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Article

Chronos vs Kairos - The Perception of Time in Near-Death Experiences, Mystical States of Consciousness, and Psychedelic-Induced States of Consciousness

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Abstract: Time can be a difficult concept to understand. Albert Einstein, who viewed time as an illusion, explained the passage of time is relative to the observer's frame of reference in the spacetime continuum. However, the state of consciousness of the observer also influences the passage of time. This paper examines the relationship between the experience of time and different states of consciousness including near-death experiences, mystical states of consciousness, and psychedelic medicine-induced states of consciousness. Two different experiences of time are described. These are Chronos and Kairos. Chronos is described as 4th dimensional time whereas Kairos is 5th dimension time. Methods for facilitating the experience of Kairos are discussed and the potential benefits of experiencing Kairos are reviewed.

Keywords: Chronos; Kairos; mystical states of consciousness; near-death experiences; psychedelic medicines

INTRODUCTION

What is Time?

"...the separation between past, present and future has only the importance of an admittedly tenacious illusion" - Albert Einstein

What is time? Physicists, poets, and psychologists have opined about the nature of time for generations, yet many of us struggle to grasp the nature of time. Albert Einstein, who referred to time as both a "creation of the human intelligence" (Einstein 1961, p. 161) and a "tenacious illusion" (Christie's, 2022), explained that the concept of time is subjective and refers to "the arrangement of the experiences of the individual" (Einstein 1961, p. 160). This is consistent with how most physicists view time, i.e. the progression or movement of events from the past to the present and into the future (Helmenstine, 2019).

Also identified as the fourth dimension of a space-time continuum (Einstein 1961, p. 61), the concept of time is used to describe events in physical space. Einstein viewed space as a "three-dimensional continuum," meaning that it is possible to describe the position of a physical object with three numbers or co-ordinates (Einstein 1961, p. 61). Physical phenomena or events that take place in this three-dimensional continuum do so over a period of time.

Einstein also taught that time is not constant but is relative. But, relative to what? The general and special theories of relativity explain time is relative to the frame of reference of the observer. Each frame of reference has its own time (Einstein 1961, p. 31).

One of the problems encountered when attempting to understand time is our singular perception of time. Time is viewed as a thing that can be defined, described, and measured. But this perspective fails to consider the existence of more than one experience of time. The ancient Greeks described two different experiences of time, with each being dependent upon the state of the observer. These are called *Chronos* and *Kairos* (Pauling, 2022).

Chronos

The most common way we experience time is by the sequential passage of events. A clock indicates the passage of time in seconds, minutes, and hours whereas a calendar marks the passage of time in days, weeks, months, etc. This experience of time is known as "Chronos," from which the words *chronic, chronicle*, and *chronology* are derived. If an event lasts a long time, it is *chronic. Chronicle* refers to the recording of a sequence of events that occur through time and a *chronology* is a record of a series of events. Chronos is thus linear time or sequential time as we experience it in our everyday lives. We are experiencing Chronos when we attend an event at a specific time on our watch or on a specific day on the calendar. When we count down the days until Christmas or arrange to meet with friends for coffee at a particular time on a particular day, we are experiencing Chronos time.

Also referred to as *clock time* or *calendar time*, Chronos is experienced as a series of events that can be identified according to a reference frame or a timeline. This timeline is made up of a series of bounded segments that we label as seconds, minutes, hours, days, weeks, months, years, etc. The time of occurrence of an event as well as the duration of the event can be identified on this timeline. Furthermore, events in Chronos move in a single direction, from past, to present to future. Chronos is the fourth dimension of which Einstein spoke when he described the 4-dimensional space-time continuum.

To understand Chronos, imagine that you are sitting in a theater watching a movie. The movie has a beginning, a middle and an end. For example, the movie may start at 7:00 pm on Wednesday October 12th and finish at 9:00 pm that same day. This is Chronos time. In Chronos, events are sequential and move in one direction only. Time is experienced as flowing only forward, not backward.

Einstein taught that the passage of time is relative to the frame of reference of the observer and each frame of reference has its own experience of time. Since most of us are moving at approximately the same speed relative to each other, we don't notice a significant difference in the passage of time. However, if we were to travel at a very fast speed relative to others, we would notice a difference in the passage of time. The closer one travels to the speed of light, the longer the time between events. This is known as *time dilation*. Similarly, clocks moving through physical space at a speed near the speed of light run slower than stationary clocks and this effect becomes more pronounced as the clock's speed approaches the speed of light. The speed of light is also the limiting velocity for physical objects in the 4-dimensional (4-D) space-time continuum (Einstein 1961, p. 41).

One reason why the speed of objects in the space-time continuum is limited by the speed of light is that as an object approaches the speed of light, its mass increases. Therefore, it would take an infinite amount of energy to accelerate a physical object to the speed of light. Only massless particles, such as photons, are able to travel at the speed of light (American Museum of Natural History).

The characteristic features of Chronos are listed in Table 1. These are: (1) events are sequential, (2) events are experienced in a unidirectional order, (3) events can be identified with a specific point on a timeline, (4) the duration of events is measurable along a timeline, (5) the passage of time is relative to the perspective of the observer with regard to an outside frame of reference, (6) the speed of an object is limited by the speed of light.

Table 1. Characteristics of Chronos.

CHARACTERISTIC	CHRONOS
1. Order in which events are experienced	Sequential
2. Direction in which events are experienced	Unidirectional: from past to present to future; linear
3. Relationship of events relative to a timeline	Events can be identified with a specific point on a timeline
4. Duration of events relative to a timeline	The duration of events is measurable along a timeline
5. Relationship between the occurrence of events and an outside frame of reference	The occurrence of events and the passage of time is relative to the perspective of the observer with regard to an outside frame of reference
6. Limitation on events by the speed of light	Yes, events are limited by the speed of light
7. Association with thought	Associated with rational thought

But Chronos is only one way of experiencing time. A second is Kairos.

Kairos

"We usually conceive of time as something simple, fundamental, flowing evenly, indifferent to everything from the past to the future, measured by clocks. Over time, the events of the universe follow one another in order: past, present, future. The past is fixed, the future is open ... Well, all this [from current physics] has turned out to be false." Carlo Rovelli, physicist

Kairos describes an experience of time that is different from Chronos. Kairos is also known as archetypal time, timelessness (Tart 1983, p. 127), nunc flue, "passing present" (Wilber 1993 p. 116), God's time (Herbers 2020), or eternity (Wilber, 1993 p. 86).

Wilber (1993) refers to Kairos as *eternity* and explains "...eternity is not everlasting time nor a split fraction of a second - rather, it is timeless, a moment without date or duration, existing in its entirety right now" (p. 86). Wilber (1979) goes on to explain:

The eternal moment is a timeless moment, a moment which knows neither past nor future, before nor after, yesterday nor tomorrow, birth nor death...To live in the present, above time...seems to be the crux of the whole matter of eternity... the past and future are simply the illusory products of a symbolic boundary superimposed upon the eternal now...time, as a boundary upon eternity, is not a problem to get rid of, but an illusion which doesn't exist in the first place (Wilber 1979 p. 62, 65).

Kairos thus transcends Chronos and the 4-dimensional space-time continuum. Kairos is 5th-dimensional time. In Kairos, events are not referenced to a timeline, but are experienced according to

their relationship with other events. Also, events are not identified with a particular time on a watch or day on the calendar, but instead are identified according to when they occur in relation to other events. Kairos is *relational time*. Also, in Kairos time, events are experienced simultaneously rather than sequentially.

In order to understand Kairos time, imagine that you are in the same movie theater previously described, but this time you are in the projection room where the camera and film are located. Next, imagine that you take the reel of film off the projector and unwind the film on the floor. Each frame of the film represents an event in time. If you look at an individual frame of the film, you can see that there is a frame just preceding it and another frame immediately following it. You can look at individual frames on the film in any order you like. You can start with the first frame or the last frame, or even one in the middle because all frames are available to look at simultaneously. You can also look at the frames in any direction you like. You can start with the first frame, then the second, then the third, and so on until you have looked at every frame on the film from first to last. Or you can start with the last frame, and look at the one before it and so on until you reach the first frame of the film. Or you can start in the middle and go in either direction. Also, you can start looking at the film at any time on your watch and any day on the calendar. The events on the film will be the same on Tuesday at 10:00 am and on Friday at 7:00 pm. The only change is the time on the clock or the date on the calendar when the frames are being observed, but the frames remain the same. The amount of time that passes on your watch that is required to observe the movie is irrelevant because it is possible to observe all the frames of the film simultaneously. They are all in front of you at once. You can select whether you focus on a single frame, or all the frames simultaneously. The frames do not change regardless of the time on your watch or the date on a calendar when you look at the frames. This transcendence of clock time is Kairos.

The characteristic features of Kairos are listed in Table. These include: (1) events exist simultaneously, (2) events can be perceived as occurring in any number of directions, (3) events are independent of any point on a timeline, (4) the duration of events cannot be measured on a timeline, (5) events occur in relation to other events without regard to an outside frame of reference such as a timeline, and (6) events are not limited by the speed of light.

Table 2. FEATURES OF CHRONOS AND KAIROS.

CHARACTERISTIC	CHRONOS	KAIROS
1. Order in which events are experienced	Sequential	Simultaneous
2. Direction in which events are experienced	Unidirectional: from past to present to future; linear	Multidirectional: events can be experienced in any order; non-linear
3. Relationship of events relative to a timeline	Events can be identified with a specific point on a timeline	Events are independent of any specific point on a timeline
4. Duration of events relative to a timeline	The duration of events is measurable along a timeline	The duration of events cannot be measured on a timeline

5. Relationship between the occurrence of events and an outside frame of reference	The occurrence of events and the passage of time is relative to the perspective of the observer with regard to an outside frame of reference	Events occur in relation to other events. Events happen outside of Chronos time
6. Limitation on events by the speed of light	Yes, events are limited by the speed of light	No, events are not limited by the speed of light
7. Association with thought	Associated with rational thought	Associated with numinous or intuitive thought*

^{*}Marney Makridakis. "Kronos & Kairos: Linear and Numinous Time Concepts." *Creativity Portal*. https://www.creativity-portal.com/articles/marney-makridakis/kronos-kairos-time.html.

Our Experience of Time is Determined by Our State of Consciousness

What determines whether events are experienced in Chronos or Kairos time? One of the primary determining factors is our state of consciousness. Ordinary, waking consciousness imposes a sequence and a timeline on events, resulting in the experience of time as Chronos. Altered states of consciousness, on the other hand, do not impose a timeline or a sequence on events. Thus, time is experienced as Kairos. We experience events as they exist in Chronos during ordinary, waking consciousness and we experience these same events in Kairos during altered states of consciousness. One altered state of consciousness in which Kairos is experienced is a near-death experience.

Near-Death Experiences

The term "near-death experience" (NDE) was coined over 50 years ago by Dr. Raymond Moody in his book *Life After Life* (1973). After interviewing 50 people who had a close brush with death, Moody compiled these accounts into a description of a prototypical NDE. Thus began the scientific exploration of NDEs.

Nearly a half century later, Moody's friend and mentor, Dr. Bruce Greyson published a book entitled *After* summarizing his decades of research into NDEs (Greyson, 2021). In this book, Greyson explains:

Many people who have had NDEs describe a sense of timelessness. Some of them say that time still existed, but that the NDE seemed to be outside the flow of time. Everything in their NDE seemed to be happening at once, or they seemed to move forward and backward in time. Others say that they realized in the NDE that time no longer existed, that the very concept of time became meaningless (Greyson, 2021 p. 33).

As an example, Greyson recounts the story of Bill Hernlund, a twenty-three-year-old US Air Force firefighter who experienced a NDE in which his sense of time was altered. Hernlund had just pulled his truck close to the back of a burning airplane when an explosion knocked him off balance. This first explosion was followed by a second, more powerful explosion that blasted Hernlund into the side of his truck, knocking him unconscious. Hernlund then passed through a tunnel toward a light that was pulling him toward it. Hernlund explained: "I moved exceptionally fast down the tunnel, and it took no time at all to reach it. It seemed like time was different or nonexistent there, wherever 'there' was' (Greyson 2021, p. 28).

Hernlund then encountered a being of light who projected "feelings of unconditional love and peace." This being of light asked him questions such as "How do you feel about your life?" and "How did you treat other people?" Concurrently with these questions, Hernlund experienced events from his life. He experienced: "every single event of my life from earliest childhood to the plane crash

projected in front of me. There were details concerning people and things that I had forgotten about long ago" (p. 28-29).

During NDEs, many individuals describe a sensation of time slowing down. Greyson recounts the NDE of a forty-four-year-old man named Rob who fell from a ladder (Greyson, 2021 p. 31). Rob described his experience this way: "The actual fall was slowed way down, almost like a series of camera still pictures being taken. A sort of 'click,' 'click' visual progression...this wonderful slowing down which allowed me to think clearly in split seconds was phenomenal" (Greyson, 2021 p. 32).

A similar account comes from the Swiss geology professor Albert von St. Gallen Heim, who at the age of twenty-two was climbing in the Swiss Alps when he fell sixty feet down a mountain and survived. Heim later described that while falling down the mountain, "Time became greatly expanded" (quoted in Greyson, 2021, p. 32).

Greyson reports 75% of the people he has spoken with about their NDEs describe an altered sense of time, and more than 50% describe a sense of timelessness during their NDEs (Greyson, 2021 p. 33).

Joe Geraci is one of these NDErs. A thirty-six-year-old policeman who almost bled to death following surgery, Geraci described his sense of timelessness as follows:

I knew what it was like to experience eternity, where there was no time. It's the hardest thing to try and describe to someone. How do you describe a state of timelessness, where there's nothing progressing from one point to another, where it's all there, and you're totally immersed in it? It didn't matter to me if it was three minutes or five that I was gone. That question is only relevant to here (Greyson, 2021 p. 32-22).

Another frequent component of NDEs is a life review during which individuals re-experience past events from their lives. Gregg Nome was twenty-four years old when his inner tube capsized after he floated over a waterfall. He describes his life review as follows:

I realized that I was a passive observer in the process, and it was as if someone else was running the projector. I was looking at my life objectively for the first time ever...The images began with living color scenes of my childhood. I was astonished, because I saw myself sitting in a baby's high chair and picking up some food with my hand and throwing it onto the floor. And there was my mom, twenty-five years younger, telling me that good boys don't throw their food on the floor. Next I saw myself at a lake on a summer vacation we took when I was about three or four years old...I was amazed at how many scenes I was seeing that had long since been forgotten...The images continued at high speeds, and I knew that time was about to run out, for the images were getting closer and closer to the present... (Greyson, 2021 p. 36-37).

Some NDErs experience events before they happen in Chronos time. One such NDEr is Dannion Brinkley. A military veteran, Brinkley experienced a NDE after being hit by lightning while talking on a corded telephone during a thunderstorm. He had just told his friend he needed to get off the phone when lightning struck the telephone line. Brinkley explained:

The next sound I heard was like a freight train coming into my ear at the speed of light. Jolts of electricity coursed through my body, and every cell of my being felt as if it were bathed in battery acid. The nails of my shoes were welded to the nails in the floor so that when I was thrown into the air, my feet were pulled out of them (Brinkley 1994 p. 4).

Brinkley then experienced a classic NDE in which he observed his own body from above and was "engulfed by peace and tranquility" (p. 5). He then passed through a tunnel into a light and traveled through the tunnel "at a high rate of speed" (p. 8) until he was engulfed in "the brightest light I had ever seen." Next he encountered a "Being of Light." Brinkley described what happened next:

The Being of Light engulfed me, and as it did I began to experience my whole life, feeling and seeing everything that had ever happened to me. It was as though a dam had burst and every memory stored in my brain flowed out (p. 10).

Brinkley not only saw events from his life during his NDE, but he also saw events from the future. He saw the Chernobyl nuclear power plant explosion that would occur 10 years after his NDE (p.36), and he witnessed the eventual breakup of the Soviet Union (p. 37). He saw millions of refugees streaming across the US border from Central and South America (p. 45).

Following his NDE, Brinkley continued to experience precognition. He knew about events before they happened. For example, he knew what people were going to say before they spoke. He didn't understand how he knew this, but explained, "I would hear the words in my head as surely as if the person had spoken them" (p. 109).

Brinkley also began to "see movies." He explained, "I would look at someone and suddenly see snippets from his life, as though I were looking at a home movie" (p. 112). He began to predict the winning team in football games. Brinkley's ability to see events before they happened confused him, because he didn't understand how he could do this. But his confusion did not stop him from observing events before they occurred. It was as if he was in the projector room and was seeing the events on the reel of film before they were projected onto the theater screen.

Another NDEr who experienced the transcendence of Chronos is Anita Moorjani. After being diagnosed with lymphoma, Anita's health deteriorated until she lapsed into a coma and was rushed to the hospital. In this comatose state, Anita's perception began to change,

I was more acutely aware of all that was going on around me than I've ever been in a normal physical state. I wasn't using my five biological senses, yet I was keenly taking everything in, much more so than when I'd been using my physical organs. It was as though another, completely different type of perception kicked in, and more than just perceive, I seemed to also encompass everything that was happening, as though I was slowly merging with it all (Moorjani 2012, p. 60).

Anita's described what happed as her perception continued to expand:

I was no longer confined by the confines of space and time and continued to spread myself out to occupy a greater expanse of consciousness...It didn't feel as though I'd physically gone somewhere else - it was more as though I'd awakened (Moorjani, 2012, p. 65).

During her NDE, Anita's perception of time changed:

Time felt different in that realm, too, and I felt all moments at once. I was aware of everything that pertained to me - past, present, and future - simultaneously...time didn't run linearly the way we experience it here. It's as though our earthly minds convert what happens around us into a sequence; but in actuality, when we're not expressing through our bodies, everything occurs simultaneously, whether past, present, or future...without the limitations of my body, I took in all points of time and space as they pertained to me, all at once (Moorjani 2012, p. 67-68).

Anita described her experience of time during her NDE "...time was completely irrelevant. It wasn't even a factor to consider, as though it didn't exist" (Moorjani 2012, p. 74).

In summary, descriptions of time from NDErs, such as time being "different," "nonexistent," "slowed down," "greatly expanded," "eternity," "there was no time," and "timelessness" are describing Kairos time. Another type of altered state experience in which individuals can experience Kairos time is called a "mystical experience."

Mystical Experiences

Mystical experiences have been reported for thousands of years and have occurred both in the context of religious or spiritual practices as well as outside of spiritual traditions (Barrett & Griffiths 2018; Van der Tempel & Moodley 2020). But what are mystical experiences?

The modern psychological exploration of these experiences began in 1901 when Canadian psychiatrist Maurice Bucke described a state of consciousness he termed "cosmic consciousness" (Bucke, 1968 p. 1). Bucks characterized this as "a consciousness of the cosmos" (Bucke 1968 p. 2) and he equated this state with nirvana in Buddhism, the "Kingdom of Heaven" in Christianity, and "Gabriel" in Islam (Bucke 1968 p. 51-52). He also listed numerous individuals who had experienced

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cosmic consciousness including Siddhartha Gautama, Jesus, Mohammed, Dante, William Blake, Walt Whitman, and others (Bucke, 1968).

Later, the American philosopher and psychologist William James offered a phenomenological account of mystical states of consciousness in his book "The Varieties of Religious Experiences" (James, 1982). James listed four characteristics of mystical experiences: [1] ineffability (i.e. the experience cannot be described in words), [2] noetic quality (information obtained transcends the rational intellect), [3] transiency (experiences rarely last more than 1 hour), and [4] passivity (one's individual will is surrendered to a higher power). James goes on to characterize one type of mystical experience, which he labels a "conversion experience," as follows:

It is natural that those who personally have traversed such an experience should carry away a feeling of its being a miracle rather than a natural process. Voices are often heard, lights seen, or visions witnessed; automatic motor phenomena occur; and it always seems, after the surrender of the personal will as if an extraneous higher power had flooded in and taken possession (James, 1982 [1902] p. 228).

Walter Stace (1960), who was a Professor of Philosophy at Princeton, identified a "common core" of mystical experiences. Stace listed seven dimensions of mystical experiences:

- 1. Unity a unity of all things
- 2. Sacredness a sense of holiness or sacredness
- 3. Noetic quality the experience is imbued with an aspect of meaning and a sense of encountering ultimate reality that is more real than usual everyday reality
- 4. Deeply felt positive mood joy, ecstasy, blessedness, peace, tenderness, gentleness, tranquility, awe
- 5. Ineffability the experience is difficult to put into words
- 6. Paradoxicality to explain the experience, one seems to have to describe the coexistence of mutually exclusive states or concepts
- 7. Transcendence of time and space experiences may have a non-temporal and non-spatial aspect Ken Wilber (1993) wrote of a metaphorical "spectrum of consciousness" to explain why individuals experience and describe reality differently. Wilber termed the level of mystical experience as "the level of Mind" and described that at this level, the individual feels they are "one with the universe" (p. 8).

Time in Mystical States of Consciousness

How is time, or the progression of events, described during mystical states of consciousness? These accounts often explain time as different from "ordinary" time (i.e. Chronos). During mystical states of consciousness, individuals experience time as being sped up or slowed down, expanded or contracted, or standing still. What does this mean? Can time be stretched or shrunk? Or is this simply the perspective of the observer? It may be helpful to look at some examples.

Bill W, the co-founder of Alcoholics Anonymous (AA), describes his personal experience of time during a mystical state of consciousness. Following a series of hospitalizations for severe alcoholism, Bill W returned to the hospital once again for help with his uncontrolled drinking. Faced with the possibilities of chronic mental illness or death, Bill W resolved to do anything that would help him. Finally, in despair, he cried out: "If there is a God, show me. Show me. Give me some sign" (Thomsen, 1975 p. 201). This cry for help was followed by a profound change in consciousness:

As he formed the words, in that very instant he was aware first of a light, a great white light that filled the room, then he suddenly seemed caught up in a kind of joy, and ecstasy such as he would never find words to describe...he had the feeling that he was stepping into another world, a new world of consciousness, and everywhere now there was a tremendous feeling of Presence which all his life he had been seeking. Nowhere had he ever felt so complete, so satisfied, so embraced. This happened. And it happened suddenly and as

definitely as one may receive a shock from an electrode, or feel heat when a hand is placed close to a flame. Then when it passed, when the light slowly dimmed, and the ecstasy subsided - and whether this was a matter of minutes or much longer, he never knew; he was beyond any reckoning of time... There could be no doubt of ultimate order in the universe, the cosmos was not dead matter, but a part of the living Presence, just as he was part of it. Now, in place of the light, the exaltation, he was filled with a peace such as he had never known...In time, when the rational mind began to take over, the flood gates would open to words, thoughts, explanations. Now, for a brief moment, he fell back on the bed and refused to allow himself to think. Gradually - and there was no awareness of time - he pulled himself up and permitted himself to think as well as feel, and as he did, little by little fears began to return, to reenter along with his rational thought. Was what had happened some form of hallucination, some phenomenon a doctor would spot as a natural symptom of a damaged brain? (Thomsen, 1975 p. 202-2020).

Following this mystical experience, Bill W. never drank alcohol again. He went on to co-found Alcoholics Anonymous, a volunteer group that has helped more than 2 million individuals stop drinking (Alcoholics Anonymous, 2021).

Psychedelic Medicines

Another state of consciousness that allows one to experience Kairos is the state of consciousness produced by the ingestion of psychedelic medicines (Griffiths, et al. 2008). Psychedelic medicines are a diverse group of molecules originating from both natural and synthetic sources. Previously referred to as "hallucinogens," the perception of these medicines is evolving from being categorized as "bad drugs" to being understood as powerful medicines that can treat psychiatric disorders and improve mental health (Krebs & Johansen 2013).

The list of known psychedelic medicines is expanding. These medicines come from different chemical classes and exert unique effects. However, they share in common the ability to alter consciousness in profound ways.

The term *psychedelic* was first applied to these medicines by psychiatrist Humphry Osmond in 1956 while referring to their "mind manifesting" or "mind revealing" effects (Grinspoon & Balakar, 1997, p. 8). One of the characteristic effects of psychedelic medicines is a shift in the perception of time. As Grinspoon and Balakar (1997) describe in their account of the effects of LSD: "Time may seem to slow down enormously as more and more passing events claim the attention, or it may stop entirely, giving place to an eternal present" (p. 12). In their characterization of the psychedelic experience, Grinspoon and Balakar expand upon their description of the experience of an altered sense of time:

Some of the most uncanny effects are on the perception of time. Usually it goes more slowly: people speak of years or even literally an eternity passing in a minute, and events may seem to be without beginning or end. But time can also pass infinitely quickly, or the events of a psychedelic experience may take place in a time outside of time. The world may freeze for a moment like a film when the projector stops. Time may also run backward; past, present, and future events may be experienced as happening all at once; or the whole idea of a temporal succession and measurement may seem irrelevant and artificial (Grinspoon & Balakar 1997, p. 96).

A personal description of this altered perception of time comes from psychologist Stanley Krippner, who provided the following account following his ingestion of psilocybin: "I experienced a negation of time. Past, present, and future all seemed the same" (Grinspoon & Balakar 1997, p. 100).

The English writer Alan Watts (1970) described an altered sense of time as one of the dominant characteristics of his experiences with psychedelic medicines: "The first characteristic is a slowing down of time, a concentration in the present" (p 134).

Another personal account comes from British M.P. Christopher Mayhew, who ingested mescaline in front of a television camera:

After brooding about it for several months, I still think my first, astonishing conviction was right - that on many occasions that afternoon, I existed outside time. I don't mean this metaphorically, but literally. I mean that the essential part of me (the part that thinks to itself, "This is me") had an existence, quite conscious of itself, in a timeless order of reality outside the world as we know it...I was not experiencing events in the normal sequence of time. I was experiencing the events of 3:30 [P.M.] before the events of 3.0; the events of 2.0 after the events of 2.45, and so on (Mayhew, 1965, pp. 294-295).

Mayhew went on to describe that it was as if all events were in effect simultaneous for him and therefore could be experienced in any order (Grinspoon & Balakar, 1997, p. 102).

Paul Mosher was a medical student when he ingested LSD-25 in 1960. Mosher experienced an altered perception of time.

As I paced, I happened to notice at one point the clock resting on the mantelpiece. It said, I clearly remember, 12:25. Then I lapsed into a train of thought whose various labyrinths seemed to lead me in thousands of directions for thousands of hours. And then I glanced at the clock again. This time it read 12:28, which led me to exclaim, "My God, so much has happened in the last three minutes" (Mosher ,1961 p. 360-361).

Mosher went on to expound upon his perception of time:

My sense of time was, of course, strikingly distorted. This may well have had something to do with the sudden unusual speed of my thoughts; the rate of mental processes must in some way provide a yardstick by which we measure the flow of time. If the yardstick were stretched, corresponding measurements would also be distorted. Seconds would literally become minutes, and minutes hours, which was exactly how things did seem to me (Mosher, 1961, p. 261).

How Can We Shift from Chronos to Kairos Time?

Making the shift from Chronos to Kairos requires detachment from ordinary waking consciousness. This shift may occur spontaneously (e.g. during mystical experiences, near-death experiences, etc.) or may be induced (e.g. by the ingestion of psychedelic medicines, meditation, breathing techniques, etc.). The key to shifting from Chronos to Kairos is to change one's state of consciousness from ordinary consciousness to an altered state of consciousness. Table 2 lists experiences and methods that are associated with altered states of consciousness that facilitate the experiencing of Kairos.

Table 2. EXPERIENCES AND METHODS ASSOCIATED WITH ALTERED STATES OF CONSCIOUSNESS AND KAIROS.

Near-death experiences

Spontaneous mystical experiences

Psychedelic medicine-induced experiences

Meditation

Breathwork (e.g. holotropic breathwork)

Shamanic practices (e.g. vision quest, sun dance, sweat lodge)

Dance (e.g. Sufi sema dance, ecstatic dance, Kalahari bushmen trance dance)

Deprivation states (e.g. fasting, sleep deprivation, sensory deprivation, social isolation)

Dreams

Hypnosis

Prayer (e.g. centering prayer, the Jesus Prayer, etc.)

Chanting (e.g. Vedic kirtan, icaros of ayahuasqueros)

Playing music (e.g. drumming)

Athletics (e.g. distance running)

Pros and Cons of Experiencing Time in Chronos vs Kairos

Both Chronos and Kairos have benefits and drawbacks related to daily functioning. These include:

- 1. **Benefits of Chronos** Chronos time makes it easier to schedule and organize events, particularly with other people. It is easier to obtain dental care if you schedule an appointment with a dentist on a given date and time or meet a friend for coffee at a prearranged time on a specified date.
- 2. Drawbacks of Chronos Chronos time gives us limited access to events. We are able to experience only those events which are occurring in the present. We must use our memory to experience past events (and these memories can be inaccurate or distorted) and use our imagination to experience future events (and our imagination is not always an accurate representation of future events).
- 3. **Benefits of Kairos** in Kairos, it is possible to experience events that occurred in the past and may occur in the future. This allows us to understand the relationships between these events. For example, we can learn how past events affect us in the present (such as how traumatic childhood experience can cause us to feel anxious as an adult) and experience potential future outcomes of choices or behaviors that occur in the present (e.g. see and feel the consequences of continuing excessive alcohol use on our body, our career, and our relationships). We also learn that we have multiple potential futures, depending upon the choices we make in the present.
- 4. Drawbacks of Kairos It is difficult to function in Chronos time while experiencing Kairos time. Keeping track of the time of day or the day of the week may be challenging when days, months, and years no longer exist in a linear sequence. It is difficult to make a dental appointment or meet a friend for coffee if we can only schedule events following the occurrence of another event. For example, it is difficult to meet a friend for coffee if you agree to meet after you make a visit to the grocery store, particularly if your friend doesn't have a frame of reference for when you are going to the grocery store.

Conclusions

Chronos and Kairos are two different experiences of time. If we comprehend the differing natures of these two experiences of time, we can better understand Kairos and learn to navigate within Kairos.

Today we are confronted with a plethora of seemingly unsolvable problems. Global warming, the COVID-19 pandemic, climate change, inflation, war, famine, political strife, and social polarization threaten to tear apart our families, rip through the very fabric of our societies, and render our world uninhabitable. By accessing Kairos and the information contained therein, we gain access to potential new solutions to individual, societal, and global problems. Let us hope we can learn to utilize our increased access to Kairos to find solutions to these problems as well as other benevolent purposes and employ the information we obtain in Kairos wisely.

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