

GURDJIEFF'S COSMOLOGICAL IDEAS

The system of knowledge that Gurdjieff taught has a psychological side and a cosmological side, which form twin halves of a comprehensive whole. Study of the psychological ideas is helpful in understanding the cosmological concepts, and vice versa.

To a certain extent, a thorough grounding in Gurdjieff's basic psychological ideas is a prerequisite to approaching his complex cosmology. Gurdjieff generally introduced his students to the psychological ideas and the need for personal self-study first, before he dealt with the cosmological principles. Many students of the Work have reported that they found the psychological component easier to understand than the cosmological.

Gurdjieff's cosmological teachings have attracted criticism since the earliest phase of his teaching in Russia. Pupils admitted that they found many of the cosmological principles incomprehensible and questioned their validity and relevance to their own lives. External observers noted that much of the cosmological teaching is difficult to verify on the basis of personal experience. Critics have stressed that many elements of Gurdjieff's cosmological teachings lack scientific verification and directly contradict established scientific facts. The language that Gurdjieff used to present his cosmological ideas was also problematic for some. Gurdjieff used technical terms like 'matter' and 'atoms' in ways that were inconsistent with established definitions of the terms.

Gurdjieff made the already daunting task of understanding his cosmological ideas more difficult by the style of his writing. Manuscripts like *Beelzebub's Tales to His Grandson* abound in complex neologisms (invented words) and obscure expressions of ideas. In this way, Gurdjieff deliberately challenged his readers and forced them to make extended efforts of attention and comprehension.

The validity of Gurdjieff's cosmological teachings has been questioned on a number of grounds, ranging from their sheer implausibility to more substantive issues of definition, meaning and lack of scientific support.

Unbelievable and Incoherent

Gurdjieff clearly intended that his teachings challenge his students' existing world view. In the preface to his first series of writings, Gurdjieff wrote that his objective was "to destroy, mercilessly, without any compromise whatever, the beliefs and views, by centuries rooted in him, about everything existing in the world." (1) This explains, to a great extent, the provocative nature of his teachings regarding the universe and the purpose of human existence.

Critics have dismissed Gurdjieff's conception of the universe, describing it as unbelievable, incoherent and even delusional. Psychiatrist Anthony Storr believes that

Gurdjieff's cosmological teachings were an elaborate "confidence trick" that showed how gullible and impressionable his followers were.

One of the major difficulties in approaching the written presentation of Gurdjieff's cosmology is his complex writing style and his use of unusual terminology. This has caused critics like Anthony Storr to dismiss Gurdjieff's cosmology out of hand:

Gurdjieff's cosmogony can only be described as fantastic. Reviewing his picture of the universe, it is hard to understand that any intelligent, educated person could believe in it. Yet disciples managed to read *All and Everything* as if its incoherence must contain esoteric wisdom; as if it was their fault if they did not understand it rather than the author's inability to construct a credible picture of man and the universe or to write intelligibly. (2)

Storr goes further by suggesting that Gurdjieff's use of language resembles that used by some psychiatric patients. He argues that chronic schizophrenics frequently invent words which carry a special meaning for them but which others find completely incomprehensible. However, Gurdjieff's unusual writing style appears to have been consciously chosen. He employed unusual neologisms like 'harnelmiatznel' and 'triamazikamno' to challenge his readers' linguistic assumptions and encourage deeper investigation. Gurdjieff's students found it difficult to understand his cosmological writings and lectures, but believed that the obscurities in meaning were intentional. They were their teacher's way of ensuring the students would invest significant effort to find meanings rather than being fed doctrines and ideas whole.

Gurdjieff was aware that when discussing profound ideas, the depth of meaning and flexibility of expression were often sacrificed for the sake of clarity and precision. John Bennett, a senior student of Gurdjieff, writes: "As Gurdjieff's ideas derive their significance far more from their breadth and depth than from logical consistency or even factual accuracy, he was almost compelled to express himself in new and startling terms." (3) Bennett suggests that, in a sense, Gurdjieff's writings were an experiment in a new literary form combining Eastern and Western modes of expression.

Lack of Scientific Validity

Gurdjieff's cosmological system has been criticized as completely unscientific, without any credible evidence to support it. Anthony Storr compared Gurdjieff's ideas to science fiction, saying they were completely at odds with the principles of science and astronomy.

On the surface Gurdjieff's cosmological doctrine bears little resemblance to the tenets of modern science. The traditional divisions of scientific knowledge (physics, astronomy, chemistry, biology, and so on) do not exist in Gurdjieff's schemata. Although scientific terms appear in Gurdjieff's writings ('vibration,' 'oxygen') they are used in completely

different ways that bear no relationship to science. Further, Gurdjieff's cosmological ideas are difficult if not impossible to verify using standard scientific methods of experiment and quantitative analysis.

Some have questioned the validity of evaluating Gurdjieff's cosmological teachings on the basis of scientific standards. They point out that the methodology, aim and perspective of metaphysical systems are very different from those of modern science. (4) Gurdjieff biographer James Moore enumerates some of these fundamental differences:

Gurdjieff's universe is sacred; science's secular. Gurdjieff's universe is essentially qualitative; science's quantitative. Gurdjieff's universe has an ontological dependence on the Creator, and a hierarchy of subordinate levels; science's universe is isotropic and value-free. Gurdjieff's universe has a centrum (the 'Holy Sun Absolute'); science's universe is diffuse. Gurdjieff's universe is growing in 'being'; science's growing in 'space-time.' Gurdjieff's universe is living . . . science's universe . . . is inert. Gurdjieff situates man at the periphery; science . . . clings to a psychological anthropocentrism. (5)

Others attempting to rationalize Gurdjieff's unscientific assertions have gone beyond examining the limitations of the scientific model. Some have argued that Gurdjieff's cosmological writings are essentially allegorical and cannot be evaluated in the context of contemporary scientific paradigms. (6) Others postulate that Gurdjieff's cosmological teachings were deliberately intended to shock and undermine assumptions about the nature of reality and to challenge the authority and validity of science.

Although Gurdjieff's cosmological system is difficult to understand from the perspective of current scientific paradigms, it should not be dismissed out of hand. Gurdjieff brought a deeper meaning and a sense of the sacred to our understanding of the universe. It may not be possible to fairly evaluate his cosmological teachings within the confines of current scientific thinking or ordinary states of consciousness and perception. Perhaps the greatest value of Gurdjieff's cosmology lies in its inherent power to challenge our assumptions about reality and our generally unquestioned acceptance of the scientific model.

Materiality vs. Spirituality

Some metaphysicians have described Gurdjieff as a 'materialist' who denied the reality of the spiritual dimension of existence. One of Gurdjieff's central cosmological teachings was the concept of degrees of materiality permeating the universe: "Everything in the Universe is material: *therefore the Great Knowledge is more materialistic than materialism.*" (7) In conversations with his Russian pupils he further elaborated on his ideas of the material nature of the universe, which seem ironically scientific:

Everything in this universe can be weighed and measured. The Absolute is as material, as weighable and measurable, as the moon,

or as man. If the Absolute is God it means that God can be weighed and measured, resolved into component elements, 'calculated,' and expressed in the form of a definite formula. (8)

Gurdjieff further claimed that knowledge, especially esoteric knowledge, possesses all the characteristics of materiality and, as such, is finite and cannot be freely distributed to everyone. This higher knowledge, to be effective as a spiritual nutrient, needs to be concentrated and "preserved among a small number of people and not dispersed among the masses." (9)

Traditionalist scholar Whithall Perry condemned Gurdjieff's belief in the importance of concentrating esoteric knowledge in the hands of a chosen few: "Pure Knowledge, being an attribute of Divinity is Infinite – hence inexhaustible – and no more 'partitionable' than Pure Being or Pure Beatitude." (10)

Critics have argued that Gurdjieff's theory of materiality is nothing but an updated version of the ancient teachings of the Greek philosopher Democritus. Some have charged that the theory directly contradicts traditional spiritual teachings. Whithall Perry points out that Gurdjieff's materialistic cosmology is a form of atomism, a doctrine that is not supported by any traditional Eastern or Western spiritual systems, except for certain schools on the "heretical fringes."

Gurdjieff's conception of materiality may be much more subtle and sophisticated than his critics are prepared to admit. His cosmological teachings also encompass the element of human consciousness which makes possible the perception of a continuum of energy and matter reflecting successive levels of refinement. Physicist Basarab Nicolescu concurs: "Gurdjieff's 'matters' have multiple aspects, most of which totally escape the methodology of modern science since they concern, rather, the inner alchemy of man." (11) The idea of degrees of materiality and fields of energy promulgated by Gurdjieff may ultimately find support in the future discoveries and emerging theories of quantum physics and related scientific disciplines.

Influence of the Moon

For the vast majority of humanity the waxing and waning of the moon in the night sky is an occurrence devoid of any metaphysical meaning. Modern science describes the moon as a cold, lifeless satellite whose only real influence on the earth is a gravitational pull that produces the earth's tides.

Gurdjieff believed that the earth's lunar companion creates a much broader range of effects than merely the tides. Critics, and even some of Gurdjieff's own students like John Bennett and Robert de Ropp have considered Gurdjieff's beliefs about the moon to be eccentric and bizarre.

In some instances Gurdjieff's pronouncements about the moon were clearly made tongue-in-cheek and were not to be taken seriously. In *Beelzebub's Tales to His Grandson*, he writes that the moon is inhabited by beings which resemble large ants "always bustling about, working both on and within their planet." (12) In another passage he claims that the moon possesses an atmosphere, the development of which is being hindered by the undesirable earthly activity of human beings.

Gurdjieff explained in *Beelzebub's Tales* that the moon was created when the comet 'Kondoor' collided with the young earth, producing two fragments, 'Loonderperzo' (later known as the moon) and 'Anulios.' (13) Gurdjieff claimed that the moon remains an embryonic planet in the early stages of evolution, but that sometime in the future it would reach the same level of development as the earth.

One of Gurdjieff's more controversial teachings was the notion that organic life on the earth feeds the moon. Gurdjieff went even further, claiming that the growth of the moon is related to the death of living creatures on earth:

The process of the growth and warming of the moon is connected with life and death on the earth. Everything living sets free at its death a certain amount of the energy that has 'animated' it; this energy, or the 'souls' of everything living -- plants, animals, people -- is attracted to the moon as though by a huge electromagnet, and brings to it the warmth and the life upon which its growth depends . . . The souls that go to the moon possessing perhaps even a certain amount of consciousness and memory, find themselves there under ninety-six laws, in the conditions of mineral life, or to put it differently, in conditions from which there is no escape apart from a general evolution in immeasurably long planetary cycles. (14)

Gurdjieff proposed that reciprocally the moon exerts widespread and profound influence on life on earth by controlling all of man's actions and manifestations: "All evil deeds, all crimes, all self-sacrificing actions, all heroic exploits, as well as all the actions of ordinary everyday life, are controlled by the moon." (15) Scientists dismiss the possibility that the moon has such an important influence on terrestrial life, or that it has a metaphysical significance or ontological 'meaning.' Yet, some of Gurdjieff's followers have challenged this view by citing the evidence of science itself. James Moore writes:

Interestingly, today's science is conceding considerably more causality to the moon than when Gurdjieff propounded his idea in 1916. Biology is less distanced from Gurdjieff's proposition that man is an evolutionary construct of the moon (and of course the sun). Thus: no land animals without prior amphibians; no amphibians without tides; and no tides without the moon. There also now emerges the moon's putative effect on atmospheric ozone levels and wind-field tides; on geomagnetic activity and magnetotropism; and on the incidence of earthquakes, precipitation, and hurricane formation. Certain social scientists seriously debate statistical correlations between the moon's synodic and sidereal phases and

official returns for the incidence of murder, suicide, epileptic attacks, hospital admissions, and certifications of insanity. (16)

Another school of thought believes that Gurdjieff intended his teaching about the moon to be taken allegorically, as a representation of the unconscious or 'lunatic' mind. There is also a belief in the metaphysical significance of the moon in certain traditional spiritual teachings. The Hindu *Upanishads* characterize the waxing moon as symbolic of access by humans to higher levels of being. In some esoteric teachings the moon represents a gateway between the higher and lower realms of consciousness. Robert de Ropp, who was a student of P.D. Ouspensky for many years and briefly of Gurdjieff, presents the possibility that Gurdjieff's lunar myth was merely an allegory with a deeper meaning for mankind:

How could anyone seriously claim that the Moon was growing and getting warmer? Men had travelled to the Moon, walked on its surface, brought back moon-rocks. The Moon was dead. There was not the slightest chance of its coming to life. The whole idea of the "Ray of Creation" was incorrect. The cosmos did not grow like a tree. New stars were formed out of the dust and gas in the spiral arms of the galaxies. Old stars died, the small ones shrinking into white dwarfs, the big ones exploding as supernovas. Out of the dust of those supernovas new stars were formed. Of course it was perfectly possible to argue that the whole moon-myth was an allegory, that the entity "moon" had no reference to the Moon in the sky. It described all those forces that work to keep Man enslaved and which prevent him from seeing the truth about his situation. But why disguise the truth in such an elaborate allegory? It only served to confuse people. (17)

Planetary Influences

In his cosmological teachings Gurdjieff also postulated that the planets have a significant effect on organic life, particularly for human beings. Gurdjieff told P.D. Ouspensky that the planets were actually 'living beings' with a definite lifespan, sequence of development and possibility of transition to other planes of being. During talks with his students, he claimed that the planets have certain energetic emanations or vibrations which influence life on earth. Living organisms act as a 'transmitting station of forces,' playing a crucial role in the development of the earth:

Organic life represents so to speak the *earth's organ of perception*. Organic life forms something like a sensitive film which covers the whole of the earth's globe and takes in those influences coming from the planetary sphere which otherwise would not be able to reach the earth. The vegetable, animal, and human kingdoms are equally important for the earth in this respect. A field merely covered with grass takes in planetary influences of a definite kind and transmits them to the earth. The same field with a crowd of people on it will take in and transmit other influences. The population of Europe take in one kind of planetary

influences and transmits them to the earth. The population of Africa take in planetary influences of another kind, and so on. (18)

Gurdjieff believed that human beings are highly sensitive to and affected by the simultaneous influences of the sun, moon and planets. Tensions and relationships between the planets are perceived and reflected by humans in their mass behaviour, and even produce events like acts of violence and wars.

Gurdjieff was clearly aware of the historical significance of astrology. In *Beelzebub's Tales* he wrote that the ancient Egyptian astrologers understood the influence of the planets on human life and often arranged marriages on the basis of astrological compatibility. Gurdjieff characterized contemporary astrology as a deterioration of ancient esoteric knowledge in which astrological signs were syntheses of a group of characteristics which formed the basis of an individual's personal challenges during their lifetime.

For many of Gurdjieff's critics, the idea of planetary influences on human behaviour smacks of pseudo-science. Anthony Storr dismisses Gurdjieff's claim of adverse planetary influences as a "bizarre notion." Yet, principles of astrology are part of the cosmological teachings of many philosophical and spiritual traditions. Anthropological research suggests that many civilizations have based their customs and religious practices on the movements of the sun, moon, planets and stars. There is a growing body of statistical and empirical evidence to support many astrological claims that were formerly considered completely unfounded. (19) It may be that Gurdjieff's principles of planetary influence are based more in reality than critics formerly believed.

The 'Organ Kundabuffer'

Perhaps one of Gurdjieff's strangest claims was the implantation and subsequent removal in human beings by higher powers of an organ called 'Kundabuffer.' The concept first appeared in written form in the early drafts of *Beelzebub's Tales to His Grandson*, but was referred to by Gurdjieff in his earlier talks and lectures. Student John Bennett captures the essence of this theory:

At a certain period in the history of the earth it was perceived by the Higher Powers that a very undesirable and dangerous situation was developing on the planet Earth which could endanger the equilibrium of the entire solar system and, in particular, the evolution of the Moon. For this reason, the Higher Powers intervened and brought about the insertion into man's physical nature of an organ said to have been situated at the base of the spine and called by Gurdjieff the 'Organ Kundabuffer.' This prevented man from seeing the situation as it really was and led him to base his values solely on the satisfaction of his own desires and the pursuit of happiness. The organ had the effect of arresting the evolution of man and ensuring him a blissful though animal existence. (20)

Gurdjieff claimed that the Organ Kundabuffer was removed when the cosmic evolutionary danger passed. However, the Higher Powers had not foreseen that one of the consequences of implanting the Organ Kundabuffer in human beings for so many years was that its properties would become fixed as a predisposition and transmitted by heredity to subsequent generations, even though the organ was eventually removed. The result was the development by humans of negative characteristics like pride, envy, hate and egoism. In *Beelzebub's Tales* Gurdjieff argues that a serious consequence has been the failure by humanity to reach its greatest potential for inner development and for serving higher spiritual purposes.

Critics like scholar Whithall Perry have denounced the theory of the Organ Kundabuffer as bizarre and unbelievable. Although believing the theory was meant to be taken literally, John Bennett himself admits that there is no direct evidence to support and no means by which to independently verify the theory. It seems much more probable that Gurdjieff's "theory" is a myth or metaphor for the human condition rather than a reflection of factual reality. It is possible that Gurdjieff created this concept as a tool to challenge his students' prevailing beliefs about human motivation and evolution. (21)

The Development of a Human Soul

The belief in the existence of a human soul is a fundamental tenet of many of the world's spiritual traditions. Gurdjieff, however, claimed that human beings are born without a soul, though they have the possibility of developing a soul during the course of their spiritual development. (22) This position outraged many followers of traditional religions.

Although Gurdjieff's claim appears provocative, a closer examination reveals a complex and highly developed point of view. In a conversation with Professor Denis Saurat in 1923, he describes a hierarchy of possibilities for the development of a human soul:

Few human beings have a soul. None have one at birth. Those who do not acquire one, die: their atoms are dispersed, nothing is left. A few make themselves a partial soul and are submitted to a kind of reincarnation which allows them to progress. And, finally, a very small number succeed in acquiring immortal souls. But this number is really very small indeed. Most of those who have achieved any success have only managed to acquire partial souls. (23)

Gurdjieff believed that a fully developed human being possessed four bodies of increasing degrees of refinement which "mutually interpenetrate one another, and form four independent organisms, standing in a definite relationship to one another but capable of independent action." (24)

According to Gurdjieff, the most subtle body - usually referred to as the 'divine body' in esoteric Christianity - is the vehicle of the soul. But, contrary to traditional teachings, Gurdjieff claimed that humans are not born possessing the finer bodies, but have to develop them during their lifetime under the right internal and external conditions. To develop a soul it is necessary to accumulate a surplus of 'fine matters' in the human organism that can be crystallized to form a soul capable of surviving after the physical body expires. Gurdjieff likened the transformation of finer substances to an alchemical process:

The possibility of the soul lies in the presence in man of a certain combination of substances which are without organization, but which carry all his potential for experience. These substances can be organized and, in the course of this, they are eventually transformed in the *Kesdjan* body which is the outer vehicle of the soul. Ordinary man in whom these substances have not 'crystallized' is not immortal, although there is a sensitive something in him that is able to survive the death of the physical body. This sensitive mass has no permanent form and eventually dissolves. Man becomes immortal only when he has created or built for himself his own complete soul. (25)

Consistent with traditional religious teachings, Gurdjieff taught that the soul in a fully developed human being can attain a degree of immortality following physical death on earth: "The fourth body is composed of material of the *starry world* . . . *This means that a man possessing the fourth body is immortal within the limits of the solar system.*" (26)

Gurdjieff asserted that an individual who did not develop a 'divine body' through the process of inner development would lose the possibility of obtaining an immortal soul capable of surviving death. The way to acquire a soul is through 'conscious labours and intentional suffering' under the guidance of a spiritual master. Fourth Way author William Patterson concurs: "It is only when men begin to awaken to Being that they step out of the dream of ephemeral egotism and begin to have true substance." (27)

Gurdjieff's followers are divided on whether his ideas about the nature of the human soul are literal or metaphorical. Some pupils like John Bennett believed they were factually true. Others wonder whether Gurdjieff merely intended to motivate his pupils to make greater spiritual efforts by postulating that a soul is not a human birthright, but must be developed through intense spiritual work.

Commentary

The cosmological system that Gurdjieff taught is challenging, complex and vast in scope and vision, with an impressive subtlety and inner consistency of ideas. (28) However, the same could be said for an outstanding work of science fiction. The

question remains whether Gurdjieff's cosmological ideas are a valid representation of the metaphysical nature of humanity and the universe.

For Gurdjieff's critics, the answer is a resounding "no" and they have ample material to support their arguments. Some of Gurdjieff's ideas expressed in *Beelzebub's Tales to His Grandson* -- "The Sun neither heats nor lights" and "Apes are descended from humans" -- are obviously absurd and not meant to be taken literally. Other ideas conflict with traditional religious teachings or contemporary materialistic science.

However, other cosmological principles from Gurdjieff's teaching, such as the 'law of three' (29), are supported in other metaphysical traditions. Some scientists have remarked on the correspondence between Gurdjieff's concept of 'reciprocal maintenance' (30) and the modern theory of ecology. Thoughtful scholars like Michel Waldberg argue that Gurdjieff's ideas should be taken seriously:

Gurdjieff's 'laws' are definitely not as fantastic as one might think, and his cosmology may be less absurd than it seems. For the moment, though, this is not what matters: the important thing is to see the process through which Gurdjieff, so to speak, disabuses his reader, forces him to question what he never questions and -- last but not least -- makes him grasp at first hand what it is that produces that dismal mechanization of thought which lies at the root of so many of our troubles. (31)

The psychological and cosmological teachings that Gurdjieff transmitted directly to his students and through his writings integrated the apparent duality of matter and spirit, the world of phenomena and the metaphysical reality of consciousness and being. It revealed an underlying unity that reconciled science and religion, materialism and spirituality, and transcended our usual conceptual categories:

This science viewed the world of visible matter as modern physics does, recognizing the equivalence of mass and energy, the subjective illusion of time, the general theory of relativity. But its inquiry did not stop there, accepting as real only phenomena that could be measured and proved by controlled experiment. This science also explored the mystic's world outside sense perception, the vision of another reality, infinite beyond space and time. The aim was to understand the place of man in the cosmic order, the meaning of human life on the earth, and actually to know and experience in oneself the reality of both worlds at the same time. It was a science of being. (32)

Perhaps the greatest value of Gurdjieff's cosmological teachings is the way in which they challenge our established ways of thinking about the world and ourselves. Gurdjieff's universe was imbued with meaning and an evolutionary intent that engender a sense of awe and inspiration. To fully comprehend and appreciate Gurdjieff's cosmology requires both a fundamental shift in perspective and the development of a heightened level of

consciousness. Gurdjieff was arguably ahead of his time with his esoteric description of the universe and the meaning of human life. Perhaps future generations will place more value on its depth and insights than Gurdjieff's contemporaries did.

NOTES

- (1) G.I. Gurdjieff *Beelzebub's Tales to His Grandson: An Objectively Impartial Criticism of the Life of Man* (New York: Harcourt, Brace & World, 1950), preface.
- (2) Anthony Storr *Feet of Clay* (New York: Simon & Schuster, 1996), p. 41.
- (3) John Bennett *Gurdjieff: Making a New World* (New York: Harper & Row, 1973), p. 273.
- (4) Students of the Gurdjieff Work, such as theatre and film director Peter Brook, have argued in "The Secret Dimension" in Jacob Needleman and George Baker eds. *Gurdjieff: Essays and Reflections on the Man and His Teaching* (New York: Continuum, 1996), pp. 30-31) that the scientific model is fundamentally incomplete and unable to explain or describe the apparent duality of matter and spirit:

Since the Renaissance, our own science has accurately pinpointed the detailed processes and mechanisms of the universe, from the infinitely large to the infinitely small, but it has failed disastrously to introduce into its equations the dimension of living experience. It omits consciousness; it cannot capture the meaning of perception, nor the specific taste of thought. The highly abstract and purely mental system of mathematical symbols has no way of evoking the humanity of artistic experience nor the spirituality of religion. As a result, we have two parallel interpretations of reality which can never meet: the scientific language of definition and the symbolic language of perception.
- (5) James Moore *Gurdjieff: The Anatomy of a Myth* (Rockport, Massachusetts: Element Books, 1991), p. 346.
- (6) Historians of science point out that the theories and paradigms of science are constantly changing as new research modifies or refutes scientific "facts." For further discussion see Thomas Kuhn *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).
- (7) G.I. Gurdjieff *Views From the Real World: Early Talks of Gurdjieff* (New York: E.P. Dutton, 1973), p. 21.
- (8) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 86.

- (9) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 37.
- (10) Whithall Perry *Gurdjieff: In Light of Tradition* (Bedfont, Middlesex: Perennial Books, 1978), p. 47.
- (11) Basarab Nicolescu “Gurdjieff’s Philosophy of Nature” in Jacob Needleman and George Baker, eds. *Gurdjieff: Essays and Reflections on the Man and His Teaching* (New York: Continuum, 1996), p. 44.
- (12) G.I. Gurdjieff *Beelzebub’s Tales to His Grandson: An Objectively Impartial Criticism of the Life of Man* (New York: Harcourt, Brace & World, 1950), p. 62.
- (13) There is scientific support for Gurdjieff’s contention. The hypothesis that the moon was created some four billion years ago by a cataclysmic collision between a large cosmic body and early earth is now accepted by many scientists. And in 1970 scientists reported the discovery of a small celestial object measuring less than two kilometers in diameter that they believed constituted a third member of the earth-moon system.
- (14) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 85.
- (15) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 85.
- (16) James Moore *Gurdjieff: Anatomy of a Myth* (Bedfont, Massachusetts: Element Books, 1991), p. 347.
- (17) Robert de Ropp *Self Completion* (Nevada City, California: Gateways/IDHHB, 1988), p. xxiv.
- (18) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 138.
- (19) The most intriguing evidence supporting a planetary influence on human behaviour is the extensive research of French statistician Michel Gauguin, summarized in his books *Cosmic Influences on Human Behavior* (London: Garnstone Press, 1973) and *Birthtimes* (New York: Hill and Wang, 1983). For a review of the scientific debate regarding the validity of astrology see H.J. Eysenck and D.K. Nias *Astrology: Science or Superstition* (London: Pelican Books, 1984) and John Anthony West’s *The Case for Astrology* (London: Viking Arkana, 1991).
- (20) John Bennett *Gurdjieff: Making a New World* (New York: Harper & Row, 1973), p. 250.

- (21) Rafael Lefort suggests that the term ‘Kundabuffer’ is “composed of two Persian words *kund*, to blunt, and *farr*, pomp or splendour, the combined word thus being a technical term meaning to blunt the perception by pompousness or self-love.” [The *Teachers of Gurdjieff* (London: Victor Gollancz, 1973), pp. 132-133.]
- (22) The idea that the human soul must be developed also appears in other spiritual teachings such as Sufism. In *The Knowing Heart* (Boston: Shambhala, 2000, pp. 211-212), Kabir Helminski writes:
- The world is a place for fashioning the soul, in the sense that soul is not given to us automatically, despite our assumptions to the contrary. Our interiority, our presence, must be created from within the distractions and forgetfulness of everyday outer life, from within the constant clash of pleasure and pain, happiness and loss.
- (23) Louis Pauwels *Gurdjieff* (New York: Samuel Weiser, 1975), p. 177.
- (24) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 40.
- (25) John Bennett *Gurdjieff: Making a New World* (New York: Harper & Row, 1973), p. 246.
- (26) P.D. Ouspensky *In Search of the Miraculous: Fragments of an Unknown Teaching* (New York: Harcourt, Brace & World, 1949), p. 94. (emphasis in original quote)
- (27) William Patterson *Taking with the Left Hand* (Fairfax, California: Arete Communications, 1998), pp. 86-87.
- (28) Gurdjieff’s cosmological system is a vast, comprehensive model of the universe and the place of humanity in the cosmic order. It is an amazingly complex, detailed and internally coherent representation of the ancient dictum ‘As Above, So Below,’ which postulates that the complete human being is a microcosm or miniature replica of the universe or macrocosm. The essence of Gurdjieff’s cosmological teachings are presented in P.D. Ouspensky’s *In Search of the Miraculous* and Gurdjieff’s *Beelzebub’s Tales to His Grandson*. Further explorations and elaborations of these ideas can be found in Maurice Nicoll’s *Psychological Commentaries on the Teachings of G.I. Gurdjieff and P.D. Ouspensky*, Rodney Collin’s *The Theory of Celestial Influence* and Keith Buzzell’s *Perspectives on Beelzebub’s Tales and Explorations in Active Mentation*.
- (29) The ‘law of three’ is one of the fundamental principles forming the foundation of Gurdjieff’s cosmology. This law asserts that every event or action, on scales ranging from the molecular to the cosmic, is the result of three interacting forces, which he

termed 'active,' 'passive' and 'reconciling.' A similar concept of a trinity of forces or energies is found in Hinduism, Christianity, the Kabbalah, alchemy, astrology and Western occult traditions.

(30) The 'law of reciprocal maintenance' proposes that the cosmic harmony of the universe is maintained by a mutual exchange of substances and energy through the interaction of different classes and levels of beings. This idea is similar to the notion of systems theory in many biological and ecological sciences.

(31) Michel Waldberg *Gurdjieff: An Approach to His Ideas* (London: Routledge & Kegan Paul, 1981), p. 24.

(32) Jeanne de Salzmann *The Reality of Being* (Boston: Shambhala, 2010), pp. 295-296.