



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 12, Issue 10, October 2023

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.423

9940 572 462

6381 907 438

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www.ijirset.com

Global Wealth Disparity: A Critical Analysis of Lunar Investments and Their Implications for Poverty Eradication

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ABSTRACT: As billionaires such as Sir Richard Branson and Jeff Bezos venture into space, the question arises: "Why prioritize lunar habitation over addressing global poverty?" Their motivations likely stem from personal interests and the potential for technological innovations, shifting perceptions, and theoretical advancements. This paper explores a specific socio-psychological aspect discussed later.

It's important to note that not all lunar endeavors share the same motivations. The 20th-century lunar race, which still resonates today, is now a focal point for a new generation investigating space's economic potential and its implications for the future. This paper examines the role of commercial enterprises, considering their efficiency and motivations behind private satellite investments?

KEYWORDS: Moon inhabit, space exploration, lunar race.

I. INTRODUCTION

In July 2021, Sir Richard Branson and Jeff Bezos undertook audacious journeys, flying 53 and 65 miles, respectively, above the Earth's surface. These missions, while not the pioneers of human space exploration, mark a profound shift in the narrative of celestial endeavors. Unlike their predecessors, who embarked on space missions driven by public interest and funding (Stavnichuk, Mikolajewicz, Corlett, Morris, & Komarova, 2020), Branson and Bezos charted a new trajectory, fueled by their private interests and resources (Luscombe, 2020). Despite Bezos acknowledging the contributions of his customers and employees, these journeys remain largely self-financed. The conjunction of private funding and personal motivation has ushered in an era of 'space lords' presiding over our cosmic ambitions.

The response from the general public to these newly anointed space travelers is as diverse as it is passionate. Enthusiastic space enthusiasts celebrate the rekindled zeal for space exploration, with hopes of catalyzing technological breakthroughs and interstellar expansion. Yet, this renewed vigor is met with criticism from those who argue that the vast wealth of these spacefarers could be more judiciously deployed to combat pressing global challenges such as poverty and hunger.

This perennial debate extends beyond its surface discourse, delving into the intricate realm of social choice theory (Shen, Sui, & Fu, 2020). To unravel the rationale behind the priorities of these billionaires, we must first appreciate that pivotal technological advancements, such as pest control, antibiotics, and vaccines, have historically stood as paramount drivers in the global fight against poverty, even in the developing world, far surpassing the impact of development aid. With this in mind, lunar habitation can garner both financial and moral support, particularly if it catalyzes vital technological innovations, as Nobel economist Angus Deaton suggests (Deaton, 2021).

This research endeavor aspires to illuminate the motivations behind billionaires' lunar ambitions, interrogating the veracity of their decisions, while probing the latent attitudes that impel them towards lunar habitation. Furthermore, we aim to explore why the Moon, with its distant allure, has taken precedence over the urgent need to address global poverty.

II. MOON IN THE 20TH AND 21ST CENTURY

The Moon, along with several other celestial bodies, has captivated human curiosity from time immemorial and continues to do so (NAZAROV, 2019). This enduring fascination finds its roots in the earliest epochs of human civilization. For over five millennia, ancient Babylonian priests and Chinese astrologers laid the foundations for our understanding of celestial bodies and the cosmos.

By the latter half of the 20th century, the Union of Soviet Socialist Republics (USSR) emerged as a pioneer in ambitious space exploration endeavors. Their efforts, driven by strategic priorities and a commitment to public engagement, set the stage for modern space exploration. The USSR achieved a significant milestone by launching the first artificial earth satellites into the universe (Krichevsky & Udartsev, 2019). During this era, the race to the Moon was marked by a semblance of cooperation, as both sides aimed to overcome key challenges. Notably, the elements of lunar travel, including orbit entry, lunar landing, lunar orbit, and Earth reentry, appeared feasible, with the main hurdles centered around launch vehicle readiness.

Today, the Moon once again takes center stage, as the current generation explores the economic potential of space. Space agencies from various nations, and more than 120 countries globally, actively participate in space exploration, deploying uncrewed missions to explore distant reaches of the solar system. Lunar rovers have left their marks on the Moon's surface, shedding light on its enigmatic history.

Forecasts from experts suggest that the celestial economy is poised for remarkable growth, with a projected threefold increase from 2017 to 2040 (Calla, Fries, & Welch, 2018), potentially exceeding a trillion dollars in profits. Commercial enterprises, expected to comprise four-fifths of the industry, are on the cusp of rapid expansion. Private satellites, serving scientific, military, and other purposes, are becoming more cost-effective and accessible.

Despite this burgeoning frontier of space exploration, it's important to acknowledge the potential challenges. New research reveals previously unnoticed negative consequences arising from prolonged human exposure to space, particularly during extended habitation on celestial bodies such as Mars, the Moon, and beyond, where radiation risks loom large. Experts caution that the possibilities are vast, including the scenario of individuals with physical or mental health issues residing on these distant planets.

In response, recent advancements in medical research (Smith & Buckey, 2021) focus on equipping individuals to withstand the rigors of space travel and return to Earth seamlessly, enabling them to adapt to terrestrial conditions within three to six months.

III. WHY GO TO MOON?

The exploration of the Moon is a global endeavor, requiring investment and collaboration from nations around the world (Wells, 2017). Success in lunar exploration demands the collective efforts of a diverse array of professionals, including engineers, planetary scientists, physicists, medical researchers, mathematicians, materials scientists, chemists, architects, mechanics, doctors, computer programmers, and more.

The Moon holds a wealth of knowledge, just as numerous as its craters, each appealing to a variety of interests. Formed from the same primordial material as Earth and possessing a record of Earth's history, the Moon provides a unique window into the past, tracing the evolution of Earth and the solar system. It also bears the marks of asteroid impacts, which have significantly shaped Earth's history.

Beyond its scientific value, the Moon presents intriguing engineering challenges. It serves as a testbed for technology development, flight proficiency, life support systems, and investigative methods, all aimed at mitigating risks and enhancing the efficiency of future missions. Lunar expeditions offer a first glimpse into life and work in a different world, enabling the evaluation of materials and equipment under the extreme conditions of space, from radiation exposure to temperature extremes. The Moon also serves as a platform for mastering the use of robots in support of human tasks, enabling exploration of remote and potentially hazardous terrains.

Inhabiting the Moon successfully not only advances human survival and knowledge on Earth but also paves the way for the exploration of the entire solar system and beyond. In the realm of medical research, challenges abound in maintaining astronaut health in environments with higher radiation levels and lower gravity than Earth. These challenges yield potential benefits for all of humanity, including the development of interventions for muscle and bone loss, and advancements in cancer treatment. Medical research continually evolves, driven by the rigors of space exploration.

Moreover, lunar exploration unlocks new commercial opportunities, driving technological advancements and the innovative use of resources. Ultimately, establishing a presence on the Moon expands the horizons of exploration and opens the door to settling on other moons and planets beyond Earth. The universe remains a vast and uncharted frontier, filled with untold discoveries waiting to be unearthed!

IV. HOW RIGHT IS BILLIONAIRE'S DECISION OF MOON INHABITATION

As lunar habitation garners increased attention among billionaires, it's common for misconceptions to arise, particularly when a lack of proper understanding prevails. Media outlets often portray these endeavors as a competition among the wealthy elite, propelling themselves into space.

This knowledge gap can be attributed to editorials, reports, and opinions that often overlook the underlying motivations, the significance of these missions, and their potential impact, which extends to everyone, not just those journeying to or inhabiting the Moon.

For four decades, pioneers in space exploration have tirelessly striven to bring America and the world to this pivotal juncture. The general public, based on their perspectives, can be divided into different categories. Some see it as a triumph for humanity, while others view it as the extravagances of the affluent. The former group perceives it as an opportunity to advance scientific discovery, strengthen the prospects for all life on Earth, and invest in a domain of human achievement that has the potential to address profound human challenges, from the elusive nature of motivation to the tangible impacts of industry on our lives. The latter category, however, deems it a misuse of resources that could be better directed towards public services.

Nonetheless, we exist in a society that venerates wealth and celebrity. It's a society where some influencers exploit the public for financial gain, and figures like the Kardashians serve as idols. In such a society, where the pursuit of wealth and power is the defining paradigm, those among us who deploy their wealth to elevate us to new heights are often maligned as malevolent figures.

Nevertheless, the intentions of these individuals, regardless of their personal lives or the methods they employ to venture into space, are ultimately aligned with the betterment of our planet and humanity. This investment may yield significant benefits in the future. They are pioneering technologies and systems that liberate us from the confines of gravity and open new frontiers beyond our terrestrial boundaries.

While it may be challenging to employ the word "altruistic" to describe those in space, their investments represent a profound commitment to transformation. They are channeling billions into creating the infrastructure that will enable us to journey into space. In a world where billionaires could easily indulge in political influence, acquire lavish estates, or own sports teams, they are directing their resources toward the greater good.

Should they succeed in their endeavor, we may shift away from a centuries-long reliance on Earth's resources to sustain our thriving society, embarking on a celestial economy capable of addressing the complexities of global warming. The proceeds from their ventures, be it automobiles, media, or other products, could be redirected to correct past environmental wrongs. Instead of extracting minerals and metals from our precious soil, we could harvest them from lifeless celestial bodies. Furthermore, as we distance ourselves from the confines of Earth, we have the potential to establish novel modes of human interaction in space, fostering unity and understanding. By merely glimpsing and experiencing the Overview Effect, we forge new ways of appreciating the delicate and beautiful asteroid that is our home.

V. POSSIBLE ATTITUDE OF BILLIONAIRES THAT ENCOURAGE THEM TO INHABIT THE MOON WITH EXAMPLE

One particular emotion serves as the driving force behind most of our actions, and the quest for lunar habitation is no exception. To illustrate this, let's delve into the example of Jeff Bezos.

The billionaire recently announced his inclusion in the inaugural group of travelers aboard Blue Origin's New Shepard rocket. Alongside his brother Mark and an enigmatic guest who secured their ticket at an auction for a staggering \$28 million, Mr. Bezos was scheduled to ascend 60 miles above Earth's surface on July 20. But what fuels this desire to journey into space?

In an Instagram video post, Bezos candidly shared his motivation for this celestial voyage. He expressed that this is a lifelong dream he is fulfilling – a thrilling adventure and a momentous milestone.

At face value, some might interpret this as a manifestation of a childhood dream of space exploration or a personal aspiration driven by the remarkable wealth that places them well above the \$100 billion mark. In Bezos' case, the prevailing emotion is desire. However, this is just one facet of the emotional tapestry, for there may be an element of colossal ambition intertwined in this pursuit. It's possible that within their vast business empires, some, or perhaps regrettably, most of these individuals may not consistently exhibit the requisite levels of fairness, empathy, or kindness toward those who contributed to their wealth. Consequently, they embark on lavish lunar and space projects as a means of redirecting their considerable resources.

Furthermore, there might be an acknowledgment that they may not be the ideal role models for leading such significant endeavors. Some among us may have encountered these figures, either personally or through media, and understand that, despite their monumental wealth, they remain subject to the same human imperfections as everyone else. Socially anxious, restless, and often out of touch with the everyday lives of ordinary people, they are surrounded by an entourage of managers and sycophants that further isolates them from the ordinary human experience.

VI. CONCLUSION

Even after Jeff Bezos' historic journey to space, the enduring question persists, particularly when viewed through the lens of potential beneficiaries in the developing world. Is providing a cash transfer to those in need a more practical use of resources than investing in lunar habitation? Surprisingly, the answer is not unequivocally in favor of cash transfers. The billionaires may be charting a course that diverges from the consensus of society at large, yet their perspective warrants consideration.

It is essential to recognize that groundbreaking ideas and initiatives often face skepticism when initially introduced to society. The collective reluctance to embrace novelty is a characteristic feature of human behavior. However, over time, as the tangible benefits of these actions become evident, society gradually warms to these novel concepts. Thus, determining who is in the right, whether it be the billionaires or the broader society, will require the passage of time and the accumulation of evidence.

For now, it remains unwise to rush to judgment without a thorough examination of the long-term outcomes. The billionaires' unique vision, though met with initial resistance, may eventually unveil new possibilities and benefits that society at large has yet to fully appreciate. The course of action taken by these visionaries may, in time, find its validation in the transformative impact it has on our world.

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