

**Principle:**

A **principle** is a proposition or value that is a guide for behaviour or evaluation. In law, it is a rule that has to be or usually is to be followed, or can be desirably followed, or is an inevitable consequence of something, such as the laws observed in nature or the way that a system is constructed. The principles of such a system are understood by its users as the essential characteristics of the system, or reflecting system's designed purpose, and the effective operation or use of which would be impossible if any one of the principles was to be ignored. A system may be explicitly based on and implemented from a document of principles as was done in IBM's 360/370 *Principles of Operation*.

Examples of principles are, entropy in a number of fields, least action in physics, those in descriptive comprehensive and fundamental law: doctrines or assumptions forming normative rules of conduct, separation of church and state in statecraft, the central dogma of molecular biology, fairness in ethics, etc.

In common English, it is a substantive and collective term referring to rule governance, the absence of which, being "unprincipled", is considered a character defect. It may also be used to declare that a reality has diverged from some ideal or norm as when something is said to be true only "in principle" but not in fact.

**As law****As moral law**

A principle represents values that orient and rule the conduct of persons in a particular society. To "act on principle" is to act in accordance with one's moral ideals. Principles are absorbed in childhood through a process of socialization. There is a presumption of liberty of individuals that is restrained. Exemplary principles include First, do no harm, the golden rule and the doctrine of the mean.

**As a juridic law**

It represents a set of values that inspire the written norms that organize the life of a society submitting to the powers of an authority, generally the State. The law establishes a legal obligation, in a coercive way; it therefore acts as principle conditioning of the action that limits the liberty of the individuals. See, for examples, the territorial principle, homestead principle, and precautionary principle.

## **As scientific law**

Archimedes principle, relating buoyancy to the weight of displaced water, is an early example of a law in science. Another early one developed by Malthus is the *population principle*, now called the Malthusian principle. Freud also wrote on principles, especially the reality principle necessary to keep the id and pleasure principle in check. Biologists use the principle of priority and principle of Binominal nomenclature for precision in naming species. There are many principles observed in physics, notably in cosmology which observes the mediocrity principle, the anthropic principle, the principle of relativity and the cosmological principle. Other well-known principles include the uncertainty principle in quantum mechanics and the pigeonhole principle and superposition principle in mathematics.

## **As axiom or logical fundament**

### **Principle of sufficient reason**

The principle states that every event has a rational explanation. The principle has a variety of expressions, all of which are perhaps best summarized by the following:

For every entity  $x$ , if  $x$  exists, then there is a sufficient explanation for why  $x$  exists.

For every event  $e$ , if  $e$  occurs, then there is a sufficient explanation for why  $e$  occurs.

For every proposition  $p$ , if  $p$  is true, then there is a sufficient explanation for why  $p$  is true.

However, one realizes that in every sentence there is a direct relation between the predicate and the subject. To say that "the Earth is round", corresponds to a direct relation between the subject and the predicate.

### **Principle of non-contradiction**

According to Aristotle, "It is impossible for the same thing to belong and not to belong at the same time to the same thing and in the same respect." For example, it is not possible that in exactly the same moment and place, it rains and doesn't rain.

### **Principle of excluded middle**

The principle of the excluding third or "principium tertium exclusum" is a principle of the traditional logic formulated canonically by Leibniz as: either  $A$  is  $B$  or  $A$  isn't  $B$ . It is read the following way: either  $P$  is true, or its denial  $\neg P$  is. It is also known as "*tertium non datur*" ('A third (thing) is not). Classically it is considered to be one of the most important fundamental

principles or laws of thought (along with the principles of identity, no contradiction and sufficient reason).

## **PHILOSOPHY:**

### **Introduction**

### **Knowledge**

Traditionally, the term "philosophy" referred to any body of knowledge. In this sense, philosophy is closely related to religion, mathematics, natural science, education and politics. Newton's 1687 *Mathematical Principles of Natural Philosophy* is classified in the 2000s as a book of physics; he used the term "natural philosophy" because it used to encompass disciplines that later became associated with sciences such as astronomy, medicine and physics.

In the first part of the first book of his *Academics*, Cicero introduced the division of philosophy into logic, physics, and ethics. He was copying Epicurus' division of his doctrine into canon, physics, and ethics. In section thirteen of the first book of his *Lives and Opinions of the Eminent Philosophers*, the 3rd-century Diogenes Laërtius, the first historian of philosophy, established the traditional division of philosophical inquiry into three parts:

- Natural philosophy ("physics," from *ta physika*, "things having to do with nature (*physis*)" was the study of the constitution and processes of transformation in the physical world;
- Moral philosophy ("ethics," from *êthika*, literally, "having to do with character, disposition, manners") was the study of goodness, right and wrong, justice and virtue.
- Metaphysical philosophy ("logic") was the study of existence, causation, God, logic, forms and other abstract objects ("*meta ta physika*" lit: "After [the book] the Physics").

This division is not obsolete but has changed. Natural philosophy has split into the various natural sciences, especially astronomy, physics, chemistry, biology, and cosmology. Moral philosophy has birthed the social sciences, but still includes value theory (including aesthetics, ethics, political philosophy, etc.). Metaphysical philosophy has birthed formal sciences such as logic, mathematics and philosophy of science, but still includes epistemology, cosmology and others.

### **Philosophical progress**

Many philosophical debates that began in ancient times are still debated today. Colin McGinn and others claim that no philosophical progress has occurred during that interval.

Chalmers and others, by contrast, see progress in philosophy similar to that in science, while Talbot Brewer argued that "progress" is the wrong standard by which to judge philosophical activity.

### **Historical overview**

In one general sense, philosophy is associated with wisdom, intellectual culture and a search for knowledge. In that sense, all cultures and literate societies ask philosophical questions such as "how are we to live" and "what is the nature of reality". A broad and impartial conception of philosophy then, finds a reasoned inquiry into such matters as reality, morality and life in all world civilizations.

### **Western philosophy**

Western philosophy is the philosophical tradition of the Western world and dates to Pre-Socratic thinkers who were active in Ancient Greece in the 6th century BCE such as Thales (c. 624 – 546 BCE) and Pythagoras (c. 570 – 495 BCE) who practiced a "love of wisdom" (*philosophia*) and were also termed *physiologoi* (students of *physis*, or nature). Socrates was a very influential philosopher, who insisted that he possessed no *wisdom* but was a *pursuer of wisdom*. Western philosophy can be divided into three eras: Ancient (Greco-Roman), Medieval philosophy (Christian European), and Modern philosophy.

The Ancient era was dominated by Greek philosophical schools which arose out of the various pupils of Socrates, such as Plato, who founded the Platonic Academy and his student Aristotle, founding the Peripatetic school, who were both extremely influential in Western tradition. Other traditions include Cynicism, Stoicism, Greek Skepticism and Epicureanism. Important topics covered by the Greeks included metaphysics (with competing theories such as atomism and monism), cosmology, the nature of the well-lived life (*eudaimonia*), the possibility of knowledge and the nature of reason (*logos*). With the rise of the Roman empire, Greek philosophy was also increasingly discussed in Latin by Romans such as Cicero and Seneca.

Medieval philosophy (5th–16th centuries) is the period following the fall of the Western Roman Empire and was dominated by the rise of Christianity and hence reflects Judeo-Christian theological concerns as well as retaining a continuity with Greco-Roman thought. Problems such as the existence and nature of God, the nature of faith and reason, metaphysics, the problem of evil were discussed in this period. Some key Medieval thinkers include St. Augustine, Thomas Aquinas, Boethius, Anselm and Roger Bacon. Philosophy for these

thinkers was viewed as an aid to Theology (*ancilla theologiae*) and hence they sought to align their philosophy with their interpretation of sacred scripture. This period saw the development of Scholasticism, a text critical method developed in medieval universities based on close reading and disputation on key texts. The Renaissance period saw increasing focus on classic Greco-Roman thought and on a robust Humanism.

Early modern philosophy in the Western world begins with thinkers such as Thomas Hobbes and René Descartes (1596–1650). Following the rise of natural science, Modern philosophy was concerned with developing a secular and rational foundation for knowledge and moved away from traditional structures of authority such as religion, scholastic thought and the Church.

Major modern philosophers include Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. 19th-century philosophy is influenced by the wider movement termed the Enlightenment, and includes figures such as Hegel a key figure in German idealism, Kierkegaard who developed the foundations for existentialism, Nietzsche a famed anti-Christian, John Stuart Mill who promoted Utilitarianism, Karl Marx who developed the foundations for Communism and the American William James. The 20th century saw the split between Analytic philosophy and Continental philosophy, as well as philosophical trends such as Phenomenology, Existentialism, Logical Positivism, Pragmatism and the Linguistic turn.

### **Middle Eastern philosophy**

The regions of the fertile Crescent, Iran and Arabia are home to the earliest known philosophical Wisdom literature and is today mostly dominated by Islamic culture. Early wisdom literature from the fertile crescent was a genre which sought to instruct people on ethical action, practical living and virtue through stories and proverbs. In Ancient Egypt, these texts were known as *sebayt* ('teachings') and they are central to our understandings of Ancient Egyptian philosophy. Babylonian astronomy also included much philosophical speculations about cosmology which may have influenced the Ancient Greeks. Jewish philosophy and Christian philosophy are religio-philosophical traditions that developed both in the Middle East and in Europe, which both share certain early Judaic texts (mainly the Tanakh) and monotheistic beliefs. Jewish thinkers such as the Geonim of the Talmudic Academies in Babylonia and Maimonides engaged with Greek and Islamic philosophy. Later Jewish philosophy came under strong Western intellectual influences and includes the works

of Moses Mendelssohn who ushered in the Haskalah (the Jewish Enlightenment), Jewish existentialism and Reform Judaism.

Pre-Islamic Iranian philosophy begins with the work of Zoroaster, one of the first promoters of monotheism and of the dualism between good and evil. This dualistic cosmogony influenced later Iranian developments such as Manichaeism, Mazdakism, and Zurvanism.

After the Muslim conquests, Early Islamic philosophy developed the Greek philosophical traditions in new innovative directions. This Islamic Golden Age influenced European intellectual developments. The two main currents of early Islamic thought are Kalam which focuses on Islamic theology and Falsafa which was based on Aristotelianism and Neoplatonism. The work of Aristotle was very influential among the falsafa such as al-Kindi (9th century), Avicenna (980 – June 1037) and Averroes (12th century). Others such as Al-Ghazali were highly critical of the methods of the Aristotelian falsafa. Islamic thinkers also developed a scientific method, experimental medicine, a theory of optics and a legal philosophy. Ibn Khaldun was an influential thinker in philosophy of history.

In Iran several schools of Islamic philosophy continued to flourish after the Golden Age and include currents such as Illuminationist philosophy, Sufi philosophy, and Transcendent theosophy. The 19th- and 20th-century Arab world saw the Nahda (awakening or renaissance) movement which influenced contemporary Islamic philosophy.

### **Indian philosophy**

Indian philosophy (Sanskrit: *darśana*; 'world views', 'teachings') refers to the diverse philosophical traditions that emerged since the ancient times on the Indian subcontinent. Jainism and Buddhism originated at the end of the Vedic period, while Hinduism emerged as a fusion of diverse traditions, starting after the end of the Vedic period.

Hindus generally classify these traditions as either orthodox or heterodox – *āstika* or *nāstika* – depending on whether they accept the authority of the Vedas and the theories of Brahman and Atman (soul, self) therein. The orthodox schools include the Hindu traditions of thought, while the heterodox schools include the Buddhist and the Jain traditions. Other schools include the Ajñāna, Ajivika and Cārvāka which became extinct over their history.

Important Indian philosophical concepts shared by the Indian philosophies include dharma, karma, artha, kama, dukkha (suffering), anitya (anicca, impermanence), dhya na (jhana, meditation), renunciation (with or without monasticism or asceticism),

various samsara with cycles of rebirth, moksha (nirvana, kaivalya, liberation from rebirth), and virtues such as ahimsa.

### **Jain philosophy**

Jain philosophy accepts the concept of a permanent soul (jiva) as one of the five *astikayas*, or eternal infinite categories that make up the substance of existence. The other four being *dharma*, *adharma*, *akasha* (space) and *pudgala* (matter). The Jain thought separates matter from the soul completely. It has two major sub traditions: Digambara (sky dressed, naked) and Svetambara (white dressed), along with several more minor traditions such as Terapanthis. Asceticism is a major monastic virtue in Jainism. Jain texts such as the *Tattvartha Sutra* state that right faith, right knowledge and right conduct is the path to liberation. The Jain thought holds that all existence is cyclic, eternal and uncreated. The *Tattvartha Sutra* is the earliest known, most comprehensive and authoritative compilation of Jain philosophy.

### **Buddhist philosophy**

Monks debating at Sera monastery, Tibet, 2013. According to Jan Westerhoff, "public debates constituted the most important and most visible forms of philosophical exchange" in ancient Indian intellectual life. Buddhist philosophy begins with the thought of Gautama Buddha (fl. between sixth and fourth centuries BCE) and is preserved in the early Buddhist texts. It originated in India and later spread to East Asia, Tibet, Central Asia, and Southeast Asia, developing syncretic traditions in these regions. The Mahayana branches of Buddhist thought is the dominant philosophical tradition in East Asian regions such as China, Korea and Japan. The Theravada forms are dominant in Southeast Asian countries such as Sri Lanka, Burma and Thailand. Because ignorance to the true nature of things is considered one of the roots of suffering (dukkha), Buddhist philosophy is concerned with epistemology, metaphysics, ethics and psychology. Buddhist philosophical texts must also be understood within the context of meditative practices which are supposed to bring about certain cognitive shifts. Key innovative concepts include the Four Noble Truths as an analysis of dukkha, [Anicca](#) (impermanence) and [Anatta](#) (not-self). After the death of the Buddha, various groups began to systematize his main teachings, eventually developing comprehensive philosophical systems termed 'Abhidharma'.

Following the Abhidharma schools, Mahayana philosophers such as Nagarjuna and Vasubandhu developed the theories of Shunyata (emptiness of all phenomena) and Vijñapti-matra (appearance only), a form of phenomenology

or transcendental idealism. The Dignāga school of Pramāṇa (lit. means of knowledge) promoted a complex form of epistemology and Buddhist logic.

There were numerous schools, sub-schools and traditions of Buddhist philosophy in India. According to Oxford professor of Buddhist philosophy Jan Westerhoff, the major Indian schools from 300 BCE to 1000 CE were:

- The Mahāsāṃghika tradition.
- The Sthavira schools which include: Sarvāstivāda, Sautrāntika, Vibhājyavāda (later known as Theravada in Sri Lanka), and Pudgalavāda.
- The Mahayana schools, mainly : Madhyamaka, Yogachara, Tathāgatagarbha and Tantra.

After the disappearance of Buddhism from India, some of these philosophical traditions continued to develop in the Tibetan Buddhist, East Asian Buddhist and Theravada Buddhist traditions.

### **Hindu Philosophies**

Adi Shankara is one of the much studied Hindu philosophers. The Vedas-based orthodox schools are a part of the Hinduism traditions and they are traditionally classified into six darsanas: Nyaya, Vaisheshika, Samkhya, Yoga, Mīmāṃsā and Vedanta. The Vedas as a knowledge source were interpreted differently by these six schools of Hindu philosophy, with varying degrees of overlap. They represent a "collection of philosophical views that share a textual connection", according to Chadha. They also reflect a tolerance for a diversity of philosophical interpretations within Hinduism while sharing the same foundation. Some of the earliest surviving Hindu mystical and philosophical texts are the Upanishads of the later Vedic period (1000–500 BCE). Hindu philosophers of the six schools developed systems of epistemology (pramana) and investigated topics such as metaphysics, ethics, psychology (guna), hermeneutics and soteriology within the framework of the Vedic knowledge, while presenting a diverse collection of interpretations. These schools of philosophy accepted the Vedas and the Vedic concept of Atman and Brahman, differed from the following Indian religions that rejected the authority of the Vedas:

1. Cārvāka, a materialism school that accepted the existence of free will.
2. Ājīvika, a materialism school that denied the existence of free will.
3. Buddhism, a philosophy that denies the existence of ātman (unchanging soul, Self) and is based on the teachings and enlightenment of Gautama Buddha.

4. Jainism, a philosophy that accepts the existence of the ātman (soul, Self), but is based on the teachings of twenty-four ascetic teachers known as tirthankaras, with Rishabha as the first and Mahavira as the twenty-fourth.

The commonly named six orthodox schools over time led to what has been called the "Hindu synthesis" as exemplified by its scripture the *Bhagavad Gita*.

**Reference:**

<https://en.wikipedia.org/wiki/Philosophy>

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