

## The Coronavirus Pandemic: Anthroposophical Perspectives

This is a list of topics that have, either currently or in the past, been characterized as pseudoscience by academics or researchers. Detailed discussion of these topics may be found on their main pages. These characterizations were made in the context of educating the public about questionable or potentially fraudulent or dangerous claims and practices—efforts to define the nature of science, or humorous parodies of poor scientific reasoning.

Criticism of pseudoscience, generally by the scientific community or skeptical organizations, involves critiques of the logical, methodological, or rhetorical bases of the topic in question.[1] Though some of the listed topics continue to be investigated scientifically, others were only subject to scientific research in the past and today are considered refuted, but resurrected in a pseudoscientific fashion. Other ideas presented here are entirely non-scientific, but have in one way or another impinged on scientific domains or practices.

Many adherents or practitioners of the topics listed here dispute their characterization as pseudoscience. Each section here summarizes the alleged pseudoscientific aspects of that topic.

Physical sciences

Astronomy and space sciences

Earth sciences

Megalithic geometry or 366 geometry — posits the existence of an Earth-based geometry dating back to at least 3500 BCE and the possibility that such a system is still in use in modern Freemasonry. According to proponents, megalithic civilizations in Britain and Brittany had advanced knowledge of geometry and the size of Earth. The megalithic yard is correlated to the polar circumference of Earth using a circle divided into 366 degrees. [19] [20]

or — posits the existence of an Earth-based geometry dating back to at least 3500 BCE and the possibility that such a system is still in use in modern Freemasonry. According to proponents, megalithic civilizations in Britain and Brittany had advanced knowledge of geometry and the size of Earth. The megalithic yard is correlated to the polar circumference of Earth using a circle divided into 366 degrees. The Bermuda Triangle — a region of the Atlantic Ocean that lies between Bermuda, Puerto Rico and (in its most popular version) Florida. Ship and aircraft disasters and disappearances perceived as frequent in this area have led to the circulation of stories of unusual natural phenomena, paranormal encounters and interactions with extraterrestrials. [21]

— a region of the Atlantic Ocean that lies between Bermuda, Puerto Rico and (in its most popular version) Florida. Ship and aircraft disasters and disappearances perceived as frequent in this area have led to the circulation of stories of unusual natural phenomena, paranormal encounters and interactions with extraterrestrials. Climate change denial — involves denial, dismissal,

## P

unwarranted doubt or contrarian views which depart from the scientific consensus on climate change, including the extent to which it is caused by humans, its impacts on nature and human society, or the potential of adaptation to global warming by human actions. [22] [23] [24]

â€" involves denial, dismissal, unwarranted doubt or contrarian views which depart from the scientific consensus on climate change, including the extent to which it is caused by humans, its impacts on nature and human society, or the potential of adaptation to global warming by human actions. Flood geology â€" creationist form of geology that advocates most of the geologic features on Earth are explainable by a global flood. [25]

â€" creationist form of geology that advocates most of the geologic features on Earth are explainable by a global flood. The Hollow Earth â€" a proposal that Earth is either entirely hollow or consists of hollow sections beneath the crust. Certain folklore and conspiracy theories hold this idea and suggest the existence of subterranean life. [26]

â€" a proposal that Earth is either entirely hollow or consists of hollow sections beneath the crust. Certain folklore and conspiracy theories hold this idea and suggest the existence of subterranean life. Welteislehre, a.k.a. the World Ice Theory or Glacial Cosmogony â€" ice is proposed to be the basic substance of all cosmic processes and ice moons, ice planets and the "global ether" (also made of ice) had determined the entire development of the universe.

## Physics

Autodynamics â€" a physics theory proposed in the 1940s that claims the equations of the Lorentz transformation are incorrectly formulated to describe relativistic effects, which would invalidate Einstein's theories of special relativity and general relativity, and Maxwell's equations. The theory is discounted by the mainstream physics community. [27]

â€" a physics theory proposed in the 1940s that claims the equations of the Lorentz transformation are incorrectly formulated to describe relativistic effects, which would invalidate Einstein's theories of special relativity and general relativity, and Maxwell's equations. The theory is discounted by the mainstream physics community. E-Cat â€" a claimed cold fusion reactor. [28] [29]

â€" a claimed cold fusion reactor. Einsteinâ€"Cartanâ€"Evans theory â€" a unified theory of physics proposed by Myron Wyn Evans which claims to unify general relativity, quantum mechanics and electromagnetism. [30] The hypothesis was largely published in the journal Foundations of Physics Letters between 2003 and 2005; in 2008, the editor published an editorial note effectively retracting the journal's support for the hypothesis due to incorrect mathematical claims. [31]

â€" a unified theory of physics proposed by Myron Wyn Evans which claims to unify general relativity, quantum mechanics and electromagnetism. The hypothesis was largely published in the journal between 2003 and 2005; in 2008, the editor published an editorial note effectively retracting the journal's support for the hypothesis due to incorrect mathematical claims. Electrogravitics â€" claimed to be an unconventional type of effect or anti-gravity propulsion created by an electric field's effect on a mass. The name was coined in the 1920s by Thomas Townsend Brown, who first described the effect and spent most of his life trying to develop it and sell it as a propulsion system. Follow-ups on the claims (R. L. Talley in a 1990 U.S. Air Force study, NASA scientist Jonathan Campbell in a 2003 experiment [32] and Martin Tajmar in a 2004 paper [33] ) have found that no thrust could be observed in a vacuum, consistent with the phenomenon of ion wind.

â€" claimed to be an unconventional type of effect or anti-gravity propulsion created by an electric field's effect on a mass. The name was coined in the 1920s by Thomas Townsend Brown, who first described the effect and spent most of his life trying to develop it and sell it as a propulsion system. Follow-ups on the claims (R. L. Talley in a 1990 U.S. Air Force study, NASA scientist Jonathan Campbell in a 2003 experiment and Martin Tajmar in a 2004 paper ) have found that no thrust could be observed in a vacuum, consistent with the phenomenon of ion wind. Free energy â€" a class of perpetual motion that purports to create energy (violating the first law of thermodynamics) or extract useful work from equilibrium systems (violating the second law of thermodynamics).[34][35]

Water-fueled cars â€" an instance of perpetual motion machines. Such devices are claimed to use water as fuel or produce fuel from water on board with no other energy input. Many such claims are part of investment frauds. [36] [37] [38]

â€" an instance of perpetual motion machines. Such devices are claimed to use water as fuel or produce fuel from water on board with no other energy input. Many such claims are part of investment frauds. Gasoline pill or gasoline powder , which was claimed to turn water into gasoline. [39]

or , which was claimed to turn water into gasoline. Hongcheng Magic Liquid " a scam in China where Wang Hongcheng (Chinese: 王洪成; pinyin: Wǎng Hóngchéng), a bus driver from Harbin with no scientific education, claimed in 1983 that he could turn regular water into a fuel as flammable as petrol by simply dissolving a few drops of his liquid in it.[40]

Applied sciences

Agriculture

Lysenkoism , or Lysenko-Michurinism " was a political campaign against genetics and science-based agriculture conducted by Trofim Lysenko, his followers and Soviet authorities. Lysenko served as the director of the Soviet Union's Lenin All-Union Academy of Agricultural Sciences. Lysenkoism began in the late 1920s and formally ended in 1964. The pseudoscientific ideas of Lysenkoism built on Lamarckian concepts of the heritability of acquired characteristics. [45] Lysenko's theory rejected Mendelian inheritance and the concept of the "gene"; it departed from Darwinian evolutionary theory by rejecting natural selection. [46]

, or " was a political campaign against genetics and science-based agriculture conducted by Trofim Lysenko, his followers and Soviet authorities. Lysenko served as the director of the Soviet Union's Lenin All-Union Academy of Agricultural Sciences. Lysenkoism began in the late 1920s and formally ended in 1964. The pseudoscientific ideas of Lysenkoism built on Lamarckian concepts of the heritability of acquired characteristics. Lysenko's theory rejected Mendelian inheritance and the concept of the "gene"; it departed from Darwinian evolutionary theory by rejecting natural selection. Biodynamic agriculture " method of organic farming that treats farms as unified and individual organisms. Biodynamics uses a calendar which has been characterized as astrological. The substances and composts used by biodynamicists have been described as unconventional and homeopathic. For example, field mice are countered by deploying ashes prepared from field mice skin when Venus is in the Scorpius constellation. No difference in beneficial outcomes has been scientifically established between certified biodynamic agricultural techniques and similar organic and integrated farming practices. Biodynamic agriculture lacks strong scientific evidence for its efficacy and has been labeled a pseudoscience because of its overreliance upon esoteric knowledge and mystical beliefs.[47]

Architecture

Feng shui " ancient Chinese system of mysticism and aesthetics based on astronomy, geography and the putative flow of qi . Evidence for its effectiveness is based on anecdote and there is a lack of a plausible method of action; this leads to conflicting advice from different practitioners of feng shui. Feng shui practitioners use this as evidence of variations or different schools; critical analysts have described it thus: "Feng shui has always been based upon mere guesswork." [48] [49] Modern criticism differentiates between feng shui as a traditional proto-religion and the modern practice: "A naturalistic belief, it was originally used to find an auspicious dwelling place for a shrine or a tomb. However, over the centuries it...has become distorted and degraded into a gross superstition." [48]

" ancient Chinese system of mysticism and aesthetics based on astronomy, geography and the putative flow of . Evidence for its effectiveness is based on anecdote and there is a lack of a plausible method of action; this leads to conflicting advice from different practitioners of feng shui. Feng shui practitioners use this as evidence of variations or different schools; critical analysts have described it thus: "Feng shui has always been based upon mere guesswork." Modern criticism differentiates between feng shui as a traditional proto-religion and the modern practice: "A naturalistic belief, it was originally used to find an auspicious dwelling place for a shrine or a tomb. However, over the centuries it...has become distorted and degraded into a gross superstition." Ley lines " proposed intentional alignment of ancient monuments and landscape features was later explained by a statistical analysis of lines that concluded: "the density of archaeological sites in the British landscape is so great that a line drawn through virtually anywhere will 'clip' a number of sites." [50] Additional New Age and feng shui concepts have been proposed building on the original concept and pseudoscientific claims about energy flowing through the lines have been made.

" proposed intentional alignment of ancient monuments and landscape features was later explained by a statistical analysis of lines that concluded: "the density of archaeological sites in the British landscape is so great that a line drawn through virtually anywhere will 'clip' a number of sites." Additional New Age and feng shui concepts have been proposed building on the original concept and pseudoscientific claims about energy flowing through the lines have been made. Vastu shastra is the ancient Hindu system of architecture, which lays down a series of rules for building houses in relation to ambiance.[51] Vastu Shastra is considered as pseudoscience by rationalists like Narendra Nayak of Federation of Indian Rationalist Associations[52] and astronomer Jayant Narlikar, who writes that Vastu does not have any "logical connection" to the environment.[53]

Finance

Health and medicine

Pseudoscientific medical practices are often known as quackery. In contrast, modern medicine is (or seeks to be) evidence-based.

The above is not to be confused with current health treatments involving electromagnetism on human tissue, such as pulsed electromagnetic field therapy (see: Electromagnetic therapy).

Technology

5G conspiracies and 5G causes coronavirus theories " theory proposing that 5G causes health issues and also causes COVID-19.

Social sciences

History

Psychology

Racial theories

Scientific racism " claim that scientific evidence shows the inferiority or superiority of certain races.[484][485]

Sociology

Paranormal and ufology

Paranormal subjects[1][235][503][504] have been critiqued from a wide range of sources including the following claims of paranormal significance:

Numerology

Numerology (including the numerology practices of Kabbalah) â€" a set of beliefs in a divine, mystical, or other special relationship between a number and coinciding events. Numerology is regarded as pseudomathematics or pseudoscience by modern scientists. [544] [545] [546] It is often associated with the paranormal, alongside astrology and similar divinatory arts. [547]

(including the numerology practices of Kabbalah) â€" a set of beliefs in a divine, mystical, or other special relationship between a number and coinciding events. Numerology is regarded as pseudomathematics or pseudoscience by modern scientists. It is often associated with the paranormal, alongside astrology and similar divinatory arts. Scriptural codes â€" the belief that a book or fragment of holy scripture contains encoded messages that impart esoteric knowledge. One such decoding method involves identifying "equidistant letter sequences" that spell out such messages.[548]

#### Religious and spiritual beliefs

Spiritual and religious practices and beliefs, according to astronomer Carl Sagan, are normally not classified as pseudoscience.[549] However, religion can sometimes nurture pseudoscience, and "at the extremes it is difficult to distinguish pseudoscience from rigid, doctrinaire religion", and some religions might be confused with pseudoscience, such as traditional meditation.[549] The following religious/spiritual items have been related to or classified as pseudoscience in some way:

#### Creation science

Creation science or scientific creationism is a branch of creationism that claims to provide scientific support for the Genesis creation narrative in the Book of Genesis and disprove or reexplain the scientific facts, theories and scientific paradigms about geology, cosmology, biological evolution, archaeology, history and linguistics.[560][failed verification]

Irreducible complexity â€" claim that some biological systems are too complex to have evolved from simpler systems. It is used by proponents of intelligent design to argue that evolution by natural selection alone is incomplete or flawed, and that some additional mechanism (an "Intelligent Designer") is required to explain the origins of life. [572] [573] [574] [575] [576]

â€" claim that some biological systems are too complex to have evolved from simpler systems. It is used by proponents of intelligent design to argue that evolution by natural selection alone is incomplete or flawed, and that some additional mechanism (an "Intelligent Designer") is required to explain the origins of life. Specified complexity â€" claim that when something is simultaneously complex and specified, one can infer that it was produced by an intelligent cause (i.e., that it was designed) rather than being the result of natural processes.[467][571]

#### Scientology

Dianetics , a therapeutic technique promoted by Scientology, purports to treat a hypothetical reactive mind. There is no scientific evidence for the existence of an actual reactive mind, [577] apart from the stimulus response mechanisms documented in behaviorist psychology.

, a therapeutic technique promoted by Scientology, purports to treat a hypothetical reactive mind. There is no scientific evidence for the existence of an actual reactive mind, apart from the stimulus response mechanisms documented in behaviorist psychology. Scientology's Purification Rundown and Narconon programs purport to clean the human body of toxins and drugs respectively. Their method consists of very long saunas over many days, extremely large (possibly toxic) doses of vitamins including niacin, and Scientology 'training routines', sometimes including attempts at telekenesis. The programs have been described as "medically unsafe",[578] "quackery"[579][580][581] and "medical fraud",[582] while academic and medical experts have dismissed Narconon's educational programme as containing "factual errors in basic concepts such as physical and mental effects, addiction and even spelling".[583] In turn, Narconon has claimed that mainstream medicine is "biased" against it, and that "people who endorse so-called controlled drug use cannot be trusted to review a program advocating totally drug-free living."[584] Narconon has said that criticism of its programmes is "bigoted",[585] and that its critics are "in favor of drug abuse [...] they are either using drugs or selling drugs".[586]

#### Other

##### Idiosyncratic ideas

The following concepts have only a very small number of proponents, yet have become notable:



See also

Notes

^ Kaplan and Sadock's Synopsis of Psychiatry, 2007: "Psychoanalysis has existed before the turn of the 20th century and, in that span of years, has established itself as one of the fundamental disciplines within psychiatry. The science of psychoanalysis is the bedrock of psychodynamic understanding and forms the fundamental theoretical frame of reference for a variety of forms of therapeutic intervention, embracing not only psychoanalysis itself but also various forms of psychoanalytically oriented psychotherapy and related forms of therapy using psychodynamic concepts." [475] , 2007: "Psychoanalysis has existed before the turn of the 20th century and, in that span of years, has established itself as one of the fundamental disciplines within psychiatry. The science of psychoanalysis is the bedrock of psychodynamic understanding and forms the fundamental theoretical frame of reference for a variety of forms of therapeutic intervention, embracing not only psychoanalysis itself but also various forms of psychoanalytically oriented psychotherapy and related forms of therapy using psychodynamic concepts." ^ [476] Robert Michels , 2009: "Psychoanalysis continues to be an important paradigm organizing the way many psychiatrists think about patients and treatment. However, its limitations are more widely recognized and it is assumed that many important advances in the future will come from other areas, particularly biologic psychiatry. As yet unresolved is the appropriate role of psychoanalytic thinking in organizing the treatment of patients and the training of psychiatrists after that biologic revolution has born fruit. Will treatments aimed at biologic defects or abnormalities become technical steps in a program organized in a psychoanalytic framework? Will psychoanalysis serve to explain and guide supportive intervention for individuals whose lives are deformed by biologic defect and therapeutic interventions, much as it now does for patients with chronic physical illness, with the psychoanalyst on the psychiatric dialysis program? Or will we look back on the role of psychoanalysis in the treatment of the seriously mentally ill as the last and most scientifically enlightened phase of the humanistic tradition in psychiatry, a tradition that became extinct when advances in biology allowed us to cure those we had so long only comforted?"

References

## Reference

[Introduction to Research and Medical Literature for Health Professionals \(Blessing, Introduction to Research and Medical Literature for Health Professionals wi\)](#)

[Handbook of Attachment: Theory, Research, and Clinical Applications](#)