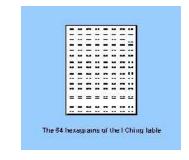


# Time Synchronicity



©2024, AlephTalks
Adapted from Wikipedia
7 March 2024





- Synchronicity (German: Synchronizität) is a concept first introduced by analytical psychologist Carl G. Jung "to describe circumstances that appear meaningfully related yet lack a causal connection."
- In contemporary research, synchronicity experiences refer to one's subjective experience whereby coincidences between events in one's mind and the outside world may be causally unrelated to each other yet have some other unknown connection.
- Jung held that this was a healthy, even necessary, function of the human mind that can become harmful within psychosis.



- Jung developed the theory of synchronicity as a hypothetical noncausal principle serving as the
  intersubjective or philosophically objective connection between these seemingly meaningful
  coincidences. Mainstream science generally regards that any such hypothetical principle either
  does not exist or falls outside the bounds of science.
- After first coining the term in the late 1920s or early 30s, Jung further developed the concept in collaboration with physicist and Nobel laureate Wolfgang Pauli through long correspondences and in their eventual 1952 work The Interpretation of Nature and the Psyche (German: Naturerklärung und Psyche) which comprises one paper from each of the two thinkers.
- Their work together culminated in what is now called the Pauli-Jung conjecture. During his career,
  Jung furnished several different definitions of synchronicity, defining it as "a hypothetical factor
  equal in rank to causality as a principle of explanation", "an acausal connecting principle",
  "acausal parallelism", and as the "meaningful coincidence of two or more events where
  something other than the probability of chance is involved".
- In Pauli's words, synchronicities were "corrections to chance fluctuations by meaningful and purposeful coincidences of causally unconnected events", though he had also proposed to move the concept away from coincidence towards instead a "correspondence", "connection", or "constellation" of discrete factors.
- Jung and Pauli's view was that, just as causal connections can provide a meaningful understanding
  of the psyche and the world, so too may acausal connections



- A 2016 study found that two thirds of therapists surveyed agreed that synchronicity experiences could be useful for therapy.
- Analytical psychologists likewise hold that individuals must come to understand the compensatory meaning of these experiences in order to "enhance consciousness rather than merely build up superstitiousness". However, clients who disclose synchronicity experiences in a clinical setting often report not being listened to, accepted, or understood.
- Furthermore, the experiencing of an overabundance of meaningful coincidences is characteristic of the earliest stages of schizophrenic delusion.
- M. K. Johansen and M. Osman write that "prevalent among many scientists, particularly
  psychologists studying coincidences, is [the view] that the occurrence of coincidences, as
  psychologically experienced, is induced by noisy chance occurrences out in the world which are
  then misconstrued via irrational cognitive biases into unfounded, possibly even paranormal,
  beliefs in the mind."
- One study has shown that both counselors and psychoanalysts were less likely than psychologists
  to agree that chance coincidence was an adequate explanation for synchronicity, while more
  likely than psychologists to agree that a need for unconscious material to be expressed could be
  an explanation for synchronicity experiences in the clinical setting.



- Jung used the concept of synchronicity in arguing for the existence of the paranormal.
- This idea was similarly explored by writer Arthur Koestler in his 1972 work The Roots of Coincidence and was also taken up by the New Age movement.
- Unlike magical thinking, which believes causally unrelated events to have some paranormal causal connection, the synchronicity principle supposes that events may truly be causally unrelated yet have some unknown noncausal connection. The objection from a scientific standpoint, however, is that this is neither testable nor falsifiable and therefore does not fall within the realm of empirical study. Scientific scepticism regards it as pseudoscience.
- Jung stated that synchronicity events are nothing but chance occurrences from a statistical point of view, but are meaningful in that they may seem to validate paranormal ideas. However, no empirical studies of synchronicity experiences based on observable mental states and scientific data were conducted by Jung in order to draw his conclusions, though some studies have since been done in this area



- While a given observer may subjectively experience a coincidence as meaningful, this alone cannot prove any objective meaning to the coincidence.
- Various statistical laws, such as Littlewood's law and the law of truly large numbers or basic properties of probability as Poisson clumping, show how unexpected occurrences can be inevitable or more likely to encounter than people otherwise assume.
- These serve to explain coincidences such as synchronicity experiences as chance events which have been misinterpreted by confirmation biases, spurious correlations, or underestimated probability



- Synchronicity arose with Jung's use of the ancient Chinese oracle I Ching. It has 64 hexagrams, each built from two trigrams or bagua. A divination is made by seemingly random numerical happenings for which the I Ching text gives detailed situational analysis. Richard Wilhelm, translator of Chinese, provided Jung with validation. Jung met Wilhelm in Darmstadt, Germany where Hermann von Keyserling hosted Gesellschaft für Freie Philosophie. In 1923 Wilhelm was in Zurich, as was Jung, attending the psychology club, where Wilhelm promulgated the I Ching. Finally,
  - I Ching was published with Wilhelm's commentary. I instantly obtained the book and found to my gratification that Wilhelm took much the same view of the meaningful connections as I had. But he knew the entire literature and could therefore fill in the gaps which had been outside my competence.
  - — Aniela Jaffé (1962), Memories, Dreams, Reflections of C.G. Jung, page 374



- Jung coined the term synchronicity as part of a lecture in May 1930, or as early as 1928, at first for use in discussing Chinese religious and philosophical concepts.
- His first public articulation of the term came in 1930 at the memorial address for Richard Wilhelm where Jung stated:
  - The science [i.e. cleromancy] of the I Ching is based not on the causality
    principle but on one which—hitherto unnamed because not familiar to us—I
    have tentatively called the synchronistic principle.



- The I Ching is one of the five classics of Confucianism. By selecting a passage according to the traditional chance operations such as tossing coins and counting out yarrow stalks, the text is supposed to give insights into a person's inner states. Jung characterised this as the belief in synchronicity, and himself believed the text to give apt readings in his own experiences. He would later also recommend this practice to certain of his patients.
- Jung argued that synchronicity could be found diffused throughout Chinese philosophy more broadly and in various Taoist concepts. Jung also drew heavily from German philosophers Gottfried Leibniz, whose own exposure to I Ching divination in the 17th century was the primary precursor to the theory of synchronicity in the West, Arthur Schopenhauer, whom Jung placed alongside Leibniz as the two philosophers most influential to his formulation of the concept, and Johannes Kepler. He points to Schopenhauer, especially, as providing an early conception of synchronicity in the quote:
  - All the events in a man's life would accordingly stand in two fundamentally different kinds of connection: firstly, in the objective, causal connection of the natural process; secondly, in a subjective connection which exists only in relation to the individual who experiences it, and which is thus as subjective as his own dreams[.]
  - — Arthur Schopenhauer, "Transcendent Speculation on the Apparent Deliberateness in the Fate of the Individual", Parerga and Paralipomena (1851), Volume 1, Chapter 4, trans. E. F. J. Payne



- As with Paul Kammerer's theory of seriality developed in the late 1910s, Jung looked to hidden structures of nature for an explanation of coincidences In 1932, physicist Wolfgang Pauli and Jung began what would become a long-spanning correspondence in which they discussed and collaborated on various topics surrounding synchronicity, contemporary science, and what is now known as the Pauli effect. Jung also built heavily upon the idea of numinosity, a concept originating in the work of German religious scholar Rudolf Otto, which describes the feeling of gravitas found in religious experiences, and which perhaps brought greatest criticism upon Jung's theory. Jung also drew from parapsychologist J. B. Rhine whose work in the 1930s had at the time appeared to validate certain claims about extrasensory perception. It was not until a 1951 Eranos conference lecture, after having gradually developed the concept for over two decades, that Jung gave his first major outline of synchronicity. The following year, Jung and Pauli published their 1952 work The Interpretation of Nature and the Psyche (German: Naturerklärung und Psyche), which contained Jung's central monograph on the subject, "Synchronicity: An Acausal Connecting Principle".
- Other notable influences and precursors to synchronicity can be found in: the theological concept of correspondences, sympathetic magic, astrology, and alchemy

# Pauli-Jung Conjecture



- The Pauli–Jung conjecture is a collaboration in metatheory between physicist Wolfgang Pauli and analytical psychologist Carl Jung, centered on the concept of synchronicity. It was mainly developed between the years 1946 and 1954, four years before Pauli's death, and speculates on a double-aspect perspective within the disciplines of both collaborators. Pauli additionally drew on various elements of quantum theory such as complementarity, nonlocality, and the observer effect in his contributions to the project. Jung and Pauli thereby "offered the radical and brilliant idea that the currency of these correlations is not (quantitative) statistics, as in quantum physics, but (qualitative) meaning."
- Contemporary physicist T. Filk writes that quantum entanglement, being "a particular type of acausal quantum correlations", was plausibly taken by Pauli as "a model for the relationship between mind and matter in the framework [...] he proposed together with Jung." Specifically, quantum entanglement may be the physical phenomenon which most closely represents the concept of synchronicity.

# Analytical Psychology



- In analytical psychology, the recognition of seemingly-meaningful coincidences is a mechanism by which unconscious material is brought to the attention of the conscious mind. A harmful or developmental outcome can then result only from the individual's response to such material.
   Jung proposed that the concept could have psychiatric use in mitigating the negative effects of over-rationalisation and proclivities towards mind—body dualism.
- Analytical psychology considers modern modes of thought to rest upon the pre-modern and primordial structures of the psyche. Causal connections thus form the basis of modern worldviews, and connections which lack causal reasoning are seen as chance. This chance-based interpretation, however, is incongruent with the primordial mind which instead interprets this category as intention. The primordial framework in fact places emphasis on these connections, just as the modern framework emphasizes causal ones. In this regard, causality, like synchronicity, is a human interpretation imposed onto external phenomena. Primordial modes of thought are however, according to Jung, necessary constituents of the modern psyche that inevitably protrude into modern life—providing the basis for meaningful interpretation of the world by way of meaning-based connections. Just as the principles of psychological causality provide meaningful understanding of causal connections, so too the principle of synchronicity attempts to provide meaningful understanding of acasual connections. Jung placed synchronicity as one of three main conceptual elements in understanding the psyche

# Analytical Psychology



- Psychological causality, as understood in Freudian theory, by which repressed libidinal energy is discharged across the psyche in response to principles of cause and effect—though Jung broadened this to a more generalized mental energy that is "particular to the unfolding of the individual psyche"
- Psychological teleology, by which self-actualisation is an element of the psyche as potential
- Psychological synchronicity, or meaningful chance, by which the potential for self-actualisation is either enhanced or negated

# Analytical Psychology



- Jung felt synchronicity to be a principle that had explanatory power towards his concepts of archetypes and the collective unconscious.
- It described a governing dynamic which underlies the whole of human experience and history—social, emotional, psychological, and spiritual.
- The emergence of the synchronistic paradigm was a significant move away from Cartesian dualism towards an underlying philosophy of double-aspect theory. Some argue this shift was essential in bringing theoretical coherence to Jung's earlier work

### Philosophy of Science



- Jung held that there was both a philosophical and scientific basis for synchronicity. He identified the complementary nature of causality and acausality with Eastern sciences and protoscientific disciplines, stating "the East bases much of its science on this irregularity and considers coincidences as the reliable basis of the world rather than causality. Synchronism is the prejudice of the East; causality is the modern prejudice of the West" (see also: universal causation). Contemporary scholar L. K. Kerr writes:
  - Jung also looked to modern physics to understand the nature of synchronicity, and attempted to adapt many ideas in this field to accommodate his conception of synchronicity, including the property of numinosity. He worked closely with Nobel Prize winning physicist Wolfgang Pauli and also consulted with Albert Einstein. The notion of synchronicity shares with modern physics the idea that under certain conditions, the laws governing the interactions of space and time can no longer be understood according to the principle of causality. In this regard, Jung joined modern physicists in reducing the conditions in which the laws of classical mechanics apply

# Philosophy of Science



- It is also pointed out that, since Jung took into consideration only the narrow definition of causality—only the efficient cause—his notion of acausality is also narrow and so is not applicable to final and formal causes as understood in Aristotelian or Thomist systems.
- Either the final causality is inherent in synchronicity, as it leads to individuation; or synchronicity can be a kind of replacement for final causality. However, such finalism or teleology is considered to be outside the domain of modern science.
- Jung's theory, and philosophical worldview implicated by it, includes not only mainstream science thoughts but also esoteric ones and ones that are against mainstream.

#### Paranormal



- Jung's use of the concept in arguing for the existence of paranormal phenomena has been widely considered pseudoscientific by modern scientific scepticism.
- Furthermore, his collaborator Wolfgang Pauli objected to his dubious experiments of the concept involving astrology—which Jung believed to be supported by the laboratory experiments behind the uncertainty principle's formulation.
- Jung similarly turned to the works of parapsychologist Joseph B. Rhine to support a connection between synchronicity and the paranormal.

#### Paranormal

From Synchronicity: An Acausal Connecting Principle



- How are we to recognize acausal combinations of events, since it is obviously impossible to examine all chance happenings for their causality? The answer to this is that acausal events may be expected most readily where, on closer reflection, a causal connection appears to be inconceivable....
- It is impossible, with our present resources, to explain ESP [extrasensory perception], or the fact of meaningful coincidence, as a phenomenon of energy. This makes an end of the causal explanation as well, for "effect" cannot be understood as anything except a phenomenon of energy. Therefore it cannot be a question of cause and effect, but of a falling together in time, a kind of simultaneity. Because of this quality of simultaneity, I have picked on the term "synchronicity" to designate a hypothetical factor equal in rank to causality as a principle of explanation

#### Paranormal

Roderick Main, in the introduction to his 1997 book Jung on Synchronicity and the Paranormal,



• The culmination of Jung's lifelong engagement with the paranormal is his theory of synchronicity, the view that the structure of reality includes a principle of acausal connection which manifests itself most conspicuously in the form of meaningful coincidences. Difficult, flawed, prone to misrepresentation, this theory none the less remains one of the most suggestive attempts yet made to bring the paranormal within the bounds of intelligibility. It has been found relevant by psychotherapists, parapsychologists, researchers of spiritual experience and a growing number of non-specialists. Indeed, Jung's writings in this area form an excellent general introduction to the whole field of the paranormal.

#### Western Science Views



- Since their inception, Jung's theories of synchronicity have been highly controversial and have never had widespread scientific approval. Scientific scepticism regards them as pseudoscience. Likewise, mainstream science does not support paranormal explanations of coincidences. A contemporary study by R. G. Sacco states that:
  - Synchronicity is one of the most widely known terms of Jungian psychology. Although generations of scholars from various fields have found the concept intuitively appealing and interpretively useful, there has been little agreement among theorists how synchronicity might operate, and researchers have had difficulty providing empirically testable models.
- Despite this, synchronicity experiences and the synchronicity principle continue to be studied within philosophy, cognitive science, and analytical psychology. Synchronicity is widely challenged by the sufficiency of probability theory in explaining the occurrence of coincidences, the relationship between synchronicity experiences and cognitive biases, and doubts about the theory's psychiatric or scientific usefulness.

#### Western Science Views



- Psychologist Fritz Levi, a contemporary of Jung, criticised the theory in his 1952 review, published in the periodical Neue Schweizer Rundschau (New Swiss Observations). Levi saw Jung's theory as vague in determinability of synchronistic events, saying that Jung never specifically explained his rejection of "magic causality" to which such an acausal principle as synchronicity would be related. He also questioned the theory's usefulness.
- In a 1981 paper, parapsychologist Charles Tart writes:
  - [There is] a danger inherent in the concept of synchronicity. This danger is the temptation to mental laziness. If, in working with paranormal phenomena, I cannot get my experiments to replicate and cannot find any patterns in the results, then, as attached as I am to the idea of causality, it would be very tempting to say, "Well, it's synchronistic, it's forever beyond my understanding," and so (prematurely) give up trying to find a causal explanation. Sloppy use of the concept of synchronicity then becomes a way of being intellectually lazy and dodging our responsibilities.

#### Western Science View



- Robert Todd Carroll, author of The Skeptic's Dictionary in 2003, argues that synchronicity experiences are better explained as apophenia—the tendency for humans to find significance or meaning where none exists. He states that over a person's lifetime one can be expected to encounter several seemingly-unpredictable coincidences and that there is no need for Jung's metaphysical explanation of these occurrences.
- In a 2014 interview, emeritus professor and statistician David J. Hand states:
  - Synchronicity is an attempt to come up with an explanation for the occurrence of highly improbable coincidences between events where there is no causal link. It's based on the premise that existing physics and mathematics cannot explain such things. This is wrong, however—standard science can explain them. That's really the point of the improbability principle. What I have tried to do is pull out and make explicit how physics and mathematics, in the form of probability calculus does explain why such striking and apparently highly improbable events happen. There's no need to conjure up other forces or ideas, and there's no need to attribute mystical meaning or significance to their occurrence. In fact, we should expect them to happen, as they do, purely in the natural course of events.[25]
- In a 2015 paper, scholars M. K. Johansen and M. Osman state:
  - As theories, the main problem with both synchronicity and seriality is that they ignore the possibility that coincidences are a psychological phenomenon and focus instead on the premise that coincidences are examples of actual but hidden structures in the world.

# Jung's Scarab Example



- By way of example, I shall mention an incident from my own observation. A young woman I was treating had, at a critical moment, a dream in which she was given a golden scarab. While she was telling me this dream I sat with my back to the closed window. Suddenly I heard a noise behind me, like a gentle tapping. I turned round and saw a flying insect knocking against the window pane from outside. I opened the window and caught the creature in the air as it flew in. It was the nearest analogy to a golden scarab that one finds in our latitudes, a scarabaeid beetle, the common rose-chafer (Cetonia aurata), which contrary to its usual habits had evidently felt an urge to get into a dark room at this particular moment.
- It was an extraordinarily difficult case to treat, and up to the time of the dream little or no progress had been made. I should explain that the main reason for this was my patient's animus, which was steeped in Cartesian philosophy and clung so rigidly to its own idea of reality that the efforts of three doctors—I was the third—had not been able to weaken it. Evidently something quite irrational was needed which was beyond my powers to produce. The dream alone was enough to disturb ever so slightly the rationalistic attitude of my patient. But when the "scarab" came flying in through the window in actual fact, her natural being could burst through the armor of her animus possession and the process of transformation could at last begin to move

### Another Example



- French writer Émile Deschamps claims in his memoirs that, in 1805, he was treated to some plum pudding by a stranger named Monsieur de Fontgibu. Ten years later, the writer encountered plum pudding on the menu of a Paris restaurant and wanted to order some, but the waiter told him that the last dish had already been served to another customer, who turned out to be de Fontgibu. Many years later, in 1832, Deschamps was at a dinner and once again ordered plum pudding. He recalled the earlier incident and told his friends that only de Fontgibu was missing to make the setting complete—and in the same instant, the now-senile de Fontgibu entered the room, having got the wrong address.
- After describing some examples, Jung wrote: "When coincidences pile up in this way, one cannot help being impressed by them – for the greater the number of terms in such a series, or the more unusual its character, the more improbable it becomes

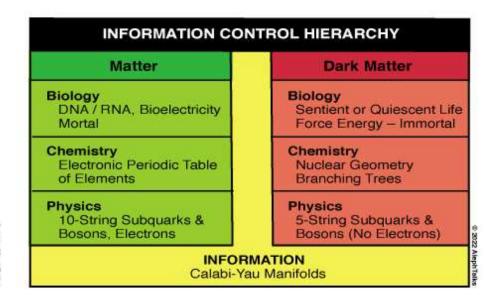
# Pauli's Synchronicity



- It is well known that theoretical physicists cannot handle experimental equipment; it breaks whenever they touch it.
- Pauli was such a good theoretical physicist that something usually broke in the lab whenever he merely stepped across the threshold.
- A mysterious event that did not seem at first to be connected with Pauli's presence once occurred in Professor J. Franck's laboratory in Göttingen. Early one afternoon, without apparent cause, a complicated apparatus for the study of atomic phenomena collapsed. Franck wrote humorously about this to Pauli at his Zürich address and, after some delay, received an answer in an envelope with a Danish stamp. Pauli wrote that he had gone to visit Bohr and at the time of the mishap in Franck's laboratory his train was stopped for a few minutes at the Göttingen railroad station. You may believe this anecdote or not, but there are many other observations concerning the reality of the Pauli Effect!

# The Sacred Geometry of the Universe

10 Matter Dimensions	10 Dark Matter Dimensions
Space-Time 4 Dimensions (x,y,z,ict²)	Space-Time 4 Dimensions i * (x,y,z,ict) = (ix,iy,iz,-ct)
Symplectic Calabi-Yau Manifold 6 Compactified Dimensions 3 Holes – Genus 3 Hodge Diamond (9,11,6,7)	Symplectic Calabi-Yau Manifold 6 Compactified Dimensions 4 Holes – Genus 4 Hodge Diamond (17,12,21,12)
Symplectic Calabi-Ya 6 Synchronizing Com 8 Holes – Genus 8 Hodge Diamond (8,23	npactified Dimensions



<sup>2</sup> ict = √(-1) \* speed of light \* time.

Multiplying by sqrt(-1)=I rotates a dimension by ninety degrees= $\exp(i*\frac{pi}{2})$ 

Symplectic = real and imaginary pairs.

#### What Is Time?

- Time appears to be a dimension that has been rotated by ninety degrees away from the other three spatial dimensions
- In our four dimensional space-time, the natural coordinates appear to be (x,y,z,ict) where c is the speed of light (meters/sec) so ct has units of meters just like (x,y,z)
- In our companion subspace for dark matter, the natural coordinates appear to be i\*(x,y,z,ict) so now there is the notion of time in our four dimensional space-time, since now i\*ict=-ct=c\*(-t) so one aspect of time is in our four dimensional space-time
- Put differently, time has two aspects or components, and is the same as spatial dimensions but also different than spatial dimensions