

# [Comparing the theory of empiricism and rationalism philosophy essay](https://assignbuster.com/comparing-the-theory-of-empiricism-and-rationalism-philosophy-essay/)

In this report, the theory of empiricism and rationalism will be discussed and compared. Empiricism is a set of theories philosophical (With applications logical, psychological or Language) that make theexperience sensitive origin of any knowledge valid and all pleasure aesthetic. Empiricism objects in particular to theinnéisme ideas and the idea of a knowledge a priori. It often goes hand in hand with a theory associationniste ideas that explains their formation by the combination of simple ideas .

Meanwhile, rationalism is Is the overall philosophical direction of accepting as the sole essence of reality driven and from the knowledge of logical thinking. From the period of Enlightenment rationalism is usually associated with the introduction of mathematical methods in philosophy , first with the work of Descartes, Leibniz and Spinoza .

Rationalism is often contrasted with empiricism. In fact, the views are not mutually exclusive, since for example the philosophy of science is rational and empirical. If , however, pulled the ends empiricism believes that all ideas come from experience, either through the five external senses or through the internal sensations such as pain and pleasure, and thus that knowledge is essentially based on experience. Similarly some versions of rationality argue that starting with basic principles such as the axioms of geometry, one could deductively derive all possible knowledge of the whole . Philosophers who argue over this point of view was Spinoza and Leibniz , whose efforts to address the epistemological and metaphysical problems raised by Descartes led to the development of a somewhat themeliokratikis approach to rationality. Both Spinoza and Leibniz argued that in principle at least all knowledge , including scientific knowledge can be gained by using the reasonableness alone. While both admit that this is not possible in practice to humans only in specific areas of science such as mathematics. Some people prefer to follow empiricism while others rationalism. I will present each one to the reader and inform them which I prefer for several reasons.

Empiricism comes from the Greek experience, The translation latin is experientia, From whom it derives the word experience.

” empirical ” in the Seniority classic , both for Greek as for Romans, refers to doctors , architects , artists and artisans in general get their skills directed toward the useful experience and technical , as opposed to theoretical knowledge conceived as “ contemplation of the truth ” regardless of any utility .

In philosophy the “ empiricism ” as such term is defined as a school or way of thinking that arises in the Modern Age, ripe fruit of a philosophical trend that develops especially in the UK since the late Middle Ages is usually seen as opposed to the call rationalism more characteristic of continental philosophy .

It is a theory of knowledge emphasizing the role of experience, Linked to sensory perceptionIn the formation of concepts:

The knowledge finds its validity only in its relation to the experience

The experience is the foundation of all knowledge not only in their origin but also as to the contents thereof

Be part of the sensible world to form concepts and how sensitive they are in their justification and limitation

Regarding universal concepts continue criticism nominalista already begun in the late Middle Ages

With regard to scientific knowledge :

The method of science is induction and offers a true likely and contingent

And philosophy of science justifies the possibility of validity of theories through experiment, In relation to the experience possible

It is fundamental requirement of scientific methodThat the hypothesis and theories should provide the opportunity to be supported by experimental observation of a content security not merely analytical, but synthetic

Today the opposition “ empiricism – rationalism ” and “ analytical-synthetic’ is little understood in a clear-cut, as it was in earlier times, and rather one or another position due to issues methodological and heuristics or attitudes toward life rather than principles fundamental philosophical .

## Science and experience

Old forms of empiricism include the work epistemological the Buddha in the East. Here we consider the evolution of Western philosophical attitudes .

## Antiquity

In ancient times there was a clear separation:

The knowledge by experience and its result: technique and productive work. What has been understood historically as the ” arts ” and ” offices ” .

The ideal of knowledge theoretical which comprises two areas:

The Science: understood as a knowledge universal and necessary. Try the latest knowledge causes and early principles, what is now understood as the foundation of reality, metaphysics.

As an ideal of knowledge Practical action directed towards achieving the well and happiness, which in turn is developed in two areas:

Achieving well individual, happiness as Ethics

The achievement of the common good social, Policy.

In classical antiquity the theoretical and practical knowledge , like knowing universal and necessaryIdeal of “ knowing” is independent of experience , and is the Wisdom. The ultimate expression of truth and knowledge as scienceIs the Metaphysics and the ideal model of life as close as possible to happinessAs EthicsConstitute the ideal of Wise.

This separation of knowledge and practical action on the production of tangible property meets a warrior aristocratic tradition and the nobility or ruling class. The arts and crafts were peculiar to slaves or traders, but the ” wisdom “( philosophy ) was the characteristic of the nobility and freemen.

In classical Athens and appeared ambivalent attitude of thinking that is going to keep throughout the history of philosophy in the West and is now characterized primarily as rationalism and empiricism. Actually respond to two attitudes and ways of understanding the function of thought and sense of life.

The first to maintain an attitude were clearly empiricist Sophists rationalists who denied the speculation about the natural world common to its predecessors, Presocratics and, above all , PlatoOn the contrary were concerned ” in such related entities as man and society. ” The value of truth is restricted to the concrete value of experience and the exercise of power , either individually (moral ) or social ( policy).

Empiricism is interested in it rhetoric in the domain of language as an essential instrument for political life in Athens and the exercise of power.

Aristotle proclaimed the importance of induction based on experience.

Perhaps Aristotle who best expressed the value of knowledge from experience , however he deemed submitted to the supreme value of the theoretical. In Metaphysics , 982 , b. 11 -32 , Aristotle conceives of knowledge as a process:

Be part of the ordinary with the animals endowed with sense and memory and therefore experience , is the accumulation of experience that men do ” experts. “

More perfect knowledge of that experience coupled with reflection , making men into “ artists ” that now call technical (Doctors , architects , strategists , etc.).

The perfection of human rational function is manifest in the supreme power of rising to the foundations of this knowledge through the causes to the first principles is in this that the man resembles the gods , knowledge of a Science first , until the eighteenth century understood as metaphysics. This is possible only to the extent that a company has insured the property, and therefore can devote to ” free men “ to” futility ” of thought in pursuit of truth of science. 12

So that , if philosophized to escape ignorance, it is clear that seeking knowledge seeking knowledge , not useless. And they witnessed what happened. For this discipline began to look for when there were almost all things necessary and related to rest and adornment of life. It is therefore evident that we look for any purpose but just as we call it free man for himself and not for another, so we consider this as the only free science , because this one is for herself. Hence also his possession could justly be considered improper man. For human nature is a slave in many respects so that as Simonides , “ only God can have such a privilege, but is unworthy of a man ‘ s search for science to provide. “

Aristotle , Metaphysics , 982 , B. 11 -32

Aristotle is actually a rationalist philosopher as one would expect in an outstanding disciple of Plato that supports knowledge metaphysical the body as such.

As such is the founder of a formal logic, deductive, which ranges from necessary to what is necessary through the necessary, as defined by the form of argument par excellence, syllogism, Based on the ability of understanding to the knowledge intuitive of the principles and intuition of essences as forms substantial of things.

However is the first to reflect on the value of knowledge and experience inductive method referred to a scientific knowledge as “ observation of Nature : Biology , Medicine, etc .

## Hellenism and Rome

But the influence of artisans in developing theories, or rather general rules, more or less scientific for the practice of the construction , agriculture , navigation , medicine, etc . , was always present , especially in Hellenism, Alexandria and during Roman empire where the “ arts” had enormous significance in civil construction , not only in cities but in the construction of roads, bridges and hydraulic works.

Hippocrates of Cos, V century BC is considered the father of medicine , by the shift which until then had mostly Egyptian tradition , linked to magic and to sacred. It is the first by a general theory about what is health and disease in relation to a definite concept of man.

They are important names of classical culture , in addition to the above : Archimedes, century BC, A true theory and practice of empirical line, Vitruvius, century BCThe first to make a treatise on architecture and urbanism and medicine Galen, century AD

## The concepts and experience

The Greeks spread the knowledge of reasonWho knows by concepts applicable to many objects as universal knowledge, the mere knowledge of the experience apprehended by the senses that only the individual and concrete.

Samos Epicurus (Fourth century BC) was the Greek philosopher, founder of Epicureísmo.

How to understand what are the concepts and their relation to the sensible and both in their relationship with reality is the foundation of these two attitudes to consider the history of rationalism and empiricism.

On the extent to which these concepts represent “ essence” immutable things, form the substance, Knowledge acquires a universal and necessary, And so is knowledge goal and makes possible scientific knowledge. This is the basis of the rationalist attitude . Language, then, to the extent that it is capable of representing the concepts as true in a language ” apophantic “ as Aristotle says in his reality as faithfully content truth.

To the extent that the concept is closer and more dependent on sensory experience , knowledge provides only a knowledge whose truth lies in the particular and concrete and is subject to the subjectivity of the individual who has the experience . The concepts and its referent in the language , words, are somewhat conventionalGeneralizations of individual experience shared with members of a cultural society that makes communication possible through language.

The concepts for empiricism are not a guarantee of objective knowledge and as science has only a relative value and justified in the generalization of common experiences, conventionally represented in the concepts and language.

“ Man is the measure of all things “ is the phrase that comes to sum up this trend. It is attributed to Protagoras one of the notable sophists with whom Socrates( Plato ), said dispute. Name that is historically embodied in the title for one of the best known ” Dialogues of Plato. 16

more rationalist tradition is represented by the Greek metaphysical thought and tradition more closely linked to the Christian tradition in the West: The Presocratics, Pythagoras, Plato and Aristotle and especially platonismo and neoplatonismBecause ultimately this idea refers to an ultimate principles, which Christians refer to God.

The most empiricist tradition is represented by Sophists and Skeptics, But each school Stoicism, Rome, Epicureísmo, Pirronismo and each historical moment have their representatives with different shades closer to one extreme or another rationalist empiricist.

## The Middle Ages

In the West the fall of the Roman Empire makes all knowledge refuge in monasteries and is restricted almost to the control and power of the Church . adopted Christian thought in antiquity and throughout the High Middle Ages platonismo and neoplatonism thought to be the best suited to their belief in One God the Creator of the world according to ideas (Divine Providence ), and gave a transcendent meaning to human life , another life must be judged by God.

From the eleventh century, through the Arab Aristotelianism is recovered in the West. thinkers are important in this process Alkindi, Avicenna, 17 18 Averroes, 19 20 Alhazen, Avempace and the special cultural significance Toledo School of Translators.

The controversy raised in the University of Paris by Roscelino and Abelardo about the reality of universal concepts was a new interest in issues logical and what will be the nominalismOne of the issues that will have greater influence in the ” assessment of the experience. “

This revaluation of the experience and the ‘ importance of individual knowledge ‘ is produced from the thirteenth century , especially the Franciscan order and Oxford UniversityAs opposed to the order of the Dominicans (University of Paris). Thomas Aquinas Dominican promotes Christian Aristotelianism has had much influence in the history of the Church.

The Franciscans stress the importance of the individual, and appreciate the experience of the world as the value of knowledge as such, does not prevent it lights up and about the meaning of life to God by recognizing the value of knowledge of nature as God’s work . The most significant thinkers of this trend are Roger Bacon, Duns ScotusAnd especially William of Ockham.

## Nominalism and ” Ockham’s razor . ” Criticism of the Aristotelian theory of motion

The call nominalism is a critically on the value of the concepts, And the sense of language.

Faced with the classic Aristotelian arguments “ qualitative” or essential , and the world of “ entities” as concepts are introduced in these arguments, Ockham establishes a principle that has passed into history as ” Ockham’s razor “ or simplicity principle” Non sunt entia sine necessitate multiplicands ” (No need to multiply entities without necessity) , or equivalent to assess the explanations simple and close to the experience, rather than resorting to arbitrary and fanciful speculation .

On the other hand in Paris Nicolas Oresme criticizes the Aristotelian theory of motion by means of quantities tables, movement is studied by relating the spaces and the time it takes to travel that area , sensing the concept of speed and accelerationSo important to establish the experimental conditions of the movement, classified them as ” uniform ” , ” deformed “ and “ uniformly deformed . ” And it is the closest antecedent to the study of movement through ” mathematically related quantities ” , the foundation of scientific progress XVI and XVII century and the concept of analysis mathematician.

Jean Buridan and its ” impetus theory “ analyzes the ” momentum “ or permanence of the movement after having sat the cause that produces it, As in the case of projectiles. It is the most important antecedent of what in modern science will be the beginning of inertia.

## The Renaissance : The incorporation of experience in scientific research

The heliocentrismo and movements of the earth were to move definitively determining physical “ qualitative” Aristotelian and move toward a physical science “ quantitative” refers to measures and calculations mathematicians.

The great discoveries , (compass , gunpowder , printing , the West Indies ) have greatly expanded the known world until then and modes of social organization and transmission of culture through books.

This renewal process forward dramatically in the RenaissanceBeing particularly important replacement abacus by algoritmo essential operations for the calculation. This is made possible after the Arab contribution numbering system decimal , introducing zero 0, Already known in India and the current numerical graphs , which made it possible to make tables of arithmetic operations and expand all fields calculationEssential for trade at this time grown bourgeoisie of cities.

Knowing herself in the cities of the control of the Church and through the influence of artists and artisans , especially the architecture for the building of new cities and essential metal for the new “ arts of war ” by the application of gunpowder. The knowledge acquired experience as a social value which until then had not.

The fact of the discovery of the West Indies ‘ raises the issue of the roundness of the earth while the heliocentrismo making body of scientific hypotheses book Copernicus. The heliocentrismo called into question and deepens the crisis of the medieval conception of the world and Aristotelian physics .

The social power of the nobility will be moving into a new social class , the bourgeoisieAnd to find a new basis in money. Money that they have to resort kings by lending the bankers to maintain an army based on gunpowder and not “ weapons of the knights. “

The change of mentality that led to the Renaissance, HumanismoNot accept the ” argument from authority “ and both artists and researchers and thinkers are demanding freedom , which greatly facilitated by the fact value the experience and experimentation as a source of knowledge.

## The knowledge acquired with this new value : ‘ to know to master nature ‘.

Leonardo da Vinci could not go to college to be illegitimate, as was sometimes tried to ” rough ” for not knowing Latin, for some:

I am fully aware that there are arrogant people who believe to be right discredit me for not being an educated man do crazy! […] not know that my materials have more value because they are derived from experience rather than the words of others , and experience is the teacher of those who have written correctly

Leonardo da Vinci’s Atlantic Codex , folio 327v .

Talk of the Renaissance is to speak of Leonardo da Vinci Miguel Angel, Etc. that if scientists were not specifically meant the opening of minds to new concepts. Luis Vives, Erasmo, Etc. meant overcoming the criterion of authority that both limited the horizon of knowledge in its dependence on faith and the Church as an authority to monitor any deviation from the ‘ established ‘.

## The Modern Age: Rationalism and Empiricism

René Descartes , the father modern rationalism.

The traditional Aristotelian philosophy goes deeper into crisis after the heliocentric theory of the universe and the progress that science is getting to apply new research methods . Of particular relevance is the method of ” resolving ” composition “ of Galileo.

Science tries to “ discover the laws governing nature to dominate . ” How is it possible to know from experience the general laws of behavior of nature ?

Models of research method : Francis Bacon and Descartes

Two models of philosophical thinking and assessment of knowledge: Rationalism Empiricism and proper.

It is in this field opposing philosophical rationalism -empiricism in which empiricism is often situated as such. Is restricted even entitled ” English empiricism “(Francis Bacon, Hobbes, Locke, Berkeley, Hume) In contrast to the ” continental rationalism “(Descartes, Malebranche, Spinoza, Leibniz, Wolff).

In this opposition the problem has been to reduce the admission of the existence or nonexistence of innate ideas.

According to Descartes has some understanding intuitions evident made by God in human nature as innate ideas or principles of thought from which it is possible to establish logical relationships between ideas received from the experience.

This way of thinking by relating ideas analysis fruit has brought huge progress in recent years been in calculation mathematical discovery and description of the laws of nature and its application to empirical science.

After the development of calculation been already in the RenaissanceAnd the development of algebra by 1″Stevin, Place, Cardan and others, it becomes possible to calculate the projectile motion by Tartaglia; drop movement of ‘ serious’ Galileo, The study of the variation of pressure by the height Torricelli, The study of the pressures and the discovery of the hydraulic press and the balance of probabilities Pascal, The prediction of planetary motion Kepler. And the culmination of this process occurs within the rationalism with its own Descartes, Pascal, Leibniz and Newton. These last two, with the discovery of infinitesimal calculusOpened up tremendous prospects in the mathematization and calculation of continuous functions applicable to many processes of continuous change of nature , finally being the work of Newton a compendium of what came to mean the physical science for centuries to come .

On the model of this process of reflection mathematics Descartes proposes his method scientific research , a science that guarantees truth by the succession of evidence with certainty down following the rules of the method.

These truths thus established correspond to the reality of the world as a major innate ideas is the idea of God as being perfect and good , who can not deceive nor be deceived .

They are the main rationalist : Descartes, Spinoza, Malebranche, Leibniz, 34 Wolff, Pascal and the group of Port Royal in France.

John Locke (1632-1704) the most influential English empiricist .

## English empiricist thought

John Locke responds to rationalism Continental , championed by Descartes, Writing in the late seventeenth Essay Concerning Human Understanding (1689 ).

The only knowledge that human can possess is knowledge a posteriori (Knowledge based on experience) . He famously proposition that the human mind is a Tabula rasa you blank, Which are written from the experiences derived from sense impressions as a person’s life continues.

There are two sources of our ideas: feeling ( from the senses ) and reflection (From the mental operations : thoughts , memories …), both make a distinction between simple and complex ideas. Simple ideas are created in a passive mode in mind, after getting through the sensation. On the contrary, complex ideas are created after the combination , comparison and abstraction of simple ideas . For example the idea of a horn like that of a horse are two simple ideas , but by coming together to represent a unicorn become a complex idea.

According to Locke , our knowledge of things is a collection of ideas , which are in agreement or disagreement with each other as a laws of association of ideas.

But consider the idea of “ substance’Or the idea of “ cause” As a” complex idea ” completely changes the foundation of all traditional philosophy based on the “ substance “ as” subject” And” causality “ and” explanation of the change or movement»

A generation later, bishop Irish George Berkeley (1685-1753) determined that the point of view of Locke opens the door for a possible atheism. He devised an extreme empiricism and metaphysical , in which objects exist if they are perceived “ This percipi est ” (To be is to be perceived) So that whenever an object is perceived , because if he perceived any human God entity would perceive it. The perception in any case is the ground of being . Such ideas rather than empirical respond to a sense idealist.

Moreover, David Hume reduces all knowledge , as such , to ” impressions “ and” ideas. ” Supports two kinds of truths : truths of fact” relation of ideas ” Every idea has to be reduced to a corresponding print. When an idea arises from the relationship between ideas , the content of reality has to rely on the impressions that motivate . If you do not find these views should be rejected as a product of mere imagination without any true content . This is the case with the idea substance and the idea of cause.

David Hume (1711-1776) created an empiricism with a point of view skeptic.

## A set of impressions generate an association of ideas about a fact and an opinion thereon.

A murder , for example, is not and can be reduced to an impression It is a list of ideas: The idea for the killing of a man (I remember an impression ) with the idea of ” displeasure that produces ” in consciousness as internal printing is associated with a new idea: “ murder” as an idea that express moral judgments concerning the refusal of the association of the two impressions: Murder is something “ bad “ as subjective assessment moral but has no knowledge content true or false.

Similarly, the notion of cause can not be reduced to an impression, arises from the relationship between ideas. What is the relationship that unites two ideas as the cause ? . For Hume it is clear that causal relationship is established under the terms of ” a constant succession of impressions “ generated in man a “ habit “ or “ custom”.

To print to a pileup of water on the fire provided that the water is still warm. It is consciousness that combines these two successive impressions and ideas (the fact of putting the water on the fire , and its successor the fact that hot). This partnership is a new idea, the idea causeWhose foundation is the expectation that “ the fact that so far has happened to me that whenever I put a pileup of water on the fire heats it “ allows me to say: “ The fire heats the water ” , ie the fire causes the water to heat.

But we can not find any impression that is directly related to the idea of cause . Y content of an idea really makes sense only in reference to printing the resulting. The idea of cause , then, is something merely subjective , the result of the association of the minds of two successive impressions whose connection is not listed as evidence.

## The problem of science and experience : the analytic and synthetic – The a priori and a posteriori

The consequences of the concept of cause, as conceived HumeConcerning a claim to be scientific knowledge can not be more destructive. It leads to a skepticism since we can never know the basis of our impressions and understanding of the experiences will never leave us one subjectivism incompatible with science.

On the other hand, the seventeenth-century science is showing some clear successes in the knowledge of the laws of nature, and in the domain of the same techniques in their applications .

This critique of the notion of cause according to empirically postulated , resulted in Side rationalist until then, his awakening of the ” dogmatic slumber . ” All his critical work trying to overcome this course was absolutely unworkable scientific knowledge.

Locke ‘ s empiricism as both Hume , drift to what has been called associationism next to reduce knowledge to an psychologism As was understood later. Traditional science from the Greeks to the modern age, proceeds by concepts. It is independent of experience, (which in the modern age is conceptualized as a priori).

Knowledge true is possible because the object experience is considered given as reality objective origin and cause of the condition leading to significant understanding of the experiences . The experience guarantees the existence of the perceived. The concepts , while validly derived from experience, they connect universal knowledge and reality.

This is how knowledge is usually assessed in non-critical consciousness that identifies with the real knowledge .

## The universal object of scientific research in traditional Aristotelian science

Whenever you perceive in the experience a ” cat ” that object will experience all the notes themselves the essence of cat, as essential qualities of “ cats ” in a universal sense , because ” this cat “ of experience participate the essential quality of ” gatidad “ and also some of the possible accidental notes that identify with that cat, if it is white cat , will have all the characteristics of the essence of ” white ” because it participates in the universal quality of ” whiteness “ if the cat runs or stops running, it is because accidentally the cat may acquire and lose ( participate and opt out of ) the form the universal quality of being ” corridor ” , etc. .

It is assumed that the mind is capable of intuit the essence universal as form of things perceived in experience. Where this happens the object in question will notes categoriales specific to that concept.

The reason this way of thinking about science, analyzes the concepts of isolation from the experience, classifies and relates the concepts to each other through the “ notes” or ” qualities ” that characterize them , and reason , applying the laws of thinking, LogicThrough the syllogisms, obtained Opinion that are applicable to real objects with a guarantee of scientific truth. The result is a science of qualities ” ‘ as was the Aristotelian science .

Science so conceived is universal universal concepts for trying to cover an entire universe of objects, and necessary it is based on real insights on the qualities of objects. science is therefore a “ qualitative “ and “ a priori “ where the experience clearly plays a secondary role .

But the starting point of philosophical thought from Descartes , for both the rationalists and empiricists to , changes dramatically :

It given is not the object of experience , but consciousness of self – thinking as a subject of experience.

The object is a “ print “ or “ idea” of consciousness. The understanding operates with ideas.

In the absence of intuition sensible reality as perceived there is no guarantee that the relationship between idea – Based on the object is truly objective . This relationship becomes problematic.

Rationalism presents a justification of science , by innate ideas, from the idea of God , but the argument is unconvincing.

The empirical value science as an inexplicable fact, with an occasional basis and likely only as a subjective and common induction .

What we can guarantee that the connections between ideas correlated to the connections of reality?

But the science in the modern age is a fact. It has acquired , from the applications of mathematical calculation , a method and an undoubted success in the realm of nature and its practical applications. A science based on ” quantity ” and ” measure ” and the mathematical relationships that allow for ” explanatory hypotheses “ that are confirmed in the experience through the experiences.

Neither rationalists or empiricists find a sufficient reason properties of such knowledge :

As analytical and a priori is independent of experience. So can deduce consequences from certain concepts obtained a priori by reason as hypothesis and analysis mainly mathematicians. Consequences that are subsequently Verified on experience through experiences.

But synthetic the other, in that it can not be reduc