

Dona et Impera: politika jednog Mjesečeva kamena

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SL. 1 – TIPIČNA GOODWILL MOON
ROCK PLAKETA, 1973.
FOTO: NASA. IZVOR:
WWW.DVIDSHUB.NET/IMAGE/729976/
POST-FLIGHT-APOLLO-17-PLAQUES

FIG. 1 – TYPICAL GOODWILL MOON
ROCK PLAQUE, 1973.
PHOTO CREDIT: NASA.
PHOTO SOURCE: WWW.DVIDSHUB.
NET/IMAGE/729976/POST-FLIGHT-
APOLLO-17-PLAQUES

Dona et Impera: Politics of a Moon Rock

IZVORNI ZNANSTVENI RAD

PREDAN: 20. 4. 2015.

PRIHVAĆEN: 23. 5. 2015.

UDK: 114:523.34-128]:327.54(73)

SAŽETAK: Završetak *Apollo* programa Sjedinjene Američke Države obilježile su gestom *dobre volje* poklonivši zemljama svijeta *Goodwill Moon Rock* (doslovno, „Mjesečev kamen dobrih namjera“). Proizvodnja prostora, u značenju koje je tom konceptu dao Henri Lefebvre, podrazumijeva društvenu akciju. Proizvodnja lunarnog prostora zahtijeva stvaranje zemaljskoga životnog okruženja u tako novoprodučenom teritoriju. Stvorivši *Goodwill Moon Rock*, SAD je darovao dio prostora koji nije posjedovao nego ga je samo imao mogućnost, doduše ekskluzivnu, proizvesti. *Goodwill Moon Rock* otkriva intrigantnu dinamiku između dizajna i projektiranja, tehnologije, prirode, i politike u hladnoratovskom kontekstu.

KLJUČNE RIJEČI: Hladni rat, geopolitika, svemir, proizvodnja prostora, teritorij



SL. 2 – PREDŠJEDNIK NIXON OBRAČA SE ČLANOVIMA MISIJE APOLLO 11
PO NJIHOVU POVRÄTAKU NA ZEMLJU, 1969. FOTO: NASA. IZVOR: SOURCE:
WWW.YOUTUBE.COM/WATCH?v=8BPJUUZO4VS

FIG. 2 – PRESIDENT NIXON ADDRESSES THE APOLLO 11 CREW UPON THEIR
RETURN TO EARTH, 1969. PHOTO CREDIT: NASA. PHOTO SOURCE: WWW.
YOUTUBE.COM/WATCH?v=8BPJUUZO4VS

ORIGINAL SCHOLARLY PAPER

RECEIVED: APRIL 20TH 2015

ACCEPTED: MAY 23RD 2015

UDC: 114:523.34-128]:327.54(73)

ABSTRACT: To mark the end of the *Apollo* program, the United States of America extended a goodwill gesture to the international community by distributing the *Goodwill Moon Rock* plaques. In Lefebvrian terms, the production of space requires social action: the production of lunar space requires extension of the life-giving terrestrial confinement onto this new territory. Thus the Goodwill Moon Rock represents a universal human achievement, but is also token of a different and exclusive space that the U.S. did not formally own, but only had an exclusive capacity to produce. *Goodwill Moon Rock* reveals an intriguing dynamics of design, technology, nature, and politics in the Cold War context.

KEYWORDS: Cold War, geopolitics, outer space, space production, territory

Dana 24. srpnja 1969. *Helikopter 66* mornarice Sjedinjenih Američkih Država sletio je na ispražnjenu platformu nosača zrakoplova *USS Hornet*, tisuću milja jugoistočno od Havajskog otočja. Posada okupljena na balkonima promatrala je slijetanje sa sigurne udaljenosti. U helikopteru su bila trojica astronauta,¹ netom sletjela u Pacifik nakon uspješnog završetka misije *Apollo 11* – prvoga ljudskog iskrcajanja na Mjesec. *Šezdeset šestica* je po prizemljenju spuštena u hangar. Tri ljudske figure izašle su iz letjelice odjevene u zaštitna odijela. Mahnule su okupljenoj gomili te pojurile u aluminijsku prikolicu,² a put kojim su bile prošle podvornik je dezinficirao otopinom glutaraldehida.³..... Trenutak kasnije, predsjednik Richard Nixon prišao je mikrofonu postavljenom pored prikolice. Iza zavjesa na prozorčiću prikolice ukazala su se lica trojice astronauta. No njihovi pomalo usiljeni osmjesi upućivali su na nemir koji su morali osjećati: bili su dočekani kao junaci, no istodobno tretirani kao stranci. Nixon i astronauti razmijenili su ljubaznosti i tople riječi, no samo kroz staklo, mikrofone i zvučnike.⁴

Usporedno s pripremama za prvi let na Mjesec pojavile su se strepnje od posljedica unošenja nezemaljskog materijala na Zemlju. Strah od izvanzemaljske zaraze postao je sveprisutan i iako, kako kaže suvremeni pisac, „nijedan biolog nije htio da ga se smatra zagovornikom života na Mjesecu“,⁵ prijetnja izvanzemaljskim životom prešla je iz sfere znanstvene fantastike u

On July 24th 1969, the United States Navy *Helicopter 66* landed on the evacuated flight deck of the *USS Hornet*, roughly one thousand miles southwest of Hawaii. The crew swarmed the ship's balconies in order to observe the landing from a safe distance. The machine carried three American astronauts¹ who minutes ago splashed down into the Pacific after successfully completing the *Apollo 11* – the first human mission to the Moon. Once at a standstill, the 66 was lowered into the hangar deck. Adorned in protective suits, three human figures descended from the helicopter. They waived to the crowd gathered, and rushed inside what resembled an aluminum trailer.² A custodian instantly sanitized the path the three new idols had just passed, spraying it with glutaraldehyde solution.³..... Seconds later, president Richard Nixon took the stand at the microphone adjacent to the trailer. The curtains of the trailer's window opened, revealing the astronauts' faces; words and smiles were exchanged, but filtered through the window's glass, microphone, and speakers.⁴ The astronauts' grin hinted at the anxiety they must have felt, being greeted like heroes but treated like aliens, and for a good reason it was believed.

With the preparation of the first human landing on the Moon, concerns surfaced about the introduction of extra-planetary materials to the Earth. Back-contamination became the buzzword. Although, in the words of a writer, “no biologist wanted to be

sferu znanosti.⁶ U najcrnjem scenariju spekuliralo se: „organizmi doneseni iz svemira mogli bi u potpunosti uništiti život na zemlji ili se razmnožiti u plodnom zemaljskom okolišu te prerasti sve oblike zemaljskog života kao što korov prekrije ledinu“.⁷ Iako je vjerojatnost za takav razvoj događaja bila beskrajno mala, pravila predostrožnosti bila su striktna, i to iz sasvim specifičnih razloga. Stoga, iako spašeni od smrtonosnoga nezemaljskog okruženja te vraćeni u sigurni zagrljaj zemaljske gravitacije, trojica povratnika iz svemira još uvijek nisu mogla osjetiti povjetarac oceana; njihovi su potencijalno toksični izdisaji filtrirani i pročišćavani kompleksnom aparaturom u unutrašnjosti aluminijske prikolice. Kroz sljedeća tri tjedna astronauti će ostati izolirani, ne zbog njihove zaštite nego zbog sigurnosti svih ostalih Zemljana. Pušteni su tek kada se smatralo da su sve potencijalne prijetnje bile isključene.⁸ …… Uzorci kamenja koje su astronauti donijeli na Zemlju morali su proći sličnu karantenu. Dolazak prvih uzoraka u NASA-in laboratorij živo je opisao jedan geolog: „Kad smo otvorili tu prvu kutiju uzoraka, tiha atmosfera očekivanja u laboratoriju bila je, zamišljam, slična onoj u srednjovjekovnom samostanu kada su redovnici iščekivali dolazak relikvije Svetog Križa.“⁹ …… Ali ova je relikvija izazivala nepovjerenje. „Ono što smo vidjeli, prisjeća se jedan svjedok, sličilo je vrećici ugljena. Kamenje je bilo pokriveno tamnosivom prašinom i nitko nije mogao o njemu zaključiti ništa.“¹⁰ …… Potencijalnu opasnost koja je vrebala iz te vrećice ugljena nije bilo moguće ignorirati. No, još se jednom pokazalo da je oprez bio pretjeran:

„Kako bi ispitali uzorke na patogene čimbenike, biolozi su cijepili dvije stotine laboratorijskih miševa fino mljevenim česticama lunarnog materijala. Ovi su miševi bili uzgojeni u potpuno sterilnim uvjetima, te nisu imali razvijenu nikakvu otpornost na bolesti. No efekata inokulacije nije bilo. Ovaj i slični eksperimenti dokazali su kako uzorci Mjesečeva kamenja ne predstavljaju Pandorinu kutiju, bez obzira na prethodne strahove.“¹¹ …… Racionalnost, predostrožnost i oprez, pa i prema izvanzemaljskim zarazama, inherentan su dio znanstvenog diskursa. No možda se pri ovom suočavanju sa sublimnim probudio svojevrsni duh praznovjerja i proširio znanstvenom zajednicom; kao da su ikarovski let na mjesec i prometejsko krijumčarenje njegovih tajni natrag na Zemlju bili preodvažna avantura. …… Ova konvergencija dvaju mitova, tehnokratskog pozitivizma s jedne strane i skoro agnostičkog relativizma s druge, svakako je dio povijesnog konteksta. Hladnoratovske podjele i vladavina kompetitivnih tehnokratskih garnitura s obje strane željezne zavjese nisu jedina obilježja ovoga burnog razdoblja; događaji i naslijeđe '68. godine postavili su okvir za kritiku upravo fetišizacije tehnokratskih doktrina, i to na Istoku i na Zapadu. Zahtjevi za društvenom i prostornom jednakošću, nacionalna oslobođenja i dekolonizacija, Vijetnamski rat,¹² emancipacija potlačenih društvenih skupina te, što je najbitnije, počeci suvremene brige za okoliš, pretkazali su zalazak katartičnog optimizma moderniteta koji je, još od kraja Drugog svjetskog rata, cvjetao na metaforama razuma, znanosti i napretka. ……

Upravo je ovakva društvena i intelektualna klima pogodovala pojavi novih ideja o proizvodnji prostora koje je Henri Lefebvre opisao u istoimenoj knjizi (*La production de l'espace*) iz 1974. godine. Djelo je to koje istodobno predstavlja iscrpnu povijest praksi društvene proizvodnje prostora te kritiku takvih praksi u vremenu kasnog kapitalima, vapeći za pravednim i otvorenim prostorom i društvom bez predrasuda. …… Polazeći od Marxove tvrdnje da „je rad kao stvaratelj uporabnih vrijednosti, kao koristan rad, uvjet za opstanak ljudi, uvjet nezavisan od svih društvenih oblika, vječita prirodna nužnost da se između čovjeka i prirode omogući razmjena materije, a prema tome i život ljudski“, Lefebvre postavlja upravo prirodu kao osnovu proizvodnje prostora.¹³ Tvrdi kako priroda predstavlja ontološki preduvjet za proizvodnju prostora, „kao golemi teritorij rođenja gdje se stvari rađaju, rastu, sazrijevaju, posustaju i umiru, priroda je inicijalna baza, ili temelj društvenog prostora“.¹⁴ Preciznije, Lefebvre kaže: „Sirovina za proizvodnju prostora nije, kao kod pojedinačnih objekata, pojedini materijal. Radije, sirovina za proizvodnju prostora je priroda sama: priroda pretvorena u proizvod, grubo manipulirana, danas pod prijetnjom potpunog uništenja, upropaštena te, što je paradoksalno, lokalizirana.“¹⁵ …… Usto, tvrdi Lefebvre, proizvodnja prostora – transformacija prirode kroz društvene prakse – ovisi o djelovanju ljudskog tijela u njegovu okolišu, o „korištenju tijela; ruku, udova i osjetilnih organa, o korištenju gesta rada“.¹⁶ …… Tijelo je osnovni alat društvenih praksi proizvodnje prostora jer modificira svoj prirodni okoliš koji ga

istodobno održava živim. Lefebvre kaže: „Živi organizam ne postoji, niti ima značenje izoliran od svojeg okoliša, od prostora u kojem se proteže i kojeg proizvodi (tj. od svojeg ‘miljea’, upotrijebimo li pomodni termin koji ima tendenciju reducirati aktivnost organizma do razine pasivnog postojanja u prirodnom materijalnom okolišu). Svaki se živi organizam odražava i prilagođava promjenama koje unosi u svoj ‘milje’ ili ‘okoliš’, drugim riječima, u svoj prostor.“¹⁷ Nadalje, Lefebvre implicira da koncept društveno proizvedenog prostora, s prirodom kao supstratom, može biti primijenjen i na nezemaljski prostor. „Prirodni je prostor zaista otvoren na sve strane. Zahvaljujući tehnologiji danas možemo ‘konstruirati’ što god i gdje god želimo: na dnu oceana, u pustinjama, planinama te ako zatreba čak i u međuplanetarnom prostoru.“¹⁸ …… No, na Mjesecu ne postoji prirodni prostor „otvoren na sve strane“; postoji samo nijemi, inertni i fatalni okoliš. Kako je onda moguće proizvesti prostor ondje gdje nema pogodnog okoliša koji bi tijelo zauzelo i u kojem bi se odražavalo? Kako proizvesti lunarni prostor iz nepostojeće lunarne prirode? Jedino potpunom i strogom separacijom ljudskog tijela od lunarnog okoliša; jedino izolacijom od izvanzemaljskog vakuuma, i uranjanjem u *zemaljsku* prirodu, u pogodnu mješavinu kisika, ugljika i dušika unutar svrshodno projektirane antropomorfne ljuske – unutar svemirskog odijela. Samo u takvom malom, lokaliziranom i ograničenom okolišu, u takvoj lokaliziranoj zemaljskoj prirodi, ljudsko tijelo može „proizvoditi“ drugi, nezemaljski prostor. No, taj prostor nikada ne

caught expecting to find life on the Moon”⁵, the threat of an extraterrestrial life crept from the realm of science fiction into hard science.⁶ In the worst-case scenario, it was believed, the “organisms brought back by *Apollo* space crafts could either kill life on Earth outright or flourish to such an extent in the ‘lush environment of Earth’ that they would overgrow terrestrial life forms just as crab grass takes over a lawn.”⁷ However infinitesimally small the chances of such a frightening development were believed to be, precaution was the rule. However, it was due to a peculiar set of reasons, as I will argue in this article. …… Although away from the lethal outer space, and again embraced by the Earth’s gravity, the newly returned space-wanderers could not feel the ocean breeze, as their potentially toxic exhalations were contained within and purified by the elaborate filtering apparatus of the aluminum trailer. For the following three weeks they will remain confined – not for their protection but for the safety of all other Earthlings – and were discharged only after all potential threats deemed unlikely.⁸ …… The rocks that the astronauts brought from the Moon had to undergo a similar scrutiny. The arrival of the first Moon rocks to NASA was vividly described by a geologist: “When we opened that first box of Moon rocks, the hushed, expectant atmosphere in the Lunar Receiving Laboratory was, I imagine, like that in a medieval monastery as the monks awaited the arrival of a fragment of the True Cross.”⁹ …… But, this ‘True Cross’ was distrustful: “‘What we saw,’ wryly recalls one observer, ‘was not much different from

a bag of charcoal. The rocks were so covered with dark-gray dust that no one could tell a thing about them.”¹⁰ …… The potential danger looming from the bag of charcoal was impossible to be ignored. Again, the caution proved to be exaggerated: “To test for pathogens, or disease-causing agents, biologists inoculated 200 germ-free mice with finely ground particles of lunar material. These mice had been bred in a completely sterile environment and lacked almost all immunity to disease. Yet they showed no ill effects whatsoever. This and other experiments indicated that the rock sample containers were no Pandora’s boxes after all, despite early qualms.”¹¹ …… The vigilance shown with regard to the potentially contagious alien germ was of course a part of the scientific orthodoxy. But it can also be seen as a specter of superstition germinating the scientific community and its ideological patrons, as it questioned precisely the positivist tenets of the scientific discourse. As if the Icarian flight to the Moon, and the Promethean smuggling of its secrets back to the Earth would have been too daring an endeavor. …… But this convergence of the two contentious mythologies—of the technocratic positivism, and more agnostic relativism—was not unrelated to its historic stage. The period was not only framed by Cold War divisions, and driven by competitive technocratic establishments from the two sides of the Iron Curtain, but was strongly marked the '68 and its aftermath. The ongoing fetishization of the particularly technocratic doctrines (of both East and West) came under popular scrutiny.

Requests for social and spatial equity, decolonization, national liberation, the Vietnam War¹², the emancipation of the oppressed social groups, and importantly, the environmental concerns, have all foreshadowed the demise of modernism’s cathartic optimism that was, since the end of the World War Two, fueled by tropes of reason, science, and progress. …… This social and intellectual climate prompted the ideas on the “production of space”, that Henri Lefebvre advanced in his homonymous book from 1974, which is both an elaborate history of the social production of space, and a critique of the space-producing social practices of advanced capitalism, pleading for a more open and emancipating space and society. …… Following Marx’ claim that labor “is an eternal natural necessity which mediates the metabolism between man and nature, and therefore human life itself”, Lefebvre postulates precisely nature as the underlying principle of space production.¹³ He argues that nature presents an ontological precondition for the production of space, that, as a “vast territory of births” where “‘things’ are born, grow and ripen, then wither and die”, nature is the “initial basis or foundation of social space.”¹⁴ More explicitly, he states, “the raw material of the production of space is not, as in the case of particular objects, a particular material: it is rather nature itself, nature transformed into a product, rudely manipulated, now threatened in its very existence, probably ruined and certainly – and most paradoxically – localized.”¹⁵ …… However, that production – the transformation of nature through

social practice – relies on a body’s performance in its environment, on “the use of the body: the use of the hands, members and sensory organs, and the gestures of work.”¹⁶ The body constitutes the essence of a spatially producing social practice, as it modifies its natural environment while simultaneously being sustained by its nurturing capacity, as Lefebvre argues: “The living organism has neither meaning nor existence when considered in isolation from its extensions, from the space that it reaches and produces (i.e. its ‘milieu’ - to use a fashionable term that tends to reduce activity to the level of mere passive insertion into a natural material realm). Every such organism is reflected and refracted in the changes that it wreaks in its ‘milieu’ or ‘environment’ – in other words, in its space.”¹⁷ …… Furthermore, Lefebvre implies that the concepts of socially produced space, with nature as its substrate, presumably can be also applied to the outer space, “indeed the space of nature remains open on every side, and thanks to technology we can ‘construct’ whatever and wherever we wish, at the bottom of the ocean, in deserts or on mountaintops – even, if need be, in interplanetary space.”¹⁸ …… Still, on the Moon there is no life or nature “open on every side.” Can space be produced where there is no life-enabling environment into which a body can enter; where the environment does not enable “reflections and refractions” but stays mute, irresponsive, und ultimately – fatal? To perform social action, and to produce the lunar space from a non-existent nature, a separation has to be maintained between a human body and its

može postati stvarna ekstenzija tijela – astronaut nikad nije prisutan u nezemaljskom prostoru nego je, sasvim suprotno, uvijek od njega izoliran. Bivati u nezemaljskom ili lunarnom prostoru znači biti u iluzivnoj i privremenoj eksklavi zemljine atmosfere. Lunarni prostor vremenski je prozor koji su dosad samo misije *Apollo* uspješno otvorile: iluzija stvorena tehnološkim i logističkim mogućnostima projektiranog okoliša. Dok proizvodi nezemaljski prostor, astronaut zaposjeda onu istu i jedinu zemaljsku prirodu. Samo ta priroda, lokalizirana eksplikativnim mogućnostima projektiranog okoliša, stvara supstrat za daljnju proizvodnju prostora. Nezemaljski je dakle prostor uvijek funkcija zemaljskog, a konfinacija je njegova ontologija. Posljedično, granice nezemaljskog prostora koji prisvajamo, kao i naš spoznajni dijapazon, određeni su upravo sposobnostima da testiramo, projektiramo i proizvedemo njihove materijalne manifestacije. Ovladavanje tim sposobnostima postaje dragocjeni kapital vrijedan zaštite. Upravo se ovdje pokazuje nepostojanost moderne distinkcije između prirode i kulture: okoliš, kao i njegova politička i društvena, drugim riječima kulturna emanacija – teritorij, nisu imanentni, određeni svojom

prirodom, nego su definirani procesima projektiranja, dizajna i njima odgovarajućih sociopolitičkih i ideoloških okvira. U kompetitivnom geopolitičkom okruženju hladnog rata, uložili su tako postali doista veliki. Nevjerojatna količina rada i razina znanja koje društvena akcija proizvodnje nezemaljskog prostora zahtijeva tako su u konačnici sadržani u specifično projektiranoj aparaturi koja je omogućila čovječanstvu da stvori i osvoji nezemaljski prostor. No ta je akcija bila upravo perverzija idealističkih i ideoloških Lefebvrevih principa: navodna emancipacija čovječanstva od zemaljske ograničenosti postignuta je mnogo prije nego što je to isto čovječanstvo uspjelo riješiti svoje unutarnje, zemaljske nesuglasice. I u konačnici, postignuta je sredstvima koja predstavljaju suprotnost popularnim protutehnokratskim tendencijama toga povijesnog razdoblja.

Dana 11. prosinca 1972. lunarni model *Challenger* misije *Apollo 17* spustio se na Mjesečevu površinu. Bilo je to posljednje slijetanje letjelice s ljudskom posadom na Zemljin satelit, čime je završilo trogodišnje razdoblje njegova istraživanja. Letjelica je sletjela

u dolinu Taurus-Littrow uz rub Mora tišine. Bitan dio tereta koji je nosila bila je impresivna veksilološka kolekcija: osim zastave SAD-a, koju su, prema već ustaljenoj tradiciji, astronauti trebali postaviti na Mjesec, letjelica je nosila i 135 zastava raznih svjetskih država.¹⁹ Tijekom trodnevne misije, astronauti Harrison (Jack) Schmitt i Eugene (Gene) Cernan obavili su tri zasebne istraživačke šetnje Mjesečevom površinom.²⁰ Na kraju treće šetnje, prije ulaska u letjelicu, podigli su s tla komad „smeđe-sivog grubozrnatog bazalta s visokim udjelom titanija“ – komad kamena koji će poslije biti nazvan uzorkom *70017*.²¹ Tom je prigodom Cernan održao i motivirajući govor: „Vrata su sad odškrinuta, ali ispunjenje zadaća koje budućnost nosi ostaje na mladim generacijama, ne samo u Americi, nego u cijelom svijetu: na mladima koji uče živjeti i raditi zajedno. Kako bismo podsjetili stanovnike svih zemalja svijeta da je to ono čemu težimo, Jack je pokupio jedan značajan kamen, tipičan za područje doline Taurus-Littrow. Kamen je to sastavljen od mnogo fragmenata, raznih veličina i oblika, vjerojatno sa svih strana Mjeseca, starih možda milijarde godina. Ali ti fragmenti raznih veličina i oblika pa čak i boja, srasli su u jedan postojani

kamen, nadišavši tako samu prirodu svemira te žive zajedno na miran i suvisao način. [...] U veliku vreću s njim, Gene! U veliku vreću!“²² Žonglirajući kamenom u astronautskim rukavicama, zabavljajući pritom hipnotizirano gledateljstvo na Zemlji, astronauti su objavili Nixonov *Goodwill Moon Rock* plan: podijeliti uzorak *70017* s narodima i državama svijeta. Ubrzo, ušli su u letjelicu, otisnuli se s Mjesečeve površine i krenuli put Zemlje.

Slike osvajanja Mjeseca koje su proizvele misije programa *Apollo* nose specifičan teret krivnje. Cernanove i Schmittove lunarne pustolovine koje su bile zasitile globalnu medijasferu prenijele su zemaljske prostorne koncepte u nezemaljski prostor, lažno ga prikazujući kao praiskonski, prirodni, geomorfni okoliš kroz koji ljudsko tijelo slobodno može lutati. Te scene sugerirale su primarni kontakt astronauta i njihova naizgled prirodnog okoliša. Oslanjajući se na dobro poznati lik hodajućeg astronauta, kao osvajača prijetećega nezemaljskog okoliša, ove su slike zlorabile formalnu analogiju između ljudskog tijela koje akcijom u *prirodi* proizvodi zemaljski prostor, i *tijela* astronauta

SL. 3 – ASTRONAUTI SCHMITT I CERAN NA MJESEČEVOJ POVRŠINI TIJEKOM MISIJE APOLLO 17, 1972. FOTOGRAFIA: NASA. IZVOR: WWW.HQ.NASA.GOV/ALSJ/A17/

FIG. 3 – ASTRONAUT SCHMITT AND CERAN ON THE MOON SURFACE DURING THE APOLLO 17 MISSION, 1972. PHOTO CREDIT: NASA. PHOTO SOURCE: WWW.HQ.NASA.GOV/ALSJ/A17/



SL. 4 – HARRISON SCHMITT PROMATRA UZORAK 70017 TIJEKOM MISIJE APOLLO 17, 1972. FOTO: NASA. IZVOR: WWW.HQ.NASA.GOV/ALSJ/A17/

FIG. 4 – HARRISON SCHMITT OBSERVING THE 70017 SAMPLE DURING THE APOLLO 17 MISSION, 1972. PHOTO CREDIT: NASA. PHOTO SOURCE: WWW.HQ.NASA.GOV/ALSJ/A17/



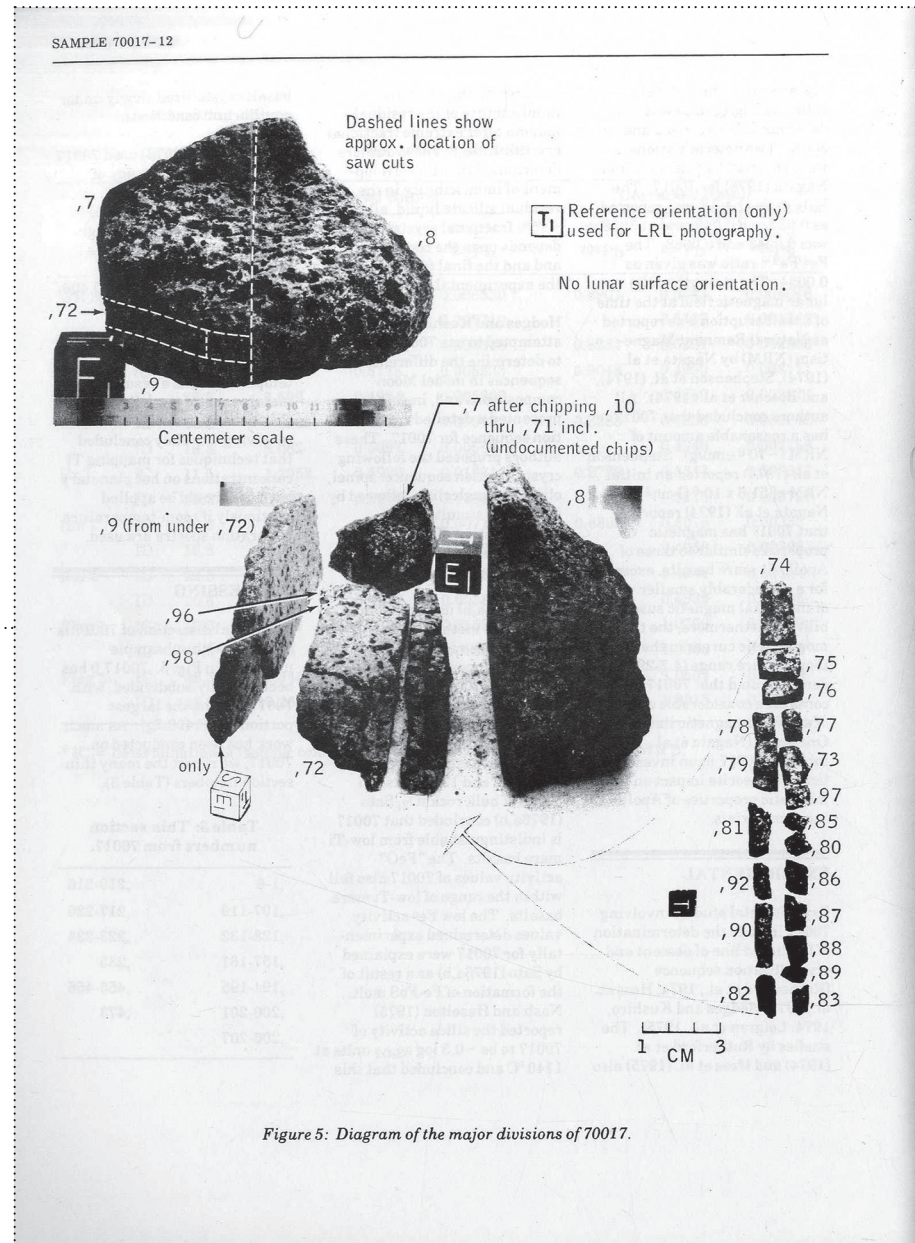
lunar surrounding. A body has to be, paradoxically, quarantined from the outer space vacuum, and immersed into a terrestrial nature, a favorable mixture of oxygen, hydrogen and nitrogen reproduced inside a purposefully designed anthropomorphic shell – inside an astronaut's suit. Only inside such a tiny, confined and localized environment a body can produce that other, outer space. However, that space can never be a true extension of the body as an astronaut is never envired by the outer space, but quite contrary, quarantined from it. Being *out there*, in the outer space, is a mere illusion: a temporary exclave of the Earth's atmosphere, both figuratively and literally. The lunar space is a time-window that only *Apollo* missions have successfully opened: an illusion created by the technological and logistical capacities of a designed environment. While producing the outer space, an astronaut occupies the same nature that the life on Earth is a part of. Only that earthly nature, localized through the explicatory potential of a designed apparatus, provides a substrate for subsequent spatial production. The outer space is always a function of the terrestrial, and containment is its ontology.

Consequently, the boundaries of the space we claim, as well as our epistemic diapason, are outlined by our ability to test, design and produce their material manifestations. This capacity becomes the precious capital, worth of protection and preservation. At this point, the modern dichotomy of nature vs. society falls apart. Both the environment, and its political emanation – the territory – are revealed as contingent, not upon nature, but upon design and its socio-political and ideological settings. In the competitive geo-political context of the Cold War, this became a game of high-stakes. The incredible amount of labor and knowledge that the action of producing the outer space demanded was ultimately embedded within specific designed apparatuses that enabled humans to walk on the solid ground of an extraterrestrial body. This social action was, almost in a cynical fashion, a perversion of the idealistic (and ideological) foundations of Lefebvre's agenda; the alleged emancipation of humanity from its terrestrial confinement was achieved before humanity resolved its internal conflicts, and by means that represented everything contrary to emancipatory and anti-technocratic popular tendencies of the era.

On December 11th 1972 the *Apollo 17* lunar excursion module *Challenger* made the last human descent to the lunar surface, ending the three-year long period of exploration. The craft landed in the Taurus-Litrow valley near the edge of Moon's *Mare Serenitatis*. A prominent part of the mission's cargo was quite an impressive vexillological collection: together with an American flag that was to be planted on the lunar surface in accordance with the established tradition, the vessel also carried 135 flags of different world countries.¹⁹ During the mission, astronauts Harrison Schmitt and Eugene (Gene) Cernan performed three separate moonwalks.²⁰ At the end of the third, just before they would enter the lunar module, the astronauts picked up a piece of “brownish-gray coarse-grained high Ti[tanium] basalt with a blicky subangular shape” – a rock sample that would later be named sample *70017*.²¹ Cernan made a passionate speech: “The door is now cracked, but the promise of the future lies in the young people, not just in America, but the young people all over the world learning to live and learning to work together. In order to remind all the people of the world in so many countries throughout the world that this

is what we all are striving for in the future, Jack has picked up a very significant rock, typical of what we have here in the valley of Taurus-Littrow. It's a rock composed of many fragments, of many sizes, and many shapes, probably from all parts of the Moon, perhaps billions of years old. But fragments of all sizes and shapes – and even colors – that have grown together to become a cohesive rock, outlasting the nature of space, sort of living together in a very coherent, very peaceful manner. [...] Put it in the big bag Gene, in the big bag!”²² While juggling the rock in their gloved hands for the amusement of their mesmerized TV-audience across the globe, the astronauts revealed Nixon's *Goodwill Moon Rock* plan: to share the *70017* with people and countries throughout the world. Within minutes, the astronauts closed out their final Moon-walk, detached from the lunar surface, and set their course earthbound.

Images of the lunar space that the *Apollo* program produced had committed a particular sin. Cernan's, Schmitt's, and other selenian wanderings that saturated the global mediasphere during the



koji biva u nezemaljskom prostoru. Izostavile su pritom cijelu aparaturu izolacije i konfinacije. Tlo po kojem su astronauti hodali pritom je lažno prizivalo kategorije zemaljskog prostora, implicirajući neograničenu slobodu zaposjedanja Mjesečeva krajolika, poimajući Mjesečev regolit kao zemaljsko tlo, a eteričnost vakuuma kao prozirnost zemljine atmosfere. Stvaranje lažne aure oko ljudskog tijela prisutnog u nezemaljskom prostoru bilo je bitnije od priznavanja stvarnih uvjeta takvog postojanja, njegove projektirane i konfinirane ontologije.

Kad se misija *Apollo 17* vratila na Zemlju, doček je bio potpuno drugačiji nego prije tri godine. Već pri izlasku iz modula koji je sletio u Pacifik tristotinjak milja jugoistočno od Američke Samoe, astronauti su se srdačno rukovali sa svojim spasilačkim timom. Jedan je čak uronio ruku u ocean – bio je to čin apsolutno nezamisliv u ranijim misijama.²³ Strah od izvanzemaljske zaraze bio je sad samo nejasno sjećanje, a prisilna karantena ljudi i predmeta pristiglih iz svemira zaboravljena praksa.²⁴ No postoji i drugi aspekt karantene i konfinacije koji je još uvijek bio iznimno važan, dapače presudan za monumentalni karakter *kamenčića dobrih namjera*. Kao što bi uranjanje u nezemaljski okoliš bilo fatalno za ljudsko tijelo, tako bi i Mjesečev kamen izložen zemaljskom okolišu prestao postojati – i kao simbol i kao znanstveni uzorak. I ovdje je bilo nužno striktno nadzirati natjecanje lunarnog i

terestrijalnog, odvajati jedno od drugoga granicom formiranom socijalnim i tehnološkim posredovanjem, granicom koja je sama po sebi materijalizacija društvene akcije proizvodnje prostora. Iako stvarne opasnosti od izvanzemaljske zaraze, kako je već spomenuto, nije bilo, sada je prijetila opasnost iz drugog smjera, onog zemaljskog. Koliko je nezemaljska jalovost bila opasna za ljude, toliko je zemaljska plodnost bila pogubna po Mjesečev kamen; koliko su god slike astronauta koji žongliraju kamenjem na Mjesecu implicirale nesputan dodir, toliko je natrag na Zemlji uzorak 70017 bio apsolutno zaštićen od dodira, ponuđen samo na promatranje i divljenje. Nasuprot slika slobodno lutajućih astronauta čija je reprezentacijska misija bila prividno naturalizirati njihove kretnje, reprezentacijska logika *Goodwill Moon Rock* plaketa bila je obrnuta: upravo je naglašavanjem konfinacije trebalo sačuvati nezemaljsku auru Mjesečeva kamena. Stoga je uzorak 70017 morao biti konfiniran unutar svoga nezemaljskog habitusa u svim emanacijama i transformacijama kroz koje je taj, zapravo, obični komad bazaltne stijene morao proći. Putovanje uzorka 70017 od dna Mjesečeva Mora tišine, do trofeja *dobrih namjera* bilo je obilježeno prolascima kroz niz pomno projektiranih okoliša čija je zadaća bila očuvati njegovu nezemaljsku čistoću i netaknutost njegove aure. Pažljivo podignut hvataljkama, nošen u rukavicama, spremljen u teflonsku *veliku vreću*, pa u vakuumske spremnike; dakle sve od Mjesečeve površine do svoje akrilne

S. 5 – PRIMARNA PODJELA UZORKA 70017. DIO OZNAČEN SA 10 PODIJELJEN JE NA 186 DIJELOVA. FOTO: NASA. IZVOR: CLIVE R. NEAL, LAWRENCE A. TAYLOR, CATALOG OF APOLLO 17 ROCKS VOLUME 2 – CENTRAL VALLEY PART 1, NASA LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TX, 1993.

FIG. 5 – PRIMARY DIVISION OF SAMPLE 70017. PART LABELED "10" WAS FRAGMENTED INTO 186 GOODWILL PIECES. PHOTO CREDIT: NASA. PHOTO SOURCE: CLIVE R. NEAL, LAWRENCE A. TAYLOR, CATALOG OF APOLLO 17 ROCKS VOLUME 2 – CENTRAL VALLEY PART 1, NASA LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TX, 1993

Apollo missions, transposed the terrestrial environmental concepts into the outer space, and misguidedly rendered that space as a primordial natural substrate, as a geomorphic environment that the bodies of astronauts could simply roam through. These images suggested a primeval contact: an interaction of astronauts' bodies and their seemingly natural outer-space surrounding. Centered on the figure of a Moon-walking astronaut, of a subduer of the menacing extraterrestrial environment, these images abused the formal analogy between the human body in nature that produces the social space while performing an action, and the body of an astronaut that occupies the outer space. As such, these representations omitted the entire apparatus of separation and confinement. The ground that the astronauts were standing on falsely recalled the categories of the terrestrial space, and implied that the body appropriates the lunar space in the same way that it negotiates the terrestrial environment, mistaking the lunar regolith for the terrestrial soil, and the emptiness of vacuum for the transparency of the Earth's atmosphere. Obtaining the false aura of a body present in the outer space was much more important than confessing to its real, designed and confined ontology.

When the *Apollo 17* returned to the Earth, the rescuing scene looked quite different from the one in 1969. Just upon exiting the spacecraft that had glided into the ocean some three hundred miles southeast of American Samoa, astronauts shook hands

with their divers-rescuers. One even immersed his bare hand into the ocean – an act inconceivable of in earlier missions.²³ The fear of back contamination was now only a vague reminiscence, as the coerced quarantine that humans and object anointed by the outer space had to endure was a forgone practice.²⁴ But, there was a different valency to containment, crucial for the character of the *Goodwill Moon Rock*. In the same way that merging an astronaut's body with the lunar environment would cause death, the Moon rock contaminated by Earthly atmosphere would perish – both as a scientific sample, and as a symbol. Here too, the competition between the lunar and the terrestrial had to be carefully controlled, always separated by a boundary formed through a social and technological mediation, a boundary that was, again, the materialization of social action. And although, as mentioned, the threat of back-contamination was a distant memory, the hazard of "forward-contamination", of spoiling the rocks' lunar aura still lingered. As much as the lunar emptiness was menacing for humans, the terrestrial fecundity was a threat to the Moon rocks' barren existence. While it was purposely (but erroneously) implied that the human body could touch the rock on the Moon, back on the Earth, the Moon rock was not to be touched, but only to be venerated and contemplated upon. Contrary to the representation of the Moon-wandering astronauts, where the aim was to naturalize their actions, the representational logic and agenda of the *Goodwill Moon Rock* was inverted: it was precisely

grobnice, kamen nikada nije napustio svoj nezemaljski dom. Kad je uzorak *70017* napokon stigao u hjustonski laboratorij, bio je razdijeljen na komadiće. Većina njegove trokilogramske mase iskorištena je za geološka i petrološka istraživanja. No komad težak otprilike dvjesto grama, izuzet je i podijeljen u fragmente koje će Nixonova administracija distribuirati u 135 zemalja svijeta, te svim američkim saveznm državama i teritorijima. Svaki je komadić, težine oko jednog grama, utopljen u akrilnu kuglu promjera oko pet centimetara. Kugla je montirana na drvenu plaketu veličine 28 x 45 centimetara, te opremljena odgovarajućom zastavom zaštićenom akrilnom pločicom pričvršćenom sa četiri vijka. Na plaketi su se također nalazile i dvije posvete predsjednika Nixona, napisane uvijek i isključivo na engleskom jeziku, u kojima su ponovljene nade za mirnom budućnošću. Na pločicama je pisalo: „Ovo je fragment kamena iz Mjesečeve doline Taurus-Littrow. Poklonjen Vam je kao simbol jedinstva ljudskih pothvata i nade američkog naroda za mir u svijetu. / Ova zastava vaše nacije ponesena je na Mjesec svemirskim brodom *America* u sklopu misije *Apollo 17*, 7.–19. prosinca 1972. / Narodu / [IME DRŽAVE] / od naroda Sjedinjenih Američkih Država / RICHARD NIXON / 1973.“²⁵ U svojim novim boravištima, omeđeni svojim prozirnim akrilnim grobnicama, opremljeni legitimirajućim aparatom, kamenčići nastali podjelom uzorka *70017* napokon su bili spremni postati diplomatskim darovima.²⁶ Iako diplomatski bonton pretpostavlja pažljiv odabir i specifičnu pripremu dara poštujući kulturni habitus

primatelja, *Goodwill Moon Rock* bio je sustavno dizajniran dar: sve su plakete bile identične, jedini specifikum bila je nacionalna zastava i ime pojedine države. Kao poklon, *Goodwill Moon Rock* sve je svoje primatelje označio kao jedan entitet, te pritom odredio specifični geopolitički poredak i odnos prema nezemaljskom prostoru.²⁷

Kako Marcel Mauss zaključuje u svojem eseju *Ogled o daru: oblik i razlog razmjene u arhaičnim društvima (Essai sur le don. Forme et raison de l'échange dans les sociétés archaïques)*, tri su teme tvorile osnovu potpunog sustava razmjene u tradicionalnim društvima: „obveza poklanjanja, obveza primanja i obveza uzvrćanja“.²⁸ Sustav je dakle bio zasnovan na principu da „odreći se davanja, kao i odreći se primanja, znači izgubiti status, kao i odreći se uzvrćanja“.²⁹ U takvom je sustavu razmjena dobara i usluga bila intrinzično povezana sa sveukupnom društvenom ravnotežom – onom materijalnog i duhovnog – te je dar, prije svoje komodifikacije, sudjelovao u obje te sfere. Mauss vidi dar kao zalag netržišnog, iskonskog, arhaičnog društva, te primjećuje kako su, uvodeći pojam besplatnog dara, napredna, moderna društva ovaj sustav izbacila iz ravnoteže. Ono što obilježava moderni dar i razlikuje ga od tradicionalnog dara koji je bio dijelom potpunog i uravnoteženog sustava razmjene dobara, jest upravo nepostojanje očekivanja kod darovatelja da dar bude uzvrćen. U svojem uvodu Maussov u eseju, Mary Douglas ističe sljedeće:

„Pojam besplatnoga dara zasnovan je na nesporazumu. Besplatni dar ne bi trebao postojati. Ono što je krivo kod tzv. besplatnog dara jest želja i namjera darovatelja da njegova gesta darivanja ne bude uzvrćena.“³⁰ Isključujući primatelja iz očekivanja za uzvrćanjem, *Goodwill Moon Rock* stvara specifičnu geopolitičku hijerarhiju. On postaje agentom novog, binarnoga svjetskog poretka koji izvrće i briše uspostavljene hladnoratovske granice, te stvara novi globalni sustav razmjene prikladan svemirskom dobu: s jedne je strane jedna jedina država čije se zastave vijore Mjesečevom površinom, a na drugoj strane sve one države čije zastave krase *Goodwill Moon Rock* plakete. Plaketa sa zastavom SAD-a, naravno, nije postojala.³¹ Odsutnost očekivanja za uzvrćanjem dodatno je praćena i potpunom nemogućnošću primatelja da uopće uzvratu sličnim poklonom uzrokujući time frustraciju i onemogućavajući korekciju neravnoteže snaga koju *besplatni* poklon uvodi. Ali s obzirom na uloge, upravo je ta nemogućnost integralni dio politike *Goodwill Moon Rocka* koji ovako postaje, skoro perfidno, upravo savršeni poklon koji Mauss kritizira: „... navodno dobrovoljni karakter ovog potpunog sustava usluga, naizgled besplatnih i bez skrivenih namjera no svejedno ograničenih i sebičnih.“³² Ne samo da reciprocitet nije bio očekivan nego je bio apsolutno nepoželjan. Svaka sposobnost primatelja da uzvratu poklon predstavljala bi prijetnju geopolitičkim (i kozmopolitičkim) ambicijama SAD-a. Mogućnost uzvrćanja značila bi da tehnološka i epistemološka sposobnost proizvodnje

nezemaljskog prostora više nije isključivo u američkim rukama. No što je još bitnije, darovatelj, SAD, poklonio je time dio nezemaljskog prostora koji zapravo nije u njegovu vlasništvu, nego ga je imao sposobnost, doduše ekskluzivnu, proizvesti. Naime, međunarodni Ugovor o svemiru iz 1967. nezemaljski je svemir – uključujući sva nebeska tijela kao što su zvijezde, planeti, kometi i meteori – definiran kao zajedničko vlasništvo čovječanstva. Time je zabranjeno bilo kojoj naciji ili individui da iskorištava ikoji dio svemira, proglasi nad njime suverenitet ili instalira u njemu naoružanje.³³ No ovaj je pravni okvir već od početka bio neodrživ upravo zbog jednostavne činjenice da svemir, kao nezemaljski prostor, ne samo da mora biti nadziran nego, kao što je gore pokazano, uvijek iznova stvaran kroz kompleksne tehnološke i logističke društvene akcije. Kao takav, izvanzemaljski prostor ne može biti u nečijem vlasništvu, niti može biti trajno oprostoren. Nezemaljski je prostor čisto virtualna sfera čiji se potencijali mogu aktualizirati društvenim akcijama i mehanizmima koji su prvi put dovoljno sazreli tek u ranim sedamdesetima. Sposobnost provođenja takvih akcija mjerilo je nezemaljske teritorijalnosti. Kao simbol zajedničkih ljudskih napora i trofej novog teritorija čovječanstva – iako nedoživljajnog i ograničenog pristupa – *Goodwill Moon Rock* nedvojbeno je predstavljao gestu dobrih namjera. Istodobno, bio je i agent ponešto skrivenih namjera, vezanih uz geopolitičke ambicije SAD-a u svemirskom dobu. No usto, dar kao izvor sumnje, kao predmet dvostrukih namjera dio

crucial to preserve the non-terrestrial aura of the Moon rocks. Thus *70017* had to be confined within its lunar environment in all its emanations and through all the transformations that this, ultimately basalt piece, was to experience. The journey that the rock took, from the bottom of the Moon’s Sea of Silence (*Mare Serenitatis*), to its deployment in the trophy like *Goodwill* plaque was a succession of carefully designed environments planned and executed in such a way to preserve the rock’s extraterrestrial purity. It was precisely the material aura of the rock that was not to be tampered with. From the tongs, to the gloved hands, to the Teflon coated *big bag*, to vacuum container, therefore, from the Moon surface to its acrylic sepulcher, the rock never actually left its lunar home. When *70017* eventually made it to Houston’s Lunar Return Laboratory, it was cut into pieces. The majority of its three-kilogram mass was used for petrologic and geological study, but a two hundred gram piece was set aside and divided into fragments to be distributed by Nixon’s administration to 135 foreign heads of state, and to all U.S. states and territories. Each fragment – a single piece of about one gram mass – was encased in a spherical acrylic button two inch in diameter. The sphere was mounted onto an 11 x 18 inch wooden plaque and adorned with the intended recipient’s flag, pressed under a 4 x 6 inch clear acrylic sheet and fastened by four bolts. The plaque also carried two plates, with a dedication from president Nixon that, always written in English, reiterated the hopes for a peaceful future. The plates read: “This fragment is a

portion of a rock from the Taurus Littrow Valley of the Moon. It is given as a symbol of the unity of human endeavor and carries with it the hope of the American people for a world at peace. This flag of your nation was carried to the Moon aboard / Spacecraft *America* during the Apollo XVII mission, / December 7–19, 1972. / Presented to the people of the / [COUNTRY’S NAME] / From the people of the United States of America. / RICHARD NIXON / 1973”.²⁵ In their new homes, confined within their transparent acrylic vaults, and accompanied with all the legitimating apparatus, the pieces of *70017* were finally safe and ready to be distributed around the world as diplomatic gifts.²⁶ Although the diplomatic etiquette assumes a state gift to be carefully chosen and tailored specifically according to the recipient’s cultural habitus, the *Goodwill Moon Rock* set was designed systematically: all plaques were identical, the only bespoke features were the national flag, and the respective name of the recipient country. As gifts, the *Goodwill Moon Rock* plaques treated its multiple recipients as one, single entity, implying a specific take on the international order and its relation to the outer space.²⁷

As Marcel Mauss concludes in *The Gift: The Form and Reason for Exchange in Archaic Societies (Essai sur le Don)*, the three themes, “the obligation to give, the obligation to receive, and reciprocate”²⁸ had always defined the total system of exchange in traditional societies. Based on the principle that “to refrain from giving, just

as to refrain from accepting, is to lose rank – as is refraining from reciprocating”²⁹, goods and services exchanged were intrinsically related to the overall social equilibrium – of the material and the spiritual – and the gift, pre-commodified, aspired to participate in both realms. Mauss sees the gift as a token of a market-free, more pristine, archaic society, and notices that the advanced, modern societies have put this system out of balance by creating the notion of a free gift. The absence of an expectation from the donor to be reciprocated is what characterizes the modern notion of the gift, and discerns it from the traditional gift, that was only one part of the total and balanced system of exchange. As Mary Douglas points out in her foreword to Mauss’s work: “[The] whole idea of a free gift is based on a misunderstanding. There should not be any free gifts. What is wrong with the so-called free gift is the donor’s intention to be exempt from return gifts coming from the recipient.”³⁰ By being exempt from returning, the donor creates a particular hierarchy of power. The *Goodwill Moon Rock* thus becomes an agent that creates a binary hierarchy of the world order, even subverting and overcoming the Cold War divisions, creating a new global total system of exchange in the space age: on the one side, one country whose flags spangle the Moon, and on the other – those countries whose flags adorn the plaques (there is no plaque with the U.S. flag).³¹ The absence of the expectation of reciprocation is paralleled with the inability of the receiver to actually perform reciprocation, causing frustration in the

receiver, and preventing the possibility of correcting the unbalance of power that the free gift establishes. But, considering the stakes, I would argue that precisely this inability is an integral part of the politics of the *Goodwill Moon Rock*, which renders it almost a perfect free gift, and that to a perfidious extent. Mauss critiques: “[the] so to speak voluntary character of these total services, apparently free and disinterested but nevertheless constrained and self-interested.”³² Not only that the reciprocity was not expected but it was never wished for. Any possibility of requital for the *Goodwill Moon Rock* would present a threat to the American geopolitical (or cosmo-political) position. It would mean that the technological and epistemological capital to produce the outer or lunar space was not exclusively American. What is more intriguing, the donor – in this case the United State – shared a piece of space that it did not actually own, but only had – although exclusive – capacity to produce. Namely, the International Outer Space Treaty from 1967 protects the outer space – including all the celestial bodies such as stars, planets, comets and meteors – as a common property of humankind, preventing any nation or individual to claim sovereignty over it, exploit it or install weaponry in any of its parts.³³ This legislative frame is, however, challenged from the outset, with the mere fact that, as a space, it must not only be policed, but as discussed above, first created through technologically and logistically complex social action. As such, the outer space can neither be legally possessed

je povijesti diplomatskog darivanja: „Opasnost koju poklonjeni predmet predstavlja bez sumnje se najbolje odražava u starom germanskom pravu i jezicima. To objašnjava i dvostruko značenje riječi *Gift* u tim jezicima – s jedne strane dar, s druge strane otrov. Rajnino zlato smrtonosno je za onog tko ga osvoji; Hagenov kalež fatalan je za junaka koji iz njega popije.“⁴³⁴ ……… Posjedovati Mjesečev kamen, iako bezopasan, također znači biti suodgovoran za prometejsko kršenje pravila zemaljske konfinacije. Darovati ga, znači preventivno raspodijeliti odgovornosti za potencijalno neodgovoran pothvat; darovati ga, znači počiniti diplomatsku inokulaciju koja oscilira između uvjerenja i praznovjerja.

Neil Armstrong

¹ Neil Armstrong, Buzz Aldrin, i Michael Collins.

² *Apollo 11 Splash Down Video*, izvor: www.youtube.com/watch?v=8bpujUZO4vs (5. 5. 2013.).

³ Kent Carter, „Moon Rocks and Moon Germs“, u: *Prologue: the Journal of the National Archives*, 33, 2001., 237.

⁴ *Apollo 11 Splash Down Video*, bilj. 2.

⁵ Henry S. F. Cooper Jr., *Moon Rocks*, The Dial Press, New York, 1970., 65.

⁶ Carter, bilj. 3, 238.

⁷ Ibid.

⁸ Pothvat osvajanja svemira bio je praćen naporima da se na Zemlji konstruira simulakrum uvjeta svemirskog prostora. Unutar Svemirskog centra u Houstonu koji je i sam izgledao kao začudan Mjesečev krajolik, izgrađen je Laboratorij za lunarne uzorke (LRL). Laboratorij je bio mjesto karantene i izolacije gdje su „zaraženi“ astronauti, oprema i uzorci prikupljeni na Mjesecu promatrani kako bi se utvrdila potencijalna prisutnost prijetećih „lunarnih mikroba“ ili drugih patogenih čimbenika. Nakon što su u spomenutoj aluminijskoj prikolici – tzv. Mobilnoj jedinici za karantenu – stigli u hjustonski Svemirski centar, astronauti Armstrong, Aldrin i Collins prebačeni

su u izolacijsku jedinicu u samom Laboratoriju, gdje su bili podvrgnuti svakodnevnim pretragama i promatranjima. Mjere primijenjene za održavanje karantene bile su striktne, pokatkad i bizarne: „Osoblje koje je radilo u laboratoriju moralo je potpisati ugovor u kojem se obvezuju da neće pokušati izaći iz karantene u slučaju da dođu u dodir s nezemaljskim materijalima, te da u slučaju njihove smrti, obitelji neće zahtijevati njihova tijela.“ Astronauti su pušteni nakon tri tjedna karantene kada su sve potencijalne prijetnje eliminirane. Vidi: Carter, bilj. 3, 244.

⁹ Kenneth F. Weaver, „What the Moon Rocks Tell Us“, u: *National Geographic magazine*, December 1969., izvor: ngm.nationalgeographic.com/print/1969/12/moon-landing/moon-rock-text (2. 5. 2013.).

¹⁰ Dr. Robin Brett, citiran u: Weaver, bilj. 9.

¹¹ Weaver, bilj. 9.

¹² Operacija *Linebacker II* – masovno bombardiranje Hanoija iz zrakoplova B-52 – započeta je dan prije povratka misije *Apollo 17*.

¹³ Karl Marx, „The Commodity“, u: Karl Marx, *Capital*, vol. 1, prev. Ben Fowkes, Penguin Books, London–New York, 1992., 133.

¹⁴ Henri Lefebvre, *The Production of Space*, prev. Donald Nicholson-Smith, Blackwell Publishing, Oxford–Cambridge, MA, 1991., 402.

¹⁵ Pod pojmom „lokalizirana“, Lefebvre primarno podrazumijeva ostatke prirode kojima prijeti eksploatacija i konačno uništenje u uvjetima naprednog kapitalizma. Kao metoda komodifikacije prirode, lokalizaciju najbolje predstavlja astronautsko odijelo: ograničeni *prirodni* okoliš sa specifičnom svrhom.

Vidi: Lefebvre, bilj. 14, 123.

¹⁶ Ibid., 40.

¹⁷ Ibid., 196.

¹⁸ Ibid., 330.

¹⁹ Osim zastava svjetskih država, u kolekciji su bile i zastave svih američkih saveznih država i teritorija koji su također primili *Goodwill Moon Rock* plakete.

²⁰ Astronaut Ronald Evans ostao je u orbiti oko Mjeseca u komandnom modulu *America*, čekajući svoje kolege da završe lunarne zadaće.

²¹ Clive R. Neal, Lawrence A. Taylor, *Catalog of Apollo 17 Rocks Volume 2–Central Valley Part 1*, NASA Lyndon B. Johnson Space Center, Houston, TX, 1993., 1.

²² Transkribirano prema: *Apollo 17 EVA-3 Close-Out Video*, izvor: www.hq.nasa.gov/alsj/a17/ (27. 4. 2013.).

Neil Armstrong

¹ Neil Armstrong, Buzz Aldrin, and Michael Collins

² *Apollo 11 Splash Down Video*. Source: www.youtube.com/watch?v=8bpujUZO4vs (last accessed on May 5, 2013)

³ Kent Carter, “Moon Rocks and Moon Germs”, In: *Prologue: the Journal of the National Archives*, 33, 2001, p. 237

⁴ *Apollo 11 Splash Down Video* (as in n. 2)

⁵ Henry S. F. Cooper Jr., *Moon Rocks*, The Dial Press, New York, 1970, p. 65

⁶ Carter (as in n. 3), p. 238

⁷ Ibid.

⁸ The efforts to conquer the outer space were complimented with the efforts to construct almost a simulacrum of that space on Earth. The Lunar Receiving Laboratory (LRL) was built within the Manned Space Flight Center Campus in Houston. An eerie moonscape by itself, it was a place of solitary confinement and a space where the “contaminated” astronauts, equipment and lunar samples would be gathered to observe if some threatening “lunar germs” or pathogenic organisms were brought with them back to Earth. After arriving in their aluminum trailer – the Mobile Quarantine Facility – to the Manned Space Center, Armstrong, Aldrin and Collins were transferred to the quarantine facility inside the LRL. They were continuously examined and observed, their blood samples were taken daily. The measures devised to maintain the quarantine were impressively strict, sometimes bizarre: “Technicians who would work in the laboratory were required to sign an agreement that they would not try to break out if ordered into quarantine as a result of coming in contact with lunar material and that next of kin would not claim bodies in the event of death.” After no ill effect was noticed in three weeks of quarantine, the astronauts were released. See: Carter (as in n. 3), p. 244

⁹ Kenneth F. Weaver “What the Moon Rocks Tell Us”, in: *National Geographic magazine*, December 1969. Source: ngm.nationalgeographic.com/print/1969/12/moon-landing/moon-rock-text (last accessed on May 2, 2013)

¹⁰ Dr. Robin Brett, cited in: Weaver (as in n. 9)

¹¹ Weaver (as in n. 9)

¹² Operation *Linebacker II* – the massive bombing of Hanoi from *B-52 Stratofortresses* – was commenced one day before the *Apollo 17* astronauts splashed down into the Pacific.

²³ *Apollo 17 Splash Down Video*, izvor: www.youtube.com/watch?v=_c2mDEdCJlc (2. 5. 2013.).

²⁴ Praksa karantene ukinuta je 1971., nakon misije *Apollo 14*. Vidi: Carter, bilj. 3, 231.

²⁵ Transkibirano prema sl. 4.

²⁶ *Goodwill Moon Rock* plakete poklonjene su tijekom 1973. i 1974. godine. Većinu plaketa poklanjala bi američka veleposlanstva ili konzulati dotične države. Službenicima je pripremljen generički tekst koji bi pročitali tijekom ceremonije poklanjanja, a u kojem se uglavnom ponavljaju želje i nade izrečene prilikom obračanja astronauta s Mjeseca. Umjesto prazne zagrade, službenici bi samo umetnuli ime države na koju se poklon odnosi. Vidi: *NARA Telegram Collection*, izvor: www.aad.archives.gov/aad/createpdf?rid=79797&dt=2472&dI=1345 (9. 5. 2013.). Neke su plakete uručene tijekom turneja koje su astronauti misije *Apollo 17* poduzeli 1973. i 1974. godine. Vidi: *Massachusetts Goodwill Moon Rock Curatorial File*. Dobiven od Violette Wolf, pomoćnice kustosa, Boston Museum of Science, Boston, MA, 2013.

²⁷ Broj primatelja *Goodwill Moon Rock* plaketa odgovara tadašnjem broju zemalja članica Ujedinjenih naroda. No, dva se popisa ne podudaraju: neke zemlje koje nisu bile članice primile su dar – poput Vatikana i Švicarske – dok je nekim državama članicama UN-a – poput DDR-a – poklon bio uskraćen.

Usporedi: *Growth in United Nations Membership, 1945-present*, izvor: www.un.org/en/members/growth.shtml#2000 (3. 5. 2013.), s listom dostupnom u: „Where Today Are Apollo 17 Goodwill Moon Rocks?“, izvor: www.collectspace.com/resources/moonrocks_goodwill.html (17. 3. 2013.).

²⁸ Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies*, prev. Wilfred Douglas Halls, Norton, New York–London, 2000., 39.

²⁹ Ibid., 41.

³⁰ Ibid., vii.

³¹ Prema tekstu na plaketi, zastave zapravo nikada nisu stigle na Mjesec nego su ostale u komandnom modulu *America* koji je u Mjesečevoj orbiti čekao povratak astronauta s površine.

³² Mauss, bilj. 28, 41.

³³ *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (hrv. Ugovor o načelima koja uređuju aktivnosti država na istraživanju i upotrebi svemira uključujući Mjesec i druga nebeska tijela; skraćeno: Ugovor o svemiru, izvor: www.unoosa.org/oosa/SpaceLaw/outerspt.html (6. 5. 2013.).

³⁴ Mauss, bilj. 28, 63.

Goodwill Moon Rock

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Goodwill Moon Rock Curatorial File. Obtained from Violetta Wolf, Curatorial Assistant, Boston Museum of Science, Boston, MA, 2013

²⁷ The number of *Goodwill Moon Rock* recipient countries corresponds with the number of United Nations member countries in 1973. However, the two lists do not match. Some non-UN member countries were recipients of the *Goodwill* plaques—like Vatican and Switzerland, while some UN members were excluded from the gift, like GDR. Compare: *Growth in United Nations Membership, 1945-present*. Source: www.un.org/en/members/growth.shtml#2000 (last accessed on May 3, 2013) with the list provided in: *Where Today Are Apollo 17 Goodwill Moon Rocks?* Source: www.collectspace.com/resources/moonrocks_goodwill.html (last accessed on March 17, 2013)

²⁸ Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies*, (trans. Wilfred Douglas Halls), Norton, New York, London, 2000, p. 39

²⁹ Ibid., p. 41

³⁰ Ibid., p. vii

³¹ According to the inscription on the plate the set of flags was carried onboard command module *America* that never landed on the Moon but remained in its orbit throughout the mission.

³² Mauss (as in n. 28), p. 41

³³ *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies*. Source: www.unoosa.org/oosa/SpaceLaw/outerspt.html (last accessed on May 6, 2013)

³⁴ Mauss (as in n. 28), p. 63