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Do Planetary Transits Predict Synchronicity Experience?

Robert G. Sacco

Fibonacci Lifechart, Toronto, Canada Email: robgsacco@gmail.com

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Abstract

Synchronicity involves the experience of personal meaning entangled with ambiguous coincidences in time. Ambiguity results from incomplete information about the chances of various events occurring. The problem that this study addresses is the lack of empirical research on synchronicity. This study sought to address this problem by exploring the astrological hypothesis that planetary transits predict synchronicity events. Synchronicities were compared with the probability distributions of planetary transits. In comparison with the base rate prediction, planetary transits were not a significant predictor of synchronicity events. The findings of this study provide new insight into the complex, multifaceted, and ambiguous phenomenon of synchronicity. The concept of ambiguity tolerance plays a significant role in synchronicity research since ambiguity cannot be completely eliminated.

Keywords

Astrology, Fibonacci Numbers, Planetary Transits, Synchronicity

1. Introduction

Do planets really influence our life? People have pondered this question for centuries. According to astrology, planetary transits predict certain significant correspondences between humans and the universe, such as synchronicities [1] [2]. Synchronicity refers to the experience of two or more causally unrelated events occurring simultaneously in a meaningful way [3]. Synchronicity is, by definition, a subjective judgment and, thus, may or may not directly reflect objective reality. Importantly, despite the fact that Jung did not develop a systematic theory of astrology, it is evident that his theory of synchronicity was influenced by it [2]. In fact, Jung explicitly endorsed his theory of synchronicity as a means to explain astrological coincidences [2].

Astrologers have claimed that planetary transits can predict synchronicity experiences (SEs), yet this has not been empirically verified. Planetary transits describe the ongoing movement of the planets in relation to a person's date of birth. A planet's orbital period is the period between transits. Astrology can be understood as a series of cycles within cycles because each planet has its own orbital period. In studies, planetary transits have been shown to be strongly associated with Fibonacci numbers [4] [5]. Furthermore, Sacco [6] has demonstrated how Fibonacci numbers can predict SEs. Despite the preliminary nature of these results, they provide some insight into how synchronicity experiences may evolve in time [6] [7] [8].

The use of time series data to study SEs scientifically is a relatively new phenomenon and is still in its early stages [9]. It builds on recent scientific discoveries that were not available to Jung and can allow us to trace possible causal factors in synchronistic events. As an example, Sacco [10] [11] extended the Fibonacci numbers to time series data based on individual birthdates. In these studies, the emergence and self-organization theories have been extended [6] [7] [8]. As of yet, no studies have directly linked SEs with planetary transits. The prior literature on synchronicity is largely based on qualitative research methods, and quantitative research methods are just beginning to emerge as a method for studying synchronicity [12].

Based on the possible correlation between Fibonacci time-series and SEs [6], as well as the historical planetary correlation, it would be interesting to establish which set of time-series could prove particularly useful in predicting SEs. It may also prove useful in clinical settings to understand the relationship between time-series models and synchronicity experiences in order to tailor interventions [13] [14]. Accordingly, the goal of the present study is to test the hypothesis that planetary transits are predictive of synchronicity events. This study seeks to reconcile the astrological hypothesis with previous research that shows synchronicity experiences are correlated with Fibonacci time patterns, so that conceptual boundary points can be identified. An additional objective is to argue that the concept of synchronicity is fundamentally ambiguous and that model refinement cannot eliminate the ambiguity.

2. Ambiguity in Synchronicity Research

Ambiguity differs from vagueness or imprecision. Adapting the definition of ambiguity provided by Arthur Koestler for creativity, Byers [15] offers the following definition of ambiguity: "Ambiguity involves a single situation or idea that is perceived in two self-consistent but mutually incompatible frames of reference" (p. 28). An ambiguity may set up a dynamic tension between parallel ideas or set the stage for a resolution. Some regard ambiguities as beautiful. Unlike ambiguity in the arts, many people feel that ambiguity is not desirable in the sciences. In his description of the traditional contrast between arts and sciences, Gupta [16] states: "Mathematical metaphors are powerful analytical tools pre-

cisely because of the unequivocal relationships between their components, whereas the power of the literary metaphor derives from the incertitude in the connections between its parts" (p. 589).

It has been argued, however, that ambiguity has a crucial role to play in the sciences. According to Byers [15], the arts and sciences are both creative human endeavors. The role of ambiguity in science is analogous to the role of ambiguity in art—it contributes to the depth and power of science. Creativity thrives on ambiguity. In science, ambiguity is not just present, it is essential. In order for new scientific ideas to emerge, there must be ambiguity—the existence of multiple, conflicting frames of reference [15]. In a comprehensive analysis of instances of "productive ambiguity" in the history of science, Grosholz [17] states that: "When distinct representations are juxtaposed and superimposed, the result is often a productive ambiguity that expresses and generates new knowledge" (p. 25).

In an ambiguous situation, there is a significant degree of uncertainty due to a lack of specification or an unstated assumption, paradigm, or frame of reference. As a result, it is possible to see the same situation from multiple perspectives. In synchronicity research, there are various kinds of ambiguity: *Symbolic ambiguity*, when various equivalent symbolic messages are invoked. *Definitional ambiguity*, where the meaning of the term synchronicity can be interpreted in various ways [18]. *Paradigmatic ambiguity*, such as Colman's [19] contrast of Jung's account of synchronicity as evidence of an objective principle of meaning in nature with a view that emphasizes human meaning-making. *Multiple-solution ambiguity*, such as with alternative explanatory models of synchronicity [11].

Ambiguities are a result of assumptions and perspectives. In the well-known Indian story of the elephant and the blind men, the men each touch a different part of the elephant's anatomy to derive contradictory views of the animal. The narrator of the story sees the complementarity of the conflicting observations which is hidden to the individual. The blind men need to exchange places with each other and experience different perspectives in order to become enlightened. The opportunity to experience diverse perspectives simultaneously can be seen as a result of ambiguity.

In synchronicity research, ambiguity often receives a bad reputation, being lumped together with misconceptions and misunderstandings as something that should be avoided at all costs. Hence, for instance, the widespread rejection of the synchronicity theory in materialist science. In order to avoid ambiguity, simplifying explanations are frequently necessary such as specifying that synchronicities are "mere coincidences" (underestimated chance events) that can be described by laws of statistics and confirmation biases [20] [21], which can impede the opportunity for discussion. Research in a field can advance if scholars are able to tolerate ambiguity in their studies until adequate methods are found to test more complex and ultimately more useful theories.

3. Synchronicity and Time

Jung's principle of synchronicity reveals a temporal association between events

that is ambiguous and has varying emotional significance. In Jung's theory, time does not follow a linear pattern. This theory is based on the assumption that there is an alternative temporal reality that exists beyond linearity and causality. The Greeks recognized two types of temporalities: *Chronos* and *Kairos*. *Kairos* is the lived experience of time, the time of human intention, purpose, and goals, in which past memory, present perception, and future desire merge. *Chronos* refers to the measurable time of succession, the conscious perception of the passage of units of time with their asymmetry of past and future, and the irreversibility of "time." These two dimensions of time are not simultaneously experienced, but rather we experience a cognitive oscillation between them, which organizes our behavior with regards to time.

A more nuanced approach to time is provided by Atmanspacher and Primas [22], who approach the problem from a dual aspect monism perspective. They provide a rigorous proposal for viewing tensed and tenseless time as complementary, yielding a framework for addressing mind-matter relations and the philosophy of time in ways that are consistent with Jung's ideas [22]. The term "tensed" refers to our mental experience of time in terms of past, present, and future, and a unidirectional movement from past to future, as in the metaphor of the arrow of time. Tenseless time refers to the concept of physicists and is consistent with the time of relativity theory. According to Atmanspacher and Primas [22], tensed and tenseless time can be synchronized by holistic correlations. In other words, mind and matter may be related by sharing a temporal domain, which serves as an interface between atemporal material and temporal mental domains.

Jung's view of time is mainly based on his work on synchronicity and entanglement between the material and the mental domains in a way that allows correlations between them. However, Jung is inconsistent and ambiguous when he refers to time and simultaneity in relation to synchronicity, as Main [23] and Yiassemides [24] have pointed out. Jung investigated aspects of synchronicity through astrology, and astrology remained a fascination for him [2]. The attribution of meaning in astrology is based on the rhythmic movement of the planets through space. Despite astrology's importance to Jung's development of the synchronicity principle, its role in guiding his discoveries is almost entirely overlooked [25]. This will be addressed in the next section, including the identification of planetary cycles as possible attractors of synchronicity.

4. The Relationship between Astrology and Synchronicity

Human beings are bound throughout their lives to natural cycles of birth and death, activity and rest, fertility and infertility, joy and sorrow, and more. Yet, to this natural perspective of life's cycles must be added a cultural perspective. In order to gain understanding and meaning, people look beyond the physical aspects of their interactions with the world. Astrology is the bridge between the world of natural law and the world of meaning. Myth-making, storytelling, and

legends about the rising and setting of the Sun and Moon date back as far as the Stone Age around 6000 BC [1]. Astrology has consistently been popular in modern America, and its popularity seems to be increasing. According to a Gallup polls, about 25% of Americans believe that the stars and planets have an influence on their lives. In addition, survey results from the National Science Foundation (NSF) indicate that the percentage of Americans who believe astrology is scientific has risen from 32% in 2006 to 40% in 2014.

Astrology's fundamental research problem is how to explain the connection between celestial bodies and our daily lives. What are the mechanisms involved? Over the millennia, a variety of theories have been offered to explain astrology's inner workings, most of which can be classified into one of two groups: *causal explanations* and *acausal explanations* [26]. In the causal model, humans are influenced by energy or force transmitted from celestial bodies to creatures on Earth. Some writers explain it in the context of an already known force, like electromagnetism or gravity. Others believe that this causal force is a form of energy yet to be discovered by science—and might even be paranormal or occult, as many esoteric astrologers believe. Either way, such "force" theories suggest that celestial forces interact with humans through a classical cause-and-effect mechanism. Most modern astrologers dismiss the causal explanation because determining the causal process is extremely difficult [26].

In contrast, acausal or synchronistic explanation holds that the secret of astrological influence cannot be found in any mechanistic theories of cause and effect, but only in a more holistic approach to viewing all phenomena as embedded in an interconnected network of meaning [3]. In Carl Jung's view, the simultaneity of celestial and human patterns is a "meaningful coincidence," with planetary positions and human lives expressing the same underlying pattern of meaning. Accordingly, the "mechanism" of astrology is more accurately described as fractal symmetry, whereby celestial bodies not only connect causally with human life, but also encompass dimensions of symmetry that are beyond their surface appearances [26]. In other words, the behaviors of microcosms reflect the behaviors of macrocosms, even though they do so in different ways. The ancient hermetic maxim "as above, so below; as below, so above" suggests these links.

Some astrologers have proposed that astrology can be integrated with a developmental perspective, using planetary motion to track human development stages. In this way, Erik Erikson's [27] life stages have been discussed in the context of planetary cycles [28] [29] [30]. Rossi and Le Grice [2] highlight the efforts of astrologers to link the temporal aspects of planets with human development and Jung's individuation process: "Correlating in some instances to natural stages of aging and development, the planetary transits reflect psychological stages and opportunities for growth. This is related to Jung's concept of individuation..." (p. 8). There is evidence that human development is in sync with planetary cycles. For example, puberty begins around the age of 10 for girls and around the age of 12 for boys [31], which corresponds to a Jupiter cycle of 11.87

years. Additionally, the end of optimal fertility in females occurs around age 30 [32], which corresponds to a Saturn cycle of 29.44 years. Human life expectancy also correlates with the Uranus cycle of 83.81 years.

Sacco [33] presented a comprehensive and integrated model for examining Erikson's eight life stages using dynamic systems theory and the Fibonacci sequence as meta-frameworks. Based on this model, the human life cycle can be viewed as a series of attractors around which individual development tends to advance and which are strongly related to planetary cycles (see **Table 1**). By identifying phase shifts in attractor states and how they relate to developmental processes, this research may also help us better understand experiences of synchronicity [9]. Dynamic forecasting is characterized by clear tendencies, despite individual differences within systems. Though we are unable to predict the weather at any given moment, we can accurately predict the temperature by the day and time of year, because their average values, as well as the variations likely to take place around those average values, is well known. The reason is that complex systems tend to "average out." Statistically, it is also possible to predict this for human-related matters, such as synchronicity experience.

This dynamic perspective contrasts with the usual way that astrologers think about prediction. Astrology is mainly based on static forecasting. *Static forecasts* use symmetry in the natal chart to predict the future [2]. In contrast, this study is aimed at increasing the sophistication of predictive thinking through the use of dynamic forecasts. *Dynamic forecasts* project the birth date over time and observe how events progress, develop, and advance [2]. Dynamical phase space is necessary to recognize attractors of a system [34] [35]. Though the dynamics underlying synchronicity are complex, multi-faceted, and ambiguous, some predictability may be found in terms of the attractors of system evolution [6] [9].

Based on empirical analysis of synchronicities in relation to planetary transits, this study is able to identify new factors that could influence synchronicities. In addition, it is able to expand the scope of existing theories. The present study was undertaken in the context of this methodological challenge. It is also in line with the importance of ambiguity in the research process.

5. The Study

The study aimed to test the astrological hypothesis that there is a relationship between synchronicity experiences and planetary transits. This is a highly relevant area of research given that synchronicities may support the therapeutic process [14] [36]. Quantitative research is lacking, however, on the underlying process that may explain synchronicity.

5.1. Subjects and Sample Size

The sample consisted of 18 subjects who had previously participated in a research study [6]. In this study, no new experimental data was collected. Each subject could recall exactly when their synchronicity occurred. In total, 18 sub-

jects reported 41 synchronicities, so the sample size was 41. Of the 18 subjects, demographic results showed the majority of respondents were female (83%), White/Caucasian/European (89%), and spiritual but not religious (56%). The subjects ranged in age from 32 to 72 years of age, with an average age of 58.90 (Median = 61.3; SD = 9.31). On the meaningfulness scale, 23 (56%) of the 41 synchronicities were rated as 10 out of 10 indicating highly meaningful experiences.

5.2. Measurements

Eight planets constitute the framework for applying astrology to human psychology: Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto [1]. Transits of planets in astrology refer to the time it takes a planet to complete one orbital cycle relative to the date of birth. For each planet, the period of its motion is equal to the period of its orbit around the Sun. **Table 1** shows the orbital periods of the planets in our solar system compared to the Fibonacci sequence multiplied by 24 hours, referred to as the Fibonacci Life Chart [10]. There is a clear symmetry between planetary orbital periods and Fibonacci time patterns, as can be seen. Note that all cycles in **Table 1** are orbital periods, except for that of the Moon, which is a precession cycle. Also note that Ceres is classified as a dwarf planet in **Table 1**, the nearest dwarf planet to the Sun.

In astrology, the transits of the slower moving planets (e.g., Jupiter and Saturn) are considered to be more important than those of the faster moving planets (e.g., Mercury and Venus) [2]. For the purposes of this study, the key measurements were three planetary transits, namely, Mars (1.88 years), Jupiter (11.86 years), and Saturn (29.46 years). A four-stage modeling strategy was used. First, a time series model was constructed for each of the three planetary transits (and their cyclic multiples) in Microsoft Excel by consecutively adding 1.88,

Table 1. Temporal symmetry of planetary transits and Fibonacci life chart method.

Body	Cycle (Years)	FLCM (Years)	Percent Error
Mercury	0.24	0.24	0.00%
Venus	0.62	0.63	-1.61%
Earth	1.00	1.03	-3.00%
Mars	1.88	1.67	11.17%
Ceres	4.60	4.37	4.98%
Jupiter	11.87	11.45	3.54%
Moon	18.60	18.53	0.38%
Saturn	29.44	29.98	-1.83%
Uranus	83.81	78.51	6.32%
Pluto	248.40	205.54	17.25%
		Average deviation	3.72%

Note. Average deviation statistically significant at the 5% level. Planetary data are from Weissman (2014).

11.86, and 29.46 years to a default date of 01/01/2000. Second, birthdates were individually entered into the default date to automatically convert the Excel model into a time series. Third, all calendar dates generated by the time series falling 182.5 days (6 months) before/after the date of the corresponding synchronicity were identified using the Excel conditional formula and compared to the number of full days between synchronicity dates. Finally, these observed dates were compared to expected match rates using cutoff limits based on 13, 21, 34, 55, and 89 calendar days before or after the synchronicity date. Table 2 shows the match rates for the expected distribution.

5.3. Statistical Analysis

In terms of statistical analysis, the sample size was adequate (N = 41). An evaluation of the fit between the data and the expected distribution was performed using the chi-square goodness-of-fit statistic. Statistical significance was defined as $p \le 0.10$ for all tests.

5.4. Results

This experiment was designed to test whether three planetary transits, Mars (1.88 years), Jupiter (11.86 years), and Saturn (29.46 years) would predict increased SEs in comparison to chance. Each participant's birth date was entered individually into the time series model. From individual simulations of the 18 participant birthdays, there was a total of 90 unique calendar dates that were 182.5 days before/after a synchronicity date in 41 of the 41 available synchronicities. The hypothesis that the time series model will predict a higher frequency of synchronicities than chance was tested by grouping calendar dates into categories of 13 days, 21 days, 34 days, 55 days, and 89 days unique match scenarios and comparing the proximity of the synchronicity dates for all five scenarios. The number of unique matches was compared with the expected distribution. Pearson goodness-of-fit chi-square analysis did not reveal any differences in synchronicity matches in comparison to the expected distribution (p >.10). These data are shown in Table 3.

6. Discussion

This study examined the use of planetary transits, which were the cycle lengths

Table 2. Expected distribution for the time series model ages 23.25 to 72.49 (N = 65).

Interval	Dates	Duplicate	Unique	Total range	% of Total
±13 days	1690	23	1667	17,973	9.28%
±21 days	2730	55	2675	17,973	14.88%
±34 days	4420	137	4283	17,973	23.83%
±55 days	7150	403	6747	17,973	37.54%
±89 days	11,570	1161	10,409	17,973	57.92%

Table 3. Chi-square results for synchronicity matches (N = 41).

Range	0	%	Е	%	χ^2	df	p
±13 days	5	12.20	3.80	9.28	0.42	1	0.5181
±21 days	5	12.20	6.10	14.88	0.23	1	0.6293
±34 days	9	21.95	9.77	23.83	0.08	1	0.7777
±55 days	15	36.59	15.39	37.54	0.02	1	0.8999
±89 days	24	58.54	23.75	57.92	0.01	1	0.9370

Note. O = observed matches; E =expected matches; % =percent of total (N = 41).

of Mars (1.88 years), Jupiter (11.86 years), and Saturn (29.46 years), to predict increased synchronicity experiences compared to chance. When compared to chance, planetary transit time series were not significantly more likely to predict synchronicity. The results suggest no link between planetary transits and synchronicity experience. The data is not consistent with the astrological claim that planet transits predict synchronicity.

Historically, astrology research can be divided into two major camps—correlation and causation [26]. Correlation studies focused on correlations between celestial objects and earthly events and causal studies focused on the causal forces or mechanisms that celestial objects emit that impact earthly events. For most of its long history, the emphasis within astrology was on causation—considering the effects of planets on specific earthly outcomes. During the late 1940s, beginning with the importance of Jung's research and analytic work in astrology [2], researchers, theorists, and practitioners increasingly questioned the validity of causation theories. Hence attention was focused on correlation—what celestial factors were associated with human change.

Planetary transits do not appear correlated to synchronistic experience. Given the observations over the centuries by astrologers of the association between planetary transits and synchronicity experience, another interpretation is warranted. This is possibly supplied by Sacco [4] [6] [9], whose work links planetary transits to a wider theoretical framework based on entrainment of the Fibonacci series. Fibonacci time patterns demonstrate temporal symmetry with planetary transits (see Table 1). Previous research has also demonstrated that Fibonacci time patterns might predict synchronicity experiences between ±34 days [6]. Therefore, rather than playing a direct causal role in synchronicity experience (as has often been supposed), planetary transits are perhaps an indicator of something that is very important to synchronicity, namely, Fibonacci time patterns. It would be interesting in future work to explore whether planetary transits may influence the predictability of synchronicity using a larger sample size to provide a more detailed insight into the interplay between planetary transits and the predictability of synchronicity.

In synchronicity research, and perhaps in all research studies, ambiguity tolerance serves as an important resource. The ambiguity of synchronicity allows people to investigate what is possible in the world, and in doing so, explore it. Indeed, many scientists have had experiences that they would describe as mystical, as going beyond familiar sensory dimensions and offering a glimpse of the unified reality of which mystics speak. Isaac Newton was so intrigued by the mystical that he devoted the last part of his life to alchemical studies. Albert Einstein, another prodigious pioneer of science, echoed Newton's belief in the reality of the mystical: "The most beautiful and profound emotion we can experience is the sensation of the mystical. It is the source of all true science" (p. 191) [37].

Rather than trying to resolve ambiguities, we should view them as opportunities for exploration [15]. In order for ideas to advance, there must be uncertainty, since it creates an instability in what is currently known, which allows the formation of new knowledge. This relates to a falsifiable approach to knowledge and truth and is essential for the sort of falsifiable approach exemplified here.

7. Conclusion

Astrology is an ancient field of study based on the position of planets at the time of birth. In astrology, planetary transits are often thought to predict increased synchronicity experiences, but this hasn't been empirically proven. The aim of this study was to investigate planetary transits as a potential predictor of synchronicity experience. According to the present research, planetary transits are unrelated to synchronicity experience. The current findings contradict the popular belief that planetary transits lead to synchronicity experiences. Fibonacci time patterns are more likely to play a significant role. In the context of research, ambiguity means locating parallel and equally valid meanings within their respective systems of reference. As a result, the aspects of an ambiguous situation (which may seem to be contradictory) may be related.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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