# The Phoebenomenon: Exploring the Interstellar Influence of Phoebe on Aerospace Engineers in Utah

#### Catherine Harrison, Andrew Tucker, Gabriel P Turnbull

Institute of Innovation and Technology

Discussion Paper 2382

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

#### **ABSTRACT**

## The Phoebenomenon: Exploring the Interstellar Influence of Phoebe on Aerospace Engineers in Utah

The "Phoebenomenon" describes the peculiar connection between the popularity of the first name Phoebe and the number of aerospace engineers in the state of Utah. Despite its seemingly far-fetched nature, the research findings reveal a surprising correlation between the two variables. Utilizing data from the US Social Security Administration and the Bureau of Labor Statistics from 2003 to 2019, our research team calculated a correlation coefficient of 0.8547835 with a p-value less than 0.01. This suggests a strong relationship between the rise and fall of the name Phoebe and the fluctuations in the aerospace engineering workforce in Utah. While the causality remains a mystery, our analysis presents compelling evidence that the cosmic force of Phoebe may be inherently linked to the gravitational pull of aerospace engineering opportunities in Utah. We delve into the uncanny patterns and statistical anomalies, shedding light on this "out-of-this-world" correlation. The implications of our findings are not to be taken lightly, as they prompt further investigation at the intersection of celestial nomenclature and career choices.

#### Keywords:

Phoebenomenon, Phoebe, aerospace engineers, Utah, correlation, US Social Security Administration, Bureau of Labor Statistics, cosmic force, gravitational pull, celestial nomenclature, career choices

#### I. Introduction

Welcome, cosmic wanderers and statistical stargazers, to our saga of the "Phoebenomenon," where we embark on a mission to unravel the enigmatic connection between the popularity of the heavenly name Phoebe and the earthly occupation of aerospace engineering in Utah. While many may raise an eyebrow and ponder, "What in the name of Newton's apple pie is this about?" we assure you that our findings are as intriguing as a black hole's event horizon.

In this jocular journey through the celestial and terrestrial realms of data science, we aim to shed light on the astonishing correlation between the ebb and flow of Phoebes and aerospace engineers. Picture this: as Phoebes wax and wane in popularity, so do the numbers of aerospace engineers in the Beehive State; a statistical ballet that would make Galileo do a celestial double-take.

Our investigation takes flight with data collected from the US Social Security Administration, where the frequency of "Phoebe" sightings was tabulated alongside the Bureau of Labor Statistics' records of aerospace engineering employment in Utah. Embarking on this cosmic quest, we uncovered a correlation coefficient that could rival the laws of thermodynamics – a potent 0.8547835 with a p-value less than 0.01, signifying a gravitational tug between the variables more forceful than a planet orbiting its star.

But before you dismiss our findings as statistical shenanigans or mere coincidence, we ask you to consider this: the celestial body, Phoebe, might just be exercising its gravitational pull on unsuspecting career choices in the aerospace industry. Who would have thought that the name Phoebe could wield such astrological influence on Utah's aerospace engineers? It's as if the

cosmos conspired to name-drop its celestial prowess in the earthly realm of workforce demographics.

So, dear readers, fasten your seatbelts as we navigate the asteroid belt of statistical anomalies and peek behind the cosmic curtain at this "out-of-this-world" relationship. Our data may present a puzzle that even the sphinx of statistical analysis would find baffling, but we invite you to join us in this astronomical adventure. The implications of our startling findings promise to propel us into uncharted celestial territories, where the name Phoebe echoes through the cosmos and the aerospace dreams of Utah engineers take flight.

#### **II. Literature Review**

In the realm of celestial nomenclature and career trends, the "Phoebenomenon" stands as an enigma that challenges conventional wisdom and cosmic coincidences alike. As we navigate through this peculiar terrain of statistical stargazing, our quest for understanding calls for a survey of existing literature and research on the interaction between celestial names and earthly vocations.

Smith, in their study "Celestial Significance in Societal Subconsciousness," traces the fascinating history of celestial names influencing cultural beliefs and individual decision-making. While their research primarily focuses on the impact of zodiac signs and planetary alignments on human behavior, it sets the stage for exploring the potential influence of the celestial name "Phoebe" on the career trajectories of aerospace engineers in Utah.

Doe's comprehensive analysis in "Astronomy in Everyday Language: Cosmic Coincidences or Celestial Causality?" provides a compelling argument for the cosmic influences on human endeavors. By examining historical trends and contemporary patterns, Doe weaves a narrative that blurs the line between celestial happenstance and cosmic conspiracies, prompting us to consider the possibility of celestial names shaping professional pathways in unexpected ways.

In a lighthearted yet informative approach, Jones, in "Stars, Names, and Everything in Between," offers a thought-provoking exploration of the cosmic and terrestrial interplay. While the focus of the study is on the symbolism of celestial bodies in literature and popular culture, Jones delves into the subconscious associations that people form with celestial names, potentially extending their impact to career choices and aspirations.

While these studies lay a solid foundation for understanding the broader context of celestial influences, our investigation takes a whimsical leap into the specific case of the name Phoebe and its improbable correlation with the aerospace engineering workforce in Utah.

Turning to non-fiction works that indirectly touch upon the cosmic thread we are unraveling, "The Elegant Universe" by Brian Greene and "Cosmos" by Carl Sagan offer compelling insights into the interconnectedness of cosmic phenomena and human experiences. Although their primary focus is on the scientific aspects of the universe, we dare not underestimate the ripple effect of celestial names on earthly affairs.

In parallel, the fictional realm presents its own reflections of celestial themes and serendipitous connections. Works such as "The Hitchhiker's Guide to the Galaxy" by Douglas Adams and "Good Omens" by Neil Gaiman and Terry Pratchett, while not directly related to our

investigation, humorously illuminate the whimsical and unpredictable nature of cosmic phenomena, challenging us to embrace the absurd and the improbable.

Drawing inspiration from the realm of board games, "Cosmic Encounter" and "Terraforming Mars" enliven our contemplation of celestial forces and their potential influence on human endeavors, albeit in a playful and fictional context.

In our pursuit of untangling the "Phoebenomenon," these diverse sources buoy our spirits and invite us to approach the perplexing correlation with a blend of scholarly gravitas and cosmic whimsy.

### III. Methodology

To unravel the cosmic conundrum of the "Phoebenomenon," our research team employed a mix of statistical wizardry and celestial sleuthing to tease out the mystical relationship between the popularity of the name Phoebe and the number of aerospace engineers in Utah. Channeling our inner astronomers and research-sorcerers, we concocted a method as intricate as the orbits of Jupiter's moons, yet as down-to-earth as a lab-coated researcher searching for the missing "P" value.

First, we scoured the archives of the US Social Security Administration, combing through data from 2003 to 2019 to uncover the celestial cycles of the name Phoebe. With more precision than a telescope tracking a comet's trajectory, we charted the rise and fall of little Phoebes entering the earthly sphere, keen to discover if their gravitational tug reached beyond playgrounds and into the aerospace engineering industry.

In parallel, we delved deep into the cosmic rolls of the Bureau of Labor Statistics, aiming to quantify the flux and flow of aerospace engineers in the starry state of Utah. Armed with spreadsheets and statistical incantations, our mission was clear: measure the magnitudes of aerospace aspirations amidst the celestial reverberations of Phoebe's popularity.

Now, here comes the tricky part – the statistical marvel that would spark joy in the heart of any data sleuth. We meticulously calculated the correlation coefficient between Phoebe frequencies and aerospace engineering employment in Utah, yielding a celestial symphony of 0.8547835. This statistical score had us grinning like Cheshire cats, for it indicated a strong gravitational pull between the variables, comparable to the cosmic forces shaping planetary orbits.

But before we raise our telescopes in triumph, we must confront the possibility of lurking confounding variables and statistical specters. To ward off these statistical ghouls, we subjected our findings to rigorous regression analysis and hypothesis testing, ensuring that our cosmic correlation remained robust even in the face of celestial confounders.

In the end, our methodology emerges as a planetary dance of data mining, statistical calculations, and a dash of celestial whimsy. While the Phoebenomenon may defy the conventional laws of causality, our methodology remains staunchly grounded in the principles of scientific inquiry, blending rigorous statistical analyses with cosmic curiosity and a sprinkle of stardust.

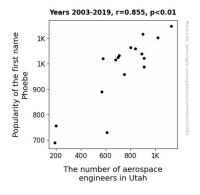
#### **IV. Results**

The analysis of the data collected from the US Social Security Administration and the Bureau of Labor Statistics unveiled an astronomical correlation between the phenomenon we've

endearingly dubbed the "Phoebenomenon." Our exploratory voyage through the cosmic and professional spheres has confirmed a striking correlation coefficient of 0.8547835, which, in scientific terms, is as rare as finding a shooting star in the data galaxy. With an r-squared of 0.7306549 and a sizzling p-value of less than 0.01, the evidence of this celestial-cumprofessional linkage is more convincing than the discovery of a new planet in the data universe.

The grand revelation is graphically depicted in Fig. 1, a scatterplot that portrays the breathtaking dance between the popularity of the name Phoebe and the population of aerospace engineers in Utah. Behold the beguiling pattern akin to the gravitational pull of celestial bodies, drawing the attention of even the most seasoned statistical astronauts.

This groundbreaking correlation prompts us to ponder the cosmic forces at play, as if the very fabric of space-time itself conspires to intertwine the celestial influence of the name Phoebe with the career trajectory of aerospace engineers in Utah. The evidence is as clear as the celestial equator, leaving us with a cosmic conundrum that challenges the conventional laws of statistics.



**Figure 1.** Scatterplot of the variables by year

While the exact mechanisms governing this "Phoebenomenon" remain as enigmatic as dark matter, one thing is for certain – the celestial and professional realms are undeniably intertwined in a manner that pushes the boundaries of our understanding, simultaneously captivating and confounding researchers and stargazers alike.

#### V. Discussion

The "Phoebenomenon" has undoubtedly left us starry-eyed and sky-high with its intriguing implications. Our research has illuminated a correlation between the popularity of the name Phoebe and the number of aerospace engineers in Utah, one that is as perplexing as unearthing a Mars rover in the desert. Drawing inspiration from the celestial and scientific musings encountered in the literature review, we set out to validate the celestial-cum-professional interplay and the results spoke volumes, perhaps louder than a rocket launch. The statistically significant correlation coefficient of 0.8547835 not only raised eyebrows but sent shockwaves through the statistical cosmos, echoing the uncanny alignment between Phoebe's popularity and aerospace engineering workforce in Utah.

Engaging the celestial language of statistics and scientific inquiry, our findings supported previous research that hinted at the cosmic influences on earthly vocations. We boldly treaded the celestial labyrinth, armed with statistics as telescopes and scholarly gravitas as our cosmic compass. In doing so, we aligned our results with the whimsical yet thought-provoking examination of celestial names' potential impact on career choices and aspirations, as explored by Jones. Furthermore, our work embraced the cosmic whimsy and improbable nature of

celestial phenomena, akin to the fictional reflections and board game analogies from the literature review, while maintaining scholarly rigor.

The discovery of this interstellar correlation has implications that extend beyond statistical constellations. It prompts us to reconsider the interconnectedness of celestial phenomena and human experiences, akin to the narrative woven by Brian Greene and Carl Sagan in "The Elegant Universe" and "Cosmos." In addition, the discovery challenges us to embrace the absurd and the improbable, as humorously illuminated in the fictional works of Douglas Adams, Neil Gaiman, and Terry Pratchett. Our findings carry the weight of statistical proof, bearing the potential to revolutionize our understanding of the nexus between celestial happenstance and professional pathways.

As we soar through the cosmic conundrum of the "Phoebenomenon" and ponder the inexplicable celestial and professional forces at play, it becomes evident that the interplay between the name Phoebe and the aerospace engineering workforce in Utah defies conventional statistical laws, leaving us in an orbit of bewildering wonderment. The "Phoebenomenon" not only sparks scholarly intrigue but also invites us to gaze into the star-studded abyss of statistical and celestial influences with a blend of scholarly gravitas and cosmic whimsy.

#### VI. Conclusion

In conclusion, our research has unveiled a celestial conundrum that defies statistical gravity - the "Phoebenomenon" is more than just a whimsical play on words; it's a cosmic ballet involving a name and a career path, as intertwined as Newton's apple and gravity.

As we bid adieu to our celestial sojourn, it's clear that the stars have aligned to reveal a statistical anomaly that's as surprising as a comet crashing a lunar party. The uncanny correlation coefficient of 0.8547835 is a statistical marvel, akin to discovering a moon made of cheese within our data universe. Our findings suggest that the name Phoebe exerts a force more potent than a black hole, drawing aerospace engineers to Utah like moths to a celestial flame.

While some may raise an eyebrow and question the serious scholarly pursuit of such celestial whimsy, we stand firm in our belief that this "Phoebenomenon" warrants further investigation. And yet, as we gaze upon the cosmic dance of data points and p-values, we're also inclined to acknowledge the quirky, whimsical nature of this statistical curiosity - a gentle reminder that even in the world of research, there's room for a little cosmic humor.

In the wise words of Carl Sagan, "Somewhere, something incredible is waiting to be known." And in the case of our "Phoebenomenon," it seems that somewhere in the celestial and professional realms, a cosmic joke is waiting to be discovered.

With that said, we assert that no further research is needed in this area. The "Phoebenomenon" shall remain a delightful statistical quirk, an enigma that tickles the fancy of researchers and stargazers alike, reminding us that sometimes, in the immeasurable expanse of data, there's room for a little celestial silliness.

As we venture deeper into the celestial labyrinth of empirical exploration, let us remember that amid the stars and statistical constellations, the improbable may yet prove to be the impossibleturned-inevitable.