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Who Owns the Moon('s Rocks)?: Moon Rocks as Material Culture

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I declare that this **Critical Cultures Research Project** is all my own work and that all sources have been fully acknowledged.

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Introduction

5,000 years ago a neolithic farmer in county Meath looked up at the Moon and charted its topographical features on the walls of the passage tomb Knowth. These inscriptions, a diagram of which can be seen in fig. 1, are the first known record of an attempted detailed depiction of the Moon (Stooke, 1994, n.p.). This lunar map is placed strategically within the tomb to be lit by passing moonlight. Universally, the Moon has taken on symbolic meaning in almost every culture, often expressed through art. The travelling exhibition *Museum of the Moon* (2016 - present) by artist Luke Jerram recreates the Moon up close. With National Aeronautics and Space Administration (NASA) imagery, the lunar surface is depicted in high definition, in unique settings from above pools (Piscina Cozzi, Milan) to painted halls (Old Royal Naval College, London) (fig. 2). Moreover, actual lunar rocks are in circulation. Despite this current reality of having the Moon in the palm of our hands, in the recent past it represented the impossible: 'a giant leap for mankind'. How has access to these moon rocks on earth changed the mythology of the Moon as a means for great imaginative leaps?



Fig. 1: Diagram by Philip Stooke showing Knowth's depiction of the Lunar Marias. (Source: Stooke, 1994)



Fig. 2: Museum of the Moon by Luke Jerram at Old Royal Naval College in London, 2023. (Source: ORNC, 2023)

During the Apollo 11 and Apollo 17 missions in 1969 and 1972 respectively, 382 kg (842 lbs) of moon rocks, soils, and debris were returned to earth for research purposes. 2220 moon rock samples were taken for research. 270 of those rocks were gifted to the nations by Richard Nixon in the form of Goodwill Plaques, while many others are distributed throughout the world for research purposes (NASA, 2022, n.p.). Despite the moon rocks being collected with the principal purpose of scientific research, they have passed through many other forms of classification. Present in science museums, natural history museums and in the hands of private collectors, the moon rock has shape-shifted across classification. However, the lunar rock appears as just a normal rock to the untrained eye and is in fact, geologically similar (Fernholz, 2019, n.p.). As an extra-terrestrial object transported to earth, the moon rock takes on terrestrial discourses.

This essay will focus on the moon rock as material culture, within institutions such as Ireland's Natural History Museum collection, the National Air and Space Museum (NASM) in Washington D.C. and the Rijksmuseum in the Netherlands. Other theorists, such as Susan M. Pearce and David J. Meltzer, have explored the relationship of the moon rock to material culture. As Susan M. Pearce expresses in *Museum Objects*, the natural world, such as the moon rock, becomes a supposition of material culture because the concept of 'natural history' is a man-made invention (1994, p. 10). The moon rock, though a natural object with no intended use, removed from its potential for scientific research, takes on human discourses from colonialism to commodity fetishism. Meltzer expresses a similar theory in regards to history in general: that history is invented by the ideology present within institutions (1981, p. 114), and is effectively written by these institutions. This theory relates to Michel Foucault's theory of power and knowledge - that power "emanates throughout a social body" such as an institution, and is intrinsically tied to knowledge (Everuss, Hsu, 2022, n.p.).

The way in which Pearce identifies material culture as all things that are humanly defined, including the natural realm, brings to mind Mark Fisher's theory of capitalist realism. Fisher likens capitalism to John Carpenter's *The Thing* (1982): "capable of metabolising and absorbing anything of which it comes into contact with" (2010, p. 10). I will apply the theories of Mark Fisher in order to analyse the commodity aspect of the moon rock through a Marxist lens. Fisher's theory of capitalist realism within science fiction (sci-fi) can be applied to the real when considering the moon rock, an object that previously only existed within the realm of sci-fi, that has been transported to earth. The objective of this essay is to analyse the ways in which the

moon rock has shifted across classification in order to serve different messages, from institutional to artistic.

In approaching this topic, I have researched various artistic representations of the moon and moon rocks, with particular interest in Bik Van der Pol's 2006 exhibition *Fly me to the Moon*. This exhibition captured my interest due to its connection to collections and artefacts, as well as the mystery that surrounds it. The moon rock at the centre of the exhibition was uncovered within the Rijksmuseum's collection, the only natural object amongst Rembrandts and other classical paintings. In order to further investigate this exhibition, I contacted the Rijksmuseum who provided me with documents in Dutch that I otherwise would not have accessed. I also engaged with the National College of Art and Design (NCAD) library staff who kindly accessed the exhibition catalogue, *NG-1991-4-25: Fly me to the Moon*, for me which is now available to borrow from the library. Lastly, I visited the Natural History Museum on Merrion St. Upper, which has been under construction for a period of time and is only showing a limited part of its collection.

Chapter one of this essay explores the late 16th century and early 17th century *Wunderkammern* and *Kunstammern*, or Cabinet of Curiosities, often referred to as the origin of museums. These collections of oddities during the age of exploration highlight a period of time wherein objects of discovery were utilised as means for accumulating power. Identifying the historic elements in place can serve as a means to analyse the moon rock when it is removed from its scientific context and presented within an institutional setting such as a museum.

Chapter two explores the ways in which the moon rock has been adopted to serve particular messages within the economic circuit of auctions as well as institutional settings. This chapter goes into detail about the ways in which the moon rock has been absorbed within material culture, applying the theories of Mark Fisher, Susan M. Pearce, and David J. Meltzer.

Chapter three details Bik Van der Pol's *Fly me to the Moon*, an exhibition that took place in the Rijksmuseum in 2006. This exhibition serves as a case study to analyse how a moon rock can be utilised to serve a particular purpose. Within the context of a contemporary art exhibition, the lunar rock is able to take on imaginative ideas without being limited by facets such as authenticity. In analysing Bik Van der Pol's *Fly me to the Moon*, I aim to identify how a fake moon rock is transposed into narrative, and how these imaginative ideas might create a more enthralling tale than a real moon rock.

The final chapter details the impact of the falsified moon rock within the exhibition and how this might reflect on institutions as a whole. Taking into consideration Foucault's theories of knowledge/power, and identifying the role of the institution in perpetuating certain narrative 'truths'.

Chapter 1: Colonial Past; Colonial Present

Fig. 3, an oil painting by Domenico Remps, c. late 17th century, shows an example of a Cabinet of Curiosities. The eye is drawn to several points within this painting: what appears to be orange coral is nailed to the doors of the cabinet, a skull sits on an upper shelf, and two beetles lay atop a plate on the bottom shelf, while the walls

of the cabinet are further adorned with works of art. This amalgam of objects and paintings appears to evade classification, aiming to invoke aesthetic appreciation above all else. However, the symmetry of the cabinet suggests a sense of order. The early attraction to these natural objects can be mirrored in the draw towards moon rocks when they are placed outside of their potential for research, as a natural object that is considered curious, mystical or other.



Fig. 3: An example of a cabinet of curiosities, by Domenico Remps, c. late 17th century, oil on canvas. (Source: 2006, SCALA, Florence)

Natural objects have had a place within museums since their very early beginnings. The Cabinet of Curiosity or *Wunderkammer* has been an example of spectacle since the early 16th century and is often referred to as the origin of museums. The desire to collect was spearheaded by the age of discovery - every ruler wanted to be the first to lay claim to new lands, and amass new knowledge. From this urge to collect emerged the Cabinet of Curiosity. The objects within represented a collection of knowledge about science in a period of discovery. The word 'science' in this sense

encompasses “philosophy, medicine, mathematics, alchemy, grammar, theology, even poetry [...] broadly the investigation of nature” (Koepe , 2019, p. 17). With this in mind, the *Kunstkammern*, aimed to represent “the capacities of the human hand to create, and to imitate and compete with the artifice of nature.” (Koepe, 2019 p. 43).

Samuel Quiccheberg in 1565, published a treatise on the nature of collecting and museums:

A collection made according to Quiccheberg’s treatise presented nature as the source of both transformation and productive knowledge; it suggested that artisans held the key to this natural knowledge; and it fostered the sense that imitation of natural processes through the work of the human hand was the means to harness and understand nature. (Koepe, 2019, p. 43).

This emphasis on reproduction and imitation is interesting when applied to the general consensus on museums today, in which authenticity is expected. Mimesis is defined as a key aspect of gaining knowledge, a practice that is applicable to current artistic techniques, such as still life or life drawing. Within these cabinets, recreations of the natural world are placed within the same context as scientific objects and natural, geological specimens. They become synonymous with their origin - the natural world they represent. As Susan Stewart expresses in *Objects of Desire*: “In acquiring objects, the collector replaces production with consumption: objects are naturalised into the landscape of the collection itself.” (1993, p. 256). The collection forms a new context for the objects, one which negates their origin.

Overall, the Cabinet of Curiosities was characterised by an amalgamation of oddities that at once collectivised represent wealth and status. Its existence is intrinsically

tied to colonialism, as they were prominent during a period of expansion for many countries. Many of the objects represent a greed for status, particularly in the case of astronomy: “The princely engagement with science was perhaps most evident in the case for astronomy. Most European rulers established at their courts centres of astronomical observation, projects that boosted both their scientific and their political reputations.” (Koepppe, 2019, p. 18). This emphasis on astronomy as a means for denoting power suggests a connection to the space race of the late 1950s to the mid 1970s between the U.S. and Russia. It’s not hard to imagine a moon rock being the most desired object within a cabinet from the 16th or 17th century, in some ways a means of owning the Moon.

Chapter 2: Who Owns the Moon(’s Rocks)?

As Bik Van der Pol have stated: “since the discovery of the Moon, people have laid claim to it, whether symbolic or genuine” (2007, p. 124). Particularly evident of this is Dennis Hope’s 1980 claim to the entirety of the Moon and all the other planets in our solar system. The claim was based on US law dating from the nineteenth century which allowed land presumed to be undeveloped to be claimed by anyone (Von der Dunk in Bik Van der Pol, 2007, p. 148). Following this Hope established the *Lunar Embassy*, where he sold plots of land on the Moon. A clear analogy to colonialism, and the claiming of public land as one’s own can be made here. Von Der Dunk, an attorney working within space law, identifies Hope’s claims as fraudulent on the grounds that the *Outer Space Treaty* of 1967 states that the Moon cannot and can never become U.S. territory, and therefore U.S. law does not apply to the Moon, making the sold deeds devoid of legal value and significance (2007, p. 157). On top

of this very literal claim to the Moon, the Moon, and its rocks, have routinely been utilised to serve specific messages. This section details the ways in which moon rocks have been literally claimed as commodities, and symbolically claimed by institutions.

Moon rocks as a Commodity

The shifting mythology of the Moon is evident in science fiction. There has been a tangible shift in sci-fi media from thought experiments set in futuristic lands, as attributed to Ursula K. le Guin, to science fiction and dystopias set in worlds similar to our own, such as Alfonso Cuarón's *Children of Men*. It is Mark Fisher's hypothesis that this shift in sci-fi is a result of capitalist realism: "the widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible even to imagine a coherent alternative to it." (2010, p. 6). This belief is upheld by the 2009 film *Moon*, directed by Duncan Jones, in which a company has laid claim to the Moon in order to harvest its surface for Helium-3, an isotope found in lunar rocks. This isotope is believed to be beneficial for energy production in future nuclear plants (ESA, 2013, n.p.). This narrative is distinctly capitalist - the natural world is co-opted and mined for resources. The Moon, which was once otherworldly and romantic, is metabolised into this capitalist realism.

Moon rocks, which are considered national treasures in the U.S., have come into private hands through auctions. In 1993, the first human-returned moon rock legally passed into private hands during a Sotheby's space memorabilia auction for \$2.2

million per gram (Fernholz, 2019, n.p.). Cassandra Hatton, Sotheby's VP stated in an interview with *Quartz* magazine:

I think of the rocks that we sold as being parallel to say a first edition of a book [...] The first edition of Newton's Principia is worth maybe \$350,000. You can get a paperback translation of Newton's Principia for maybe \$20. The accessibility of those paperbacks has in no way diminished the value of the first edition. (Fernholz, 2019, n.p.)

This analogy of the moon rock, a natural object, to a man-made and printed book reflects on the way in which the moon rock has been naturalised into this capitalist narrative. The desirability of these moon rocks to be a part of a private collection can be viewed as a continuation of the 16th century practice of the cabinet of curiosities, a means of representing power.

On top of this legal trade of real moon rocks, there are many Etsy accounts selling 'Real Moon Rock Meteorites' for the steal price of \$17.80. Interestingly, these moon rock meteorites come with certificates of authenticity. This addition highlights the lack of intrinsic value to a non-scientific eye. Through this circulation within the economic circuit the moon rock can be classified as a commodity, a "product principally intended for exchange." (Appadurai in Pearce, 1994, p. 78). The positioning of these objects outside of the scientific field and within the economic circuit transforms the moon rocks into a novelty, for in the hands of a private collector they do not have the same scientific value. Despite this, their monetary value and desirability remains immense.

Through this analysis of moon rocks as a commodity, it is clear in some ways that their value is symbolic. It is not what they are but what they represent - a piece of the

Moon. This symbolic value has translated into monetary value as a result of demand, which has made fraudulent moon rocks rampant. In Fisher's discussion of *Children of Men*, the sterility aspect within the film is used as a metaphor for stagnation within culture: "How long can a culture persist without the new?" (2010, p. 7). This metabolising of the moon rock, taking something otherworldly and turning it into a commodity, a moveable piece to which capital is assigned, negates its newness, resulting in stagnation.

Institutional Moon

The most common place to find a moon rock is within an institution. Institutions such as the Natural History Museum of Ireland and the NASM in Washington D.C. have the ability to create new narratives surrounding history with the help of objects such as these. Similar to Fisher's capitalist realism, Pearce defines material culture as having the potential to include anything that is defined by man, including natural objects, which can then take on a culturally ascribed value (1994, p. 10). In this way material culture becomes similar to John Carpenter's *The Thing*, in the same way that capitalist realism defines.

The moon rock gifted to Ireland by Nixon following the success of the Apollo 17 mission in 1972, one of 270, is a part of the National Museum of Ireland's collection (fig. 4). It is categorised within their Natural History Collection, under Meteorites and Space and is not currently on display due to the renovations taking place at the Natural History Museum as of 2019. The rock is tiny, a speck encased in a hard plastic bauble that makes getting a clear look at it near impossible. If it were

removed from this context, no longer enshrined and adorned with a plaque stating its history, to an unspecialised eye it would resemble nothing more than a pebble. The nature of a typical moon rock is so unassuming, that in 1977, during a fire at the Dunsink Observatory, a moon rock from Armstrong's 1969 mission was lost, discarded with the debris from the fire (Coughlan, 2012, n.p.). It was presumed to have ended up in the Finglas Landfill opposite the observatory. While the physicality of the moon rock is unassuming, the cultural frenzy surrounding them is significant - with articles about this moon rock stating that the shard is worth five million dollars or four million euros with the implication that the rock could be found like a lost treasure within the dump.



Fig. 4: Moon Rock collected on Apollo 17 mission in 1972. NMING:R4095 (Source: National Museum of Ireland)



Fig. 5: National Air and Space Museum 'Touchrock', 2019. (Source: National Air and Space Museum)

Despite the seemingly mundane nature of a typical moon rock, there is no denying that they are a cultural spectacle - drawing thousands to merely touch them, to feel like they are a part of recent history. At the NASM in Washington D.C., people flock to view their famous touchrock, a sample of a moon rock that museum visitors can

touch (fig. 5). As Pearce puts it: “The moon rock has been turned into material culture because, through its selection and display, it has become a part of the world of human values, a part which, evidently, every visitor wants to bring within his own personal value system.” (1994, p. 10). The desire to claim the moon rock is evident here. Every visitor wishes to engage with it, to feel a part of this history.

David J. Meltzer explores the ways in which the moon rock is adopted to serve an ideological message within the NASM in his essay on *Ideology and Material Culture*. He introduces the concept of vulgar ideology and nonvulgar ideology: “Vulgar ideology is, more often than not, an *effort* to present a message, while nonvulgar ideology is largely a *reflection* of our own ontology (ideological ontology).” (1981, p. 116). Museums serve to represent a set of ideas about a country, whether those ideas are obvious or reflective of the general consensus. In the case of the NASM, the organisation and presentation of the collections serve to invoke evidence of progression, unity and celebration at the accomplishments of the space programme. Meltzer identifies the narrative present in the museum as one that is of a recent past but also a potential future, of progress and “a history still being created” (1981, p. 118). The lunar Touchrock in the NASM embodies that idea: a piece of the Moon, accessible to all (fig. 5). The moon rock becomes emblematic of progress and the potential for that progress to have a positive impact on individuals worldwide. The ideology is in direct opposition to Mark Fisher’s theory of capitalist realism; that the end of the world is easier to imagine than an end to capitalism. Perhaps, an unconscious fear of this stagnation that Fisher philosophises is what draws people to touch the moon rock.

Chapter 3: Bik Van Der Pol's *Fly me to the Moon*

In 2006, the Dutch artist duo Liesbeth Bik and Jos van der Pol (Bik Van der Pol) were invited by the Rijksmuseum under a government funded arts scheme to produce a work in relation to the museum under the heading *A Modern View of the Rijksmuseum*. The project which started in 2005 and operated until 2008, aimed to modernise the perception of the museum which previously housed only historic works of art.

The exhibition *Fly me to the Moon* (2006) began with Bik Van der Pol's discovery of a moon rock within the museum's online database. The rock, coded as *NG-1991-4-25*, was accompanied by a piece of card stating that it was gifted to Willem Drees Sr., a former Prime Minister of the Netherlands by the visiting astronauts who returned the rock to earth during Apollo 11, 1969 (fig. 6). The rock was later donated to the museum by Willem Drees' son.

The moon rock was photographed against a blue background (fig. 7), highlighting its reddish tones. The disconnect between its location within this particular museum and its objecthood can be seen through the means in which it has been categorised (fig. 8). The museum lists its manufacturer as 'anonymous', its location as 'Moon, the.' (Bik Van der Pol, 2007, p. 117). This attempt at categorisation is clunky and humorous, as Bik Van der Pol have stated: "such a rock is literally an 'alien', strange and anomalous, amid a rich variety of objects in the museum's possession, it is the only one that is not of this world." (2007, p. 122). Bik Van der Pol identify the

otherworldly nature of the moon rock as its own object, as well as within the context of this collection.

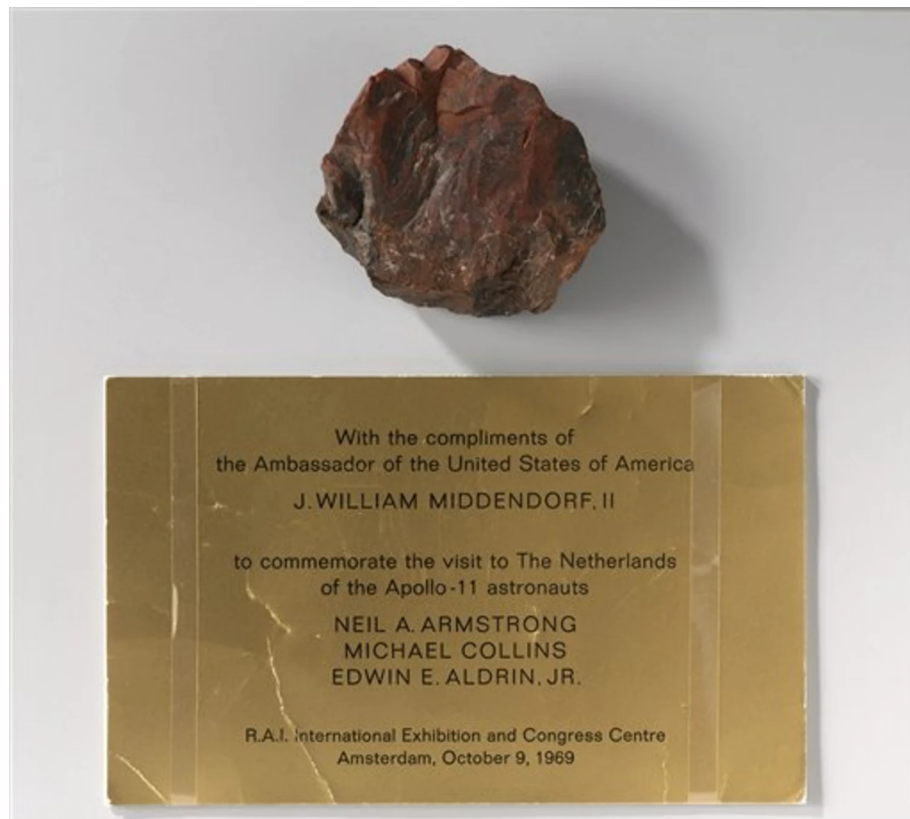


Fig. 6: An aerial view of the moon rock featuring the note stating its provenance (Source: NBC News, 2009)



Fig 7: Scanned image of the moon rock within the Rijksmuseum collection, (Source: NG-1991-4-25: Fly me to the Moon, 2007, p. 114 - 115)

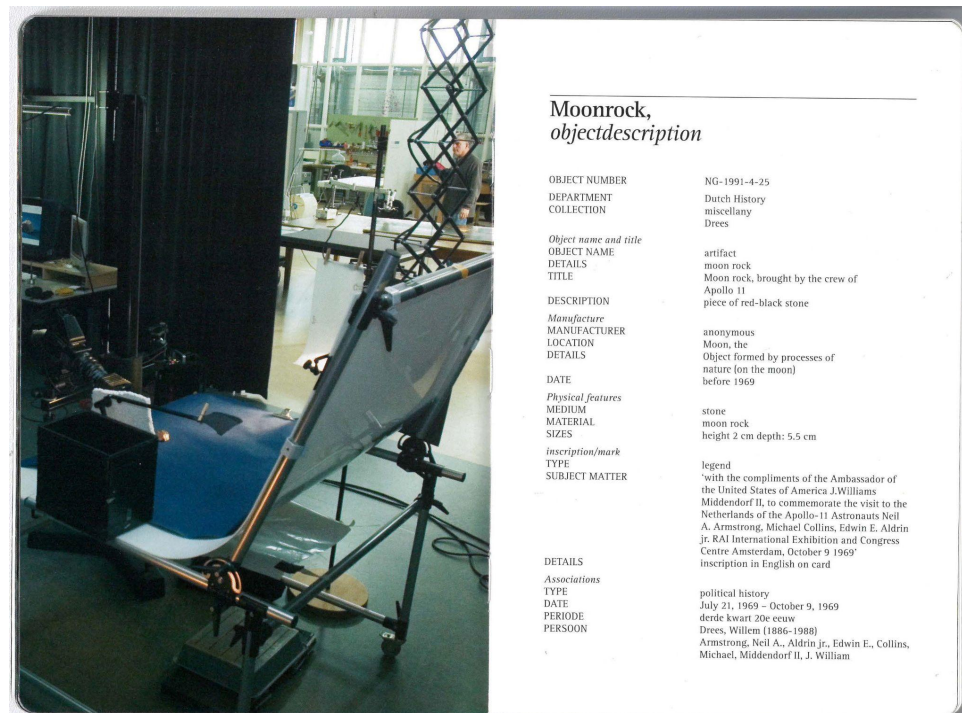


Fig. 8: Scanned image of page detailing the way in which the moon rock was categorised within the Rijksmuseum. (Source: NG-1991-4-25: *Fly me to the Moon*, 2007, p. 116 - 117)

In approaching this exhibition Bik van der Pol knew that they wished to observe an object within the collection. However, they faced institutional challenges in approaching the topics they wished to discuss. The committee of conservators banned the duo from discussing ownership, authorship, colonialism and authenticity. This was due to an ongoing controversy at the time where it was revealed that several of the paintings ascribed to Rembrandt within the museum were actually only by artists within the School of Rembrandt (Bik van der Pol, 2021, n.p.). The discovery of a moon rock within the digital catalogue provided the duo with an object that gave them the opportunity to comment on these topics, without making any direct accusations that might reflect negatively on the museum. They did this by purchasing a plot of land on the Moon, big enough to contain the Rjksmuseum's collection, through Dennis Hope's *Lunar Embassy*. Through this purchasing of land on the Moon, Bik Van der Pol were able to indirectly open up a discussion on the

aforementioned topics. The moon rock was used as a physical object to conceptualise the connection between the Moon and the Rijksmuseum.

The exhibition took place on 6th October - 7 November 2006. A spiral staircase was crafted leading to the highest point of the museum, a room within a tower of the museum. The exhibition featured the moon rock encased within a glass box and the deeds to the plot of land purchased on the Moon (fig. 9). Bik van der Pol produced a series of guided tours with an actor using a dynamic script. This tour guide led the public to the highest point of the museum, where the stone was exhibited, as close to its home in the sky as it could be.



Fig. 9: Fly me to the Moon at the Rijksmuseum, 2007. (Source: The Rijksmuseum Bulletin, 2013, p. 110)

Additionally, the duo produced a catalogue in order to memorialise the exhibition. The book titled *NG-1991-4-25: Fly me to the Moon*, features several short articles by authors such as Wouter Davidts, Jennifer Allen, and Frans Van der Dunk. The topics within the catalogue cover a wide range from space law (Van der Dunk) to science fiction short stories (Allen), all revolving round the question of ‘what if the Rijksmuseum were to purchase a plot of land on the Moon to house its collections?’

On Aneph Skias by Jennifer Allen, is a short story that imagines a world where the sun has reached unlivable temperatures. Humanity must remain inside, sleep during the day and work only at night to avoid its heat. The Rijksmuseum collection has been entirely digitised within ‘the Great Digital Inventory’ and the viewing of objects in-person banned. The story follows a group of museum workers in the wake of a conservator, Lem’s, apparent suicide. Lem would organise meetings in order to view museum objects in person. The final meeting before Lem’s death revolved around moon-related objects: “The Moon. Which is nothing more than a gigantic light bulb with a dimmer switch, was once associated with radical transformations, with the otherworldly, where the impossible could be glimpsed and experienced, from werewolves and spectres to the future of space travel.” (Allen in Van der Pol, 2007, p. 144). Allen poses that same question in this dystopian setting; how has access to the Moon shifted its mythology? At the end of the short story, a ‘digi-tech’ scans the rock and reveals it to be a piece of Plymouth Rock, dating from the 17th Century. This reveal is not far from the truth, as in 2009, the moon rock was analysed by a group of scientists and revealed to be not a moon rock, but petrified wood.

Walking on the Moon by Wouter Davidts compares the moon rock to the missing NASA tapes of the moonwalk from 1969 and the differences between these two artefacts in the ways in which viewers might approach them. It emerged in 2006 that the tapes featuring the July 1969 broadcast of Neil Armstrong walking on the Moon were misplaced within the vast enclave of the Goddard Space Flight Centre in Maryland. (Bik Van der Pol, 2007, p. 129). Wouter identifies the moon rock as a representation of the Moon as opposed to physical evidence of an event in time, its discovery at ends with the ‘disappearance’ of the moon tapes: “because the rock functions as an abstraction of the Moon, as a *pars pro toto*, its viewers are much more likely to daydream about a walk on the Moon, than to reflect on the moon-walk that took place in 1969, of which the rock is an actual souvenir.” (Bik Van der Pol, 2007, p. 132). Wouter identifies this daydreaming as an essential joy, embodying a human desire to daydream and conspire. A desire that is ignited by both the missing tapes and the moon rock’s discovery within the Rijksmuseum, as well as its revelation of fallacy. These mysteries and discoveries provide a sense of wonder and excitement- where could the tapes be? Why was there a moon rock in the Rijksmuseum? Why was there a *fake* moon rock in the Rijksmuseum? As Wouter expresses in reference to the missing tapes: “But what is it, precisely, that was ‘lost’? The direct, clearly ‘visible’ evidence that there was a man on the Moon in July 1969?” While the moon rock was not in fact, a real moon rock, its authenticity might be lost, but what is gained is in some ways more exciting, a new mystery to mull over.

In hindsight, the articles within this catalogue read as though there was some suspicion that this moon rock was not in fact from the Moon. Despite its fakeness, it

still carries out the function Bik Van der Pol intended for it; it provided a means of connecting the Rijksmuseum to the Moon. “As a result the object numbered NG-1991-4-25 has been reduced to a relic that holds its value simply because of the tale it has to tell - and so it still fits into the artists’ concept. Behind every object there is always a world of stories extending far beyond its physical boundaries.” (Van Halem, 2013, p. 111). With its inauthenticity, the petrified-wood-turned-moon-rock might take on the qualities of a work of mimesis - artwork intended to replicate the world. With this transformation of meaning the original placement of the rock within a museum of art history no longer feels out of place. It is as sensical as a unicorn horn in a 17th century *wunderkammer*.

Chapter 4: Constructed Narratives

The authenticity of the ‘moon rock’ within the Rjksmuseum was not questioned due to the page clearly stating its provenance (fig. 6.) As Mark Jones states in *Why Fakes?*: “Perception itself is determined by the structure of expectations that underpin it.” (Pearce, 1994, p. 92.) General viewers accepted this rock as genuine despite its reddish brown hue raising alarms for any geologist or individual familiar with lunar rocks due to the note accompanying it. On top of this, the rock was not questioned by the general exhibition visitor due to its presentation within a recognised institution. As Foucault has expressed in regard to his theories on power/knowledge: “‘Truth’ is linked in a circular relation with systems of power which produce and sustain it, and to effects of power which it induces and which extends it. A ‘regime’ of truth.” (1984, p. 74) This ‘regime of truth’ refers to the systems that underpin these narratives, from institutions such as museums, to the media and

education systems. In this regard, it is these institutions which have the ability to produce 'truths' and therefore hold power.

Following the revelation in 2009 that the moon rock is fake, Bik Van Der Pol published *The Addition*, a short catalogue containing comments under a blog featuring the news. The discussion revolves around posing questions such as how might this relate to the moon landing hoax? Why did the Rijkmuseum not allow the rock to be investigated until now, when geologists had already presumed it to be fake as soon as they saw it in the exhibition? "Someone put the wrong label on something. This doesn't mean the better documented objects in the museum's collection aren't what they appear to be." Comments *Slang* on the 27th August 2009 at 8:59pm (Bik Van der Pol, 2009, p. 2). This commenter touches on the ability of fakes to alter people's perceptions of reality - if the moon rock is fake, what else is fake? Needless to say the petrified wood moon rock heralded many conspiracies. Did someone steal the real moon rock and replace it with the petrified wood? The theory that Bik van der Pol formulated the story with the sole purpose of the exhibition is discussed on *moonhoaxdebunked.com*. (Alb, 2017, n.p.). Needless to say the provenance of this faux moon rock will never be uncovered. However, the mystery surrounding its origin will remain a topical discussion.

The theory that Bik van der Pol faked the moon rock for the purpose of the exhibition gives a new perspective to the exhibition catalogue. Images interspersed throughout show Vermeer's paintings of the Geographer (c. 1668 - 1669) aside a footprint on the lunar surface from Armstrong's 1969 walk (fig. 8). The footprints on the lunar surface will remain there for a million years due to the lack of wind on the Moon to blow them

away (NASA, 2004, n.p.). Could this circumstance-based archive reflect on the way a Vermeer is preserved within an institutional setting? Other images show a photographer staging the moon rock image, its reddish tone jumping out against the blue background (fig. 11). These images placed together in some ways suggest a history constructed, referring back to Meltzer's theories of ideology within museums. To admit that the ways in which the past is presented is a construct of the discourses of the present is not a negative thing, but a means of acknowledging the power which museums and similar institutions hold. As Foucault has stated: "we must cease once and for all to describe the effects of power in negative terms [...] In fact, power produces; it produces reality; it produces domains of objects and rituals of truth." (1991, p. 194).



Fig. 10: A scan of an image showing a footprint on the lunar surface (1969) and Vermeer's the Geographer (c. 1668 - 1669) (Source: NG-1991-4-25: Fly me to the Moon, 2007, p. 78 - 79)

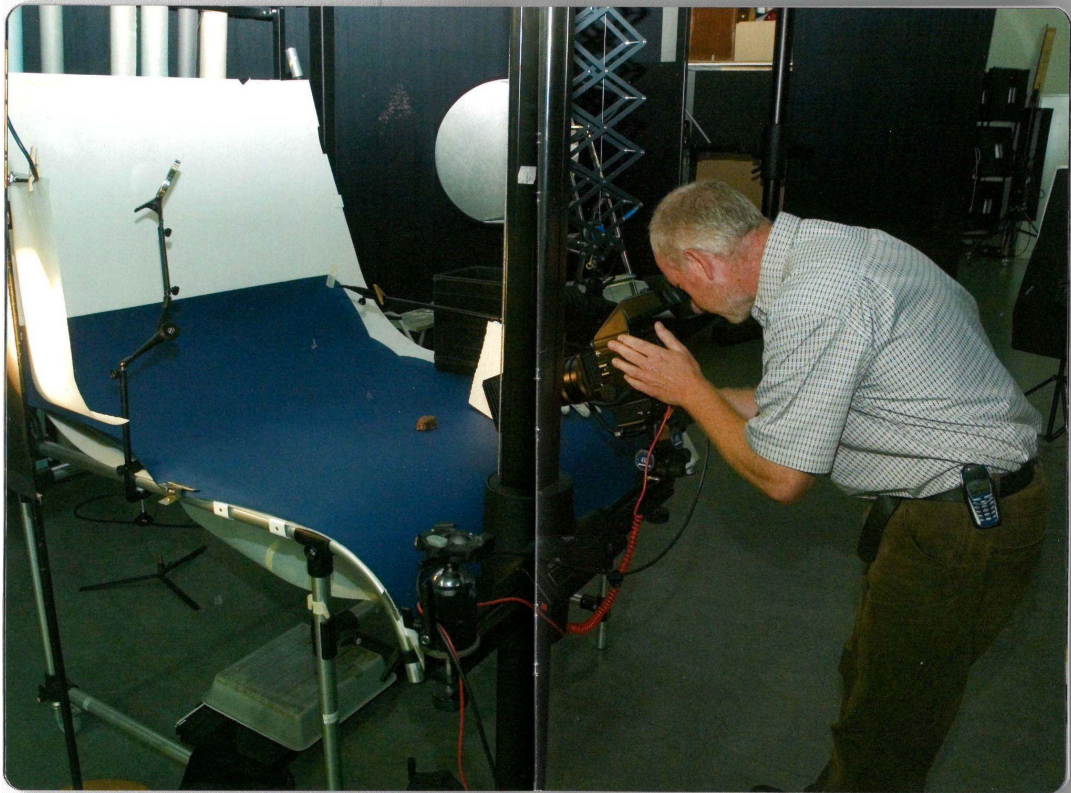


Fig 11: A scan of the moon rock image being staged, (Source: NG-1991-4-25: *Fly me to the Moon*, 2007, p. 96 - 97)

Despite this theory making sense in many ways, it has no definite conclusion. This exemplifies the means to which institutions have the ability to craft narratives: why would the Rijksmuseum, a respected institution, agree to the faking and tabulating of a moon rock within its collection? One would assume they would never do such a thing, and so the conspiracy remains just that: a conspiracy.

Conclusion

Through the analysis of the *Wunderkammern*, the moon rocks within these institutions and Bik Van der Pol's *Fly me to the Moon*, I have identified the means to which institutions play a role in defining and presenting history.

Limitations of this essay include the lack of moon rock on display in Dublin, and the limited focus on only three institutions featuring moon rocks. First-hand research and a wider scope of locations could have resulted in an alternative conclusion. Other exhibitions revolving around moon rocks and the Moon could have been touched on as a means of comparison such as Tom Sachs' *Objects of Devotion* (2017), and the work of artist duo *WE COLONISED THE MOON*, as well as the travelling exhibition *Museum of the Moon* (2015 - present), which all explore various takes on the extra-terrestrial rock. Further comparison of another exhibition featuring a moon rock might have resulted in the essay going in an alternative direction. In particular, *Objects of Devotion* might have resulted in an interesting alternative analysis as the work revolves around the adoption of the aesthetic of the cabinet of curiosities, and features a purposefully faked moon rock.

The first chapter of this essay explores the Wunderkammern of the early 17th century, and in doing so identifies the colonial history evident in museums from their very early beginnings. This provides the necessary context for the ways in which institutions and private collectors approach the moon rock. The moon rock, like many of the objects in a Cabinet of Curiosities, represents an age of discovery, making it similarly emblematic of power. On top of this, the Cabinet of Curiosities exemplifies the means to which a collection forms its own context, one which is not necessarily representative of the history that has passed.

Who owns the Moon('s Rocks)? continues on with this theme of identifying power within objects by analysing the ways in which moon rocks have entered the economic circuit through auctions, and how this demand has caused innumerable

fake moon rocks to be in circulation. Applying Mark Fisher's theories of capitalist realism, the means to which the moon rock, which was once a mythological object, is transposed into a commodity and naturalised within our terrestrial discourses is explored. A theory which is amplified by the findings of Meltzer in regards to the NASM in Washington D.C.

Overall, Bik Van der Pol's *Fly me to the Moon* serves as a case study to investigate the findings of the second chapter. The moon rock is utilised in order to craft a particular narrative, in this case one which revolves around colonialism and object authorship. This practice is routinely attributed to institutions such as the Rijksmuseum itself, as well as the Natural History Museum in Ireland and the NASM in Washington D.C.. In this way the duo effectively craft a critique on institutions while remaining a part of one.

Finally, the last chapter of this essay explores the impact that the reveal of the fake moon rock had on the general public. The questioning and conspiracies that emerged as a result of this reveal bring to light the power that institutions hold. This relates to Foucault's theory of power/knowledge - that knowledge is intrinsically tied to power. It raises questions such as does object authenticity equate to an authentic history when museums are serving their own ideological messages? As Meltzer states, identifying the role of ideology within a museum is not a call for revolution, as museums main focus lies within altruism (1984, p. 125), but simply an acknowledgement of the power that they have to engage with the viewer, and perpetuate change.

Bibliography

Alb, E. et al (2017) '9.8. How Come the Moon Rock Donated to Holland is Fake?' Moon Hoax: Debunked! [Blog] Available at: <http://www.moonhoaxdebunked.com/2017/07/98-how-come-moon-rock-donated-to.h.html> (Accessed 29/01/23)

Bik Van Der Pol (2007) 'NG-1991-4-25: Fly me to the Moon', The Rijksmuseum, New York: Sternberg press

Bik Van der Pol (2009) 'The Addition' Available at https://www.bikvanderpol.net/archive/DOC/FA_The_Addition_Bik_van_der_Pol.pdf (Accessed 26/01/23)

Bik Van der Pol (2006) 'Fly me to the Moon' Available at https://bikvanderpol.net/m/280/fly_me_to_the_moon/ (Accessed 26/01/23)

Beunk, F. (2010) 'De Maansteen Van Drees' (Translation: The Moonstone of Drees) Available at <https://www.nemokennislink.nl/publicaties/de-maansteen-van-drees/> (Accessed 28/01/23)

Coughlan A. (2012) 'Down in the dumps or on someones fireplace, just where is our own bit of moon rock?' *The Irish Independent*, March 3, Available at: <https://www.independent.ie/lifestyle/down-in-the-dumps-or-on-someones-fireplace-just-where-is-our-own-bit-of-moon-rock-26828318.html> (Accessed 12/01/23)

Dunbar, B. (ed.) (2019) 'Not-Unsolved Mysteries: The Lost Apollo 11 Tapes', Available at: <https://www.nasa.gov/feature/not-unsolved-mysteries-the-lost-apollo-11-tapes> (Accessed 25/01/23)

Everuss L., Hsu E., (2022) 'Michel Foucault's Power/Knowledge.' The Sociology of Everything Podcast [Podcast] 13 June 2022, Available at <https://www.buzzsprout.com/1889497> (Accessed 29/01/23)

Fernholz, T. (2019) 'What's a Moon Rock Worth, Anyway?' Available at: <https://qz.com/1505222/moon-rock> (Accessed 06/11/22).

Fisher, M. (2010) 'Capitalist Realism' 1st ed. Winchester, UK: Zero Books.

Foucault, M. (1984) 'The Foucault Reader' First edn. Edited by P. Rabinow. New York: Pantheon Books.

Grover, K. (2019) 'The Moon: One of the Earliest Human Symbols' BBC Culture, 29 March, Available at: <https://www.bbc.com/culture/article/20190326-the-moon-one-of-the-earliest-human-symbols> (Accessed 26/01/23)

Guthrie, J.R. (2004) 'In Search of the Goodwill Moon Rocks: A Personal Account' Available at <http://www.geotimes.org/nov04/trends.html> (Accessed 07/11/22)

Hiesinger H., Jaumann, R. (2014) 'Chapter 23 - The Moon', Editor(s): Tilman Spohn, Doris Breuer, Torrence V. Johnson, Encyclopedia of the Solar System (Third Edition), Elsevier, Pages 493-538, ISBN 9780124158450, Available at: <https://www.sciencedirect.com/science/article/pii/B9780124158450000232> (Accessed 26/01/23)

Impey, O. R. and MacGregor, A. (eds) (2017) 'The Origins of Museums: the Cabinet of Curiosities in Sixteenth and Seventeenth Century Europe.' Oxford: Ashmolean Museum.

Jerram, L. (2016) 'Museum of the Moon - About' Norfolk and Norwich Festival. Available at: <https://my-moon.org/about/> (Accessed 29/01/23)

Meltzer, D.J. (1981) 'Ideology and Material Culture', in Gould, R.A, Schiffer, M.B. (eds.) Modern Material Culture: The Archeology of Us. New York: Academic Press Inc., 113-125.

Merewether, C. ed. (2006) 'The Archive', London: White Chapel MMSU Rijeka, 26 October 2021, 'Bik Van der Pol / Artist Talk.' Available at <https://www.youtube.com/watch?v=OTSFcj9ht64> (Accessed 01/12/22)

Koeppel, W. ed. (2019) 'Making Marvels: Science and Splendor at the Courts of Europe.' New York, NY: Metropolitan Museum of Art.

Moon (2009) Directed by Duncan Jones [Film] USA: Sony Pictures Classics

NASA (2022) 'Lunar Rocks and Soils from Apollo Missions'. Available at: <https://curator.jsc.nasa.gov/lunar/> (Accessed 10/11/22)

NASA (2004) 'Apollo 11: First Footprint on the Moon' Available at: https://www.nasa.gov/audience/forstudents/k-4/home/F_Apollo_11.html (Accessed 28/01/23)

National Air and Space Museum (2016) 'The Long Journey of our Lunar Touchrock' June 16, NASM: Smithsonian. Available at

<https://airandspace.si.edu/stories/editorial/long-journey-our-lunar-touchrock>
(Accessed 29/01/23)

Newcott, B., 2019, 'The Moon Rock Hunter is Coming for You' Saturday Evening Post, 16 May. Available at:
<https://www.saturdayeveningpost.com/2019/05/the-moon-rock-hunter/> (Accessed 26/01/23)

Pearce, S. M. (ed.) (1994) 'Interpreting objects and collections.' London: Routledge (Leicester readers in museum studies).

Purinton, M. D. (2007). 'George Colman's "The Iron Chest" and "Blue-Beard" and the Pseudoscience of Curiosity Cabinets.' *Victorian Studies*, 49(2), 250–257. JSTOR [online] Available at: <http://www.jstor.org/stable/4626282> (Accessed 26/01/23)

Rijksmuseum, (n. d.) 'Steen, door Drees ontvangen van de Amerikaanse Ambassadeur, before 1969' Rijksmuseum, Amsterdam. Available at
<https://www.rijksmuseum.nl/en/collection/NG-1991-4-25> (Accessed 29/01/23)

Sachs, T., (2017) 'Objects of Devotion' Available at:
<https://www.tomsachs.com/exhibitions/objects-of-devotion> (Accessed 28/01/23)

Stevenson, D. (2014) 'Making the Moon', *Physics Today*. Available at;
<https://physicstoday.scitation.org/doi/10.1063/PT.3.2583> (Accessed 25/01/23)

Stewart, S. (1993) 'On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection' 1st paperback edn. Durham: Duke University Press.

Stooke P. (1994) 'Neolithic Lunar Maps at Knowth', Available at:
<https://www.knowth.com/lunar-maps.htm> (Accessed 22/01/23)

The Economist (Producer), (2019). 'Who Owns the Moon?' [Video/DVD] The Economist. Available at:
<https://video.alexanderstreet.com/watch/what-do-moon-rocks-reveal-about-the-universe> (Accessed 26/01/23)

The European Space Agency (2013) 'Helium 3 Mining on the Lunar Surface.' Available at
https://www.esa.int/Enabling_Support/Preparing_for_the_Future/Space_for_Earth/Energy/Helium-3_mining_on_the_lunar_surface (Accessed 10/11/22)

Unknown, (2011) 'Foucault: Power is Everywhere' The Institute of Development Studies. University of Essex. Available at

<https://www.powercube.net/other-forms-of-power/foucault-power-is-everywhere/>
(Accessed 28/01/23)

Van Halem, Ludo, et al. (2013) 'Acquisitions: A Modern View of the Rijksmuseum: Projects and Installations as Part of the Visual Arts Percentage Scheme'. The Rijksmuseum Bulletin, vol. 61, no. 1, pp. 104–19. JSTOR [online], Available at: <http://www.jstor.org/stable/23646904> (Accessed 29/01/23)