

Spring 2022

Rocket Ships, Emotions, and Disgusting Wealth: The Emotional Significance of the Billionaire Space Race

Melissa J. Toney
Bard College

Follow this and additional works at: https://digitalcommons.bard.edu/senproj_s2022



Part of the [Environmental Studies Commons](#), and the [Sociology of Culture Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](#).

Recommended Citation

Toney, Melissa J., "Rocket Ships, Emotions, and Disgusting Wealth: The Emotional Significance of the Billionaire Space Race" (2022). *Senior Projects Spring 2022*. 206.

https://digitalcommons.bard.edu/senproj_s2022/206

This Open Access is brought to you for free and open access by the Bard Undergraduate Senior Projects at Bard Digital Commons. It has been accepted for inclusion in Senior Projects Spring 2022 by an authorized administrator of Bard Digital Commons. For more information, please contact digitalcommons@bard.edu.

Rocket Ships, Emotions, and Disgusting Wealth:
The Emotional Significance of the Billionaire Space Race

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
Melissa Jeanne Toney

Annandale-on-Hudson, New York
May 2022

This thesis is dedicated to my brother, Jason.

Jay, this wouldn't have been possible without our seemingly bizarre phone call about space this past summer. I'm embarrassed to admit it, but you've been my inspiration throughout this project—you are one of the most brilliant people I know.

Table of Contents

| | |
|--|----|
| Introduction..... | 1 |
| I. Details on Billionaire Space Race..... | 2 |
| II. The Beginnings..... | 3 |
| III. Literature on The 1960s Space Race..... | 6 |
| Chapter 1: Understanding Emotion..... | 13 |
| I. What are Emotions?..... | 13 |
| II. Measuring Emotion..... | 14 |
| III. Emotion as Culture..... | 16 |
| IV. Decision Making and Emotions..... | 17 |
| V. Emotion in The Context of Capitalism..... | 18 |
| VI. The Billionaires' Employment of Emotion..... | 20 |
| Chapter 2: The Billionaires' Branding | 21 |
| I. Elon Musk..... | 23 |
| II. Jeff Bezos | 27 |
| III. Richard Branson..... | 30 |
| Chapter 3: Selling The Space Race..... | 36 |
| I. Climate Change/Despair..... | 38 |
| II. Fear of War and Conflict..... | 43 |
| III. Obsession With Growth/Fear of Stasis..... | 48 |
| IV. For The Good of Mankind..... | 56 |
| Conclusion..... | 65 |
| Bibliography..... | 67 |

Introduction

Space has become a place of recontextualization over the past 70 years as technology, innovation, and continued reallocation of resources has allowed humans to reorient themselves in the conversation of outer space. Space has historically acted as a dreamscape of sorts, appearing often in some of the largest sci-fi films, prompting the notion of exploration, imagination, untouchability, and even fear to viewers and producers alike. Astrology, though being practiced for over 2,000 years, remains dominant in current day discussions of horoscopes as we try to make sense of the stars and planets at the time of our birth, promoting inherent association between space and human affairs. Constellations are gazed upon from Earth and stories are told based on the celestial objects in the sky, curating night time as a moment for exercising our creative minds. We look to the sky for answers, understanding ourselves through our innate removal from it.

Today the communal understanding of space has entered an alternative realm where we no longer need to dream of space, but rather space is being sold to us as a possible new location for humans to reside. This process has been spearheaded by three main actors: Richard Branson, Jeff Bezos, and Elon Musk, all of whom are billionaires. Their efforts via each of their personal space exploration companies: Virgin Galactic, Blue Origin, and SpaceX, respectively, have become the vehicles in which the world at large is seeing civilization take a turn into the possibility of being a multi-planetary species. The billionaire space race, the colloquial phrase used to refer to the three billionaires jumpstarting individual space companies within similar time frames, has been a long coming process that has only recently reached the attention of the world on a grand scale. This paper works to first, unpack how the billionaire space race has come to fruition and second, how the public—the consumers of billionaires' dialogue around the space

race—are victim to the emotion mongering enacted by the billionaires, subliminally or not. Emotion, as proved throughout this thesis, is a viable lens for analyzing power structures within current day culture.

I. Details on Billionaire Space Race

Though the publicity behind the billionaire space race is a relatively new concept, Bezos, Musk and Branson have been working within the space exploration industry for around 20 years. Blue Origin (Jeff Bezos), SpaceX (Elon Musk), and Virgin Galactic (Richard Branson), were founded in 2000, 2002, and 2004, respectively. The traction alongside the success of the market has substantially grown since the inception of each of their companies. In fact, space exploration was estimated in 2019 to be worth a \$447 billion industry, 55% higher than a decade ago.¹ According to the investment bank Morgan Stanley, the economic potential of space commerce in 2040 is approximately one trillion dollars.²

Each billionaire had their own pre-existing pockets of wealth in order to start their space exploration company. Jeff Bezos began his career working at a hedge fund where he eventually left to start up Amazon in 1994. Today, Amazon is the largest online retailer outside China³ and their net sales in 2021 were \$469 billion.⁴ Bezos designates \$1 million of Amazon stock per year

¹ “Topic: Space Industry Worldwide,” Statista, accessed May 1, 2022, <https://www.statista.com/topics/5049/space-exploration/>.

² “Space Economy: 4 Trends to Watch in 2022,” accessed May 1, 2022, <https://www.uschamber.com/space/space-economy-4-trends-to-watch-in-2022>.

³ Karen Weise and Michael Corkery, “People Now Spend More at Amazon Than at Walmart,” The New York Times, August 17, 2021, sec. Technology, <https://www.nytimes.com/2021/08/17/technology/amazon-walmart.html>.

⁴ “Amazon Annual Net Income 2021,” Statista, accessed May 1, 2022, <https://www.statista.com/statistics/266288/annual-et-income-of-amazoncom/>.

to fund Blue Origin.⁵ Richard Branson has funded Virgin Galactic from a combination of investments from Aabar, Abu Dhabi's state investment agency, and profits from other sections of the Virgin empire.⁶ As for SpaceX, Musk famously set share prices at \$420 each through which he completed an equity funding round of \$850 million most recently.⁷ In order to originally fund SpaceX, Musk used \$100 million of his own wealth to start the company up. This \$100 million came from the proceeds he made from selling PayPal to eBay in 2002.⁸ It is essential to frame the billionaire space race properly by setting the grounds for which Bezos, Branson, and Musk made each of their companies possible—unequivocal wealth.

II. The Beginnings

To contextualize, we need to observe the foundation that the billionaire space race erected from. October 4, 1957 marks the day that space changed forever and transformed into an attainable sect of the universe that is just another part of human existence. Sputnik, launched by the Soviet Union, was the world's first satellite to reach space on this date, and to quote NASA, "That launch [Sputnik] ushered in new political, military, technological, and scientific developments [...] it marked the start of the space age."⁹ The launch of Sputnik is well known as the beginning of not only the space age, but the space *race* between the Soviet Union and the

⁵ Annie Palmer, "Jeff Bezos Says He Spends More on Climate than Space Travel and Recounts the Time He Played an Alien," CNBC, November 15, 2021,

<https://www.cnbc.com/2021/11/15/jeff-bezos-says-he-spends-more-on-climate-than-space-travel.html>.

⁶"How Richard Branson Has Been Funding Virgin Galactic – Parabolic Arc," accessed May 1, 2022, <http://www.parabolicarc.com/2015/01/26/richard-branson-funding-virgin-galactic/>.

⁷ Michael Sheetz, "Elon Musk's SpaceX Raised \$850 Million, Jumping Valuation to about \$74 Billion," CNBC, February 17, 2021,

<https://www.cnbc.com/2021/02/16/elon-musks-spacex-raised-850-million-at-419point99-a-share.html>.

⁸ Leslie Wayne, "A Bold Plan to Go Where Men Have Gone Before," The New York Times, February 5, 2006, sec. Business,

<https://www.nytimes.com/2006/02/05/business/yourmoney/a-bold-plan-to-go-where-men-have-gone-before.html>.

⁹"NASA | History - Sputnik," accessed May 1, 2022, <https://history.nasa.gov/sputnik.html>.

United States. In response to the launch of Sputnik, the United States launched their first satellite, Explorer 1, which was designed, built, and launched by the Army Ballistic Missile Agency (ABMA) on January 31, 1958. Later that year, the National Aeronautics and Space Administration announced its inception, and the United States had its first organization solely dedicated to space exploration. To follow was a series of rocket launches working to prove supremacy over the opposing nation. Dogs, plants, mice, squirrel monkeys, and frogs were launched into space as each nation reached with stretched palms to theoretical victory over one another, and citizens at home watched on the edge of their seats. In America, the red scare was still coursing through the veins of many and the notion of freedom was on the lines. In fact, the fear expanded outwards from the fear of communism, to the fear of death, “According to a survey conducted in the mid 1950s, most Americans anticipated that they would more likely perish in a Soviet attack than die from natural causes.”¹⁰

The achievements continued to overlap and surpass one another, with the Soviet Union having the first success with sending a human, Yuri Gagarin, into space in 1961 only to be met with the first American, Alan Shepard, being launched into space less than a month later. The space race was transparent with the goal of meeting the other nation with their level of technology or exceeding it. The ultimate goal was to put a man on the moon, as stated by President Kennedy in May of 1961.¹¹ On July 20, 1969, Kennedy’s mission was met when Americans Neil Armstrong, followed by Buzz Aldrin 20 minutes later, landed and walked on the moon. Though the “winner” of the space race is a point of controversy as the stakes of a win are not clear, many Americans recognized the moon landing as America effectively winning.

¹⁰Karsten Werth, “A Surrogate for War—The U.S. Space Program in the 1960s,” *Amerikastudien / American Studies* 49, no. 4 (2004): 563–87, <https://www.jstor.org/stable/41158096>.

¹¹“Space Exploration,” National Archives, August 15, 2016, <https://www.archives.gov/research/aic/reference/space-timeline.html>.

The cultural drive around the space race is undeniable; it was placed in the context of the cold war, the bay of pigs invasion, the red scare, all while the media fueled the fire by reiterating the weight of a winner and loser. The fear of inferiority, the fear of war, and the fear of communism pushed NASA, the United States government, and United States citizens forward—the stakes were out in the open for the world to see.

Once the Apollo missions were completed in 1972, the drive to continue exploring space took a stark hit. Buzz Aldrin, one of the first people to step foot on the moon, explains it as follows: “After the Apollo lunar missions, America lost its love of space—there was no concentrated follow-up and we didn’t have any clear missions.”¹² NASA no longer was an organization that represented American exceptionalism, but rather one that limited opportunities for the private sector. No longer to be treated as a sci-fi location or an arena for nations to assert their dominance, the perception of space was altering; now to be understood as the final economic frontier, a playground for the ultra-wealthy, and a region to overcome and colonize.

Decentralizing space became a mission of the rich, as NASA’s funding and priorities were subject to revision by policy makers which made the barriers to entry too intense for those trying to privatize space. The centralized system of space exploration had a short crumble beginning in 2005, and continues into today. Commercial Orbital Transportation services (COTS) was funded in 2005 and worked to ensure that NASA was a customer and partner to the private industries working in space rather than a supervisor. Blue Origin, SpaceX, and Virgin Galactic were founded in 2000, 2002, and 2004, respectively. All billionaire owned companies, all established during the rise in the decentralization of space (ie. the time when space is significantly less monitored in order to ensure an optimal profit for the most wealthy). The

¹² Matthew Weinzierl, “Space, the Final Economic Frontier,” *Journal of Economic Perspectives* 32, no. 2 (May 1, 2018): 175, doi:10.1257/jep.32.2.173.

billionaire space race no longer exists in a theoretical realm, a moment that historians have speculated and even predicted for quite some time. Rocket launches by some of the most wealthy people in the world, (Bezos, Musk, and Branson) are in full action, this time with no discussion of the role of emotions such as nationalism, fear of war, or fear of loss.

The question arises, then, what is the validity in using emotions as a lens to further understanding cultural shifts, such as the proposal for humans to relocate to space? It is clear the history of space exploration has been tackled with the understanding that emotions are relevant, and to go a step further, had a critical role in driving the United States and the Soviet Union to space. Today, the limited analysis on the billionaire space race presents an opportunity to explore the differing ways emotions are present in the current rendition of space exploration. Throughout this paper I will be deconstructing both the impacts and worth of emotions alongside the actions and words of Jeff Bezos, Elon Musk, and Richard Branson. Emotions, in the context of this paper, refer to the emotions of the greater public, particularly the emotions of those who are so far removed socially and economically from the idea of going to space. The next section synthesizes existing literature on the original space race in order to orient readers properly.

III. Literature on The 1960s Space Race

The framing of space exploration literature regarding the space race and the United States government initiatives to reach space often revolve around four general concepts. Karsten Werth, author of “A Surrogate for War—The U.S. Space Program in the 1960s” categorizes the four sections as the following; Astronaut biographies, space science and technological evolution, origins of the “space race” (political relevance, founding of NASA), and individual

projects (planning, management, Apollo mission operations, etc.).¹³ A large portion of this respected scholarly work within these fields was written earlier in the space race experience and often reflected an unbiased attitude toward the United States partaking in space exploration.¹⁴ The majority of the literature accessible today within these categories that predate the year 2000 work as storytelling tools, explaining the technicalities of the space race and reflections of culture rather than a critical analysis and commentary on the space race in practice.

Arguably one of the most common fixations of the space race in literature and beyond is the component of the ‘race’ itself. The formation of analysis around competition is a common tool to explain America’s drive within the space race. This notion of competition was fed to many citizens throughout the space age of the 60s and 70s, an us-versus-them mentality, boiling down space travel to a game with an ultimate winner and loser. This understanding of the space race is quite literally reflected in its title, being reproduced simply everytime space exploration in the 20th century is labeled as the ‘space race.’ Some of the most consumed pieces of literature on the space race outline space exploration in terms of political rivalry, some include; *Two Sides of the Moon: Our Story of The Cold War Space Race* by David Scott and Alexei Leonov (estimated 10k+ copies sold), *Failure is Not an Option* by Gene Kranz (estimated 100k+ copies sold), and *Shoot For the Moon* by James Donovan (estimated 10k+ copies sold). All of these books work to promote the idea that the space race was grounded in national superiority. The significance of these titles is their grounding in the idea that emotion is the largest driver in the 1960s space race coming to fruition. This framing is also larger than just

¹³Werth, “A Surrogate for War—The U.S. Space Program in the 1960s.”

¹⁴ Popular works by Robert A. McDougall, John M. Logsdon, Arnold S. Levine, Homer E. Newell, and others alike all wrote literature falling into these four categories, all done before 2000. Werth’s writing dates back to 2004, which is relatively recent but her work is one of the first to address the gap in literature.

literature, but is an outline of the cultural understanding of not only space, but society. Space became a place that exposed what was happening back on Earth, a window to society's feelings

While the framing of 1960s space exploration often revolves around the 'race' component, it is important to provide alternatives to this approach in order to provide a fuller picture on the understanding of the space race as time has progressed. In Bradley G. Shreve's 2003 article titled "The US, The USSR, and Space Exploration, 1957-1963" Shreve investigates the truth behind the common narrative of the 'race' aspect of the space race. Shreve argues that space exploration became a "forum for dialogue and peace," in many different ways and worked as a "pressure valve or balancing point" for many moments of heightened political tension, rather than fueling the political tension.

In order to build this argument, Shreve focuses on the National Aeronautics and Space Act of 1958. Section 102a of the act outlines the goals of peace within space travel "It is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind." Section 102c builds on this idea stating, "The aeronautical and space activities of the United States shall be conducted so as to contribute materially to...cooperation by the United States with other nations and groups of nations in work done pursuant to this Act and in the peaceful applications of the result thereof."¹⁵ Supporting this sentiment of peace is the communication between President Kennedy and Khrushchev during the boom in space success. In April of 1961 President Kennedy sent a telegram to Chairman Khrushchev congratulating him and the Soviet Union on sending the first person into space. President Kennedy sent his applause as follows:

The people of the United States share with the people of the Soviet Union their satisfaction for the safe flight of the astronaut in man's first venture into space. We

¹⁵Bradley G. Shreve, "The US, The USSR, and Space Exploration, 1957-1963," *International Journal on World Peace* 20, no. 2 (2003): 70, <https://www.jstor.org/stable/20753399>.

congratulate you and the Soviet scientists and engineers who made this feat possible. It is my sincere desire that in the continuing quest for knowledge of outer space our nations can work together to obtain the greatest benefit to mankind.¹⁶

Shreve references the handful of interactions between Kennedy and Khrushchev as a point of commonality that brought both nations together rather than pitting them against one another.

There is much validity in referencing the words and conversations of the faces of power, although the positive must be presented alongside the more anger-filled and threatening telegrams between both leaders. The April of 1961 letter from President Kennedy was filled with empty promises of peace as the bay of pigs invasion occurred just five days after he sent his telegram. Khrushchev then sent a telegram with a strong possibility of retaliation to Kennedy on April 18, 1961;

Mr. President, I send you this message in an hour of alarm, fraught with danger for the peace of the whole world. Armed aggression has begun against Cuba. It is a secret to no one that the armed bands invading this country were trained, equipped and armed in the United States of America. The planes which are bombing Cuban cities belong to the United States of America, the bombs they are dropping are being supplied by the American Government.[...]

As far as the Soviet Union is concerned, there should be no mistake about our position: We will render the Cuban people and their government all necessary help to repel armed attack on Cuba. We are sincerely interested in a relaxation of international tension, but if others proceed toward sharpening, we will answer them in full measure.¹⁷

Shreve's argument holds strong value in the discussion of space travel being a point of emotional expression. Although Shreve strays from the 'race' aspect of the 1960s space race, he continues to reinforce the idea that the discussion of the exploration of space holds the ability to enable emotional dialogue. Shreve suggests that the tensions that were seemingly a product of the space

¹⁶ "Foreign Relations of the United States, 1961–1963, Volume VI, Kennedy-Khrushchev Exchanges - Office of the Historian," accessed May 1, 2022,

<https://history.state.gov/historicaldocuments/frus1961-63v06/d8>.

¹⁷ Ibid.

race were more accurately about political interactions outside of the realm of space. Rather, the opportunity of space provided a forum where leaders could unite around the notion of progress and peace. Regardless, the space race became a conceptual place that both tightened bonds and exposed the spectrum of emotions that were borne out of the political climate of the time.

Although, due to the changing presidents throughout the space race, the balance between peace and tension altered throughout time. Shreve acknowledges the fundamental difference between the actions of Dwight D. Eisenhower and John F. Kennedy during the space race. When Dwight D. Eisenhower was president (1953-1961) his administration promoted a sense of fear, urgency, and speculation of the downfall of American exceptionalism. Secretary of state John Foster Dulles believed that Sputnik was one of many USSR propaganda moves (compared to their testing of the ICBM and large-scale bomb). Dulles continually expressed fear of the dwindling of American prestige and image in the eyes of the rest of the world stating, “If we lose repeatedly to the Russians as we have lost with the earth satellite, the accumulated damage would be tremendous.”¹⁸ Dulles was not the only proponent of fearing America’s image downfall as the National Security Council voiced similar concerns speaking to ‘the end of the US Golden Age.’ Regardless of the inconsistency of the space race’s ability to promote peaceful dialogue, both John F. Kennedy and Dwight D. Eisenhower made adequate room in their understanding of the space race for both ends of the emotional spectrum: fear as well as hope.

Alternatively, Karsten Werth’s analysis of the 1960s space race in her journal article “A Surrogate For War – The US Space Program in the 1960s” speaks to the fear of war, but flips fear on its head by discussing the United States military expansion through space travel rather than focusing on America’s fear of the USSR’s military. Werth puts a large emphasis on space

¹⁸ Bradley G. Shreve, “The US, The USSR, and Space Exploration, 1957-1963,” *International Journal on World Peace* 20, no. 2 (2003): 70, <https://www.jstor.org/stable/20753399>.

exploration being a large-scale paramilitary operation for the United States, shining light on our lack of understanding how the space race became a trojan horse for ulterior motives. Werth puts it, “The country that could launch the heaviest satellites had the most powerful rockets”¹⁹

Werth’s main argument is that to dedicate the space race solely to the urge to “explore the unknown,” as Eisenhower phrased it, or to attempt to prove capitalism superior to communism, is to fall short on understanding the broader scope of war and military infrastructure within space exploration. Werth highlights a notion heavily overlooked: there is a dual use of space technology. Furthering space technologies was presented as an alternative to war for the American and Soviet civilians, but simultaneously provided the U.S. government a reflection of larger military power. Improving space travel technology meant a better understanding of communication and scanning capabilities,²⁰ among other things, that could ultimately be used for large scale military operations. Going to space not only meant to the American government that they could have a larger military presence, but it reflected to the rest of the *world* that the U.S. military was capable of more. This capability worked in the same realm of nuclear deterrence at the time as the fear of the bomb was still lingering after the bombings of Japan only 15 years prior. As space technology continued to progress, there became an unspoken understanding that both the United States and the USSR held great abilities to not only attack one another, but other regions of the world, building up their “untouchability” as countries of power. This understanding of the 1960s space race as a paramilitary operation works in similar ways to Shreve’s argument as it also helps to uphold the sense of “peace” between the USSR and the United States.

¹⁹Werth, “A Surrogate for War—The U.S. Space Program in the 1960s.”

²⁰ Roger Handberg, “Dual-Use as Unintended Policy Driver: The American Bubble,” in *Societal Impact of Spaceflight* (Washington, D.C.: NASA, 2007), 353–68, <https://history.nasa.gov/sp4801-chapter18.pdf>.

We often use the larger idea of emotions to understand the original space race. Though Shreve, Werth, and other popular works vary in their angles, they all employ the ways in which the space race either creates an emotional state (peace, competition, fear) or reflects an emotional state of society at the time (tension, military desires, nationalism). As the billionaire space race is a product of the 1960s space race, we can recall the ways in which emotion was recognized as a driving element in the USSR and The United States decisions. This paper attempts to put similar weight to the existence of emotions in large scale expeditions such as the billionaire space race. Although, here I am not arguing that emotion has driven the space race, as many arguments of that nature have been made for the 1960s space race, but rather that emotion and emotion mongering exists through the actions of the billionaires. The importance of recognizing the role of emotion is that it holds the ability to reveal the realities of society's concerns. Moreover, emotion holds the capability to be weaponized as well as profited off of within the larger context of private capitalist ventures. Recognizing the acts of emotion mongering allows for greater agency over one's decisions.

Chapter 1: Understanding Emotion

Emotions have been studied tirelessly throughout a range of fields in order to understand movements, patterns, and drives in culture, society, economics, and the environment. Here I supplement existing peer reviewed literature on emotions at large to understand their use as vehicles for space exploration discussions. This section addresses emotion at a basic level: What emotion is in practice and what the histories of interacting and understanding emotion look like. In interacting with emotion, I beg the question of how we measure emotion and how do we understand how it impacts us—the consumers of emotional dialogue? When revealing how emotion impacts us we must then address the ways in which emotions are weaponized against consumers in a capitalist system of varying incomes and the strategies utilized to profit from emotion. These methods of understanding emotion lead to the takeaway that the strategic utilization of emotion, in the context of capitalism, reflects the societal understanding of the environment and climate, wealth, space travel, and future life. Emotions are a functional lens to analyze the billionaire space race as it helps to highlight how the most wealthy and powerful people on our planet tap into culture.

I. What are Emotions?

Emotions, as defined by Michel Cabanac, can be vaguely understood as a mental experience, varying in description and understanding from one entity to another, but always relating to both intensity and pleasure. The thread between all emotions, Cabanac states, “is that they are all aroused by exposure of the subject to situations more or less related to motivation, either positive or negative but all resulting in a behavior oriented towards, or away from, the

stimulus.”²¹ In this case, the “stimulus” we will study later on is what Elon Musk, Jeff Bezos, and Richard Branson say in the public realm, prepared for public consumption.

In knowing that the definition of emotion is difficult to pin but having certainty that emotion is grounded in exposure to stimuli, we must administer a discussion around ways in which we understand and interact with emotion. Doing so will give us grounds to analyze the stimuli (what billionaires say) from a pre existing foundation and bring us closer to understanding the weight of evoking emotion.

II. Measuring Emotion

Later in this work I will be attempting to dissect the emotional dialogue that is projected by each billionaire. In order to do so, there must be an established understanding of the proper ways in which emotion is measured, if at all. Emotions are largely socially constructed through action and interaction,²² and so the measurements of such emotion differ from measurements that test the physiological workings of one’s body with a simple test. As Michelle Rosaldo puts it, “feelings are not substances to be discovered in our blood but social practices organized by stories that we both enact and tell.”²³ A scale or measurement has yet to be widely produced and unanimously accepted for measuring emotion due to the complexity of emotion being a culmination of interaction rather than a product of a singular isolated event. The ability to utilize emotion for one’s own benefit is near impossible to regulate, though the goal here is enabling the identification of emotion being evoked, not the regulation of it.

²¹ Michel Cabanac, “What Is Emotion?,” *Behavioural Processes* 60, no. 2 (November 1, 2002): 69–83, doi:10.1016/S0376-6357(02)00078-5.

²² Jack Katz, *How Emotions Work* (Chicago, Ill.: University of Chicago Press, 2001).

²³ Ian Burkitt, “Social Relationships and Emotions,” *Sociology* 31, no. 1 (1997): 37–55, <https://www.jstor.org/stable/42855768>.

In Kristen Boehner's work, "How Emotion is Made and Measured," the conflict between the urge for emotion to be studiable and quantifiable alters the idiosyncratic "data" on emotion that includes personal, cultural, and timely experiences. Boehner provides a historical analysis of the understanding and breakdown of emotion in the West since the 19th century and its misinterpretation of emotion being both "anti-scientific" and unworthy of studying.²⁴ As emotion overtime was understood as relevant to both long term decision making and problem solving, which have been studied in the fields of cognitive science and psychology, the urge to quantify emotion arose. A traditional approach to the analysis of emotions falls within the realm of Human-Computer Interaction Research (also known as HCI). Boehner recognizes the faults of this strategy by comparing it to the usual analysis of cognition, "Like cognition, emotion has been treated as objective, internal, private, and mechanistic."²⁵ Rather, Boehner recognizes emotion as a cultural experience, one that is not contained by the boundaries of one's own body and produced singularly (and solely influenced by isolated events shown on computers), but a mutual influence from and towards the world around us. Therefore, there isn't a refined technique to analyze the many interviews, posts, quotes, and grandiose statements that Musk, Bezos, and Branson produce. Due to the haziness nature of measuring emotion, the most practical way of analyzing what the billionaire's say is through identifying specific topics that they are addressing rather than directly translating and dissecting the quotes as entities that contain emotional stimuli individually. From there, I will pull from preexisting studies and research on the states of emotion around each of these topics that I identify in order to contextualize the cultural significance of the topic.

²⁴Kirsten Boehner et al., "How Emotion Is Made and Measured," *International Journal of Human-Computer Studies*, Evaluating affective interactions, 65, no. 4 (April 1, 2007): 275–91, doi:10.1016/j.ijhcs.2006.11.016.

²⁵ Ibid.

III. Emotion as Culture

Emotion is a realm that must be explored through understanding that it is a product of interaction between culture and the individual rather than solely an individually produced phenomenon. Jack Katz's book, *How Emotions Work*, focuses on the ways in which emotion interacts with, and ultimately is, culture. There are two ways in which this claim comes to fruition. The first relies on the understanding of culture as "taxonomic," whereas culture is categorical and that it pre-exists the meanings of emotion. In this argument, emotions simply have different meanings and importance within different cultural groups. In the other form of this argument, emotions are not just understood differently in different cultures, but they are produced differently in different cultures. Boehner synthesizes this argument quite well in *How Emotion is Made and Measured*, saying: "To experience a feeling as, say, anger, love, happiness, lust, or frustration, one must be grounded in a cultural context that makes anger, love, happiness, lust, or frustration meaningful (and in turn determines a response to that emotion—whether it is something to be proud of, ashamed of, etc.)."²⁶ Emotion holds weight as both a driving factor of culture and an outcome of culture, a cyclical dynamic between the individual and the society around them. Emotion is heavily a product and a producer of the language spoken in different cultures as well. In Martha Nussbaum's highly influential book *Upheavals of Thought: The Intelligence of Emotions*, Nussbaum speaks of language as a contributing factor to the establishment and expression of emotions:

The fact that we label our emotions alters the emotions we can have...we do not simply apply terms to antecedently organized items. In the process of labeling, we are also frequently organizing, bounding some things off from others, sharpening distinctions that

²⁶ Ibid.

may have been experienced in an inchoate way. From then on, we experience our emotions in ways guided by these descriptions.²⁷

For emotions to simply exist and be expressed in ways that suit people, the language, slang, and connotations of emotion are in a back and forth exchange between culture and the individual. In order for emotions to even be a part of the discussion, emotions need to be considered as relevant to culture and even as a direct partner in culture.

IV. Decision Making and Emotions

To prove the relevance of emotion to not only culture, but as an impact on decision making is to build the argument that emotion is a viable lens to analyze current events through. There are a plethora of studies across a range of disciplines which inform us today about how our emotions heavily impact our decision making in both the short term and long term. One of the more widely known studies from Isen and partners in 1976 demonstrated short-lived impacts of emotion on decision making.²⁸ In this study, researchers influenced the mood of individuals by leaving free gifts for them at their doors. After positive emotions infiltrated the individuals, they were more likely to help with requests over the phone relative to the control condition. Directly after the positive emotion manipulation (the free gift), individuals were more likely to complete the phone request. After 20 minutes the impact of the free gift on the likelihood to complete the request over the phone decreased substantially. Other studies have pushed back on this notion that emotions only have the ability to affect decisions in the short term. Simonsohn conducted a study that considered how the weather during campus visits impacted student's decision on

²⁷Martha Craven Nussbaum, *Upheavals of Thought: The Intelligence of Emotions*, 8. print (Cambridge: Cambridge University Press, 2008), 149.

²⁸Peter J. D Carnevale and Alice M Isen, "The Influence of Positive Affect and Visual Access on the Discovery of Integrative Solutions in Bilateral Negotiation," *Organizational Behavior and Human Decision Processes* 37, no. 1 (February 1, 1986): 1–13, doi:10.1016/0749-5978(86)90041-5.

whether or not to enroll in the college.²⁹ In this study, Simonsohn found that the mood incited by the weather impacted students' decision making not only immediately after their visit, but in the months following as well. Emotions impact decision making in a broader sense than just reflecting what humans want—emotions are a driving force in acceptance, admiration, agreement and disagreement, and morals. In a 2008 study performed by Andrade and Ariely, incidental emotional states (happy and angry) were projected onto participants through computer simulations where each participant would watch a happy or angry condition and then be asked to describe a personal experience related to the video.³⁰ The participants would then be given an offer in reference to their participation in the study. Those who received the anger provoking simulation were much more likely to refuse an unfair offer than those given the happy provoking simulation.

Emotions that are projected onto people from outside actors, such as shown in these studies, have the potential to dictate much more than simply how we feel in a singular situation. This section helps to bridge the gap between stimuli, feeling, and the ways in which emotions have a larger effect. Emotions not only prompt us to act in specific ways, but help to reinforce beliefs about society, the environment, the economy, and our future.

V. Emotion in The Context of Capitalism

Now knowing that emotions are collectively produced and bleed into how we see other components of the world, we turn to the capitalist system around us to understand how emotion

²⁹Uri Simonsohn, “Weather To Go To College,” *The Economic Journal* 120, no. 543 (March 1, 2010): 270–80, doi:10.1111/j.1468-0297.2009.02296.x.

³⁰Eduardo B. Andrade and Dan Ariely, “The Enduring Impact of Transient Emotions on Decision Making,” *Organizational Behavior and Human Decision Processes* 109, no. 1 (May 1, 2009): 1–8, doi:10.1016/j.obhdp.2009.02.003.

is commodified. The term “emotional branding” was coined by Marc Gobé in 2001 in his Book *Emotional branding: The New Paradigm for Connecting Brands to People*.³¹ Emotional branding, or the practice of constructing bonds between the consumer and brands utilizing story-telling and the illusion of passion, blurs the lines of what and who is able to evoke emotion and how capitalistic enterprises utilize our emotions for their greater benefit. In other words, consumers are able to be infiltrated by emotion even by entities that aren’t human, such as brands and corporations, to ultimately turn a profit. Akgün explains in a 2013 article that emotional branding works as follows:

The engagement of consumers in a deep, long-term, intimate emotional connection with the brand, which is beyond the benefit based satisfaction, and which creates a special trust based relationship for the development of a holistic emotional experience.³²

The benefits of emotional branding for companies include customer satisfaction, loyalty, and higher probability of repurchasing.

Emotional branding, I argue, can exist in larger contexts than simply a singular brand or company. Emotional branding is uniquely explored through the ways in which figures such as Musk, Bezos, and Branson project their voices, personal brands, messages, and companies out into the world. They validate their actions by touching on topics that have deep roots in emotions such as fear and hope. They are not only selling a product, but selling a cultural shift that reflects our future and the possibility to reorient life itself.

³¹Gobe Marc, *Emotional Branding* (Allworth, 2010), <https://www.simonandschuster.com/books/Emotional-Branding/Marc-Gobe/9781581156720>.

³²Ali Ekber Akgün, İpek Koçoğlu, and Salih Zeki İmamoğlu, “An Emerging Consumer Experience: Emotional Branding,” *Procedia - Social and Behavioral Sciences*, The Proceedings of 9th International Strategic Management Conference, 99 (November 6, 2013): 503–8, doi:10.1016/j.sbspro.2013.10.519.

VI. The Billionaires' Employment of Emotion

Emotion is, in total, a direct reflection of culture, a determinant in many of our decisions and understandings of the world, and arguably most important in this scenario, a component of humans that can be employed by other entities for their individual benefit. Working from this foundation of emotions as malleable and utilitarian, we return to the focus of the usage of emotions in practice today. To analyze how the age of the new space race and the individual billionaires are appropriating our emotions, we must look to the formulated words that some of the most wealthy people on the planet are tactically presenting to the public in order to begin to recognize certain themes and patterns in their behavior towards the public. It would be foolish to graze over what global elites are saying in press conferences, presentations, rocket launches, on social media platforms, podcasts, and other forms of media for the public consumption alike. Their words are working billboards and marketing for not only themselves and their empires, but their ideals, predictions of the future, and their products. The sway and impact these actors have is dependent on their image in the media and the demographics they strive to appeal to.

This section outlines the different ways in which the billionaires have branded themselves to the public and the unique ways that they have infiltrated certain sects of the population. In doing this, we can observe how they establish a reputation within different waves of culture and society and in doing so the weight of their words, visions, and actions become ever more relevant and powerful.

Chapter 2: The Billionaires' Branding

Although the inherent power of Musk, Branson, and Bezos stems initially from their wealth, the steps in which the billionaires have taken to further their influence within certain demographics bolsters their ability to evoke emotion when speaking about the space race. Each billionaire has taken on differing routes and identities that appeal to specific age groups, beliefs, and interests. Analyzing what sects they are appealing to and the persona they aim to project is essential in the discussion of emotion as we have predetermined that emotion needs to be culturally relevant in order to have impact.

Behind all of this it is important to recognize that the billionaires needn't be social figures in order to pursue any of their economic endeavors. They are quite literally the most wealthy human beings on planet Earth, and in the capitalist world, that equates to the most *powerful* human beings on planet Earth. Elon Musk is the richest person globally with a net worth of \$253.6 billion, followed by Jeff Bezos with a net worth of \$150.3 billion, and straying approximately 500 spots down on the richest persons list Richard Branson has a net worth of \$5 billion.³³ Comparatively, \$5 billion dollars may seem miniscule within this context. However, to put it into perspective, \$5 billion could be used to pay for providing shelter for every single homeless person in the United States for a whole year, and then some,³⁴ pay off student loans for over 150,000 US graduates,³⁵ or even give medicaid to 1.4 million uninsured Americans.³⁶

³³ "Real Time Billionaires," Forbes, accessed May 3, 2022, <https://www.forbes.com/real-time-billionaires/>.

³⁴Dennis P. Culhane and Seongho An, "Estimated Revenue of the Nonprofit Homeless Shelter Industry in the United States: Implications for a More Comprehensive Approach to Unmet Shelter Demand," Taylor & Francis Group, March 2021, 1, doi:<https://doi.org/10.1080/10511482.2021.1905024>.

³⁵What Can You Buy With 5.7 Billion Dollars? (Trump's Wall Cost), accessed May 1, 2022, <https://www.youtube.com/watch?v=pX3U1pcbp24>.

³⁶"Nine Things to Buy with \$5 Billion Instead of a Border Wall," Institute for Policy Studies, December 7, 2018, <https://ips-dc.org/nine-things-to-buy-with-5-billion-instead-of-a-border-wall/>.

The power of these men is indisputable simply by their massive amount of wealth alone, so the initiative for being characters in the public eye stems from something other than necessity. Their personalities do not *need* to be marketed in order to accomplish their space exploration endeavors. As these men can fit into the category similar to those of socialites, associating with other high profile celebrities and consistently making news headlines, they exist and market themselves within the public realm for reasons that don't conform to those of socialites. More importantly, their exclusionary space companies do not rely on a demand expressed by the general public due to the vast majority of the general public being unable to afford to participate in space travel. Investigating how each individual billionaire has created a marketable persona puts us in a better position to analyze the intentionality behind what they say and the emotions they evoke on a broader scale.

Regardless of necessity, the billionaires still act in ways that intentionally evoke emotion. In doing so, they are not necessarily growing their networth or personal empire, but rather exploring less tangible outcomes. For example, Jeff Bezos might allocate a large sum of money to Amazon in order to increase their online traffic—a tangible and measurable result. Alternatively, here Bezos tells personal anecdotes and obsessively speaks about his customers not in order to improve his sales, but rather influence emotions. Once the quota of becoming one of the wealthiest people in the world is met, it seems as if there is only one further step to take: to infiltrate the emotions of society, not just their pockets.

The next three sections provide an outline of who each billionaire has made themselves appealing to. Since their space companies have only recently come into the limelight, this discussion focuses on the billionaires' pre-existing companies, broad public discussions of success, and general moments of publicity. Since each space company is inextricably linked to

the founder and the founder is linked to their previous economic endeavors, this section on the billionaires' branding is relevant to today's discussion of the billionaire space race.

I. Elon Musk

Look, I know I sometimes say or post strange things, but that's just how my brain works. To anyone I've offended, I just want to say, I reinvented electric cars and I'm sending people to Mars in a rocket ship! Did you think I was also going to be a chill, normal dude?³⁷ –Elon Musk, 2021

Elon Musk, most notably, has established a brand that appeals to the disruptor: the group that appreciates his rigidness and ability to ruffle feathers while also maintaining a relatable humorous shtick. One of the largest identifiers of Musk's influence and infiltration of the public on a larger scale than just wealth is his recently assigned title of “Person of the Year” by TIME magazine. Molly Ball, a TIME national political correspondent speaks towards Musk's inescapable influence in regards to his branding techniques,

You know, it's really hard to escape Elon Musk's dominance over so many things in American life right now. He's got his rocket company that is completely dominating the space launch business. He's got a car company that is completely dominating the electric vehicle market. He's got 65 million twitter followers and he likes to make weird jokes and set people off. And sometimes with a single tweet he can control the stock market or the value of various different crypto currencies. So this is a man who's just sort of become ever present across a lot of different sectors.³⁸

As Ball touches on, Musk reaches beyond the scope of the pre-existing form of what a “typical” billionaire looks like. This rigid idea of the wealthy always having a refined performance towards the public does not come across with his antics, but rather he challenges this mold that has been filled before by people like Bill Gates, Warren Buffet, Michael Bloomberg, and even

³⁷ Elon Musk Monologue - SNL, accessed May 3, 2022, https://www.youtube.com/watch?v=fCF8I_X1qKI.

³⁸ TIME Person of the Year: Elon Musk, accessed May 1, 2022, <https://www.youtube.com/watch?v=PbVSZvC7UxY>.

John D. Rockefeller. As he breaks away from our understanding of how a billionaire acts through his bluntness, he pulls in a demographic that is drawn to this divergence from the norm.

Musk generates a stronger grip over public opinion and attention due to his assertion as eccentric, controversial, and having versed knowledge on the use of memes and other internet trends. Elon once tweeted out in 2020, “Who controls the memes, controls the Universe” racking up over 700 thousand likes.³⁹ Musk has built a brand that speaks to the younger generation of people across the world who largely perceive the world through social media. Though twitter is frequented by people of all ages, more than half of twitter users are between the ages of 18-34⁴⁰ and those who engage with and consume memes on the platform are that exact demographic, gen Z followed by millenials.⁴¹ To take his involvement in the social media platform a step further, Musk began hinting toward his personal frustrations with Twitter in early 2022. He proposed a poll on the platform gauging whether the site inhibits the expression of free-speech stating, “Free speech is essential to a functioning democracy.”⁴² In an outward public response, he ultimately bought \$3 billion worth of Twitter shares making him the largest shareholder of the platform and is now a class II director at the company.⁴³ This move to own over 9 percent of the company’s stocks was a public move that was well taken by the general public. In fact, Twitter shares soared 27 percent immediately after the announcement of Musk’s stake in the business.⁴⁴ This business

³⁹Elon Musk, Twitter Post, June 2020, 3:35 a.m.,

<https://twitter.com/elonmusk/status/1276418907968925696>.

⁴⁰“Global Twitter User Age Distribution 2021,” Statista, accessed May 1, 2022,

<https://www.statista.com/statistics/283119/age-distribution-of-global-twitter-users/>.

⁴¹“To Meme or Not to Meme?,” Insider Intelligence, accessed May 1, 2022,

<https://www.emarketer.com/content/to-meme-or-not-to-meme>.

⁴² Elon Musk, Twitter Post, March 3, 2022, <https://twitter.com/elonmusk/status/1507259709224632344>.

⁴³“Why Did Elon Musk Spend \$2.9 Billion to Join Twitter’s Board of Directors?,” Fortune, accessed May 1, 2022, <https://fortune.com/2022/04/07/why-did-elon-musk-invest-twitter-edit-button-board/>.

⁴⁴ Fred Imbert, “Twitter Shares Close up 27% after Elon Musk Takes 9% Stake in Social Media Company,” CNBC, April 4, 2022,

<https://www.cnbc.com/2022/04/04/twitter-shares-soar-more-than-25percent-after-elon-musk-takes-9percent-stake-in-social-media-company.html>.

move, in comparison to previous endeavors that cater to a wealthier demographic (Tesla, SpaceX, The Boring Company), encapsulates and directly affects a public platform that has very few barriers to entry. Moreover, this decision to invest in Twitter directly reflects how intertwined Twitter is with Elon Musk's personal brand.

Musk has done much more than use Twitter to push himself into the media—he has infiltrated the public eye with a wide range of publicity stunts. His entry into pop culture through entertainment has been a driving force in his assertion as a household name. Musk has appeared on a massively popular podcast that has 12 million subscribers on Youtube, “The Joe Rogan Experience,” where Musk smokes cannabis towards the end of the interview after philosophizing about life itself.⁴⁵ This moment stirred up a lot of attention, although ultimately reinforcing his archetype of rebellious mad genius that appeals to millennials and Gen Z alike. On top of the podcast, Musk has had a handful of cameos in movies and television shows that target a relatively younger crowd such as Iron Man 2, The Big Bang Theory, The Simpsons, Young Sheldon, South Park, Men in Black, Saturday Night Live, and Rick and Morty. Elon Musk has successfully not only made himself relevant through his technological advancements, but made his words and actions relevant through invading circles of entertainment, pop culture, and the internet realm.

Musk has become even more wrapped up in entertainment tabloid headlines due to his partnership with the alternative electronic musician, Grimes, in mid 2018. Their whirlwind of a relationship has been plastered across media outlets and pushed Musk’s personality further into the spotlight. Their childrens’ unpronounceable names alongside the massive fundamental dichotomy between the couple have been the main topics of discussion. Musk, through his

⁴⁵ Joe Rogan Experience #1169 - Elon Musk, accessed May 1, 2022, https://www.youtube.com/watch?v=ycPr5-27vSI&list=PL4jt261bzEh7OWgs1jJ_l30j1u2a30MEt&index=7.

relationship with Grimes, crossed outside of the realm of being an entrepreneur and into a broader status of a general celebrity.

In comparison to Branson and Bezos, Musk has made it clear that Tesla does not have a public relations team and does not use traditional marketing strategies for his products. Tesla and Musk's further economic endeavors do not use traditional advertisement options such as ads on television and radio but rather rely purely on word of mouth. This in and of itself creates a public stir and plays into Musks' off-the-cuff and against the grain attitude and antics. He claimed on twitter recently that he does not want to "manipulate" public perception because he "trusts the people."⁴⁶ Musk's attempts to advertise his products through less "manipulative" ways than commercials appeals to the consumer. In the capitalist system, we are constantly force fed ways in which to buy into a better life—Musk recognizes this consumer fatigue and plays it in his favor. Through rejecting a public relations and typical marketing team, Musk uses himself as a vessel for his products. If he relies on word of mouth and the weight of his words being enough to sell his products, his existence becomes an embodiment of an advertisement. Therefore, all of his actions play into the ingenuity of marketing—what he does on twitter, on podcasts, within his cameos, or even within his personal relationships, is admittedly to fulfill the job that a public relations team and a marketing strategy would have done. Elon Musk has positioned his personality, actions and beliefs in an impactful way beyond his stature of wealth to enable himself to inject emotions into the public through alternative practices rather than traditional marketing. His ability to break away from the 'elite' archetype brings more weight to his words as he is drawn as more relatable, honest, and down to Earth without invalidating his level of power or intelligence as an entrepreneur.

⁴⁶Elon Musk, Twitter Post, April 6, 2021, <https://twitter.com/elonmusk/status/1387172830094233601>.

II. Jeff Bezos

“I would much rather if they said, you know, *inventor* Jeff Bezos, or *entrepreneur* Jeff Bezos, or *father* Jeff Bezos. Those kinds of things are much more meaningful to me.”⁴⁷
 –Jeff Bezos, 2018

Alternatively, Jeff Bezos’ strategy of self branding exists as the exact type of brand Elon Musk aims to stray away from. His clean cut image partners well with his rehearsed stories of his upbringing, personal aspirations, and his push to depict himself as self made. Bezos maintains a high level of professionalism while also allowing for subtle familial stories that may be seen as personable and build him as an honest character. By doing this, Bezos distracts from the distance that he has from the general public as his wealth and power are extremely unrelatable. In identifying with the struggles of his upbringing, Bezos taps into the “American Dream” archetype, building a bond between himself and those around him.

Bezos’ approach to building up his brand is precisely calculated and it can be seen in his array of public facing talks and interviews. His formula for describing his upbringing relies heavily on his relations with his family. Without fail, Bezos checks off the following boxes when prompted to speak towards his struggle to success: his mother having him at 17, his father being a Cuban immigrant, and helping his grandparents on his family ranch growing up. In a variety of interviews, Bezos makes a point to tell these same stories in nearly word-for-word manner, passing over key points that drive home that he is deserving of both his wealth and our empathy. Moreover, he clings to a story that embodies the humble beginnings of Amazon where he depicts a scene of himself packing boxes on the floor. In a 2018 interview with Personal Business Insider Bezos tells the story as the following:

⁴⁷ “Forum on Leadership | Bush Center,” Forum on Leadership | Bush Center, accessed May 1, 2022, <http://www.bushcenter.org/exhibits-and-events/events/2018/04/forum-on-leadership.html>.

We had only 10 people in the company at that time...we were all packing boxes, we didn't even have packing tables, and we were on our hands and knees on a concrete floor packing the boxes. At about one or two in the morning I said to one of my software engineering colleagues, 'Paul, this is killing my knees, we need to get knee pads. And Paul looked at me and he was like 'Jeff, we need to get packing tables.' I was like 'Oh my god, that is such a good idea!' The next day I bought packing tables.⁴⁸

Jeff Bezos holds this story at such a high praise that he also tells it almost exactly the same in an interview with The Economic Club of Washington, D.C.,⁴⁹ The Bush Center Forum on Leadership 2018,⁵⁰ and the 2001 Academy Summit.⁵¹ The repetition of this story throughout 20 years in at least four different large scale, public facing events is a result of the aim to curate the image of Jeff Bezos to the public in a hyper-specific way. Bezos and his public relations team have crafted his story to reflect a sense of humbleness, humor and perseverance to bring some attention away from being in the running for the title of richest human on the planet.

In contrast to Musk, Bezos has built his empire through transactions that don't take place in the forefront of the media. In doing this, Bezos prioritizes building his personal brand as an admirable, goal driven father, spouse, and son rather than pushing the image of an overbearing tech mogul that is inserting himself into a variety of markets. In fact, in the Economic Club of Washington, D.C. conference Bezos talks about people's curiosity with him gaining the title of the second wealthiest person in the world. Bezos brushes this title off and counters it by saying,

⁴⁸ Mathias Döpfner, "Jeff Bezos Reveals What It's like to Build an Empire — and Why He's Willing to Spend \$1 Billion a Year to Fund the Most Important Mission of His Life," Business Insider, accessed May 1, 2022, <https://www.businessinsider.com/jeff-bezos-interview-axel-springer-ceo-amazon-trump-blue-origin-family-regulation-washington-post-2018-4>.

⁴⁹Jeff Bezos, CEO and Founder, Amazon, accessed May 1, 2022, <https://www.youtube.com/watch?v=zN1PyNwjHpc>.

⁵⁰"Forum on Leadership | Bush Center."

⁵¹Jeff Bezos, 2001 Academy Summit, accessed May 1, 2022, https://www.youtube.com/watch?v=b_dSGjOPixs.

“I would much rather if they said, you know, *inventor* Jeff Bezos, or *entrepreneur* Jeff Bezos, or *father* Jeff Bezos. Those kinds of things are much more meaningful to me.”⁵²

Although Amazon and Blue Origin are heavily tied to the name Jeff Bezos, many of the corporations that he has high stakes in are not associated with his name. Some of these high profile companies include: IMDB, Whole Foods, GoodReads, Alexa, The Washington Post, Business Insider, and Twitch.⁵³ His economic empire has been built in a way that doesn’t define his brand, but rather his brand appeals to the demographic who finds value in genuine struggle, and once again, the American dream. Similar to being courted around a mansion and being encouraged to focus on the house’s foundation rather than looking at the extravagant decor, Bezos encourages the public to focus on where he came from rather than the gross amount of wealth he has accrued today.

One of the most popularized ideologies of Bezos is his “customer obsession.” On Amazon’s “Who We Are” page, the first sentence is “Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking.”⁵⁴ Alongside his rehearsed familial and humble beginning stories, Bezos, without fail, accredits Amazon’s success to his obsession with the customer rather than obsession with the success of the competitor. In the majority of interviews previously listed (The Economic Club of Washington, D.C, The Bush Center Forum on Leadership 2018, Business Insider) alongside many other interviews (CNBC,⁵⁵ Internet

⁵²Jeff Bezos, CEO and Founder, Amazon.

⁵³Sally French, “All the Companies in Jeff Bezos’s Empire, in One (Large) Chart,” MarketWatch, accessed May 1, 2022,

<https://www.marketwatch.com/story/its-not-just-amazon-and-whole-foods-heres-jeff-bezos-enormous-empire-in-one-chart-2017-06-21>.

⁵⁴“Who We Are | Amazon,” US About Amazon, accessed May 1, 2022, <https://www.aboutamazon.com/about-us>.

⁵⁵Jeff Bezos Customer Obsession 1999, accessed May 1, 2022, <https://www.youtube.com/watch?v=vxwjzVW7z5o>.

Association,⁵⁶ Amazon Prime Video India,⁵⁷ etc.) Bezos focuses on customer obsession and the unique ability of Amazon to be connected to customers through a sense of affection. He has made it a point to extend his hand outward to care for the customer, almost as if the customer should return the care out of principal.

In Bezos' strategy to brand himself, he has broken down the barriers that ostracize him as one of the most wealthy people on Earth. Instead, Bezos recognizes his success but is certain to attribute his success to his relatable struggles, the rawness of hard work, and his instinct to care for others. This combination of different rhetoric pushes the public to understand Jeff Bezos through an emotional lens, furthering his ability to speak toward future economic endeavors and use that emotional lens to his advantage.

III. Richard Branson

“Life is short, life should be fun. If the chairman of the company is having fun—if you go to a party and, you know, I let my hair down and I'm the first to be thrown in the swimming pool and I'm not standing in the corner of the room sipping cherry or something—then everybody will have a laugh. Everybody will have it fun [...] play hard, work hard.”⁵⁸ –Richard Branson, 2014

Richard Branson falls somewhere in the mix between Elon Musk and Jeff Bezos' strategies of self branding. Branson has built his empire on a much grander scale than the other two with 49 of his companies using the Virgin name,⁵⁹ though a 2012 Guardian article shined light on about 400 operations that the Virgin investment group is involved in through “tangled web of

⁵⁶Jeff Bezos On Customer Obsession & Long Term Think, accessed May 1, 2022, <https://www.youtube.com/watch?v=ctoEOdJxzE4>.

⁵⁷Fireside Chat with Jeff Bezos | Shah Rukh Khan, Zoya Akhtar | Amazon Prime Video, accessed May 1, 2022, <https://www.youtube.com/watch?v=IJJB7eb-1u0>.

⁵⁸ Work Hard, Play Hard: The Richard Branson Business Plan, accessed May 1, 2022, <https://www.youtube.com/watch?v=g7fbe-oV-X0>.

⁵⁹“The Virgin Group | Virgin,” Virgin.Com, accessed May 1, 2022, <https://virgin.com/about-virgin/virgin-group>.

enterprises owned via a complicated series of offshore trusts and overseas holding companies.”⁶⁰ Branson has a massive number of investments and companies that represent his name, especially those using the Virgin brand. With that, there is immense pressure to have a well established, and frankly likable, personality that backs these companies. To create this brand, Branson promotes his level of success simultaneously alongside his level of external social involvement. The ways in which Branson allocates his money, although at times frivolous (such as purchasing a private island in the British Virgin Islands), is also used in a way to market Virgin’s beliefs through investing in public initiatives and feel-good rhetoric that establishes Branson as charitable and socially conscious.

No, Branson does not run to Twitter to share his favorite memes nor does he tell overly rehearsed stories of his childhood to get a laugh out of the audience. Rather, Branson uses a polished blog and Youtube channel as a catalyst for his heartwarming and rather socially aware discussions on the state of the world. Branson's blog gives viewers an opportunity to get a sense of his constant inward and outward facing reflection, branding the billionaire as in tune with a world that is seemingly distanced from him due to his social standing and immense wealth. Some of the recent titles of Branson’s blog posts include; “Why Business Must End Reliance on Russian Oil and Gas,” “Supporting Refugees With Virgin Atlantic,” “Working Together To Redefine Dyslexia,” “The Dignity of Peace,” and “Investing in The Ocean to Fight The Climate Crisis.” These blog posts are personal statements, signed by Branson himself, and ground the billionaire by expressing vulnerability with the greater public. These blog posts not only give insight for the public to understand Branson’s character in a personable way, but provide a screenshot into the level of intensity Branson experiences his emotions. In a relevant blog post

⁶⁰Richard Wachman, “Virgin Brands: What Does Richard Branson Really Own?,” *The Observer*, January 8, 2012, sec. Business, <https://www.theguardian.com/business/2012/jan/08/virgin-brands-richard-branson-owns>.

titled “Flying to Space Onboard Virgin Galactic” Branson speaks mostly about his emotions towards the expedition. The article begins with a sentimental reflection on his growth from child to adult. He says, “I have dreamt about this moment since I was a child, but nothing could have prepared me for the view of Earth from space. It was magical.” Later he continues, “How you feel when you look down on Earth is impossible to put into words, it’s just indescribable beauty. I can’t wait for you all to get up there.”⁶¹ The form of a blog is unique in that it reads most similarly to a personal bedside journal—vulnerability that reflects the raw emotions that are something so universal to connect us all. In using his blog to express his emotions and general interests in supporting communities in need, Branson validates his success and wealth as being used in a “proper” way instead of solely self indulgent. In branding himself this way, Branson has entered spheres much larger than simply entrepreneurs who are interested in how to be successful but rather creates an opportunity to connect with a demographic that is invested in social change. In expressing his emotions Branson has built up a genuineness that seems to get lost in the discussion of wealth—making his words more easy to receive and believable.

Coupled with his blog, in the past nine months Branson’s activity on his Youtube has picked up immensely. Many of his recent videos depict a variety of his personal adventures through cartoons of himself and friends. The topics of the cartoons include taking a hot air balloon across the Pacific, another video for ballooning across the Atlantic, crossing the Atlantic via ship with record time, and an informational cartoon on Virgin Galactic's strategy for rocket launch. All of which use a Dr. Seuss esk voiceover with childrens rhymes and wit. His Youtube channel greatly removes the brand of money-hungry billionaire from his title and replaces it with

⁶¹“Flying to Space Onboard Virgin Galactic | Virgin,” Virgin.Com, accessed May 1, 2022, <https://virgin.com/branson-family/richard-branson-blog/flying-to-space-onboard-virgin-galactic>.

a taste of innocence. In doing this, Branson has made himself palatable to viewers of all levels, adults as well as children.

Besides Youtube and his blog, Branson also employs the most common form of self branding: interviews and public facing discussions. These forms of self expression are an opportune moment to project the brand that supports the billionaire. In an interview titled “Work Hard, Play Hard: The Richard Branson Business Plan,” the host even points out the impact Branson’s name has on the Virgin brand and asks the following: “Have you become so inextricably linked to the Virgin brand, you’ve almost become a brand in yourself, do worry that when you extricate yourself from Virgin, will Virgin die with you?”⁶² In interviews, Branson is neither an overly rehearsed speaker nor an off-the-cuff wild card, as we’ve seen in the past two examples. Rather, he often utilizes storytelling as his main form of communication in order to tap into a sense of nostalgia and growth to evoke emotions from the audience. These stories tend to have quite a variety of content but are nevertheless driven by the intention of creating an inspiring image for himself.

Many of Branson’s interviews often beg the questions of his success, bravery, and life lessons rather than focusing on the logistics of business and wealth. In the ways that he has projected his life through his blog and Youtube, and to an extent the general use of social media to speak about similar topics reflected in his blog, Branson has prompted many interviews to skew towards understanding his interest in the world around him rather than the world that he is building through his empire of companies. Through these various platforms, Branson has built a brand as an extremely optimistic adventurer, philanthropist, problem solver, and risk taker, often even referencing the many times he almost faced death. Many titles of his interviews reflect this skew towards Branson’s theories on life; “Screw It, Just Do It!: Exclusive Video Interview With

⁶²Work Hard, Play Hard.

Richard Branson,” “Richard Branson: Cheating death in a giant balloon,” “Richard Branson: Lessons on Business and Life,” “Work Hard, Play Hard: The Richard Branson Business Plan,” “Richard Branson: My Approach to Life,” “Sir Richard Branson: Leading With Vision and Taking on Challenges.” These interviews, each amassing over thousands and even hundreds of thousands of views on Youtube alone, continue to promote Branson’s brand as free-spirited, inspiring, and driven by experience and discovery. This branding not only associates the Virgin brand to a sense of self fulfillment but also appeals to a demographic that resonates with this nonconformist and self driven lifestyle. Moreover, Branson has made it quite clear that his goal is not wealth, but rather mass change for the public good. In doing this, Branson validates both his words and actions as entrepreneurs can often be deemed as money driven, making their efforts ingenuine. Branson ironically recognizes the wealth gap that is a product of capitalism in the “Work Hard, Play Hard: The Richard Branson Business Plan” interview where he says, “The fault of capitalism, they [entrepreneurs] sometimes make the kind of money that is completely unnecessary for them to make. In order not to stifel capitalism by imposing, sort of, draconian taxes on those people, it’s up to those people to then use that money to give it back to society in one form or another.” Although Branson is fundamentally part of this issue, still he continues to appeal to the sect of his audience that may see faults within his wealth while simultaneously defending his actions.

Through Youtube, blogging, social media, and interviews, Richard Branson has successfully invaded different pockets of the public by engaging with intense emotions, public action, and feel-good rhetoric that differentiates Branson from other wealthy personnel. The use of his platform in this way has paved a path for Branson to engage in emotional dialogue for future economic endeavors, such as space exploration. If over the years Branson had not built up

a brand in this way, it would set him up for his words to fall short of having much meaning towards the public—in continuing his relevance in this way, Branson now has a foundation that upholds his abilities to tap into public emotion.

Chapter 3: Selling The Space Race

In summary, I have to this point established the ways emotions were properly utilized to analyze the 1960s space race, defined emotions, provided a sense of the importance emotion plays in decision making, culture, marketing, and general acceptance/rejection of ideas, and provided a backdrop of how each billionaire has made themselves culturally relevant as well as the ways in which they have built brands that make their words impactful for certain demographics. This section builds off of this foundation by looking directly at the ways in which Jeff Bezos, Richard Branson, and Elon Musk are speaking towards, and ultimately selling, their space expeditions to the public. In doing this, the billionaires are utilizing emotion to enact a cultural shift that continues to reproduce gross margins of income inequality, environmental degradation, unbalanced power structures, and ultimately, make the richest people in the world richer.

The core of this data are statements made directly by each individual through social media, general online presence such as blogging, and direct quotes from interviews. I have followed two main parameters when gathering data for this section. The first parameter is finding sources pertaining to this time in which space travel is highly attainable through the privatization of space by the wealthy. Although tensions between Virgin Galactic, Blue Origin and SpaceX have existed since the early 2000s, the billionaire space race heavily gained traction in late 2015 due to a public dispute between Elon Musk and Jeff Bezos on Twitter.⁶³ Once this dispute was picked up as a news story and Musk released his plan for an interplanetary transport system at the International Astronautical Congress, the public was more interested in the possibilities of

⁶³ Chris Isidore, "Jeff Bezos Tweets a Snarky Congrats to Elon Musk," CNNMoney, December 22, 2015, <https://money.cnn.com/2015/12/22/news/companies/jeff-bezos-elon-musk-twitter-feud/index.html>.

space travel.⁶⁴ Due to this, I have only considered interviews and conferences that are from early 2016 until present day. Looking at material from this time frame should provide the most accurate representation of what the billionaire space race has morphed into in terms of marketing and engagement with the public. The second parameter I have set is the context in which the billionaires are speaking. I've targeted advertisements, publicized interviews and conferences regarding space exploration, personal online statements, and the general success of the billionaires to focus on the intentionality of projecting towards an audience.

To break down these highly loaded quotes I have established a system to analyze and unpack what each billionaire is attempting to evoke. I have identified four different topics that are heavily tied to an emotional response that each of the billionaires use in order to validate their personal goals within space. These four culturally relevant topics include: Climate change and climate despair, the fear of war and conflict, obsession with growth and the fear of being stagnant, and the need for hope among hopelessness. The first three topics here use fear as the basis for their emotional relevance. The last section, the need for hope, is utilized by all three billionaires in order to insert their personal space companies as a notion of hope for the future. These four topics are the main ways the billionaires present their goals as palatable for the public alongside covering up the everpresent incentive to expand their personal power and wealth.

These four topics, as I will explain, are areas of thought that can be proven to hold weight in society through examining the actions of existing power structures and governmental entities. Moreover, a vast array of research is available that proves the existence of emotions, largely fear, among large demographics in regards to these topics. The presence of emotions is crucial to making each of these topics both relevant and impactful selling points for the journey to space.

⁶⁴International Astronautical Federation, "IAF : International Astronautical Congress (IAC)," accessed May 1, 2022, <https://www.iafastro.org/events/iac/>.

Without the emotional weight, each topic could fall short of having any impact on the public. The following sections will first outline the ways in which the selected topic is present in society, mainly American society, and tends to evoke an emotional response. The following half of each section will then explain the ways each billionaire taps into the emotional response of the topic by altering the topic to validate space exploration.

I. Climate Change/Despair

Jeff Bezos is the one actor that manipulates the preexisting emotional intensity of climate change as a catalyst to plug his space company, Blue Origin. Both Elon Musk and Richard Branson do not address the discourse on climate change in the larger context of the space race.

Although studies on climate change have been in the works for well over a century, the public's grasp on the climate crisis has only very recently been widely accepted. As early as the 1850s, there have been studies that pointed towards human actions as the perpetrator for the change in climate. An American scientist, Eunice Newton Foote, modeled the implications that CO_2 and H_2O in the atmosphere have on generating a warmer climate in 1850, building the base of understanding that the planet will slowly warm as levels of CO_2 rise.⁶⁵ Over the next hundred years, scientists, and recently the public, battled to establish the validity of climate change and the inherent impact humans have on the environment. One of the largest contributors to the global understanding of climate change was the development of the Intergovernmental Panel on Climate Change (IPCC) in 1989 through the United Nations. The IPCC issues a report every six

⁶⁵Amara Huddleston , “Happy 200th Birthday to Eunice Foote, Hidden Climate Science Pioneer” (Climate.gov, October 2021), <https://www.climate.gov/news-features/features/happy-200th-birthday-eunice-foote-hidden-climate-science-pioneer>.

to seven years regarding the updated knowledge on climate change, its effects, and possible responses. In 1997 the Kyoto Protocol, the first global agreement to lower greenhouse gas emissions, was enacted between 41 countries and the European Union.⁶⁶ Since then, climate change has been politicized, denied, accepted, appropriated for personal gain, and ultimately, is a point of tension that often provokes an intense emotional response.

In fact, a survey was conducted by Bath university in partnership with five other universities in 2021 across ten countries to survey the state of climate despair. The study sampled 10,000 people aged between 16 and 25 on their opinions and feelings towards the current state of the climate. The results overwhelmingly point to the topic of climate change resulting in an intense emotional and anxiety ridden state. Nearly 60 percent of respondents stated that they felt either “very worried” or “extremely worried” about climate change, more than 45 percent stated that these feelings impacted their daily lives, 75 percent agreed that the future was frightening, 56 percent felt that humanity is doomed, and two-thirds report feeling the emotions of fear, sadness, and anxiety.⁶⁷ Another large scale survey was conducted in 2021 by the Pew Research Center in 2021 that gauged feelings about climate change.⁶⁸ The study looked at 17 different countries⁶⁹ and participants of all ages reported back with a similar result, if not more telling, than the Bath University study. 72 percent of those surveyed across the 17 countries felt either very or somewhat concerned that global climate change will harm them personally at some point

⁶⁶“What Is the Kyoto Protocol?” (United Nations, n.d.), https://unfccc.int/kyoto_protocol.

⁶⁷“Climate Change: Young People Very Worried - Survey,” BBC News, September 14, 2021, sec. World, <https://www.bbc.com/news/world-58549373>.

⁶⁸ James Bell et al., “In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work,” Pew Research Center’s Global Attitudes Project, September 14, 2021, <https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/>.

⁶⁹ Canada, U.S, Greece, Spain, Italy, France, Germany, UK, Belgium, Netherlands, Sweden, South Korea, Singapore, Japan, Taiwan, New Zealand, Australia.

in their lifetime. This number has sharply increased since 2015 and the concern in these countries is continually growing.

Discussions of climate change have become largely personal and emotionally driven since there is now a collective understanding that climate change is occurring in real time and has the ability to directly affect our personal lives. Knowing the weight that the fear of climate devastation has on many communities, there is an implementation of hope in the larger discussion of climate in relation to the privatization of space.

Jeff Bezos has found ways to profit off the fear of climate change by inserting Blue Origin as the only plausible solution for the future. This highly rehearsed rhetoric that Bezos uses in a wide range of interviews and conferences perfectly balances hope and hopelessness in the same discussion. Bezos follows a formula that first outlines the limitations of living on Earth, then describes the necessity for growth in civilization, and finishes with the only solution if this is the case: become a multiplanetary species through Blue Origin. Ironically, Bezos fails to acknowledge the role Amazon has played in the deterioration of the planet—but that’s a discussion for another paper.⁷⁰ This planetary destruction, caused largely by worlds biggest corporations, including Amazon, is presented as so far gone that Bezos uses the inability to reverse the climate crisis to his advantage. In a “Fireside Chat” with Amazon Prime India in 2020, Bezos taps into the overlap between climate change, the limited resources of Earth, and the singular solution of moving human activity to space:

⁷⁰ Amazon produced 465 million pounds of plastic waste in 2019, with more than 22 million pounds polluting the world's waterways.

“Amazon’s BIG Plastic Pollution Problem,” Beyond Plastics - Working To End Single-Use Plastic Pollution, accessed May 1, 2022, <https://www.beyondplastics.org/amazons-big-plastic-pollution-problem>. In 2020, Amazon emitted 60.64 million metric tons of carbon dioxide which is equivalent to the amount of carbon dioxide 2.3 million people produce in one year.

“Amazon’s Carbon Footprint Grew This Much Last Year,” Fortune, accessed May 1, 2022, <https://fortune.com/2021/06/30/amazon-carbon-footprint-pollution-grew/>.

We have a very small planet, and humanity has gotten very big. Anybody who doesn't believe in climate change—20 years ago maybe you could excuse people for wondering if it's real—today there's so much evidence the people who don't believe in the problem of climate change are really fooling themselves. It's an important problem and one of the ways—there are many things we have to do about climate change—but long term one of the things we need to do [...] is we need to use the near infinite resources of space.⁷¹

Those who recognize climate change as a reality are forced into a corner due to Bezos' framing of the issue. He leads the audience along in a way that states an agreeable fact: climate change is a problem and we have to actively work to curb the effects. The next step, though, leads the audience to understand that the only viable solution is to leave Earth.. The emotional ties that society has to climate change: fear, sadness, and anxiety are all steps to a sense of hopelessness. Bezos recognizes this hopelessness and denies the option of being able to address climate change on Earth, but rather inserts his own business endeavor as a beacon of hope. Bezos meets the public where they stand and uses language that is both diminishing to morale, for example the statement that our planet is now “small” in comparison to humans, but complementing these discouraging images with an attainable solution. In a 2018 conference held by the Economic Club of Washington, D.C. Bezos uses the energy crisis, and more specifically the inability to sustain the consumerist lifestyle we have established for today, to evoke the fear that stems from climate change. He states,

So there's all sorts of problems that we are about to face because, for the first time in our civilizational history going back thousands of years, we're now big compared to the size of the planet. We can fix that problem, but we can fix it in exactly one way: by moving out into the solar system.⁷²

Bezos uses fear tactics similar to those from the focus of the climate crisis in the late 1960s when the book *The Population Bomb*, written by Paul Ehrlich, sounded the alarm for the amount of

⁷¹Fireside Chat with Jeff Bezos | Shah Rukh Khan, Zoya Akhtar | Amazon Prime Video.

⁷²Jeff Bezos, CEO and Founder, Amazon, accessed May 1, 2022, 1:00:22
<https://www.youtube.com/watch?v=zN1PyNwjHpc>.

people occupying Earth.⁷³ Erlich promoted the notion that population was increasing at such a rapid rate globally that if it continued, humans could not sustain current living standards. Erlich's book described the worst case scenarios surrounding food access, possible environmental impacts, and outlined the steps to take in order to curb these impacts. The level of response Ehrlich received from his writing was overwhelming, even contributing to a large governmental call for population control. This fear of the growing rates of human population and the never ending need for resources has persisted into the present day, as Bezos often touches on in many other settings. During the Blue Origin Conference in 2019, Bezos again flirts with this impossibility to sustain life on Earth and the intensity of overgrowth of the human population in recent years;

For all of human history the earth has felt big to us and actually in a really correct sense it has been big. Humanity has been small. That's not true anymore—the earth is no longer big, humanity is big. It seems big to us, but it is finite.⁷⁴

Continually igniting this sense of our planet seemingly shrinking due to human activity taps into the fears of people all across the globe, as we've seen laid out in the Bath University and Pew Research Center surveys. The tactical recognition of climate change, without identifying the ways his own empire of companies has contributed to this issue, is a surface level way to enter a part of the human experience that is highly personal. Since the opportunity to go to space is so far removed from the majority of the world as it is only viable for the world's wealthiest communities, Bezos bases his space expedition off of an issue that is understood, and more importantly felt, globally. The repetition of the same sentiment, that Earth is “small” or “shrinking” and humanity is overbearing for the earth, increases the pressure on the already existent anxieties of the need to address climate change. To tap into the public's emotion using

⁷³ Paul R. Ehrlich, *The Population Bomb* (Cutchogue, New York: Buccaneer Books, 1971).

⁷⁴Going to Space to Benefit Earth (Full Event Replay), accessed May 1, 2022, 4:42
<https://www.youtube.com/watch?v=GO98hGUe6FM>.

culturally relevant topics is to be able to sway the public opinion towards acceptance and even support for the privatization of space.

II. Fear of War and Conflict

Although Jeff Bezos is the only billionaire who uses climate despair to his advantage, Elon Musk appeals to the demographic who falls on the other end of the spectrum but still sees the possibility of human devastation. Musk puts the likelihood of the collapse of society into the hands of war and conflict rather than believing in an environmental collapse. In fact, Musk stated his frustrations in a 2021 Babylon Bee podcast interview about climate change alarmists,

I'm not in the camp of the super alarmist global warming [group]. I don't think we're screwed because of the parts per million of CO2 in the oceans and atmosphere. I think this is actually not a terrible level. [...] Climate change would not be catastrophic for human civilization but it would be very disruptive—humans love living right on the ocean.”⁷⁵

However, Musk has previously stated in a 2017 Rolling Stone interview that “Climate change is the biggest threat that humanity faces this century, except for AI,” he continues, “I keep telling people this. I hate to be Cassandra here, but it's all fun and games until somebody loses a fucking eye. This view [of climate change] is shared by almost everyone who's not crazy in the scientific community.”⁷⁶ Since then, Musk has heavily altered his point of view, pointing a finger at the perpetrators of climate alarmism and downplaying the effects that climate change will have on vulnerable communities across the world (although, he will likely go unaffected in his lifetime due to his socio-economic standing). However, Elon Musk does fuel fear as a business strategy,

⁷⁵Full Interview: Elon Musk Sits Down With The Babylon Bee, accessed May 1, 2022, 43:02 <https://www.youtube.com/watch?v=jvGnw1sHh9M>.

⁷⁶Neil Strauss, “Elon Musk: The Architect of Tomorrow,” Rolling Stone, November 15, 2017, <https://www.rollingstone.com/culture/culture-features/elon-musk-the-architect-of-tomorrow-120850/>.

just using a topic other than climate change. Musk fixates on the fall of humanity due to war in particular.

To no surprise, this is simultaneously a rising fear of many Americans in the recent highly divisive years within American politics and international relations. In order for Musk to make statements igniting the fear of war, he must have culturally relevant grounds to do so or else his alarmist statements would fall flat. In a 2021 National Survey conducted by Zogby Analytics, nearly half (46%) of Americans believe a future civil war is likely.⁷⁷ Elon Musk is speaking to a demographic who is constantly digesting stories of contention such as the capitol riot, Black Lives Matter protests, claims of fake news and fraudulent polling results, a global pandemic, and international invasions of land. The Associated Press puts the points of division today ever so eloquently,

It's no longer just Republican vs. Democrat, or liberal vs. conservative. It's the 1 percent vs. the 99 percent, rural vs. urban, white men against the world. Climate doubters clash with believers. Bathrooms have become battlefields, borders are battle lines. Sex and race, faith and ethnicity...the melting pot seems to be boiling over.⁷⁸

This constant observation, and often participation in, the divisive networks in American politics and globally work to reinforce the fear of war felt across the world. A larger study conducted by the French Think Tank Foundation found that around 50 percent of all respondents from 55 different countries believed that the prospect of “another World War” breaking out in the “coming years” is “likely.”⁷⁹ This study, in comparison to the Zogby Analytics’ American-based poll, pooled respondents from all across the globe and the results varied from only 23 percent of

⁷⁷Zogby, “The Zogby Poll®: Will the US Have Another Civil War?,” accessed May 1, 2022, <https://zogbyanalytics.com/news/997-the-zogby-poll-will-the-us-have-another-civil-war>.

⁷⁸“Divided America,” Divided America, accessed May 1, 2022, <http://www.ap.org/explore/divided-america/>.

⁷⁹“Poll: World War Considered Likely, Democracy Supported in Most Countries,” Democracy Without Borders, February 11, 2022, <https://www.democracywithoutborders.org/21715/poll-world-war-considered-likely-democracy-supported-in-most-countries/>.

respondents from Belarus believing that another World War is likely in the coming years, to 66 percent of respondents from Indonesia believing so (59 percent in the United States). From the same study, 76 percent of respondents were either “worried” or “very worried” of war occurring.⁸⁰

As shown here, this fear is widely present across the globe. Using conflict and war as a reason to go to space has the ability to resonate with a larger pool of people. Elon Musk has successfully located the possibility of war as a point of high emotion and has used this uncertainty as a pillar in his discussion of space exploration. In a 2018 SXSW conference with Jonathan Nolan, a science-fiction screenwriter, Musk discussed SpaceX and the viability of Mars being a home for human life. The necessity, Musk explains, of going to space can be found in the inevitability of human destruction. He states:

If there is likely to be another dark age, which it seems—my guess the fall will be at some point, I'm not predicting we're *about* to enter a dark age, but there's some probability that we will. Particularly if there's a third World War, then we want to make sure that there's enough of a seed of human civilization somewhere else to bring civilization back and perhaps shorten the length of the dark ages. I think that's why it's important to get a self-sustaining base ideally on Mars.⁸¹

Although he successfully sounds the alarm for another “dark age” due to war, he does not stop here. He continues on to depict what life post-World War III would look like. He says,

Musk: “You know, last century we had two massive World Wars, three if you count the Cold War. I think it's unlikely that we'll never have another World War again. There probably will be at some point.”

Nolan: “And if we have another one it would probably be the last.”

Musk: “Yeah, it could just be radioactive rubble, yeah.”

Musk has built a nightmare-esque dreamscape where civilization hits a point of “radioactive rubble.” This statement, said coldly without any sense of satire, is complemented by other

⁸⁰Ibid.

⁸¹ Elon Musk Answers Your Questions! | SXSW 2018, accessed May 1, 2022, 40:50 <https://www.youtube.com/watch?v=kzIUyrcbos>.

instances of Musk suggesting that the collapse of civilization is within the foreseeable future. In a podcast interview with Lex Fridman, a Russian-American computer scientist and AI researcher, Musk continues to give reasons for the inability to continue life on Earth:

But, eventually given enough time, Earth is likely to experience some calamity. That could be something that humans do to themselves, or an external event like [what] happened to the dinosaurs. [...] If none of that happens and somehow, magically, we keep going, then the sun will—the sun is gradually expanding and will engulf the earth.⁸²

The lack of room Musk gives to hope of life on Earth is alarmist and leads listeners to a single conclusion: we should get to space before we no longer have the option to. In other circumstances, Musk has given less detailed predictions of the future and rather sided with a sense of hopelessness. In a Joe Rogan Experience podcast, Musk stated simply: “The universe as we know it will dissipate into a fine mist of cold nothingness eventually. [...] So I think it’s really just about how can we make it last longer.”⁸³ Musk successfully flattens the future for life on Earth to a singular scenario where we “dissipate into a fine mist of cold nothingness.” This strategy for evoking emotions not only promotes an alarmist headspace, but further limits any productive thinking. In one of the most telling speeches where Musk presents the mission of SpaceX in a public conference, showing models, expectations, and limitations of the mission, Musk almost immediately brings in his alarmist reasoning for going to space. He states,

I mean first of all, why go anywhere, right? There are really two fundamental paths history is going to bifurcate along two directions. One path is we stay on Earth forever and then there will be some eventual extinction event. I don't have an immediate doomsday prophecy, but eventually history suggests there will be some doomsday event.

⁸² Elon Musk: SpaceX, Mars, Tesla Autopilot, Self-Driving, Robotics, and AI | Lex Fridman Podcast #252, accessed May 1, 2022, 1:45
https://www.youtube.com/watch?v=DxREm3s1scA&list=PL4jt261bzEh7OWgs1jJ_l30j1u2a30MEt&index=9.

⁸³ Joe Rogan Experience #1169 - Elon Musk, accessed May 1, 2022,
<https://www.youtube.com/watch?v=ycPr5-27vSI>.

The alternative is to become a space-bearing civilization and a multi-planet species, which I hope you would agree is the right way to go.⁸⁴

In a more specific attempt to fuel the fear of life on earth, Elon Musk has gone on record to predict that the rise in artificial intelligence (AI) will be the most likely cause of World War III. In a since deleted tweet from September 4, 2017, Musk said “China, Russia, soon all countries w [with] strong computer science. Competition for AI superiority at national level most likely cause of WW3 imo [in my opinion].”⁸⁵ Predictions of global devastation only enhances the preexisting fear of war that is universally felt. News outlets including The Guardian,⁸⁶ CNN,⁸⁷ Business Insider,⁸⁸ and more have picked up this tweet and shared it by the masses. Youtube creators have echoed Musk’s warning of human devastation and spread his alarmist statements using overwhelming clickbait titles such as: “‘Prepare Yourselves’- Elon Musk's URGENT SHOCKING Warning About WORLD WAR 3!” “Elon Musk Warns Humans About World War 3,” “Elon Musk: World War 3 Warning - The LAST World War Is Coming (2022),” “Elon Musk Just WARNED The WORLD About WW3!” “Elon Musk's Terrifying Warning About World,” “Elon Musk's Terrifying Warning About Future.” These videos have collectively accrued well over a million views, each amassing tens of hundreds of thousands of views each. Musk using Twitter as a platform to spread fear of another World War allows for the projection of his beliefs far beyond the immediate group he is speaking to. Rather, what he has tweeted out can be easily

⁸⁴Elon Musk: SpaceX, Mars, Tesla Autopilot, Self-Driving, Robotics, and AI

⁸⁵Shivali Best, “Elon Musk Claims AI Is the ‘Most Likely Cause of WW3,’” Mail Online, September 4, 2017, <http://www.dailymail.co.uk/~article-4850410/index.html>.

⁸⁶Alex Hern, “Elon Musk Says AI Could Lead to Third World War,” The Guardian, September 4, 2017, sec. Technology, <https://www.theguardian.com/technology/2017/sep/04/elon-musk-ai-third-world-war-vladimir-putin>.

⁸⁷Seth Fiegerman, “Elon Musk: Forget North Korea, AI Will Start World War III,” CNNMoney, September 4, 2017, <https://money.cnn.com/2017/09/04/technology/culture/elon-musk-ai-world-war/index.html>.

⁸⁸Sam Shead, “Elon Musk Said National Competition for AI Could Lead to World War III — Take That with a Pinch of Salt,” Business Insider, accessed May 1, 2022, <https://www.businessinsider.com/elon-musk-thinks-ai-will-be-the-cause-of-world-war-iii-2017-9>.

turned into other forms of consumption such as Youtube videos, news articles, and even retweeting his writing is a way of reproducing his thoughts.

III. Obsession With Growth/Fear of Stasis

A topic that Jeff Bezos discusses in statements of why space is the rightful next step is the innate right of humans to be able to continue to grow as a society. The following section outlines both growth from the economic perspective as well as the value of the growth of material possessions.

Growth, largely a fill in for economic growth, has historically been a fixation of the most powerful regions of the world. For instance, the World Bank, largely influenced by the western gaze, values and ranks countries based on their gross national index (GNI) per capita. GNI is seen as one of the most valued indicators of an economy's 'health' to intergovernmental institutions, economists, and investors alike. Since high income economies, or developed economies, are associated with a higher standard of well being, sanitation, proper education, food security, and health care, the economies that are not growing (and often seen as low income in comparison to economies that are growing) are associated with the antithesis of well being. To fail to grow in the economic realm is ingrained in society as the failure to improve, enhance, and progress towards a common good. The pressure of growth, in this context, is constantly reproduced through language. When speaking about regions around the world that have failed to live up to the standard of growth the west has instilled, the common language that is used is "developing" or "underdeveloped" versus "developed," a constant solute to the duty of the region to continually grow and avoid a state of stagnation. The use of the "developed" countries as a template for countries that have not had as intense rapid development is the suggestion that prosperity is found within change and ultimately, growth. Moreover, institutions such as the

World Bank and the International Monetary Fund (IMF) push the notion that economic growth is inextricably tied to societal growth. According to the Center on Budget and Policy Priorities, “Growth matters for both fiscal stabilization and for raising living standards.”⁸⁹ Through higher powers instilling in society that the growth of GNI and gross domestic product (GDP) are indicators of society’s well being, there is a collective understanding of growth being the ultimate goal.

Capitalist enforced growth does not just occur at a scale as large as growth of economies of nations as a whole, but also is enforced through the amount we consume. In 2022, we are living in a state of consumption that is built off of the slow transition from the innate desire to survive to the enjoyment of surplus materials and wealth. One of the earliest declarations of this transition was in 1889 by Simon Patten, a celebrated economist and Chair member of the Wharton School of Business. He made the powerful statement that America had “entered a new order of consumption” where consumption was inherently linked to prosperity.⁹⁰ He continued to promote the idea that consumption, materials, and possessions were a “sign of her growing moral development.”⁹¹ Once the citizen identified with being a consumer, value and power was attributed to consumption. Not only through wealth, but consumption meant that there was some sense of control over markets. Alfred Marshall, an American economist who introduced the concept of economics to the University of Cambridge in the 1890s, famously stated that the consumer was the “ultimate regulator of demand.”⁹²

⁸⁹Chad Stone, Economic Growth: Causes, Benefits, and Current Limits (Center on Budget and Policy Priorities, April 2017), <https://www.cbpp.org/research/economy/economic-growth-causes-benefits-and-current-limits>.

⁹⁰ Frank Trentmann, “How Humans Became ‘Consumers’: A History,” The Atlantic, November 28, 2016, <https://www.theatlantic.com/business/archive/2016/11/how-humans-became-consumers/508700/>.

⁹¹ Ibid.

⁹² Ibid.

Consumers in the 19th and 20th centuries had the agency to determine what they want the power of their dollar to support, promoting the identity of a consumer as an enabling force of change through boycotts or investments. Consumer leagues spearheaded the movement of “ethical consumerism” in which groups would use their money to enact change within the production stages of goods. Successes of consumer leagues include decent working conditions, free trade, minimum wage, etc. The foundation of consumers being a powerful force has bled into today, but as gross wealth inequalities have been worsening since the 19th century, the power of the individual consumer has begun to fade and the emphasis of material possessions being linked to prosperity has remained dominant.⁹³ The fight for ethical forms of production are now heavily regulated by the state through welfare programs and social services, though many grassroots organizations continue to fight for change in the plethora of issues regarding unethical forms of production. However, the catalyst for change is more commonly through policy and regulation rather than the producer directly responding to the change in behavior of the consumer.

Consumerism is not only a form of investment that represents growth but is also a utility for the regulation, and even improvement of, one’s emotional state. The cultural phenomenon of “retail therapy,” the act of shopping to alleviate negative moods,⁹⁴ is a product of the force fed idea that growth, even growth of material possessions or personal resources, leads to personal benefit and well being. In fact, a 2013 survey found that more than half of Americans (51.8 %)

⁹³ Chad Stone et al., “A Guide to Statistics on Historical Trends in Income Inequality” (Center on Budget and Policy Priorities , January 2020), <https://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality>.

⁹⁴Minjeong Kang and Kim K. P. Johnson, “Retail Therapy: Scale Development,” *Clothing and Textiles Research Journal* 29, no. 1 (January 2011): 3–19, doi:10.1177/0887302X11399424.

engage in retail therapy in some form to alter their mood.⁹⁵ Nearly 20% attribute their shopping to feel better after a bad day at work, 14.6 % participate after receiving bad news, and 12.2% participate in retail therapy after getting in a fight with their partner.⁹⁶

This argument is two-fold: one part relies on the idea that society is distinctly invested in the idea of change, progress, growth, and advancement, as seen in the ways the largest global institutions measure the success of economies, and by default, the well being of nations. To not grow your economy to the point of “developed” is equated to not meeting a better standard of living. The second part of this argument is that the idea of growth through a lens of capitalism is not only a concept that pertains to governments, scholars, and inventors, but something that exists in daily life shown through the ways that access to resources influences our emotions. Since we have evolved to value consumption so much so that it is a point of release for more than half of Americans, the loss of ability to sustain the current level of consumption has the ability to disrupt this pleasure. We have put so much value toward the ability to use an unlimited amount of energy, purchase goods for comfort, and use materials as a source of relief, that the concept of these options no longer being available as humanity will soon have scarce resources is directly a play on emotion. For Bezos to propose that without the possibility of space humanity will lose the ability to grow, which will be outlined next, there is this intense sense of helplessness. If we have learned to value growth in terms of the economy, living standards, and even personal consumption, the suggestion that there is no chance for growth without space is quite alarming.

⁹⁵ “More Than Half (51.8%) of Americans Engage in Retail Therapy,” April 2, 2013, <https://www.businesswire.com/news/home/20130402005600/en/Ebates-Survey-More-Than-Half-51.8->

⁹⁶Ibid.

Jeff Bezos has focused intensely on the relationship between growth, dynamism, and stasis as a selling point for Blue Origin. In a 2018 interview with Personal Finance Insider, Bezos states with a zest of emotion,

First of all, of course, I'm interested in space because I'm passionate about it and I've been studying and thinking about it since I was a five year old boy. But that is not why I'm pursuing this work. I'm pursuing this work [Blue Origin] because I believe if we don't, we will eventually end up with a civilization of stasis, which I find very demoralizing.⁹⁷

The framing that makes this statement strong is the ability for Bezos to preface this work as being larger than a personal endeavor and rather an act of savior for the general public. He suggests that without his work or the ability to expand towards space, civilization will eventually hit a “demoralizing” standstill. This sense of stasis that he continues to touch on in almost every speech regarding Blue Origin stems from the possibility of eventually having to limit growth of society in terms of consumption of energy, development, and generally capping human existence. Later in his Personal Finance Insider interview he goes into the details of why he fears the inability to leave Earth:

Now if you take baseline energy usage, globally across the whole world, and compound it at just a few percent a year for just a few hundred years, you have to cover the entire surface of the earth in solar cells. That's the real energy crisis and it's happening soon. and by soon I mean within just a few hundred years—and so we don't actually have that much time. So what can you do? Well, you can have a life of stasis where you cap how much energy we get to use. [...] Now take the alternative scenario where you move out into the solar system. The solar system can easily support a trillion humans and if we had a trillion humans we would have 1,000 einsteins and a thousand mozarts and unlimited, for all practical purposes, resources, from solar power and so on. [...] by the way, I believe that we'll move all heavy [in that time frame] industry off of Earth and Earth will be zoned residential and light industry and it will basically be a very beautiful planet.⁹⁸

⁹⁷Jeff Bezos Talks Amazon, Blue Origin, Family, And Wealth, accessed May 1, 2022, 38:00 https://www.youtube.com/watch?v=SCpgKvZB_VQ.

⁹⁸Jeff Bezos Talks Amazon, Blue Origin, Family, And Wealth.

Bezos hones in on the fact that in order to sustain the current lifestyle Americans and the western world have become accustomed to, we will need to cover the “entire Earth surface” in solar cells to produce the adequate amount of energy. According to the World Economic Forum, solar panels on 50 percent of the world’s rooftops could produce enough electricity to power the globe.⁹⁹ Compiled research done by Aaron Hardy, editor for Axion Power, found that if we covered 3.27% of the United States in solar we would be able to power the world’s needs for electricity.¹⁰⁰ Though Bezos’s claim is proven to be incorrect and subsequently, borderline alarmist, the thought process is likely true: we *will* have to alter the ways in which we live to properly sustain the planet, whether that be consuming less goods, participating in clean energy alternatives, or capping the amount we produce. Instead of presenting alternative methods of what we can do here, back on Earth, Bezos takes this as an opportunity to instill the idea that life will be unfulfilling if we are to adjust the ways we consume to curb the high demand of resources. He equates altering the way we live as consumers on Earth to stasis, failure to be dynamic, or the lack of progress—all of which have value that is ingrained within society through the ways I have listed (value of growth/development, the role that consumption plays in the majority of American's emotions). Bezos continues to tap into the emotions of the consumer during an interview with The Economic Club of Washington, D.C., presenting a similar sentiment:

Energy usage for a long, long time has been growing at a few percent a year, even as efficiency has grown very fast. We’re always getting more efficient and even though we’re getting more efficient we keep using more energy.[...] so do you want that to continue for your grandchildren or your grandchildren’s grandchildren? In other words, I

⁹⁹“Solar Panels on Half the World’s Roofs Could Meet Its Entire Electricity Demand – New Research,” World Economic Forum, accessed May 1, 2022, <https://www.weforum.org/agenda/2021/10/solar-panels-half-the-world-roofs-electricity-research/>.

¹⁰⁰Aaron, “Powering The Entire World With Solar: Surface Area and Panel Requirements,” Axion Power, January 16, 2020, <https://www.axionpower.com/knowledge/power-world-with-solar/>.

want my grandchildren's grandchildren to be using way more energy per capita than I am, and I would like to see not having a population cap. I wish there were a trillion humans in the solar system. Then there would be a thousand einsteins and a thousand mozarts. But we don't have that long.¹⁰¹

In this interview, there is emphasis on making his argument palatable for his audience. To make the urgency seem relevant and personal, Bezos references the ability for *your* grandchildren to live lives as fulfilled with consumption of energy surpassing the levels of today. This statement is directly related to the idea that high levels of consumption are linked to higher levels of well being, whereas limiting consumption is linked to rationing and the inability to experience a sense of fulfillment. In a Blue Origin talk where Bezos is outlining the whole scope of his space expedition company, he pushes this idea of the decline in the quality of life to the next level, saying:

What happens when unlimited demand meets finite resources? The answer is incredibly simple: rationing. That's the path that we would be on and that path would lead, for the first time, to where your grandchildren and their grandchildren would have worse lives than you. There's good news: the good news is that if we move out into the solar system, for all practical purposes, we have unlimited resources.¹⁰²

This dialogue is pertinent to the discussion around emotion and in particular, fear. Bezos no longer dances around his point that quality of life will significantly deteriorate without the option of space, but rather says it bluntly: "That path would lead, for the very first time, to where your grandchildren and their grandchildren would have worse lives than you." Using terms such as finite resources, rationing, and unlimited resources pushes his agenda of emotion mongering and instilling the dichotomy between fear and hope. In building this story about the future, Bezos places life on Earth in opposition to life in space providing only two possible options for the public to choose from: stay here and quality of life will inevitably deteriorate, or decide to

¹⁰¹Jeff Bezos, CEO and Founder, Amazon.

¹⁰²Going to Space to Benefit Earth (Full Event Replay).

support him in his space endeavor to fund the ideal future for society. Moreover, the connotation that the word “rationing” holds is deeply intertwined with the hardships of war, food, and general lack of access to resources. The examples of ration in a sentence provided by Merriam-Webster are “The soldiers were given their rations for the day,” “During the war, the government rationed gasoline,” and “The government had to ration water during times of drought.”¹⁰³ The idea that Bezos is trying to instill is rooted in the collective understanding that the limitation of resources is reflective of struggle and low quality of living. He proceeds to intertwine freedom into his belief that growth is a granted right of all humans during a Living Legends of Aviation awards ceremony in January 2019. Bezos states, “If somebody is telling you how many children you can have, and how much energy you can use, that doesn't sound like freedom to me.”¹⁰⁴

An essential component of Bezos’ presentation is this idea of the “unlimited.” In response to society's fixation on growth, Bezos is depicting space as a utopian society that doesn't have a limit on consumption—the ultimate environment for capitalism to thrive without facing the backlash of their effects on the environment. Space is the next step for capitalists as it seemingly lessens the blow that big corporations have had on the environment: if we go to space and access the unlimited resources there, the damage that has been done to earth is less severe. Bezos is both distracting from his contribution to the acceleration of the scarcity of resources¹⁰⁵ while also targeting the idea of the “unlimited” as a source of hope after asserting a sense of hopelessness having to do with Earth.

¹⁰³“Definition of Ration,” accessed May 1, 2022, <https://www.merriam-webster.com/dictionary/ration>.

¹⁰⁴Alan Boyle, “Jeff Bezos on Going to Space vs. Making Earth Better: ‘It Shouldn’t Be Either-or,’” GeekWire, January 19, 2019, <https://www.geekwire.com/2019/jeff-bezos-going-space-vs-making-earth-better-shouldnt-either/>.

¹⁰⁵“Amazon Is Destroying Unsold Products by the Thousands,” August 2021, <https://environmentmaine.org/blogs/environment-america-blog/ame/amazon-destroying-unsold-products-t-housands>.

The topic of growth is extremely culturally relevant due to the ways in which society has learned to measure well being and happiness—and Jeff Bezos uses this to his advantage. Finding an emotionally charged topic, such as growth and human’s right to consumption, provides Bezos the opportunity to instill a sense of hopelessness for the future of civilization. He uses the example of your grandchildren having to ration out how much energy they consume, humanity having to instill a population cap, and society failing to progress: a perfect picture of a dystopian world. Using alarmist strategy to promote the success of Blue Origin is a bonafide example of emotional marketing.

IV. For The Good of Mankind

A rhetoric that all three billionaires utilize is language that establishes a sense of care, hope, and light within the context of heavy topics such as the devastation of humanity, environmental degradation, and the limitations of well being. There is a large opportunity within the space exploration market to play into emotions on the opposing end of the spectrum: hope. While creating scenes that emit a sense of hopelessness and appeal to a mass audience who is sharing these ideas of hopelessness, the alarmist rhetoric is only as effective as the ability to pose a solution. In other words, the billionaires would not be getting what they want out of sounding the alarm for the public unless they follow up with painting themselves as a savior within the context of downfall.

Jeff Bezos has largely founded and validated his Blue Origin space expedition through the existence of climate change despair and distress. He has emphasized the limitations of resources, the scale at which our population has grown, and the seemingly shrinking planet. Within this argument that Earth is no longer viable due to its state of degradation, Bezos

continues to sound alarm due to his projection that society is unable to progress any further in these conditions. He creates scenarios of our grandchildren having to ration out how much they consume and monitoring the amount of energy they use while suggesting that future generations will have to limit how many people the earth can hold. He blatantly states that those who live life within these parameters will have “worse lives than you.” Within his moments of fear mongering, Bezos assures his audience that he is doing this work purely out of his personal care for the planet and humanity at large. A recurring sentiment that Bezos shares is that Earth is the best planet in the solar system. In his presentation of Blue Origin, Bezos states,

We've sent robotic probes like this one to all the planets in our solar system [...] Earth is the best one. It is not close. This one is really good. [...] We get to have both. We get to preserve this unique gem of a planet which is completely irreplaceable. There is no plan B. We have to save this planet and we shouldn't give up a future for our grandchildren's grandchildren of dynamism and growth. We can have both.¹⁰⁶

After assuring the public that life on Earth is headed into a moment of decreasing quality of life, Bezos inserts what his company can bring to the table: a solution to save humanity and upkeep progress and well being. Using words such as “unique gem” of a planet inserts this image of fragility into the larger picture—something so fragile that he has the ability to save. He uses this language in an interview conducted after he had completed his first mission to space. Bezos says,

We live on this beautiful planet. We need to take all heavy industry, all polluting industry, and move it into space and keep earth as this beautiful gem of a planet that it is.¹⁰⁷

Framing Earth in this way discredits any accusations of malpractice done by Bezos. He takes the opportunity to clarify that he is proposing to leave earth for the pure intention of, essentially, saving the planet.

¹⁰⁶Going to Space to Benefit Earth (Full Event Replay).

¹⁰⁷ Natalie Musumeci, “Jeff Bezos Wants to Move ‘all Polluting Industry’ into Space to Keep Earth Clean,” Business Insider, accessed May 4, 2022, <https://www.businessinsider.com/jeff-bezos-move-all-polluting-industry-into-space-blue-origin-2021-7>.

An argument can be made that Bezos truly does care about preserving the planet and recognizes the harm that human activity has caused. With that, this section is here to highlight that Bezos' solution to the degradation of the planet is not to establish systems and change on Earth so the outcome can be collectively felt, but rather to provide an alternative route of safety for a select few humans. There is no mention of growing his wealth or empire as this would highlight the motivation for these expeditions, rather the focus is toward selling Blue Origin as an emotionally driven journey to validate a sense of care and honesty. In an interview with Alan Boyle, a representative for Geekwire, during the International Space Development Conference in 2018, Jeff Bezos boils down the two part strategy of hopelessness/hopefulness in one clear sentence. He says, "We will have to leave this planet... and it's going to make this planet better."¹⁰⁸ Vague sweeping statements such as these are sprinkled throughout interviews with Bezos so as to inject an intense shock and then a sense of relief.

Elon Musk also uses a similar strategy of hope and care subsequently to his predictions of collapse, though he inserts a genuine sense of inspiration and excitement into why SpaceX has the ability to improve the lives of mankind. Musk explains lightheartedly the true goal behind SpaceX and traveling to space with ease in an interview at the SXSW conference:

We wanted to get the public excited about the possibility of something new happening in space—of the space frontier getting pushed forward. The goal of this was to inspire you and make you believe again. Just as people believed in the Apollo era that anything is possible.¹⁰⁹

In a tone similar to that of a Christmas movie, Musk uses terms such as "inspire," "believe," and "excited." Each term promotes an atmosphere of faith, trust and hope to back his actions and to grant Musk the power of instilling these optimistic traits. In a stark contrast to his series of

¹⁰⁸Boyle, "Jeff Bezos on Going to Space vs. Making Earth Better."

¹⁰⁹Elon Musk Answers Your Questions! | SXSW 2018.

predictions of a new “dark ages” or World War III, Musk uses SpaceX as not only a savior for life on Earth, but a savior of morale. In his Babylon Bee interview he regurgitates a similar notion:

Anyway, the point is that we want to have an inspiring and exciting future. And one where we are a space-bearing civilization and multi-planet species, I think is a much more exciting and inspiring future than one where we are forever confined to Earth and never go back to the moon and the moon was our high water mark and that’s all we ever did. That's depressing.¹¹⁰

In order to assert his work as valuable, Musk creates an opposition between staying on Earth and leaving Earth where they are intrinsically opposite from one another and one outcome is inspiring where the other is limiting. Since Musk has built up his reasoning for leaving Earth as a way to avoid the devastation of humanity, the mere proposal of space exploration is a step in providing the world with hope for the future. In his presentation of SpaceX, Musk repeats this idea of excitement once again:

It was really more from the standpoint of what are the things that need to happen in order for the future to be an exciting and inspiring one. And I really think there is a fundamental difference, if you sort of look into the future, between a humanity that is a space-bearing civilization, that’s out there, exploring the stars, on multiple planets, and I think that’s really exciting, compared with one where we are forever confined to earth until some eventual extinction event.¹¹¹

And once again in the Joe Rogan Experience Podcast:

There needs to be things that make you look forward to waking up in the morning. You wake up in the morning, you look forward to the day, look forward to the future. In a future where we are a space-bearing civilization and out there amongst the stars, I think that’s very exciting. That is a thing we want. Whereas if you knew we would not be a

¹¹⁰ *Full Interview: Elon Musk Sits Down With The Babylon Bee*. Accessed May 1, 2022, 49:19. <https://www.youtube.com/watch?v=jvGnw1sHh9M>.

¹¹¹ *Making Humans a Multiplanetary Species*, accessed May 1, 2022, 13:16 https://www.youtube.com/watch?v=H7Uyfqj_TE8&list=PL4jt261bzEh7OWgs1jJ_l30j1u2a30MEt&index=1.

space bearing civilization but forever confined to Earth: this would not be a good future. That would be very sad.¹¹²

The notion of excitement is a fixation of Elon Musk when talking about the future. Providing context of hope not only allows Musk to use his work, his space company, and his own self as a selling point that fills a gap in the market, but orients the public to understand that his work is out of the pure urge for an exciting future. Let us refer back to a quote about what emotional branding :

The engagement of consumers in a deep, long-term, intimate emotional connection with the brand, which is beyond the benefit based satisfaction, and which creates a special trust based relationship for the development of a holistic emotional experience.¹¹³

Elon Musk, through his technique of first removing all sense of hope by his predictions of the unstoppable devastation of the future, founds the basis for the need of hope. This is step one to emotional branding: create a long term engagement. Since he injects hopelessness into the conversation, he inserts space exploration as a vehicle for hope, insisting on the public to trust him in his space endeavor. Although Musk speaks towards the ways in which SpaceX would operate logistically, this is not a universal language among people. Rather, fear, hope, and trust are communally understood concepts that the world is able to relate to and engage in, as we've seen in referenced studies throughout this paper. Using these emotions to further his work have the largest potential for support.

To this point, Richard Branson has yet to use rhetoric that fits into any of the three topics I have identified as fear mongering. He often speaks about climate change outside of the discussion of space travel, even offering \$25 million dollars to the first person to figure out how to remove carbon from the atmosphere in 2007.¹¹⁴ He has participated in protests and active work

¹¹²Joe Rogan Experience #1169 - Elon Musk.

¹¹³Akgün, Koçoğlu, and İmamoğlu, "An Emerging Consumer Experience."

¹¹⁴Jeremy Lovell, "Virgin's Branson Offers \$25 Mln Global Warming Prize," Reuters, February 9, 2007, sec. Science & Space, <https://www.reuters.com/article/us-climate-prize-idUSL0944223320070209>.

against international wars including Vietnam,¹¹⁵ Ukraine,¹¹⁶ and Iraq.¹¹⁷ Instead of curating a sense of panic around large topics of climate change and war, Branson actively has participated in the mitigation and confrontation of these problems. Branson does not use fear mongering to create the space for his hopeful rhetoric, but rather uses his hopeful tone as the entire base of his space expedition. Whether or not this is a successful tactic is a larger discussion to be had at another time, although it is important to recall that Branson's net worth is substantially less than that of his billionaire counterparts. This being said, maybe fear mongering is a form of marketing that brings in a larger income?

Regardless, Branson has set his intentions of space travel around accessibility, unity, and equity and a feel-good narrative. The basis of Branson's space exploration through Virgin Galactic is centered around founding a new platform of life that funds positive work back on earth. In one of Virgin Galactic's ad series on youtube, Branson narrates as the video cuts together clips of the gradient sunset, stoic portraits of himself, and a montage of rocket ships suspended above Earth. In the narration of this ad, the second sentence Branson states is:

There are only a handful of people in the world who have been to space and we will change that. Space should be for everyone. We will change the world for good through access to space.¹¹⁸

Though the recognition of inequity is minimal, Branson attempts to project language often used in human rights discourse and focus on the role of "access" in his work. In recent years, the term

¹¹⁵“Protesting from the Page to the Streets | Virgin,” Virgin.Com, accessed May 1, 2022,

<https://virgin.com/branson-family/richard-branson-blog/protesting-from-the-page-to-the-streets>.

¹¹⁶Virgin Group, “Sir Richard Branson speaks out in support of Ukraine's sovereignty,” accessed May 1, 2022,

<https://www.prnewswire.com/ru/press-releases/sir-richard-branson-speaks-out-in-support-of-ukraine-s-sovereignty-804895284.html>.

¹¹⁷“How We Tried to Stop the Iraq War | Virgin,” Virgin.Com, accessed May 1, 2022,

<https://virgin.com/branson-family/richard-branson-blog/how-we-tried-stop-iraq-war>.

¹¹⁸The Spaceline For Earth, accessed May 1, 2022,

<https://www.youtube.com/watch?v=NmXVUunC5io&list=PL4jt261bzEh7oqGx3WDEBkqcRvuBpt4X8&index=2>.

“access” has evolved into a buzzword that embodies the notion of awareness from an actor with power. An article surrounding accessibility that was published in and touches on the conceptual fuzziness of the term. In the article, “Accessibility Matters: a review of policy issues and arenas” by Dr. Marc Wolfram, “access” in its usage is analyzed,

What should be retained from it [the debate on access], however, is the basic understanding that ‘accessibility’ is usually seen to combine two types of factors: Some that express the objective of *reaching a destination*, and others that account for the *impedance* or *costs* related to getting there. ‘Accessibility’, it seems, articulates a specific balance between contrasting objectives, namely to satisfy needs and to minimize costs.¹¹⁹

To appropriate the term “access” in this context of a classist expedition, which cost \$450,000 to board a Virgin Galactic flight, is filled with empty promises and surface level intentions. When the claim to “make space accessible” is followed by activity that is inherently opposite, the use of the term is simply to trigger an emotional response from an audience. In a video of the Virgin Galactic crew, including Branson, after their landing of their trip into space, Branson reiterates this notion of access in a talk with reporters:

Imagine a world where people of all ages, all backgrounds from anywhere, of any gender, or any ethnicity have equal access to space. And they will in turn, I think, inspire us back here on Earth.¹²⁰

Branson uses space travel as an overarching act that, through a sense of escapism, has the ability to draw people together and become a social utopia. The existing sentiment regarding space critiques that space exploration is an exertion of power that does not consider the wider good. Through Branson’s dialogue, he compensates for this lack of consideration of humanity at large

¹¹⁹Marc Wolfram, “Where Accessibility Matters: A Review of Policy Issues and Arenas” (ResearchGate, 2008), https://www.researchgate.net/profile/Marc-Wolfram/publication/296331128_Where_accessibility_matters_A_review_of_policy_issues_and_arenas/links/56d454ee08aefd177b0f49c1/Where-accessibility-matters-A-review-of-policy-issues-and-arenas.pdf

¹²⁰“Flying to Space Onboard Virgin Galactic | Virgin,” Virgin.Com, accessed May 1, 2022, <https://virgin.com/branson-family/richard-branson-blog/flying-to-space-onboard-virgin-galactic>.

by using terminology such as “access.” In a 2019 Keynote address at the Air, Space, and Cyber Conference, Branson drills the idea of access into the public yet again. He says, “Together we can make space accessible in a way that has only been dreamt of before now. And by doing that, we can truly bring positive change to life on Earth.”¹²¹

The emotions around access and inequality, especially in the United States, are widely felt. According to a 2021 survey with over a thousand participants across all 50 states, only 40 percent of Americans believe that racial minorities in the United States have equal job opportunities to white people.¹²² The same study also found that there is an increasing support among white people for affirmative action programs for racial minorities. In a Pew Research Center study, 69 percent of Democrats believe the country has not done enough to give equal rights to women (26 percent of republicans believe that there is more work to do).¹²³ In another Pew Research Center study in 2017, Americans across the United States expressed their different feelings towards a variety of religious groups, finding more “cold” feelings toward Muslims and “warm” feelings towards Jews.¹²⁴

In sum, a large portion of Americans have distinctly recognized the obvious unequal treatment of different races, genders, and religions within the United States. This inequality is followed by a widely felt necessity for change. Branson inserts his work as an opportunity to

¹²¹Richard Branson, Keynote Address, 2019 Air, Space & Cyber Conference, accessed May 1, 2022, <https://www.youtube.com/watch?v=oAXRqWMF77c&list=PL4jt261bzEh7oqGx3WDEBkqcRvuBpt4X8&index=6>.

¹²²Gallup Inc, “Americans’ Confidence in Racial Fairness Waning,” Gallup.Com, July 30, 2021, <https://news.gallup.com/poll/352832/americans-confidence-racial-fairness-waning.aspx>.

¹²³Juliana Menasce Horowitz, Kim Parker, and Renee Stepler, “Wide Partisan Gaps in U.S. Over How Far the Country Has Come on Gender Equality,” Pew Research Center’s Social & Demographic Trends Project, October 18, 2017, <https://www.pewresearch.org/social-trends/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/>.

¹²⁴Jessica Hamar Martínez, “Americans Express Increasingly Warm Feelings Toward Religious Groups,” Pew Research Center’s Religion & Public Life Project, February 2017, <https://www.pewresearch.org/religion/2017/02/15/americans-express-increasingly-warm-feelings-toward-religious-groups/>.

create this change and assemble a setting in which this “accessibility” can occur. Regardless of using fear, Branson is still reproducing highly emotional topics and presenting “solutions” of equity and access in order to promote his personal work.

All three billionaires use hope in ways that position themselves as a solution to a greater issue, whether it is in response to the landscape of hopelessness they built or simply in response to the current state of society. Hope, as packaged in the context of the most wealthy people on the planet, has the opportunity to resonate in more intense ways as there is an association between money and the ability to produce change.

Conclusion

The billionaire space race is a foundational piece in the discussion of current events that can be turned to for understanding culture, capitalism, wealth inequalities, climate change, fear, hope, growth and our future. This thesis was a product of a personal fixation on the billionaire space race as something so drastically far removed from myself but simultaneously it seemed to be a portal into the warped realities of the world we live in. Something so distinct about the act of the richest people going to space, regardless of their reasoning, is that it became a forum for people across the globe to weigh in on the reasons behind their support or dismissal of space exploration. Opinion pieces in the news are splattered across the internet, some of which I found to be quite clever, honestly. A personal favorite is: “Billionaire space race: the ultimate symbol of capitalism’s flawed obsession with growth.”¹²⁵ Alternatively, there are titles such as: “The billionaires’ space race benefits the rest of us. Really.”¹²⁶ Regardless of the stance of the public, one idea is constant: the billionaire space race triggers an emotional response.

Investigating this theory meant two things: determining that emotions are a viable method of research and completely immersing myself in the rhetoric of Bezos, Musk and Branson in order to dissect their dialogue. Throughout this thesis, emotion is established as a practical approach to not only understanding events, but culture. Simultaneously, the language of Bezos, Musk, and Branson in the context of the billionaire space race can be used to investigate the current day culture.

¹²⁵ Tim Jackson, “Billionaire Space Race: The Ultimate Symbol of Capitalism’s Flawed Obsession with Growth,” *The Conversation*, accessed May 4, 2022, <http://theconversation.com/billionaire-space-race-the-ultimate-symbol-of-capitalisms-flawed-obsession-with-growth-164511>.

¹²⁶ “Opinion | The Billionaires’ Space Race Benefits the Rest of Us. Really.,” *Washington Post*, accessed May 4, 2022, <https://www.washingtonpost.com/opinions/2021/07/13/billionaires-space-race-benefits-rest-us-really/>.

It is largely understood that the actions of the wealthiest people on the planet have the ability to affect the public in many tangible ways. These impacts include the state of the economy, access to jobs, levels of pollution, and governmental regulations. This thesis works to address a less tangible effect that the billionaires can have on the public: the dictation of our emotional state through the understanding of culture. To ignore the presence of emotions is to allow the wealthiest people on the planet to infiltrate the public's emotional well being. Capitalism does much more than dictate how much we get paid, where we work, and what we purchase, but it has the ability to influence how we feel about the world. In order to have a more impactful sense of agency over the individual, there is a necessity to understand and unpack the intentionality behind fear mongering and other actions that draw out intense emotions from the public. This power dynamic between the vast majority of the world, the 98 percent of the population that will never relate to the power and wealth accrued by Bezos, Musk, and Branson, and the billionaires themselves is an evolving dynamic that must be intensely analyzed. If our emotions have the ability to fuel the wealth of these three men, then we inherently have the power within ourselves to command the success or decline of them as well.

Bibliography

- Aaron. "Powering The Entire World With Solar: Surface Area and Panel Requirements." *Axion Power*, January 16, 2020.
<https://www.axionpower.com/knowledge/power-world-with-solar/>.
- Akgün, Ali Ekber, İpek Koçoğlu, and Salih Zeki İmamoğlu. "An Emerging Consumer Experience: Emotional Branding." *Procedia - Social and Behavioral Sciences*, The Proceedings of 9th International Strategic Management Conference, 99 (November 6, 2013): 503–8. doi:10.1016/j.sbspro.2013.10.519.
- Statista. "Amazon Annual Net Income 2021." Accessed May 1, 2022.
<https://www.statista.com/statistics/266288/annual-et-income-of-amazoncom/>.
- "Amazon Is Destroying Unsold Products by the Thousands," August 2021.
<https://environmentmaine.org/blogs/environment-america-blog/ame/amazon-destroying-unsold-products-thousands>.
- Beyond Plastics - Working To End Single-Use Plastic Pollution. "Amazon's BIG Plastic Pollution Problem." Accessed May 1, 2022.
<https://www.beyondplastics.org/amazons-big-plastic-pollution-problem>.
- Fortune. "Amazon's Carbon Footprint Grew This Much Last Year." Accessed May 1, 2022. <https://fortune.com/2021/06/30/amazon-carbon-footprint-pollution-grew/>.
- Andrade, Eduardo B., and Dan Ariely. "The Enduring Impact of Transient Emotions on Decision Making." *Organizational Behavior and Human Decision Processes* 109, no. 1 (May 1, 2009): 1–8. doi:10.1016/j.obhdp.2009.02.003.
- Bell, James, Jacob Poushter, Moira Fagan, and Christine Huang. "In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work." *Pew Research Center's Global Attitudes Project*, September 14, 2021.
<https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/>.
- Best, Shivali. "Elon Musk Claims AI Is the 'Most Likely Cause of WW3.'" *Mail Online*, September 4, 2017.
<http://www.dailymail.co.uk/~/article-4850410/index.html>.
- Boehner, Kirsten, Rogério DePaula, Paul Dourish, and Phoebe Sengers. "How Emotion Is Made and Measured." *International Journal of Human-Computer Studies*, Evaluating affective interactions, 65, no. 4 (April 1, 2007): 275–91. doi:10.1016/j.ijhcs.2006.11.016.

- Boyle, Alan. “Jeff Bezos on Going to Space vs. Making Earth Better: ‘It Shouldn’t Be Either-or.’” *GeekWire*, January 19, 2019.
<https://www.geekwire.com/2019/jeff-bezos-going-space-vs-making-earth-better-shouldnt-either/>.
- Burkitt, Ian. “SOCIAL RELATIONSHIPS AND EMOTIONS.” *Sociology* 31, no. 1 (1997): 37–55. <https://www.jstor.org/stable/42855768>.
- Cabanac, Michel. “What Is Emotion?” *Behavioural Processes* 60, no. 2 (November 1, 2002): 69–83. doi:10.1016/S0376-6357(02)00078-5.
- Carnevale, Peter J. D, and Alice M Isen. “The Influence of Positive Affect and Visual Access on the Discovery of Integrative Solutions in Bilateral Negotiation.” *Organizational Behavior and Human Decision Processes* 37, no. 1 (February 1, 1986): 1–13. doi:10.1016/0749-5978(86)90041-5.
- CHAD STONE, DANILO TRISI, ARLOC SHERMAN, and JENNIFER BELTRÁN. “A Guide to Statistics on Historical Trends in Income Inequality.” Center on Budget and Policy Priorities , January 2020.
<https://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality>.
- BBC News. “Climate Change: Young People Very Worried - Survey,” September 14, 2021, sec. World. <https://www.bbc.com/news/world-58549373>.
- “Definition of RATION.” Accessed May 1, 2022.
<https://www.merriam-webster.com/dictionary/ration>.
- Dennis P. Culhane and Seongho An. “ Estimated Revenue of the Nonprofit Homeless Shelter Industry in the United States: Implications for a More Comprehensive Approach to Unmet Shelter Demand.” *Taylor & Francis Group*, March 2021. doi:<https://doi.org/10.1080/10511482.2021.1905024>.
- Divided America. “Divided America.” Accessed May 1, 2022.
<http://www.ap.org/explore/divided-america/>.
- Döpfner, Mathias. “Jeff Bezos Reveals What It’s like to Build an Empire — and Why He’s Willing to Spend \$1 Billion a Year to Fund the Most Important Mission of His Life.” *Business Insider*. Accessed May 1, 2022.
<https://www.businessinsider.com/jeff-bezos-interview-axel-springer-ceo-amazon-trump-blue-origin-family-regulation-washington-post-2018-4>.
- Ehrlich, Paul R. *The Population Bomb*. Cutchogue, New York: Buccaneer Books, 1971.

- Elon Musk Answers Your Questions! | SXSW 2018*. Accessed May 1, 2022.
<https://www.youtube.com/watch?v=kzIUyrccbos>.
- Elon Musk Monologue - SNL*. Accessed May 3, 2022.
https://www.youtube.com/watch?v=fCF8I_X1qKI.
- Elon Musk: SpaceX, Mars, Tesla Autopilot, Self-Driving, Robotics, and AI | Lex Fridman Podcast #252*. Accessed May 1, 2022.
https://www.youtube.com/watch?v=DxREm3s1scA&list=PL4jt261bzEh7OWgs1jJ_130j1u2a30MEt&index=9.
- Federation, International Astronautical. "IAF : International Astronautical Congress (IAC)." Accessed May 1, 2022. <https://www.iafastro.org/events/iac/>.
- Fiegerman, Seth. "Elon Musk: Forget North Korea, AI Will Start World War III." *CNNMoney*, September 4, 2017.
<https://money.cnn.com/2017/09/04/technology/culture/elon-musk-ai-world-war/index.html>.
- Fireside Chat with Jeff Bezos | Shah Rukh Khan, Zoya Akhtar | Amazon Prime Video*. Accessed May 1, 2022. <https://www.youtube.com/watch?v=IJJB7eb-1u0>.
- Virgin.com. "Flying to Space Onboard Virgin Galactic | Virgin." Accessed May 1, 2022.
<https://virgin.com/branson-family/richard-branson-blog/flying-to-space-onboard-virgin-galactic>.
- "Foreign Relations of the United States, 1961–1963, Volume VI, Kennedy-Khrushchev Exchanges - Office of the Historian." Accessed May 1, 2022. <https://history.state.gov/historicaldocuments/frus1961-63v06/d8>.
- Forum on Leadership | Bush Center. "Forum on Leadership | Bush Center." Accessed May 1, 2022.
<http://www.bushcenter.org/exhibits-and-events/events/2018/04/forum-on-leadership.html>.
- French, Sally. "All the Companies in Jeff Bezos's Empire, in One (Large) Chart." *MarketWatch*. Accessed May 1, 2022.
<https://www.marketwatch.com/story/its-not-just-amazon-and-whole-foods-heres-jeff-bezos-enormous-empire-in-one-chart-2017-06-21>.
- Full Interview: Elon Musk Sits Down With The Babylon Bee*. Accessed May 1, 2022.
<https://www.youtube.com/watch?v=jvGnw1sHh9M>.

- Statista. “Global Twitter User Age Distribution 2021.” Accessed May 1, 2022.
<https://www.statista.com/statistics/283119/age-distribution-of-global-twitter-users/>.
- Going to Space to Benefit Earth (Full Event Replay)*. Accessed May 1, 2022.
<https://www.youtube.com/watch?v=GQ98hGUe6FM>.
- Group, Virgin. “Sir Richard Branson speaks out in support of Ukraine’s sovereignty.” Accessed May 1, 2022.
<https://www.prnewswire.com/ru/press-releases/sir-richard-branson-speaks-out-in-support-of-ukraine-s-sovereignty-804895284.html>.
- Handberg, Roger. “Dual-Use as Unintended Policy Driver: The American Bubble.” In *Societal Impact of Spaceflight*, 353–68. Washington, D.C.: NASA, 2007.
<https://history.nasa.gov/sp4801-chapter18.pdf>.
- Hern, Alex. “Elon Musk Says AI Could Lead to Third World War.” *The Guardian*, September 4, 2017, sec. Technology.
<https://www.theguardian.com/technology/2017/sep/04/elon-musk-ai-third-world-war-vladimir-putin>.
- Horowitz, Juliana Menasce, Kim Parker, and Renee Stepler. “Wide Partisan Gaps in U.S. Over How Far the Country Has Come on Gender Equality.” *Pew Research Center’s Social & Demographic Trends Project*, October 18, 2017.
<https://www.pewresearch.org/social-trends/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/>.
- “How Richard Branson Has Been Funding Virgin Galactic – Parabolic Arc.” Accessed May 1, 2022.
<http://www.parabolicarc.com/2015/01/26/richard-branson-funding-virgin-galactic/>.
- Virgin.com. “How We Tried to Stop the Iraq War | Virgin.” Accessed May 1, 2022.
<https://virgin.com/branson-family/richard-branson-blog/how-we-tried-stop-iraq-war>.
- Huddleston, Amara. “Happy 200th Birthday to Eunice Foote, Hidden Climate Science Pioneer.” Climate.gov, October 2021.
<https://www.climate.gov/news-features/features/happy-200th-birthday-eunice-foote-hidden-climate-science-pioneer>.
- Imbert, Fred. “Twitter Shares Close up 27% after Elon Musk Takes 9% Stake in Social Media Company.” *CNBC*, April 4, 2022.

- <https://www.cnn.com/2022/04/04/twitter-shares-soar-more-than-25percent-after-elon-musk-takes-9percent-stake-in-social-media-company.html>.
- Inc, Gallup. "Americans' Confidence in Racial Fairness Waning." *Gallup.Com*, July 30, 2021.
- <https://news.gallup.com/poll/352832/americans-confidence-racial-fairness-waning.aspx>.
- Isidore, Chris. "Jeff Bezos Tweets a Snarky Congrats to Elon Musk." *CNNMoney*, December 22, 2015.
- <https://money.cnn.com/2015/12/22/news/companies/jeff-bezos-elon-musk-twitter-feud/index.html>.
- Jackson, Tim. "Billionaire Space Race: The Ultimate Symbol of Capitalism's Flawed Obsession with Growth." *The Conversation*. Accessed May 4, 2022.
- <http://theconversation.com/billionaire-space-race-the-ultimate-symbol-of-capitalisms-flawed-obsession-with-growth-164511>.
- Jeff Bezos, 2001 Academy Summit*. Accessed May 1, 2022.
- https://www.youtube.com/watch?v=b_dSGjOPixs.
- Jeff Bezos, CEO and Founder, Amazon*. Accessed May 1, 2022.
- <https://www.youtube.com/watch?v=zN1PyNwjHpc>.
- Jeff Bezos On Customer Obsession & Long Term Think*. Accessed May 1, 2022.
- <https://www.youtube.com/watch?v=ctoEOdJxzE4>.
- Jeff Bezos Talks Amazon, Blue Origin, Family, And Wealth*. Accessed May 1, 2022.
- https://www.youtube.com/watch?v=SCpgKvZB_VQ.
- Joe Rogan Experience #1169 - Elon Musk*. Accessed May 1, 2022.
- https://www.youtube.com/watch?v=ycPr5-27vSI&list=PL4jt261bzEh7OWgs1jJ_l30j1u2a30MEt&index=7.
- Kang, Minjeong, and Kim K. P. Johnson. "Retail Therapy: Scale Development." *Clothing and Textiles Research Journal* 29, no. 1 (January 2011): 3–19.
doi:10.1177/0887302X11399424.
- Katz, Jack. *How Emotions Work*. Chicago, Ill.: University of Chicago Press, 2001.
- Lovell, Jeremy. "Virgin's Branson Offers \$25 Mln Global Warming Prize." *Reuters*, February 9, 2007, sec. Science & Space.
- <https://www.reuters.com/article/us-climate-prize-idUSL0944223320070209>.
- Making Humans a Multiplanetary Species*. Accessed May 1, 2022.
- https://www.youtube.com/watch?v=H7Uyfqj_TE8&list=PL4jt261bzEh7OWgs1jJ_l30j1u2a30MEt&index=1.

Marc, Gobe. *Emotional Branding*. Allworth, 2010.

<https://www.simonandschuster.com/books/Emotional-Branding/Marc-Gobe/9781581156720>.

Martínez, Jessica Hamar. “Americans Express Increasingly Warm Feelings Toward Religious Groups.” *Pew Research Center’s Religion & Public Life Project*, February 2017.

<https://www.pewresearch.org/religion/2017/02/15/americans-express-increasingly-warm-feelings-toward-religious-groups/>.

“More Than Half (51.8%) of Americans Engage in Retail Therapy,” April 2, 2013.

<https://www.businesswire.com/news/home/20130402005600/en/Ebates-Survey-More-Than-Half-51.8-of-Americans-Engage-in-Retail-Therapy%E2%80%9463.9-of-Women-and-39.8-of-Men-Shop-to-Improve-Their-Mood>.

Musk, Elon. *Twitter Post*, June 3, 2020.

<https://twitter.com/elonmusk/status/1276418907968925696>.

———. *Twitter Post*, April 6, 2021.

<https://twitter.com/elonmusk/status/1387172830094233601>.

———. *Twitter Post*, March 3, 2022.

<https://twitter.com/elonmusk/status/1507259709224632344>.

Musumeci, Natalie. “Jeff Bezos Wants to Move ‘all Polluting Industry’ into Space to Keep Earth Clean.” *Business Insider*. Accessed May 4, 2022.

<https://www.businessinsider.com/jeff-bezos-move-all-polluting-industry-into-space-blue-origin-2021-7>.

“NASA | History - Sputnik.” Accessed May 1, 2022.

<https://history.nasa.gov/sputnik.html>.

Institute for Policy Studies. “Nine Things to Buy with \$5 Billion Instead of a Border Wall,” December 7, 2018.

<https://ips-dc.org/nine-things-to-buy-with-5-billion-instead-of-a-border-wall/>.

Nussbaum, Martha Craven. *Upheavals of Thought: The Intelligence of Emotions*. 8. print. Cambridge: Cambridge University Press, 2008.

Washington Post. “Opinion | The Billionaires’ Space Race Benefits the Rest of Us. Really.” Accessed May 4, 2022.

<https://www.washingtonpost.com/opinions/2021/07/13/billionaires-space-race-benefits-rest-us-really/>.

Palmer, Annie. “Jeff Bezos Says He Spends More on Climate than Space Travel and Recounts the Time He Played an Alien.” *CNBC*, November 15, 2021.

<https://www.cnbc.com/2021/11/15/jeff-bezos-says-he-spends-more-on-climate-than-space-travel.html>.

Democracy Without Borders. “Poll: World War Considered Likely, Democracy Supported in Most Countries,” February 11, 2022.

<https://www.democracywithoutborders.org/21715/poll-world-war-considered-likely-democracy-supported-in-most-countries/>.

Virgin.com. “Protesting from the Page to the Streets | Virgin.” Accessed May 1, 2022.

<https://virgin.com/branson-family/richard-branson-blog/protesting-from-the-page-to-the-streets>.

Forbes. “Real Time Billionaires.” Accessed May 3, 2022.

<https://www.forbes.com/real-time-billionaires/>.

Richard Branson, *Keynote Address, 2019 Air, Space & Cyber Conference*. Accessed May 1, 2022.

<https://www.youtube.com/watch?v=oAXRqWMF77c&list=PL4jt261bzEh7oqGx3WDEBkqcRvuBpt4X8&index=6>.

Shed, Sam. “Elon Musk Said National Competition for AI Could Lead to World War III — Take That with a Pinch of Salt.” *Business Insider*. Accessed May 1, 2022.

<https://www.businessinsider.com/elon-musk-thinks-ai-will-be-the-cause-of-world-war-iii-2017-9>.

Sheetz, Michael. “Elon Musk’s SpaceX Raised \$850 Million, Jumping Valuation to about \$74 Billion.” *CNBC*, February 17, 2021.

<https://www.cnbc.com/2021/02/16/elon-musks-spacex-raised-850-million-at-419point99-a-share.html>.

Shreve, Bradley G. “The Us, The Ussr, And Space Exploration, 1957-1963.”

International Journal on World Peace 20, no. 2 (2003): 67–83.

<https://www.jstor.org/stable/20753399>.

Simonsohn, Uri. “Weather To Go To College.” *The Economic Journal* 120, no. 543 (March 1, 2010): 270–80. doi:10.1111/j.1468-0297.2009.02296.x.

World Economic Forum. “Solar Panels on Half the World’s Roofs Could Meet Its Entire Electricity Demand – New Research.” Accessed May 1, 2022.

<https://www.weforum.org/agenda/2021/10/solar-panels-half-the-world-roofs-electricity-research/>.

- “Space Economy: 4 Trends to Watch in 2022.” Accessed May 1, 2022.
<https://www.uschamber.com/space/space-economy-4-trends-to-watch-in-2022>.
- National Archives. “Space Exploration,” August 15, 2016.
<https://www.archives.gov/research/alic/reference/space-timeline.html>.
- Stone, Chad. *Economic Growth: Causes, Benefits, and Current Limits*. Center on Budget and Policy Priorities, April 2017.
<https://www.cbpp.org/research/economy/economic-growth-causes-benefits-and-current-limits>.
- Strauss, Neil. “Elon Musk: The Architect of Tomorrow.” *Rolling Stone*, November 15, 2017.
<https://www.rollingstone.com/culture/culture-features/elon-musk-the-architect-of-tomorrow-120850/>.
- The Spaceline For Earth*. Accessed May 1, 2022.
<https://www.youtube.com/watch?v=NmXVUunC5io&list=PL4jt261bzEh7oqGx3WDEBkqcRvuBpt4X8&index=2>.
- Virgin.com. “The Virgin Group | Virgin.” Accessed May 1, 2022.
<https://virgin.com/about-virgin/virgin-group>.
- TIME Person of the Year: Elon Musk*. Accessed May 1, 2022.
<https://www.youtube.com/watch?v=PbVSZvC7UxY>.
- Insider Intelligence. “To Meme or Not to Meme?” Accessed May 1, 2022.
<https://www.emarketer.com/content/to-meme-or-not-to-meme>.
- Statista. “Topic: Space Industry Worldwide.” Accessed May 1, 2022.
<https://www.statista.com/topics/5049/space-exploration/>.
- Trentmann, Frank. “How Humans Became ‘Consumers’: A History.” *The Atlantic*, November 28, 2016.
<https://www.theatlantic.com/business/archive/2016/11/how-humans-became-consumers/508700/>.
- Wachman, Richard. “Virgin Brands: What Does Richard Branson Really Own?” *The Observer*, January 8, 2012, sec. Business.
<https://www.theguardian.com/business/2012/jan/08/virgin-brands-richard-branson-owns>.
- Wayne, Leslie. “A Bold Plan to Go Where Men Have Gone Before.” *The New York Times*, February 5, 2006, sec. Business.
<https://www.nytimes.com/2006/02/05/business/yourmoney/a-bold-plan-to-go-where-men-have-gone-before.html>.

- Weinzierl, Matthew. "Space, the Final Economic Frontier." *Journal of Economic Perspectives* 32, no. 2 (May 1, 2018): 173–92. doi:10.1257/jep.32.2.173.
- Weise, Karen, and Michael Corkery. "People Now Spend More at Amazon Than at Walmart." *The New York Times*, August 17, 2021, sec. Technology.
<https://www.nytimes.com/2021/08/17/technology/amazon-walmart.html>.
- Werth, Karsten. "A Surrogate for War—The U.S. Space Program in the 1960s." *Amerikastudien / American Studies* 49, no. 4 (2004): 563–87.
<https://www.jstor.org/stable/41158096>.
- What Can You Buy With 5.7 Billion Dollars? (Trump's Wall Cost)*. Accessed May 1, 2022. <https://www.youtube.com/watch?v=pX3U1pcbp24>.
- "What Is the Kyoto Protocol?" United Nations, n.d.
https://unfccc.int/kyoto_protocol.
- US About Amazon. "Who We Are | Amazon." Accessed May 1, 2022.
<https://www.aboutamazon.com/about-us>.
- Fortune. "Why Did Elon Musk Spend \$2.9 Billion to Join Twitter's Board of Directors?" Accessed May 1, 2022.
<https://fortune.com/2022/04/07/why-did-elon-musk-invest-twitter-edit-button-board/>.
- Wolfram, Marc. "Where Accessibility Matters: A Review of Policy Issues and Arenas." ResearchGate, 2008.
https://www.researchgate.net/profile/Marc-Wolfram/publication/296331128_Where_accessibility_matters_A_review_of_policy_issues_and_arenas/links/56d454ee08aefd177b0f49c1/Where-accessibility-matters-A-review-of-policy-issues-and-arenas.pdf.
- Work Hard, Play Hard: The Richard Branson Business Plan*. Accessed May 1, 2022.
<https://www.youtube.com/watch?v=g7fbe-oV-X0>.
- Zogby. "The Zogby Poll®: Will the US Have Another Civil War?" Accessed May 1, 2022.
<https://zogbyanalytics.com/news/997-the-zogby-poll-will-the-us-have-another-civil-war>.