

Towards Falsification of Mundane Astrology with Bound Sign Subdivisions

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Introduction

Since the mid-1990s, the revival of traditional astrology has uncovered and restored technical concepts of astrology developed in the Babylonian, Hellenistic, Medieval, and Renaissance eras unknown to 20th century astrologers. These concepts include a richer set of zodiac definitions beyond the division of the 360-degree zodiac into twelve equal sections which birthed Sun sign astrology in the 1930s¹. In addition to the twelve astrological signs, the 360-degree zodiac can be sliced and diced by exaltation and triplicity rulers as well as bounds and decans. Of these additional zodiac refinements, none has proven more valuable to delineation and prediction than the bounds. Often referred to as 'Egyptian bounds,' recent research dates them to the prior Babylonian era²; for clarity I will refer to them as 'bounds' [See Appendix].

After restoring original zodiac definitions developed at the dawn of astrology, the traditional astrology revival also uncovered many unknown predictive techniques. These include Firdaria, Directing by Triplicity, Directing through the Bounds, and Zodiacal Releasing. Of these techniques, Directing through the Bounds combines primary directions and the bounds in a manner which yields greater specificity in event prediction open to demands of falsification necessary to rescue astrology from categorization as pseudoscience.

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I. Falsification

Falsification Introduced: Lessons from Karl Popper

For Karl Popper, the year 1919 was a landmark year in his philosophical development. It was the year of the famous May 29, 1919, total solar eclipse which provided the opportunity for Einstein to test his theory of general relativity. First published in 1915, general relativity stated the universe was not static in a Newtonian sense; instead, space-time was a fabric which could be modified by gravity. This meant the appearance of distant stars near the Sun would differ because the large mass of the Sun would bend light rays making stars appear in slightly different positions than their actual known positions. This warp cannot normally be seen because of the brightness of the diurnal Sun; however, a solar eclipse which blocks the Sun's light could allow photography to capture the warped star positions if Einstein were correct. Photographic experiments conducted by Sir Arthur Eddington confirmed the Sun's mass did in fact warp the fabric of space-time and altered star locations in accordance with Einstein's theory of general relativity.³

What impressed Popper was not that Einstein's theory was proven correct, but that Einstein stated:

If the redshift of spectral lines due to the gravitational potential should not exist, then the general theory of relativity will be untenable (Popper, 1963, 39)⁴.

Vienna in 1919, the city where Popper was born and where he would reside until 1937, was a cultural hotbed where the psychological theories of Sigmund Freud and Alfred Adler were popular topics of discussion in the early days of the Weimar Republic (1918-1933). Theories of Karl Marx also drew admirers in the wake of the 1917 Russian Revolution, still underway in 1919. As Popper learned more about theories of Marxism and psychology, he quickly became disillusioned⁵. Unlike Einstein, who was willing to outline criteria which would invalidate his theory, neither Marx, Freud, nor Adler made such disqualifying claims on their theories of social progress (Marxism) or psychology (Freud and Adler). Instead, Popper observed proponents of Marxism and psychology claiming that all phenomenon verified their theories. This lack of criticality led Popper to formulate his theory of falsification which asks:

Under what conditions would I admit that my theory is untenable? In other words, what conceivable facts would I accept as refutations, or falsifications, of my theory? (Popper, 1963, 43).

Popper later applied his falsification theory to the philosophical problem known as demarcation: how to draw the line between science and pseudo-science. In Popper's view, any theory which cannot be falsified is classified as pseudo-science. This does not mean that pseudo-science has no meaning only that it cannot be considered scientific. Popper's demarcation solution challenged the then-dominant language philosophy of Ludwig Wittgenstein which used verification and a complex set of language rules to demarcate science from pseudo-science. As drawn by Wittgenstein, the line of demarcation excluded metaphysics and other topics including astrology from discussion. According to Wittgenstein, since metaphysical concepts did not have meaning, they did not exist. During his lifetime, Popper eventually won the debate against Wittgenstein.⁶

Can Astrology be Falsified? Test design according to Karl Popper

Let us first consider why Popper considered astrology a pseudo-science.

Einstein's theory of gravitation clearly satisfied the criterion of falsifiability...

Astrology did not pass the test. Astrologers were greatly impressed, and misled, by what they believed to be confirming evidence – so much so that they were quite unimpressed by any unfavourable evidence. Moreover, by making their interpretations and prophecies sufficiently vague they were able to explain away anything that might have been a refutation of the theory had the theory and the prophecies been more precise. In order to escape falsification they destroyed the testability of their theory. It is a typical soothsayer's trick to predict things so vaguely that the predictions can hardly fail: that they become irrefutable. (Popper, 1963, 37).

Popper's complaint is a common thread among astrology skeptics which challenged the veracity of Sun Sign astrology for its vagueness in a wave of statistical tests conducted from the late 1970s to the mid-1990s.⁷ To overcome vagueness, Popper favored bold theories with high informational content.

...Why we are interested in theories with a high degree of corroboration. And I explained why it is a mistake to conclude from this that we are interested in highly probable theories. I pointed out that the probability of a statement (or set of statements) is always the greater the less the statement says: it is inverse to the content or the deductive power of the statement, and thus to its explanatory power. Accordingly every interesting and powerful statement must have a low probability; and vice versa: a statement with a high probability will be scientifically uninteresting, because it says little and has no explanatory power (Popper, 1963, 58).

Theories which meet Popper's suggestion of high informational content are inherently risky to test, e.g., the narrow scope under which theories may be proven correct increases odds theories will be falsified by experimental findings. Risky theories should be sought out for falsification because failure to falsify means proposed theories represent a true addition to scientific knowledge.

Since the mid-1980s, the traditional astrology revival has uncovered astrological vocabulary and techniques with higher informational content compared to Sun sign astrology. While most traditional authors state their richer toolbox is preferable to the watered-down version of Sun sign astrology which appeared in the 1930s (a statement I agree with), I still assert these techniques still need to be tested. In this vein, Popper's comments on tradition are relevant.

Quantitatively and qualitatively by far the most important source of our knowledge – apart from inborn knowledge – is tradition. Most things we know we have learned by example, by being told, by reading books, by learning how to criticize, how to take and accept criticism, how to respect truth.

The fact that most of the sources of our knowledge are traditional condemns anti-traditionalism as futile. But this fact must not be held to support a traditionalist attitude: every bit of our traditional knowledge (and even our inborn knowledge) is open to critical examination and may be overthrown. Nevertheless, without tradition, knowledge would be impossible. (Popper 1962, 27-28).

The willingness to critically examine definitions and techniques uncovered by the traditional astrology revival means we should study and test these methods without fear of upsetting textual literalists who often demand we

should read horoscopes according to historical texts and say no more, as did my teacher Robert Zoller. It is true that the ability to let the texts speak for themselves shows humility and is an appropriate stance to take when uncovering something for the first time. But enough time has elapsed since the 1980s that an entirely new generation of astrologers has been exposed to traditional techniques with many active practitioners capable of knowing what the tradition offers and how traditional techniques have fared within the scope of their own practice and research. Blind obedience to textual sources without willing to subject the concepts to falsification risks epistemic vices of dogmatism and obtuseness.

II. The Regulus USA National Horoscope – Introduction and Tests to Date

In an AHA! moment of discovery on 3-Dec-2004, I computed a new rectified horoscope for the birth of the United States for which over a dozen different inceptional horoscopes have been proposed. It features an Ascendant of 26SA54'40" ⁸ ⁹. Though a combination of predictive techniques were used to rectify the horoscope including transits, solar arc directions, and primary directions; I found directing the Ascendant through the bounds proved the most robust predictive technique employed. Specifically, that 43 sequential bound distributions corresponded to 43 different social movements beginning with the fight for religious freedom in 1776 (Mars/Sagittarius) and ending with the popularity of poker, the Sopranos, and makeovers starting in 1999 (Venus/Virgo); all still active social movements at time of publication in 2008.

By 2015 enough time had elapsed that the Ascendant Distributor changed from Venus/Virgo to Jupiter/Virgo. I published a free online paper *Out-of-Sample Tests and Predictions for the Regulus USA National Horoscope*¹⁰ which reviewed evidence for the end of the Venus/Virgo distributor citing fading Google Trend scores for "World Series of Poker", "Texas hold-em", "Makeover Shows", and "Martha Stewart." As the epitome of makeover culture, the last episode of Martha Stewart Living TV appeared 11-May-2012 just 19 days after the end of the Venus/Virgo Distribution on 22-Apr-2012.

On 23-Apr-2012 the Jupiter/Virgo Distribution began. I cited beer/spirits and health care as two significations of Jupiter/Virgo and made predictions on the craft beer segment of the beer category. Specifically, I predicted craft beer consumption would peak 15-Jul-2016 and that craft beer as a social fad would fade after 27-Apr-2017. I proposed the US Craft Brewery Count as defined by the Brewers Association as the relevant metric for measuring the trend of the craft beer market. I also looked ahead to the future Mars/Virgo Distribution beginning 27-Apr-2017 and predicted an increase in gym participation and extreme sports activities such as Tough Mudder competitions, the revival of US Army and military logistics, and increased natural resource extraction including oil and gas development in the Alaskan Arctic National Wildlife Refuge (ANWR).

Six years later I published a self-evaluation of predictions made in 2015¹¹. The predicted craft beer peak consumption date of 15-Jul-2016 corresponded to the Justice Department's approval of the largest beer merger in history between AB InBev and SABMiller on 20-Jul-2016 five days later. While primarily a large beer brewer, AB InBev had led mergers and acquisitions activity in the craft beer industry with eight acquisitions between 2011 and the predicted peak consumption date of 15-Jul-2016. As to the US Craft Brewery Count as the proposed metric for craft beer industry trends, this metric continued to increase, counter to expectations, but it did so at a lower rate. Moreover, other metrics including barrels brewed, hops market pricing, corporate activity, and media coverage for craft beer all suffered declines after 27-Apr-2017. The closest event match to the end of the Jupiter/Virgo Distribution was AB InBev's purchase of craft brewer Wicked Weed on 3-May-2017 for its craft beer portfolio, the last in a series of purchases. This acquisition followed a NYC op-ed by craft beer industry icon Jim Koch on 7-Apr-2017 which lamented the demise of the craft beer industry at the hands of big beer.¹²

Predictions made in advance of the Mars/Virgo Distribution proved mixed. As to **increased gym participation and extreme sports activities**, the military training-style mud obstacle course known as Tough Mudder did not gain traction nationwide. However, during the COVID pandemic, the individual sanitized version of cross-country aerobic activity did manifest in a boomlet for Peloton stationary bikes which feature videos of outdoor biking experiences or links to trainer-led spin classes. Applied to the physical fitness industry, the 'data mining' signification of Mars/Virgo emerged as wearable fitness trackers and included a significant push towards fitness monitoring by Apple Computer via its Apple Watch. The most interesting shift embodied by my prediction moniker **from beer bellies to gym rats** was a shift in consumer preferences away from high carb craft beers to lower calorie products including hard ciders and seltzers. This transition was identified by comparing shifts in Google Trends search terms "craft beer" and "hard seltzer" showing the shift in early 2017 consistent with the Ascendant Distributor changeover from Jupiter/Virgo to Mars/Virgo on 28-Apr-2017.

The prediction made for a **revival of US Army and military logistics** was based on my prior study of military offensives which linked Mars/Virgo to land mines and Saturn/Virgo to tank warfare. What happened was the birth of Project Maven on 26-Apr-2017 within two days of the Distributor changeover. Maven is a battlefield intelligence application whose objective is to deploy facial recognition techniques to identify enemies prior to lethal drone strikes. As it turns out Google was originally involved with Project Maven until the company terminated its participation in 2018 after employee protests. Google is relevant because its IPO on 19-Aug-2004 and its subsequent reorganization under the Alphabet umbrella on 2-Oct-2015 both have Jupiter/Virgo and Mars/Virgo in horoscopes computed for those dates. I suggest that Jupiter/Virgo signifies 'big data', and Mars/Virgo signifies 'data mining' or 'machine learning.' Both concepts lie at the heart of Google's business model. As for Project Maven, I suggest that facial recognition techniques are one example of machine learning deployed in a military context.

As for the prediction **back to hard rock mining** which included a specific prediction that a majority of Americans would support mineral extraction within National Parks and Wilderness areas including oil and gas development in the Alaskan Arctic National Wildlife Refuge during the years 2017-2026, results were mixed. Eight months after the start of the Mars/Virgo Distributor changeover on 28-Apr-2017, President Donald Trump signed into law the Tax Cuts and Jobs Act on 22-Dec-2017 which included provisions for oil and gas development in the Alaskan Arctic National Wildlife Refuge. This was the first time that Republicans were successful in pushing through ANWR energy development after making over 50 attempts¹³. ANWR leases were auctioned on 6-Jan-2021 in the waning days of the Trump administration. While the Biden administration suspended ANWR drilling rights shortly thereafter and formally cancelled the leases in 2023, the Biden administration did approve two major energy development projects to the consternation of environmentalists: the Willow Project on Alaska's North Slope on 13-Mar-2023¹⁴ and the largest oil and gas lease sale in US history, Lease Sale 257 spanning 80.8 mln acres in the Gulf of Mexico, on 16-Aug-2022 under the auspices of the Inflation Reduction Act.¹⁵ This set of outcomes was very unlikely in 2015 when I made the prediction. At that time, Hillary Clinton was the widespread favorite to win the 2016 Presidential election and if elected would have likely continued environmentally friendly policies of the Democratic Party which favored a pivot away from fossil fuels. Biden's reversal on Gulf offshore oil leases is also an unexpected outcome for the same reasons. As a final comment on my original prediction, I did not test my statement that "a majority of Americans would support mineral extraction." In reality, only a dedicated group of Americans (not necessarily a majority) is necessary to manifest predictions made by the Ascendant Distributors.

Prediction Evaluation - Lessons learned to date

1. Social trends, fads, consumer products, and industrial processes/projects with the same planet/sign combination as the Distributor are lifted up from an ordinary level of activity to a level of national prominence.
2. Any social trend with the same planet/sign combination as the Ascendant Distributor is fair game for consideration. Trends cited by my research are not meant to be comprehensive. In hindsight, Google's drive for 'big data' acquisition during the Jupiter/Virgo distribution was likely a more significant national trend than the craft beer fad, but I did not consider the signification of Jupiter/Virgo as big (Jupiter) data (Virgo) until after my 2015 prediction was made.
3. Identified trends typically involve active participation by roughly 15-20% of the population with another 30-40% of the population aware of the trend's existence even though they are not active participants. I do not purport this model is the exclusive arbiter of social trends. Other trends are generated by directing the Moon through the bounds as well as through non-astrological causes.
4. Identifying a single metric for measuring a trend is difficult ex-ante. Between my 2015 prediction and the 2021 evaluation, the Brewers Association changed the definition of barrels brewed. In addition, companies can change their business models; to wit, some craft beer companies like Boston Beer shifted production to hard seltzer. Other craft beer companies added whiskey to their portfolio. This means unless companies publicly report product category sales specific to products which match the Distributor's significator, the company's aggregate financial statistics and stock price may not track trends predicted by the Distributor. Multiple metrics should be identified and tracked to evaluate predictions.
5. The start and end of an Ascendant Distribution does not turn on and turn off trends like a light switch. Often the trends already exist but increase dramatically after the onset of the Distribution. Likewise, trends are rarely completely obliterated after the Distribution ends; nevertheless, activity suffers a noted decline.
6. Trends need not last the entire Distribution. A predicted rise in gym membership for the Mars/Virgo Distribution is a good example. Gym membership collapsed to zero during the COVID pandemic but re-emerged in the popularity of home workout equipment with Peloton the industry leader. After the end of the pandemic, Peloton sales collapsed, and gym memberships have slowly regained ground operating alongside online fitness products designed for home use.
7. Once the Distribution starts, activity is not constant. Peak activity occurs sometime during the Distribution. This can be timed by a transit recapitulation, e.g., each time Mars transits Virgo during the nine-year period from 2017 to 2026 when Mars/Virgo is the Ascendant Distributor. This was the basis of my prediction that the craft beer fad would peak on 15-Jul-2016. Jupiter was transiting Virgo, in the bound of Jupiter/Virgo, and bonified by Mercury/Leo.
8. Anticipating what trends will occur prior to a new Distribution is difficult but possible. At the very least broad consumer and industry themes can be identified, e.g., from beer bellies to gym rats, though I had no inkling this theme would manifest as a shift away from high calorie craft beer to low calorie hard seltzer. Nor did I see how the fitness fanaticism signification of Mars/Virgo would manifest as wearable fitness trackers.
9. It is much easier to predict the end of a known social trend after it has started, e.g., making a prediction in 2015 regarding the craft beer fad following the inception of the Jupiter/Virgo Distribution on 23-Apr-2012 which triggered a wave of craft beer popularity.

10. Interaction between the Ascendant Distributor and other Distributors for the Midheaven, Sun, Moon, Lot of Fortune, and Lot of Spirit has not been considered. If most Distributors are the same planet at a particular time, that planet may overpower Distributors of other significators.

New Predictions for the Regulus USA National Horoscope

On 31-Jan-2026, the Ascendant Distributor will shift from Mars/Virgo to Saturn/Virgo until 2-Aug-2028 when it will shift again to Saturn/Libra. I will make four predictions for the Saturn/Virgo Distribution. The primary prediction regards the outlook for Google's business operations.

Transition from the Mars/Virgo to the Saturn/Virgo Distribution on 31-Jan-2026

Before addressing the impact of the Saturn/Virgo Distribution, it is worth taking a moment to reflect on the transition of the Ascendant Distributor from one malefic to another. According to Abu Ma'shar, this is a problematic changeover¹⁶. Look no further than the changeover from Mars/Aries to Saturn/Aries on 9-Jul-1863 during the Civil War. This changeover was sandwiched by the Battle of Gettysburg 1/3-Jul-1863 (approx. 50,000 dead)¹⁷ and the New York City Draft Riots 13/16-Jul-1863 (119-120 dead and 2000 injured)¹⁸.

One frequently cited source of political violence within the United States since the inception of the Mars/Virgo Distribution began is Antifa. Google Trends reported its first entry for Antifa on 1-Feb-2017. One day after the Mars/Virgo Distribution began on 28-Apr-2017, the city of Portland, Oregon cancelled its annual Avenue of Roses Parade and Carnival because of a planned Antifa protest and counter-protest by right-wing groups¹⁹. As one who follows domestic political violence, it has been the case that Antifa has often been blamed for, or used as a dog whistle, for acts of violence unrelated to actual Antifa activity. This is similar to the way that right-wing ideologues often labeled Democrats as 'commies' during the late-1940s and 1950s at the drop of the hat without the slightest bit of evidence of actual membership in the Communist Party. Nevertheless, Antifa activity has tracked the Mars/Virgo Ascendant Distribution, however overstated its reach and activities actually are.

Simply put, a bout of violence often accompanies the end of Mars Distributions, a finding documented in USA Ascendant distributions and natal horoscopes which I have researched. Mars goes out with a bang.

My concern is with the city of Portland. In addition to the Portland event cited above, Google Trends ranks Antifa interest by subregion highest for Montana, Oregon, Idaho, Washington, and Wyoming; all states in the Pacific Northwest and Northern Rocky Mountains. Portland is in Oregon, the #2 highest ranked state with an interest in Antifa.

Apart from tracking reported incidents of Antifa violence during the current Mars/Virgo Distribution, Portland also garnered accolades as a craft beer hub by aficionados during the prior Jupiter/Virgo Distribution. Even today, Portland advertises itself as the craft beer capital and home to 70+ breweries.²⁰ Since Saturn is the enemy of Jupiter and Mars, the Ascendant Distributor changeover from Mars/Virgo to Saturn/Virgo on 31-Jan-2026 will prove problematic for Portland's craft beer industry and Antifa agitation. At the very least, **I would advise Portland residents or visitors to avoid public events or wide-open public spaces for one week either side of the 31-Jan-2026 changeover**. There is also a chance this changeover may coincide with an Act of God such as an earthquake or a major snowstorm since the Distributor changeover occurs during winter months²¹. I say this simply because the nature of Saturn includes destruction and building collapses from natural disasters. Buildings can collapse from earthquakes or excessive rooftop snow. Many astrologers have attempted to predict earthquakes by astrology with zero track record of success and I do not want to insert myself in that category of prognosticators. Such is the

ambiguity in what is knowable about astrological prediction that I cannot predict with certainty that the Distribution will time a 'final battle' between Antifa and the police, a major snowstorm, or a seismic event. While the first is favored based on recorded events which link Antifa activities to the Mars/Virgo Ascendant Distribution, a major snowstorm is more likely given the changeover occurs during winter months. An earthquake is unlikely but possible.

The Saturn/Virgo Ascendant Distribution from 31-Jan-2026 to 1-Aug-2028

What does the planet/sign combination of Saturn/Virgo signify? The nature of Saturn is to command, control, hoard, partition, and destroy. Saturn often manifests in the actions of governments and other centralized authorities operating in private industry or in the non-profit arena. The most frequently cited Virgo significations by traditional authors are sown crops including wheat and the human digestive system. Since Virgo is one of two planets ruled by Mercury, modern significations include business and accounting information as well as mental styles of discernment and scrutiny. Combining Saturn and Virgo yields these representative significations: (1) business regulation²², (2) reduced grain supplies in response to crop destruction from acts of God and/or crop hoarding, and (3) stomach cancer. These significations are not meant to be comprehensive, only descriptions which remain the closest to significations of Saturn and Virgo made by traditional authors.

Another way to identify significations of Saturn/Virgo is to identify what it does NOT signify by examining its opposites. As Saturn is the enemy of Moon, Venus, Jupiter, and Mars; there are plenty of significations for Moon/Virgo, Venus/Virgo, Jupiter/Virgo, and Mars/Virgo to choose from. It is this concept of planetary enemies I will employ for making predictions for the Saturn/Virgo distribution.

The end of Google's business model

I have made the case that Jupiter/Virgo signifies big data and Mars/Virgo signifies data mining and machine learning. As these tools lie at the core of Google's business model and helped power the rise of Google as a dominant American corporation during the Jupiter/Virgo distribution (23-Apr-2012 to 27-Apr-2017) and the ongoing Mars/Virgo distribution (28-Apr-2017 to 30-Jan-2026), the changeover of the Ascendant distributor to Saturn/Virgo on 31-Jan-2026 will prove a significant headwind to Google's business model since Saturn is the enemy of both Jupiter and Mars.

What astrology cannot tell us is exactly how the Saturn/Virgo distribution will prove problematic to Google only that it will. Nevertheless, I have considered the following scenarios as possibilities:

- An act of God destroys a major data center which proves an expensive disruption in services.
- Governmental regulations against gathering online consumer information disrupt data collection and analysis.
- Advances in quantum computing end the security principles of data encryption and disrupt big data collection.

Because Google's business model will be disrupted, one consequence of the Saturn/Virgo distribution is those individuals utilizing Google's many online platform tools ranging from email to file storage will find (1) those services may be disrupted or discontinued, (2) new fees to use services may be imposed to the extent that free Google services can no longer be subsidized by the engines of big data/machine learning, and (3) cloud-based services may prove problematic should quantum computing facilitate encryption hacks by bad actors. As to services which may be discontinued, there is a strong possibility that the analytical tool *Google Trends* itself may be discontinued or rendered ineffective. *Google Trends* represents a combination of big data and machine learning and will be hindered by the same Saturn/Virgo Ascendant distribution. Accordingly, it is unlikely that we can use data from *Google Trends* to track a decline in popularity of machine learning since *Google Trends* itself is part of

the prediction. The share price of Alphabet stock is also likely to decline, but because specific security forecasts can be considered forward-looking statements by the Securities Exchange Commission, I will refrain from making specific price forecasts.

Formal prediction #1:

Google's business model based on big data and machine learning will be untenable between 31-Jan-2026 and 1-Aug-2028. While the exact nature of the disruption of Google's business model cannot be stated in advance, Google's advertising and revenue/profits from big data collection and machine learning will face substantial declines. The two most probable times Google will face disruptions to its business model are 10-Jan to 21-Feb-2027 (Mars/Virgo – retrograde) and 10-Feb to 17-Mar-2028 (Mars/Pisces – opposite sign to Mars/Virgo).

From Karl Popper's perspective, this prediction has high enough information content that it can be judged by confirming evidence obtained in a deductive manner because at the present time Google's dominant business model, now in effect for more than ten years, has withstood multiple legal challenges.

From a falsification perspective, what could occur which would invalidate the prediction?

- **There is no disruption to big data gathering and the execution of machine learning.**
- **Pricing terms for subsidized Google applications are unchanged, e.g., free products remain free.**
- **There is no increase in governmental scrutiny or regulation over Google's business practices.**
- **Total return of Alphabet shares exceeds the total return of the S&P500 between 31-Jan-2026 and 1-Aug-2028.**

It should be noted that no horoscope analysis of Google's IPO (19-Aug-2004) or its reorganization under the Alphabet umbrella (2-Oct-2015) has been considered when making this prediction.

UPDATE: On Tuesday, September 12, 2023, the Justice department took Google to court on antitrust grounds concerning its search engine's 90% market share. This action is regarded as a landmark trial because it is the first antitrust case against a large technology firm in over two decades²³. In the context of Formal prediction #1, it may well be that this case is successful against Google, but it need not be. The only thing that astrology can model out is that the Distributor changeover from Mars/Virgo to Saturn/Virgo on 31-Jan-2026 will disrupt Google's business model. Exactly how this occurs depends on how well astrological theory can map out specific real-life significations of Saturn/Virgo without the ability to deterministically choose the correct one in advance.

Figure 1. Google IPO horoscope cast for the NYSE opening bell on 19-Aug-2004.

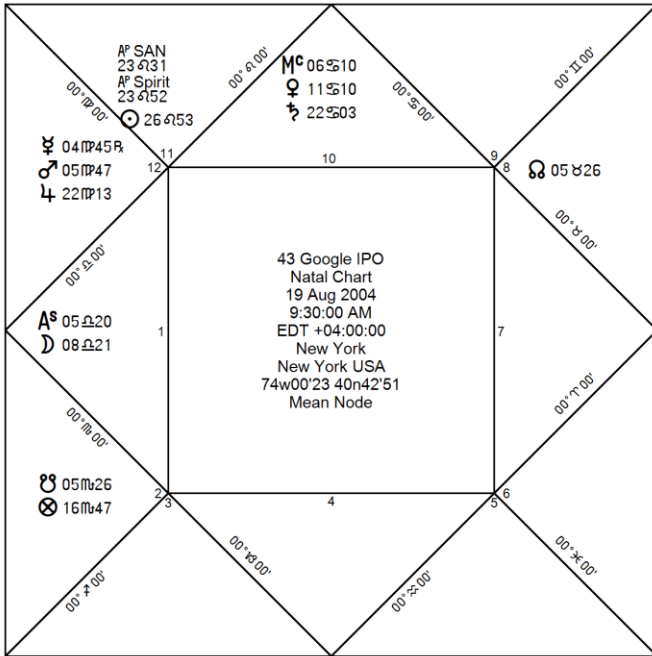
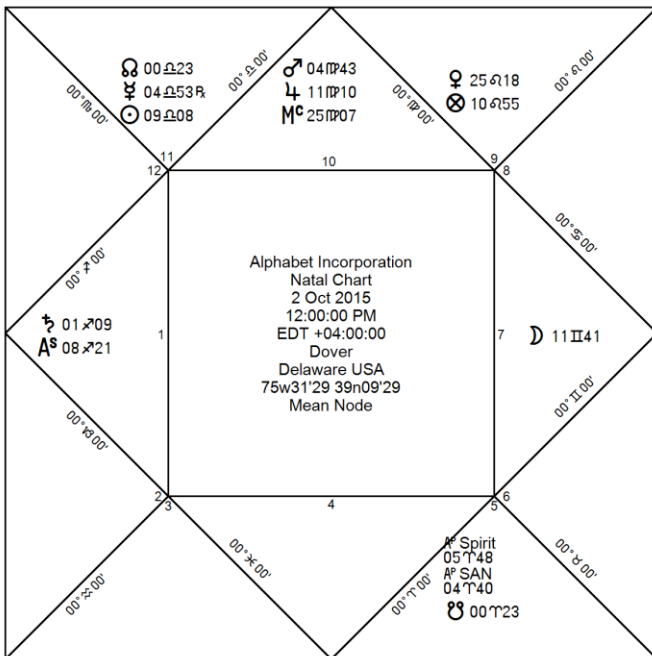


Figure 2. Alphabet Incorporation horoscope. Untimed chart cast for Noon.



Note: both horoscopes include Mars/Virgo and Jupiter/Virgo.

Other predictions for Saturn/Virgo as Ascendant Distributor between 31-Jan-2026 and 1-Aug-2028

In short, any social trends identified by prior Venus/Virgo, Jupiter/Virgo, or Mars/Virgo distributions will face substantial declines.

Formal prediction #2:

From the Venus/Virgo distribution:

Gambling (poker), pornography, and makeovers will fall in popularity. Fewer individuals will travel to Las Vegas, online pornography websites will require credit card ID verification or simply be banned, and old houses will face greater likelihood of teardowns instead of renovations/makeovers.

Suggested falsification: Tourist revenues for Las Vegas increase at a greater rate than observed for the years 1999-2011.

Formal prediction #3:

From the Jupiter/Virgo distribution:

Beer consumption will continue to decline, both in the general and craft beer segments. Access to Obamacare will be curtailed.

Suggested falsification: Total Obamacare enrollment will increase at a greater rate than observed for the years 2012-2016.

Formal prediction #4:

From the Mars/Virgo distribution:

Wearable fitness trackers including Fitbit and the fitness module of Apple Watch will face sharp sales declines and/or usage metrics, gym participation will decline, drone attacks which make use of machine learning under Project Maven will be curtailed, and resource development on federal lands will be curtailed.

I use the term 'usage metrics' as a modifier to account for the scenario that Apple Watch sales may continue to climb, yet the fitness module faces usage declines because people get tired of seeing how many calories their daily steps have burned.

Suggested falsification: Annual sales growth and/or usage metrics for fitness trackers will increase at a greater rate than observed for the years 2017-2025.

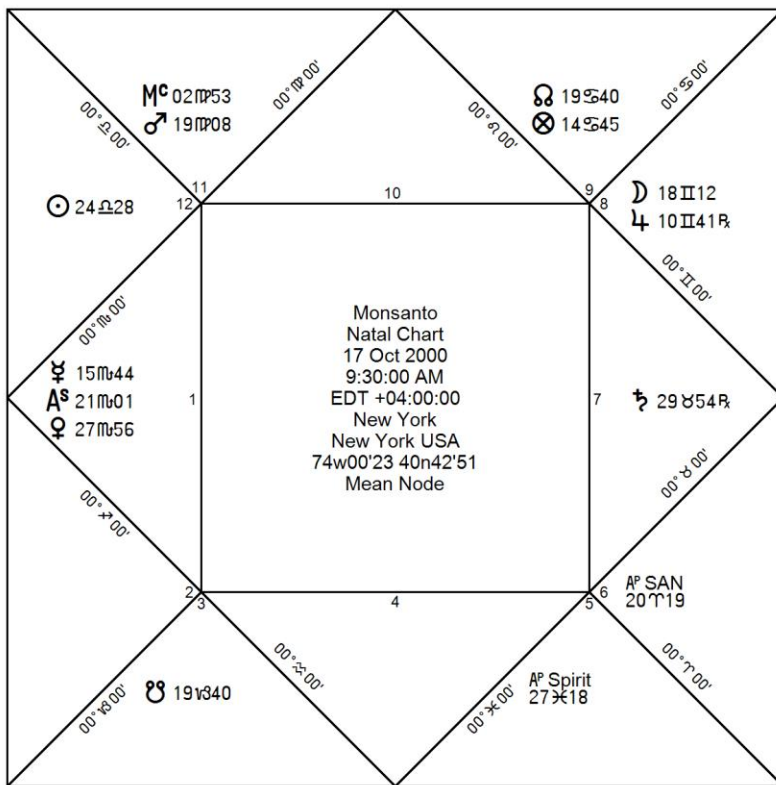
Also under my radar for the Saturn/Virgo Distribution

Possible Glyphosate ban

Glyphosate is the active ingredient in the herbicide Roundup marketed by Monsanto which was acquired by Bayer on 7-Jun-2018. The horoscope of Monsanto's IPO (17-Oct-2000, 9:30 AM, NY, NY, ASC 21SC01) features Mars 19VI08 in his own bound as Ascendant ruler. Mars/Virgo is also in mutual reception with Mercury/Scorpio by sign with Mercury nearing its first station. There has been discussion of glyphosate as a disruptor of intestinal bacteria detrimental to gut health with numerous negative impacts including (speculatively) autism.²⁴

Based on my own research, Mars/Virgo signifies a range of stomach conditions ranging from inflammatory bowel disease, ulcers, and ulcerative colitis. When seeing Mars/Virgo placed so strongly in Monsanto's IPO horoscope and learning of reports of negative effects of glyphosate on gut health, my eyebrows are raised.

If any linkages between glyphosate and gut illness are made within the mainstream scientific community (free of corporate-funded research), then glyphosate may be banned during the Saturn/Virgo distribution. Given the widespread use of glyphosate and related GMO seed products in farms, a ban of glyphosate would prove disruptive to agricultural output until alternate herbicides are reintroduced to modern farm practices.



“That 1970s feeling” or “History rhymes but does not repeat.”

At any given time, multiple social trends, fads, and moods can be isolated and tracked by social scientists. As I have made clear, social trends timed by computing Ascendant Distributors are not the sole measure of American social trends. Using the same horoscope, it is possible to identify another set of trends by directing the Moon through the bounds. I have not undertaken a complete study of the Moon’s Distributions since 1776 (give me \$250K and a year and I will get back to you!) but have the following preliminary observations to share:

From a technical perspective unlike the Ascendant, the Moon usually has latitude because it is rarely exactly on the ecliptic. This means when directing the Moon through the bounds one has a choice: compute the Moon’s primary directions with zero latitude or direct the Moon with its full latitude. While this preliminary finding needs more testing, so far, my research favors directing the Moon through the bounds with its full latitude.

As it happens, because the Moon is relatively close to the Ascendant of the *Regulus USA National Horoscope* by primary motion, the Directed Moon has already completed its passage through the bounds of Virgo. This means that historical analogs of the Moon’s distribution through the bounds of Virgo may offer clues for the current Ascendant distribution through the bounds of Virgo. To wit:

Distributor	Directed ASCENDANT	Social Trends
Mercury/Virgo	18-Nov-1990	Microsoft, Windows, and the World Wide Web
Venus/Virgo	24-Sep-1999	Martha Stewart and the Makeover Craze; Gambling – the Poker Craze
Jupiter/Virgo	23-Apr-2012	Craft Beer Popularity, Big Data, Obamacare
Mars/Virgo	28-Apr-2017	Wearable Fitness Trackers, Fitness Training, Natural Resource Extraction
Saturn/Virgo	31-Jan-2026	?
Saturn/Libra	2-Aug-2028	?

Distributor	Directed MOON ²⁵	Social Trends	
Mercury/Virgo	10-Oct-1947	Creation of Silicon Valley	
Venus/Virgo	7-Jun-1955	Las Vegas boom years	
Jupiter/Virgo	4-Apr-1966	Medicare	
Mars/Virgo	23-Jul-1970	<i>Pumping Iron</i> (1977) and fitness, high inflation, oil, and mining boom, higher crime and murder rates, edgier period of social decay.	<i>That 70s feeling!</i>
Saturn/Virgo	25-Jan-1978	Period opened with historic blizzards. Historian Rick Perlstein documented a rightward shift in American politics during the year 1978. ²⁶	<i>That 70s feeling!</i>
Saturn/Libra	18-Mar-1980	Tight interest rates caused a collapse of commodity prices ending the 1970s period of high inflation.	

The following analog comparisons are notable: Silicon Valley creation => Internet; Las Vegas popularity in 1950s => poker craze; Medicare => Obamacare; and bodybuilding => fitness training.

III. Falsification Revisited

As promising as Popper's theory of falsification appears as a solution to the demarcation problem, the theory has lost ground among the scientific community for several reasons. According to Gordin²⁷:

1. It is difficult in practice to determine whether an empirical test falsifies a theory. A test may be incorrectly executed by design, e.g., error in variables. Or a test could be incorrectly executed, e.g., error in measurement.
2. Falsification does not properly draw the line between what distinguishes science from pseudoscience in a way acceptable to the majority of the scientific community. The inability to falsify many historical scientific theories subsequently proven incorrect (biology, geology, cosmology) removes the classification of these theories as science. This despite the fact when they were originally espoused, they were considered scientific by contemporary practitioners. On the flip side is the inability of falsification to exclude theories which a majority of scientists classify as pseudoscience. By allowing anyone to assert a theory willing to subject the theory to falsification allows crank claims based on false assertions.
3. The implications of falsification may not be palatable to its proponents. Specifically, that falsification means that absolute truth cannot be achieved. Instead, science represents a body of knowledge which has not yet been falsified but may be at some point in the future. Because this attitude leaves behind no room for settled scientific truths, it is too extreme for some.

Within the United States, falsification as a solution to the demarcation problem remains popular in part because of a legal ruling against the teaching of creation science in *McLean v. Arkansas* (1982). In that case, Judge William Overton concluded creation science was not science because it failed to meet five essential characteristics of science, a list which included falsifiability²⁸. The insertion of falsifiability into the US legal code raised the ire of Larry Laudan who published a widely cited 1983 paper which ripped apart the merits of falsification²⁹. In the ensuing years, many scientists thought Laudan was too extreme in his rejection of falsification and demarcation as a legitimate lines of inquiry. The culmination of these efforts was an edited volume published by the University of Chicago Press in 2013 which approached the demarcation problem from a multidisciplinary perspective³⁰.

As an astrologer attempting to falsify the *Regulus USA National Horoscope*, I can attest to the usefulness and limits of Popper's theory of falsification.

With regard to #1 above, my use of the number of craft breweries as the metric for the craft brewery industry was problematic because some breweries maintained their viability by introducing hard ciders, hard seltzers, and whiskies to their product mix whose ingredients marked a departure from what defines craft beer. In hindsight, I can say the craft beer industry's popularity was better tracked by corporate mergers and acquisitions activity as well as stock price performance for brewers.

With regard to #2 above, like early theories of biology, geology, and cosmology which have been proven incorrect, until the 17th century astrology was considered a science by contemporary practitioners. In my opinion, astrology's reclassification as pseudoscience occurred not so much by the replacement of geocentric with heliocentric planetary theory, but the inability to propose any measurable linkages between planets and human activity which could explain astrological theory and technique. Until such linkages may be discovered, this makes astrology more of a 'craft' rather than a 'science' for those who require a known physical theory to explain how astrology works.

IV. Implications for Future Research

My goal of making falsifiable predictions for the *Regulus USA National Horoscope* is multifaceted:

To demonstrate the usefulness of national horoscopes in mundane astrology. Other than a few surviving inceptional horoscopes for cities (like Baghdad), traditional astrologers did not use national horoscopes. They are a modern construct. This makes the *Regulus USA National Horoscope* an orphan on two accounts: I created it by applying traditional techniques unknown by contemporary advocates of national horoscopes to a type of horoscope not used by traditional astrologers. Should this horoscope be confirmed, it will help cement the role of national horoscopes in the contemporary practice of mundane astrology.

To choose between competing USA national horoscopes. The fact that contemporary American astrologers are unable to agree on a single horoscope for the USA – with over a dozen proposed horoscopes in circulation – speaks to an embarrassing low level of delineation and predictive skills. This sad state of affairs is worth every bit of scorn and criticism levied by critics of astrology as a pseudoscience. Agreement on a single USA national horoscope would advance the practice of mundane astrology within the USA.

To advance the notion that falsifiable predictions, rather than delineation by deductive observations, is the better criterion for validating astrology, and the *Regulus USA National Horoscope* in particular. Advocates for competing USA national horoscopes make compelling cases for each horoscope. But these observations are usually subject to confirmation bias. I suggest that predictions which can withstand falsification are better criteria for judging the validity of horoscopic astrology.

To settle the debate between competing bound systems. My research uses what are commonly referred to as the Egyptian bounds, though I refer to them simply as the ‘bounds’ because of recently discovered cuneiform tablets which link the bounds to the Babylonian era. While the Egyptian bounds were used most frequently by traditional authors, their deployment was not exclusive. Ptolemy introduced his own set of bounds in his *Tetrabiblos* which are based on a different five-fold subdivision of each 30-degree zodiac sign. Subsequent astrological authors who relied heavily on Ptolemy’s *Tetrabiblos* tended to use his set of bounds in later publications. These include the 17th century English astrologer William Lilly whose body of work on horary astrology remains one of, if not the most cited and taught, horary sources used by 21st century practicing astrologers. Since Lilly was a successful horary astrologer and he used Ptolemy’s bounds, the unstated question is why bother considering Egyptian bounds given Lilly’s successful track record? As Popper states, while astrologers would have nothing to rely on without the availability of traditional texts, this does not mean theory and techniques in traditional texts cannot be analyzed, disputed, and rejected if necessary. I think it is time for this debate.

To contribute to the theoretical function of bounds as an essential dignity. When one contemplates what is actually happening here – that the bounds are capable of causing social trends when activated by primary directions applied to significators (Ascendant and Moon) from a national horoscope – one has to wrap one’s head around a predictive model which does not involve any planet placement at the horoscope’s inception nor any activating planet by transit (though as shown by the craft beer example transits may reinforce active social trends). This means the bounds can generate effects consistent with the planet/sign combination of each bound in the same manner that DNA gives instructions to cells to construct DNA’s biological blueprint. Since the bounds alone can generate these effects, this means the bounds are teleological: that they independently generate, order, and create significations consistent with their individual planet/sign construction. If correct, this observation asserts the bounds have a much greater role to play in traditional astrology delineation and prediction than identified by the existing literature.

Appendix. The bounds defined.

The bounds are an uneven five-fold subdivision of each 30-degree zodiacal sign. Each sign is subdivided into the bounds of Saturn, Jupiter, Mars, Venus, and Mercury. There are no bounds assigned to either Sun or Moon. To date there has been no reconstruction of the bounds other than the knowledge that the sum of degrees assigned to each planet for all twelve signs of the zodiac equals the Major Years of the Planets³¹.

Table 2. Bounds

♈	0–Jupiter	6–Venus	12–Mercury	20–Mars	25–Saturn
♉	0–Venus	8–Mercury	14–Jupiter	22–Saturn	27–Mars
♊	0–Mercury	6–Jupiter	12–Venus	17–Mars	24–Saturn
♋	0–Mars	7–Venus	13–Mercury	19–Jupiter	26–Saturn
♌	0–Jupiter	6–Venus	11–Saturn	18–Mercury	24–Mars
♍	0–Mercury	7–Venus	17–Jupiter	21–Mars	28–Saturn
♎	0–Saturn	6–Mercury	14–Jupiter	21–Venus	28–Mars
♏	0–Mars	7–Venus	11–Mercury	19–Jupiter	24–Saturn
♐	0–Jupiter	12–Venus	17–Mercury	21–Saturn	26–Mars
♑	0–Mercury	7–Jupiter	14–Venus	22–Saturn	26–Mars
♒	0–Mercury	7–Venus	13–Jupiter	20–Mars	25–Saturn
♓	0–Venus	12–Jupiter	16–Mercury	19–Mars	28–Saturn

How to read: Each zodiacal sign of 30 degrees is subdivided into five unequal subdivisions. Each subdivision is known as a ‘bound.’ Examining bounds for the sign of Aries, see the first 6 degrees assigned to Jupiter; next 6, Venus; next 8, Mercury; next 5, Mars; last 5, Saturn.

Table 3. Allocation of Bound Degrees to Major Years

	Mercury	Venus	Mars	Jupiter	Saturn	Total
Aries	8	6	5	6	5	30
Taurus	6	8	3	8	5	30
Gemini	6	5	7	6	6	30
Cancer	6	6	7	7	4	30
Leo	6	5	6	6	7	30
Virgo	7	10	7	4	2	30
Libra	8	7	2	7	6	30
Scorpio	8	4	7	5	6	30
Sagittarius	4	5	4	12	5	30
Capricorn	7	8	4	7	4	30
Aquarius	7	6	5	7	5	30
Pisces	3	12	9	4	2	30
Major Years	76	82	66	79	57	360

How to read: The bound of Mercury falls from 12AR00’00” to 19AR59’59”. This eight-degree range in Aries is listed under row ‘Aries’ and column ‘Mercury.’ Aggregated across all twelve signs, Mercury fills out 76 degrees of the entire 360-degree zodiac. The quantity 76 is the number of Mercury’s major years.

Endnotes

¹ While there is no exact date for the start of sun sign astrology newspaper columns, they did begin to appear in English newspapers in the 1930s. https://en.wikipedia.org/wiki/Sun_sign_astrology Accessed September 1, 2023.

² Alexander Jones and John M. Steele, 'A New Discovery of a Component of Greek Astrology in Babylonian Tablets: The "Terms"', NYU Library's Ancient World Digital Library, 2011. Available online: <https://dlib.nyu.edu/awdl/isaw/isaw-papers/1/> Accessed September 1, 2023.

³ Ian O'Neill, 'How a Total Solar Eclipse Helped Prove Einstein Right About Relativity,' May 29, 2017. Available online: <https://www.space.com/37018-solar-eclipse-proved-einstein-relativity-right.html>. Accessed September 1, 2023.

⁴ Karl Popper, *Conjectures and Refutations, the Growth of Scientific Knowledge*, 1963.

⁵ The police shooting of eight of his unarmed comrades during a street battle on June 15, 1919, also turned Popper away from Marx's historical materialism and towards social liberalism as an adopted personal philosophy.

⁶ For the generalist reader, I recommend *Wittgenstein's Poker: The Story of a Ten-Minute Argument Between Two Great Philosophers* by David Edmonds and John Eidinow, Ecco, 2001.

⁷ Wout Heukelom, *Understanding Astrology*, AinO Publications, 2022, Vol 1, p. ii. Available online: <https://www.astrology-and-science.com/UA-1.pdf>. Accessed August 30, 2023.

⁸ *America is Born: Introducing the Regulus USA National Horoscope*, 2nd edition. Regulus Astrology LLC. 2021. Available via Amazon: https://www.amazon.com/America-Born-Introducing-National-Horoscope/dp/0980185629/ref=sr_1_2?keywords=regulus+astrology&qid=1694964681&sr=8-2

⁹ As of 28-Aug-2023, Astrodatbank lists 14 different USA horoscopes. They can be searched under the phrase 'Nation: USA No.1' and substituting numbers 2-14 for the other horoscopes. Available online: https://www.astro.com/astro-databank/Nation:_USA_No.1 Accessed September 1, 2023.

¹⁰ 'Out of Sample Tests and Predictions for the Regulus USA National Horoscope'. Regulus Astrology LLC. June 11, 2015. Available online: <https://www.regulus-astrology.com/2015-06-11%20Regulus%20USA%20National%20Horoscope%20-%20Out%20of%20Sample%20Tests%20and%20Predictions.pdf> Accessed September 1, 2023.

¹¹ 'Evaluation of Predictions made for the Regulus USA National Horoscope on 15-Jun-2015'. Regulus Astrology LLC. June 11, 2021. Available online: <https://www.regulus-astrology.com/2021-06-11-PredictionEval-Regulus-USA-National-Horoscope.pdf> Accessed September 1, 2023.

¹² Jim Koch, 'Is It Last Call for Craft Beer?' New York Times, 7-Apr-2017. Available online: https://www.nytimes.com/2017/04/07/opinion/is-it-last-call-for-craft-beer.html?_r=0 Accessed September 1, 2023.

¹³ https://en.wikipedia.org/wiki/Arctic_Refuge_drilling_controversy. Accessed September 15, 2023.

¹⁴ https://en.wikipedia.org/wiki/Willow_project Accessed September 15, 2023.

¹⁵ <https://www.foxbusiness.com/politics/biden-approves-largest-oil-gas-lease-sale-us-history-steamrolls-eco-review-inflation-bill> Accessed September 1, 2023.

¹⁶ Abu Ma'shar. *On the Revolutions of the Years of Nativities*. Translated by Benjamin Dykes. Cazimi Press, 2019. Book III Distributions, paragraph 100, p. 315.

¹⁷ https://en.wikipedia.org/wiki/Battle_of_Gettysburg Accessed 31-Aug-2023.

¹⁸ https://en.wikipedia.org/wiki/New_York_City_draft_riots Accessed 31-Aug-2023.

¹⁹ Recounted in the entry for Mars-Ascendant direction #11 in the 2nd edition of *America is Born: Introducing the Regulus USA National Horoscope*, 2021, p. 230.

²⁰ <https://www.travelportland.com/culture/beer/> Accessed 31-Aug-2023.

²¹ As an analog, when the Directed Moon's Distributor changed from Mars/Virgo to Saturn/Virgo on 25-Jan-1978, severe winter weather occurred in the United States. Two major blizzards killed between 100-200 people. Details:

25/29-Jan-1978: The Great Blizzard of 1978 struck the Ohio Valley and Great Lakes, killing 70.

https://en.wikipedia.org/wiki/Great_Blizzard_of_1978 Accessed September 1, 2023.

5/7-Feb-1978: The Northeastern United States Blizzard of 1978 hit New England and New York City killing about 100 and causing over \$520 mln in damages.

https://en.wikipedia.org/wiki/Northeastern_United_States_blizzard_of_1978 Accessed September 1, 2023.

²² In the political realm, a current example is Massachusetts Senator Elizabeth Warren who is a frequent critic of business practices of American corporations (b. 22-Jun-1949, untimed horoscope, includes Saturn/Virgo).

²³ Eva Dou and Gerrit De Vynck. 'In first tech antitrust trial in decades, DOJ takes on Google,' *The Washington Post*, September 10, 2023. Available online: <https://www.washingtonpost.com/technology/2023/09/10/doj-google-antitrust-case-trial/> Accessed September 17, 2023.

²⁴ Stephanie Seneff, 'Glyphosate and the Gut,' *The Weston A. Price Foundation*, 2021. Available online: <https://www.westonaprice.org/health-topics/glyphosate-and-gut-health/#gsc.tab=0> Accessed 29-Aug-2023.

²⁵ Computed by Janus 5.5. Readers may note between 1-2 days difference between Ascendant Distributors as published in my book *America is Born: Introducing the Regulus USA National Horoscope* (used in this paper) and Ascendant Distributors computed by different software. Computing dates by primary directions more than 200 years from an inceptional horoscope means that the tiniest differences in astronomical constants, location, or other factors may be responsible for these differences.

²⁶ Rick Pearlstein, *Reaganland: America's Right Turn 1976-1980*. Simon & Schuster, 2020.

²⁷ Michael D. Gordin, *Pseudoscience. A Very Short Introduction*. New York: Oxford University Press, 2023.

²⁸ https://en.wikipedia.org/wiki/McLean_v._Arkansas. Accessed September 15, 2023.

²⁹ Larry Laudan, *The Demise of the Demarcation Problem*, in: R.S. Cohen and L. Laudan (eds.), *Physics, Philosophy and Psychoanalysis*. D. Reidel, 1983, pp. 111-127. Available online: <https://typeset.io/papers/the-demise-of-the-demarcation-problem-346t8kt80s> Accessed September 15, 2023.

³⁰ Pigliucci and Boudry, editors, *The Philosophy of Pseudoscience: Reconsidering the Demarcation Problem*, University of Chicago Press, 2013.

³¹ Attempts to reconstruct the bounds have been made but no successful reconstructions have been published. My observations on the bounds are as follows: (1) because bounds are valid for all horoscopes on earth, they have nothing to do with one specific location on earth. This means we need to look at the planets themselves. (2) Since the bounds date from the Babylonian era, a review of Babylonian astronomy is helpful to equip ourselves with the same tools used by Babylonian astrologers at the time the bounds were invented. Unless proven otherwise in the future, there is no evidence the Babylonians espoused elliptical orbits of planets. What remains are extensive records of planetary positions which include synodic events such as rising and setting. We assume that Babylonian records are two-dimensional snapshots of a three-dimensional system, just as our modern horoscopes are. (3) Since the number of degrees assigned to a planet's bound vary from sign to sign, we should ask ourselves what asymmetries exist between planets and signs? Simply put, because of different orbital planes, the amount of time a planet spends in each sign is not constant. This asymmetry should be examined as one input to reconstructing the bounds.

LUX ET VERITAS