early civilizations show that these events were predictable. Yet, as they occur, such events evoke awe and wonder even today in people all over the world. Large groups flock to locations around the world to witness eclipses. While some classic scientific observations have been made during such events, rituals and cultural events are also planned around such occultations. And lunar eclipses have various names depending on the visual appearance of the apparition, that is dependent on orbital geometry and alignment. [Figure11]





Concepts have been proposed to bury time capsules, set up updatable humanity archives, DNA repositories and even presidential libraries on our Moon. [Figure 12]



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Figure 11 a,b,c. Eclipse events evoke awe and wonder even today in people all over the world.

While modern scientific dogma is reticent and practitioners stay away from the illogical and alogical, astrologers hold the Moon in high esteem, and lunar motion impacts horoscope in very significant ways. [Figure 13]

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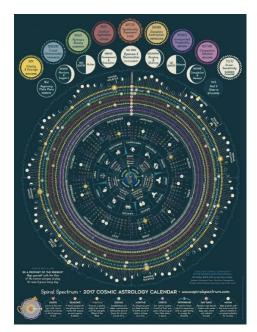


Figure 13. While modern scientific dogma is reticent and practitioners stay away from the illogical and alogical, astrologers hold the Moon in high esteem, and lunar motion impacts horoscope in very significant ways.

Earth looking high resolution live streaming images of the Earth disc is an idea that is gaining attention not only for Earth Observation but also to instill a new global awareness of the fragility of our home planet and the biosphere that seems to be under siege by forces including the ravages on nature by our own species. The Moon Village Association proposes to plant an Earth looking telescope as part of their first mission manifest. [Figure 14]



Figure 14. The Moon Village Association proposes planting a sharp, high resolution Earth-looking telescope as part of their first mission manifest. [credit NASA LRO]

Lunar tourism

In recent years, commercial space activity has shown promise to become a self sustainable human space activity, using space tourism as the springboard for a variety of activities. Starting with suborbital experience and private citizen tours of Earth orbiting space stations, the foundations are being laid for lunar tourism. The Dear Moon project is a typical example of what a lunar orbiting tour may be like that is proposed by Spacex to fly a group of artists around the Moon and back. A profile is shown in [Figure 15].

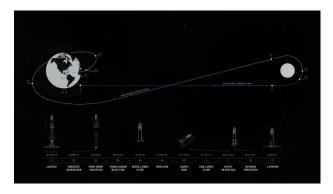


Figure 15. Dear Moon project is a typical example of a lunar orbiting tour proposed by Spacex to fly a group of artists around the Moon and back.

Astronauts returning from space seem to agree that their worldview has become different after experiencing the

view of planet Earth from above. Apollo crew in particular, after having seen the entire Earth disc synoptically from lunar distance, seem to have had a profound life-changing experience. Despite their scientific background and years of intensive crew training, they seem to gravitate toward the spiritual. [Figure 1, 2] Edgar Mitchell refers to the experience as Sankalpa Samadhi from the Sanskrit scriptures. And this "Overview Effect" is brought about by directly seeing the unique nature of Earth and observing the fragility of the biosphere first hand. Space activity, human space activity in particular, seems to be pointing humanity toward a new level of refinement, from our preoccupation with the technological sublime to a higher spiritual sublime.

Science Fiction Stories and Cinema

Our Moon features in many imaginative science fiction stories and movies. Since the Moon is so close and real, these visions tend to vicariously transport the reader and the viewer as no other alien landscape might. 2001:A Space Odyssey is a notable movie that was first screened a year before the Apollo 11 moon landing. The scenes from 2001: had a profound impact on the science and technology community, not to mention the general audience who were equally impressed by the cinematography, the sets and the story, all of which were thoughtfully put together by the team that included accomplished technology advisers as well.[Figure 16a,b]





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Conclusion

As our Moon orbits the Earth, it is the only object with a highly visible disc and landmarks that we can directly observe with our eyes (without permanently damaging our eyes). The planets, stars and so on pale in comparison.

This celestial object is a continent that is truly a global ambassador because it orbits our Earth, it is visible from all continents and latitudes, engages all our peoples awe and fascination without reservation, and through dynamic phases, attracts our attention each and every day.

Space is the ultimate arena for the expression of freedom for all humanity, as we know it. Human activities in space liberate us from the confines of Earth's cradle, refine our sensitivities, and elevate our aspirations beyond our myopic view of resources, national boundaries and cultures, governance philosophies and policies, diverse governance and civic models; Nature in her starkest, rawest mode, guiding, nay nudging our species to become citizens of the solar system and beyond, sensitizing us to the immediate cosmic environment beyond our home planet.

We now know that our space situational awareness is vital to our survival. Floating silently in the deep black velvety void, our Moon is the closest extraterrestrial body where our species can come together and work together in plain sight of all humanity on Earth, to preserve and protect as we step out of cradle Earth to embrace the beauty and bounty of nature. Our Moon is the natural site for humanity's aspiration to become a truly spacefaring species.

Half a century ago, our species set forth on an adventure, and landed, walked and drove vehicles while conducting scientific exploration on our Moon. The first human footsteps on an extraterrestrial world happened fifty years ago on July 20, 1969, when Neil Armstrong and Buzz Aldrin stepped on our Moon. [Figure 17]



Figure: 17 The first human footsteps on an extraterrestrial world happened fifty years ago when Neil Armstrong and Buzz Aldrin stepped on our Moon. [credit NASA]

Great civilizations always preserve history and we should do the same to protect these first footsteps from the harsh lunar surface environment including micrometeoritic action and thermal cycling that will erode them over time. For All MoonKind Inc. proposes the implementation of an international agreement to preserve and protect such space and these extraterrestrial artifacts of cultural and historic value. As our journey to the Moon and beyond continues, we cannot allow the traces of our first steps to be lost.

Now our Moon beckons us to go back there, not as a symbol of national prowess or military might, not as a marvel of technology, but to simply unite our species with an eye toward global harmony and peace. After all, our Moon has watched our planet from close to birth, turning from a ball of fiery molten lava and rugged rock, seen her pummelled time and again, only to transform into the vibrant blue orb with all the bounty that we now cherish.

By going back to our Moon, perhaps we can make our Moon a mirror for Earth, alive with life, liberty and the pursuit of happiness that we cherish, and constantly remind us, the stewards of Earth, how precious our biosphere is, all in the middle of the vast dark void of space. Spaceship Earth could have a most benign, silent but ever watchful sister in our Moon, the same "sora Luna" that Francis of Assisi pays homage to in the song *Laudes Creaturarum*.



Figure 18. Francis of Assisi pays homage to Sun and Moon in the song Laudes Creaturarum.



Figure19"Chapel of the Sun Song" (Laudes Creaturarum: Praise of the Creatures) in Mannheim by Yvelle Gabriel