From Descartes to Locke: Toward the Unity of Knowledge

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World Journal of Advanced Research and Reviews, 2022, 13(01), 495–507

Publication history: Received on 10 December 2021; revised on 16 January 2022; accepted on 18 January 2022

Article DOI: https://doi.org/10.30574/wjarr.2022.13.1.0049

Abstract

The main focus of this paper is to demonstrate that René Descartes and John Locke were two opposing thinkers notably in their theories of knowledge. But despite their opposing views, our major preoccupation in this work is to show their point of unity. This could be seen at the level where they were preoccupied in restoring the autonomy of man which has been high jacked by the slavery of the medieval period. Their thoughts paved the way from theocentrism to anthropocentrism. They were also united in the fact that they have been considered as the pillars of modern epistemology. Our inspiration is being drawn notably from two principal works which are *Meditations on First Philosophy* (Descartes) and *An Essay Concerning Human Understanding* (John Locke).

Keywords: Empiricism; Rationalism; Knowledge; Epistemology; Pedagogy; Autonomy

1. Introduction

Modern period was characterized by the search for an authentic theory of knowledge. This period is generally divided into two schools of thoughts, which are in opposition to each other. These schools of thought are Rationalism and Empiricism. Rationalism was championed by René Descartes while empiricism was over shadowed by John Locke. John Locke, an English philosopher of modernity was born in a well-to-do family in 1632 in Wrington a small village in southwestern England. He was among the most famous philosophers and political theorists of the 17th century often regarded as the founder of British Empiricism. René Descartes, often considered as the father of modern philosophy, attempted to break with the philosophical traditions puts in place by past philosophers as well as those of his day and start philosophy afresh that is to lay a new foundation of philosophy. The context of John Locke was characterized by political unrest which prompted him to involve in political groupings that were in opposition to the royal policies at the time. Locke could be seen as a philosopher of triple tendencies: the intellectual tendency where he was against metaphysics especially the Cartesian metaphysics, the religious tendency where he was against Catholicism and series of religious intolerances and finally the political tendency where he was against all forms of political absolutisms.

Knowledge on the other hand, is derived etymologically from a Greek noun known as ‘Gnosis’ which signifies knowledge or insight best known from the perspective of Gnosticism or a feminine Greek noun which still refers to knowledge. Knowledge is the awareness and understanding of particular aspects of reality. It is the clear, lucid information gained through the process of reason applied to reality. The traditional approach is that knowledge requires three necessary and sufficient conditions, so that knowledge can then be defined as ‘justified true belief’, as seen with Plato in his dialogue *theaetetus* which is attain through a step by step process. To Rene Descartes, knowledge is like a tree in which the base of it is metaphysics, the trunk physics and the branches other sciences. While to John Locke, knowledge is the perception of the connection and agreement or the disagreement of any of our ideas, as seen where he remarked that; “Knowledge then seems to me to be nothing but the perception of the connection and agreement, or disagreement and repugnancy of any of our Ideas. This work seeks to search for the unifying factors between Descartes...
and Locke despite their disparities insofar as their epistemological ideas are concerned. Philosophers over years had the desire to know not only what knowledge is but also how it arises. This desire is being motivated by the assumption that an investigation into the origins of knowledge can shed light on its nature. Accordingly, such investigations have been one of the major enquiries in philosophy from the time of the ancient Greeks philosophers till the present ones. This problem of the origins of knowledge has make people to have a particular feelings which equally leads to two historical important kinds of debates. One of the debate concerns the question of whether knowledge is innate that is, present in the mind, from birth or acquired through sensory experiences. There also have been a series of compromise theories, which claim that humans have both innate and acquired knowledge mostly in the case of interactionists or better still constructivist. The second kind of debate related to the problem of the origins of knowledge, is that between rationalism and empiricism. According to rationalists, the ultimate source of human knowledge is the faculty of reason which is in fact, a unique feature or faculty of the mind through which truths about reality may be grasped while according to empiricists; it is experience which is the principal source and limit of all our knowledge. But however, despite the differences in their theories of knowledge, what are the unifying factors that marks and characterized their thoughts? In other to respond to this question, we intend to use the analytical and comprehensive approach given that our aim is not to criticize the authors but rather to analyze their thoughts for better comprehension.

2. The dichotomy between Rene Descartes and John Locke’s theories of knowledge

Rene Descartes and John Locke are the fathers of modern philosophy and the major proponents of rationalism and empiricism respectively. Rationalism and empiricism are two opposing theories of knowledge that have been animating philosophy from the ancient Greek period to our time. Ancient Greek because it is popularly known that philosophy was founded in Greek by the pre Socratics. The focus of this part is to show the theories of knowledge of Descartes and Locke, not as an end in itself but as a means to demonstrate their differences. These differences will be demonstrated at the level of the exposition of Locke’s theory of knowledge which will be in opposition to Descartes’ foundation and content.

2.1. Rene Descartes Rational Approach to Knowledge

Descartes started his epistemological project by searching for a solid foundation where all knowledge’s can be based. To realized this unshakable foundation, he started by demolishing all the knowledge’s he had acquired and knowledge gotten from the senses. In fact, he started by destroying all the knowledge he had acquired that had any least doubt. Influenced by the Skeptics, Descartes lays his philosophical foundation on thought and rejected what can be doubted. Doubt here means to suspect, to disbelieve or question. In A Descartes Dictionary, John Cottingham says that Descartes attempts to clear away the rubble of prejudices or preconceived opinions, in order to lay down a reliable metaphysical base for his new science. Doubt to Descartes is not an end in itself but as a means to demonstrate their differences. These differences will be demonstrated at the level of the exposition of Locke’s theory of knowledge which will be in opposition to Descartes’ foundation and content.

In addition, Descartes doubted the following aspects of knowledge; previous knowledge or passed experiences, the nature of the senses, mathematical truth whose doubt has been caused by a malicious genius or a devil that continuously make him to doubt mathematical truth.

About previous knowledge, Descartes was educated in one of the important schools in France called La Fleche. In this school, the content of pedagogy was centered on medieval philosophy. What constitutes his previous knowledge here is the knowledge he received from the school and the knowledge implanted in him by his parents. At his mature age, he was preoccupied in demolishing this previous knowledge because he realized that they were laid on shakable foundations. This foundation, considered as shakable, is because Descartes realized that this knowledge was based on the senses especially the Aristotelian epistemology. After realizing this, he took a step forward to demolish these pre notions. It is for this reason that he comment in the first Meditation: “Several years have now passed since I first realized how numerous were the false opinions that in my youth I had taken to be true, and thus how doubtful were all those that I had subsequently build on them. And thus I realized that once in my life I had to raze everything to the ground and begin again from the new foundations, if I wanted to establish anything firm and lasting in the sciences.” Science to Descartes is supposed to be built on a standard foundation.
The Aristotelians belief that the senses are the foundation of knowledge; knowledge to them begins from the senses. This implies that without the senses, the mind is blank. It is for this reason that Anthony Kenny declares: “Beside the intellectual light within us, there is a need for thinkable species taken from outward things...the human intellect, in this life, is a faculty of understanding of material objects. Without the senses, no object would be given to us; without the agent intellect no object would be thinkable. Thought without fantasies are empty; fantasies without species are darkness to the mind.” Influenced by Plato, Descartes rejected this aspect of knowledge. To Plato the human mind from birth possessed knowledge which he called innate ideas? According to him, knowledge based on the senses is not scientific because of the changeable nature of the senses and its objects. In A Descartes Dictionary Cottingham demonstrates the various aspects of rupture between the scholastic and the Cartesian philosophy. He opines:

But there were also a number of important general ways in which Descartes’ approach to philosophy science diverged from that of his Scholastic predecessors. First, he aimed to propound a unified scientific understanding of the universe, in contrast to the compartmentalized and piecemeal approach of the scholastics and... Second, this science was to be based on mathematical principles, in contrast to the qualitative explanatory apparatus of his predecessors... Third, he wanted to develop a mechanistic model of explanation, avoiding wherever possible any reference to final causes and purposes; in this sense, Cartesian science was to stake its claim to a substantial degree of autonomy, in place of the traditional subordination of physics to theology.

Also, Descartes focused in destroying knowledge base on the five senses and the objects of the senses. This includes the sense of sight, taste, hearing, smell, feel and its external and diverse objects. While other thinkers like the Empiricist believed that the senses are the main channels through which ideas are recorded in the mind, the Rationalists in general and Descartes in particular think that the senses are deceptive and cannot give us objective knowledge. It is for this reason that Descartes started his philosophical project by demolishing sensible knowledge. According to him, the senses are not stable, they are always in continues flux as affirmed by Heraclitus in the Ancient Period. Also, the objects of the senses are not stable, they are always changing. To Descartes, building science on this type of foundation is a fruitless endeavor. True science to Descartes has an a priori base, that is, inborn ideas or metaphysical bases. It is for this reason that he concurs:

Accordingly, since we now only design to apply ourselves to the investigation of truth, we will doubt, first, whether of all the things that have ever fallen under our senses, or which we have ever imagined, any one really exist; in the first place, because we know by experience that the senses sometimes err, and it would be imprudent to trust too much to what has even once deceived us; secondly, because in dreams we perpetually seem to perceive or imagine innumerable objects which have no existence. And to one who has thus resolved upon a general doubt, there appear no marks by which he can with certainty distinguish sleep from the waking state

Descartes even went as far as considering the senses as dreams because he saw no difference between the two. The reason for making a similitude between these aspects is because when he is at sleep, he will be witnessing the things that he has been doing during the day. Qualifying the senses as dreams simply shows that they are not to be trusted if one wants to lay a better foundation. He opines: “...I now see light, I hear a noise, I feel heat. These things are false, since I am asleep.” He continued the refutation of the senses by taking an example of a wax. He explains that this wax when viewed directly with the senses appears differently. For example color, size, shape, and smell. These characteristics do not remain the same if they are being processed. What remains, Descartes says, cannot change again. With this example of a wax, he exclaimed:

Let us take, for instance, this piece of wax. It has been taken quite recently from the honeycomb; it has not yet lost all the honey flavor. It retains some of the scent of flowers which it has collected. Its color, shape and size are manifest. It is hard and cold; it is easy to touch. If you rap on it with your knuckle it will emit a sound. In short, everything is present in it that appears needed to enable a body to be known as distinctly as possible. But notice that, as I am speaking, I am bringing close to the fire. The remaining traces of the honey flavor are disappearing; the scent is vanishing; the color is changing; the original shape is disappearing. Its size is increasing; it is becoming liquid and hot; you can hardly touch it. And now, when you rap on it, it no longer emits any sound. Does the same wax still remain? I must confess that it does; no one denies it; no one thinks otherwise. So what was there in the wax that was not distinctly grasped? Certainly, none of the aspects that I reached by means of the senses. For whatever came under the senses of taste, smell, sight, touch or hearing has now changed; and yet the wax remains.

After the experiment, what is left is the essence of the wax. Essence because he says, this cannot change again. The physical appearances otherwise called the accidents have disappeared and what is left now is what we can call in Aristotle’s term, substance. Substance to him is that which lies beneath the accidents, no matter the changes of the accidents, substance can never change. This also implies that the best way to do science is to experiment the sensible
objects. It is only after the experiment has been carried out that one can have the real knowledge of an object. In the laboratory, we no longer deal only with the five senses but also with scientific objects which will help in the realization of scientific truths. Descartes is one of the main authors that have influenced this method in science which has led to the progress of science and technology which is now a tool for the liberation of man from the chains of the nature. The senses, according to Descartes, should never be trusted. The senses are in continues flux or they are flowing. This is because things appear very different from a distance and also very different when you are close to them. It is for this reason that he affirms: “Towers that had seemed round from afar occasionally appeared square at close quarters. Very large statues mounted on their pedestals did not seem large to someone looking at them from ground level. And in countless other such instances I determine that judgments in matters of external senses were in error”

Descartes conceived the body as an obstacle to his scientific project. This is because being part of the sensible world; it is a hindrance because his system has nothing to do with the sensible world. His system is centered on inborn knowledge. He defined the body as: “...all that which is capable of being bounded by some shape, of being enclosed in a place, and of filing up a space in such a way as to exclude any other body from it; of being perceived by touch, sight, hearing, taste, smell; of being moved in several ways, not, of course, by itself, but by whatever impinges upon it.” One has to note here that Descartes defines the body by giving its characteristics. These characteristics are for instance the five senses. Also in this definition, the body is not autonomous because it does not have direction for itself; it is moved by things and not by itself. It is for this reason that the foundation of knowledge cannot be built on the body. In Ego Cogito Ergo Sum, Magerate declares: “The foundations metaphor is carried on in the further remark that since if the foundations are undermined, whatever is built on top of them automatically collapses.” This foundation has as it base, reason. Therefore if we want to acquire certainty in knowledge, we have to make an effort to rid ourselves of sensible knowledge and also to put in doubt everything that is not clear and distinct.

Descartes established the foundation to his epistemology and metaphysics on the cogito ergo sum. This is the first litmus truth that he has been looking for in the Meditations. To him, this is the first and most certain of all knowledge’s to occur to anyone who philosophizes in an orderly manner. Every system of knowledge especially metaphysics most have the cogito as its starting point. He considered the cogito as the most clear and certain knowledge from which other truths have to proceed. It is for this reason that Roger Scruton declares: “Metaphysics must begin from truths that are not just evident, but in some sense self-verifying otherwise it will never be more than a shot in the dark.” From the above quotation, one can deduce that knowledge should be founded on solid grounds if we want to have an everlasting knowledge. This everlasting foundation as earlier is the mind or thought which he considered in the Discourse on Method as the first principle that he has been looking for. It is for this reason that he affirms:

I noted that, while I was trying to think of all things being false in this way, it was necessarily the case that I, who was thinking them, had to be something; and observing this truth: I am thinking therefore I exist, was so secure and certain that it could not be shaken by any of the most extravagant suppositions of the skeptics, I judged that I could accept it without scruple, as the first principle of the philosophy I was seeking.

This new foundation of science is unshakable even by the skeptic doubt. It does not proceed from the senses; it is inborn in man according to the rationalist thinkers. Thought is considered as the first principle of philosophy, it is an activity which one cannot doubt because if you are able to question what is not clear to you, it implies that the act of questioning itself is thinking and you cannot doubt the fact that you are doubting or thinking. Doubting is an activity of the mind and the mind itself is inborn. In his philosophy of language Noam Chomsky supported Descartes concerning innate ideas and the rupture with the senses. In The Cartesian Linguistics, he declares: “They seem to indicate that the mind is made up of innate systems that grow automatically, much as do the heart and the liver. Adopting such a research strategy is called nativism.” Chomsky approved the rationalist foundation to knowledge based on inborn structures in the human mind which are responsible for fast acquisition of language by children, and rejected the tabula rasa of the empiricist. He believes that the human mind is structured by innate ideas which are responsible for the gap between sensation and what is produced from the sensation.

Descartes makes an identity between his thought and his nature. He realizes that his existence recites on the fact that he is thinking. In the second Meditation, he says “I am therefore precisely nothing but a thinking thing; that is, a mind, or intellect, or understanding, or reason- words of whose meaning I was previously ignorant.” From this affirmation, one can say that the existence of man is idealistic according to the rationalist as opposed to the materialists like Karl Marx who thought that the essence of man is founded on matter, that is, it is matter or praxis that determines the essence of man. In the same line, Descartes define himself as “A thing that thinks...a thing that doubts, understands, affirms, denies, wills, refuses, and also imagines and senses.” Having seen the cogito as the corner stone of knowledge, we are going to proceed with the various innate or inborn ideas.
In his quest to establish the metaphysical foundation of knowledge, Descartes distinguished between three types of ideas which will not be expatiates in details here but in our next article which will be exclusively on Descartes theory of knowledge. An idea is a mental representation of a thing or having an image of something in the mind. The three types of ideas he based on are innate ideas, factice ideas and adventitious ideas. Innate ideas constitute the foundation of metaphysics or they are the base of any system. This is because these ideas have an a priori foundation. They are not gotten from the senses but according to the rationalists in general, and Rene Descartes in particular, these ideas are inborn. These innate ideas are: the idea of the mind, God, logical principles and mathematics. Factice ideas are invented by man. They are ideas that the human mind imagines which is not necessarily true or fact. For example, to think about a horse with ten legs is an example of this type of idea. While adventitious ideas come from our senses. For example, the idea of a white color comes in to our mind because of our experience of white. Having seen the types of ideas, our next focus will be on the rules for the direction of the mind.

Descartes establishes the cogito as the first principle of philosophy. To him, the previous principles of philosophy were not founded on solid grounds; this is the reason why he took as an obligation to lay an unshakable foundation of philosophy based on reason alone. Having done this, he proposed the various methods that one can used to direct his mind if he or she wants to arrive at certainty. These rules cover all the fields of knowledge. In other to avoid pre notions in science Descartes’ first rule given in the Meditations is “and thus I now seem able to posit as a general rule that everything I very clearly and distinctly perceive is true.” This is the first and foremost principle of science that all seeking for scientific truth should follow. Being influenced by the Aristotelians who thought that true knowledge begins from the senses, Descartes thought that it is not a safe foundation for philosophy because of the changeable nature of the sensible objects and also due to the fact that the senses are not stable. He realizes that clarity and distinctness is the beginning of knowledge.

One of Descartes preoccupations in the Meditations is to demonstrate that God is not the cause of error and that man is. The aspect of man that is responsible for error is the will and the fact that we do not use our intellect well. To avoid error, Descartes maintains that “I should never judge anything that I do not clearly and distinctly understand.” This implies that for one not to be deceived, one need to go close to the object of knowledge or even take the object of study to the laboratory for experimentation. It is only after this process that one can know the real truth about that particular object. But if one is not able to ascend to this method, one can use this alternative which is continues meditation. He alleges; “...by attentive and often repeated meditation, I can bring it about that I call this rule to mind whenever the situation calls for it, and thus I would acquire a certain habit of not erring.” The next sets of rules are his four cardinal principles that work together in the quest for certainty. In the Discourse on Method he demonstrated these four logical principles:

The first was never to accept anything as true that I did not plainly know to be such; that is to say, carefully to avoid hasty judgment and prejudice; and to include nothing more in my judgments than what presented itself to my mind so clearly and so distinctly that I had no occasion to call it in doubt. The second, to divide each of the difficulties I would examine into as many parts as possible and as was required in order to better resolve them. The third, to conduct my thoughts in an orderly fashion, by commencing with those objects that are simplest and easiest to know, in order to ascend little by little, as by degrees, to the knowledge of the most composite things, and by supposing an order even among those things that do not naturally precede one another. And the last, everywhere to make enumerations so complete and reviews so general that I was assured of having omitted nothing.

According to our author, anyone who directs his mind this way is going to attain certainty in knowledge and he is not going to be deceived. These rules go with method.

Throughout his quest for certainty, Descartes focused on two main methods. These methods are intuition and deduction. These are the safest methods of knowledge and to him; every other method should be rejected as faulty. By intuition, Descartes means: “An intellectual activity or vision of such clarity that it leaves no doubt in the mind.” Intuition comes directly in the mind, it comes like a sudden light and this light cannot be false. Deduction is “... all necessary inference from facts that are known with certainty.” With Descartes, the two methods work together that is, from clear and distinct ideas; one can therefore proceed to deduce the truth of other realities. For example, Descartes conceived the cogito as the first truth and he proceeded by deducing the truth of other things from it like the truth of his existence; that is, I think therefore I am, cogito ergo sum. These methods can help one to reach the highest level of knowledge which is wisdom. In the preface to The Principles of Philosophy, he points out:

I should in the next place, have desired to set forth the ground for holding that the true principles by which we may reach that highest level of wisdom wherein consist the sovereign good of human life, are those I have proposed in this work; and two considerations alone are sufficient to establish this, the first of which is, that these principles are very
clear, and the second, that we can deduce all the truth from them; for it is only these two conditions that are required in true principles.

With these two principles in mind, one can develop a perfect science because both methods deal with certainty. These methods are different from those given by Aristotle in his Logic. To Descartes, with intuition and deduction, one moves from a known fact to a known conclusion. But with syllogism, one reason from a premise and the truth value of the conclusion depends on the true value of the premises. To Descartes there is no other principle that can be compared with these two. The first intuition realized by him is the cogito or thought. It is from here that he will deduce all other truth. For example, the truth of his existence, of God’s existence and mathematical truths. Still in the preface to The Principles of Philosophy, he maintains that: “I have taken the existence of this thought for the first principle...from which I very clearly deduced the following truths namely, that there is a God who is the author of all that is in the world, and who, being the source of all truths could not have created our understanding in such a nature as to be deceived in judgments it formed of things it possesses a very clear and distinct perception.”

This principle of philosophy is what some philosophers like Hegel called consciousness. Consciousness means being aware of what you are doing. According to Descartes this principle of philosophy is universal; implying that everybody possesses the capacity to philosophize. This has made philosophy a universal discipline. It is in the Discourse on Method that he considers the general distribution of good sense. John Locke’s foundation to science contradicts Descartes conception.

2.2. John Locke’s Empirical Approach to Knowledge

Our main goal here is to carry out an analysis of Locke’s empirical approach to the attainment of knowledge as opposed to the Cartesian rational approach. Note should be taken that, the major aim of Locke’s Essay Concerning Human Understanding, was to establish an epistemological foundations for the new science by examining the reliability, scope, and limitations of human knowledge in contrast with the pretensions of uncritical belief, borrowed opinions, and mere superstitions for instance, like the case of innate ideas. Since the sciences had already demonstrated their practical success, Locke tried to apply their Baconian methods to the pursuit of his own philosophical aims. In order to discover how the human understanding achieves knowledge, we must trace its origins in our experiences.

We intends to show here precisely that Locke’s views on the question of innate ideas since the beginning of his epistemology aimed at rejecting the rationalist doctrine that men have innate knowledge of some truth either moral or speculative, which supplies the foundations of knowledge. Locke here, was trying to go first of all beyond Plato who advocates, through Socrates, the belief that knowledge is not a matter of study, learning or observation, but a matter of recollection as seen where he affirms that “all enquiry and all learning is but recollection.” Secondly against Descartes rational approach to Knowledge. The doctrine of innate ideas is among those doctrines which lie at the core of Descartes system of philosophy. What is innate, native, inborn, implanted as seeds, or primary to the mind is intimately connected with Descartes metaphysics, epistemology and scientific method. Descartes display a new, non-Aristotelian method of acquiring knowledge by attending properly to our innate ideas and not to our senses and in this light, he affirms in his Discourse on method that; “The Aristotelians are ‘like blind men who, in order to fight on equal terms against those who can see [...]’ Descartes remarks on innate ideas in fact form a unified account. Descartes believed that innate ideas were planted in the mind by God at its creation and this is why he thinks that; ‘Ignorance is darkness or blindness; light is knowledge or insight: ‘so it was due to this [...] that I freed myself gradually from many of the errors that can obscure the natural light of our minds’ ‘God has given each of us an inner light to distinguish the true from the false’.

According to John Locke, children have no ideas of universal propositions that are esteemed innate principles. He also investigates the notion of the identity of man to proof that identity is not innate. Also, Locke brings to light the fact that the idea of extension and number are not innate. More so, the ideas of worship to him are not innate, for if the idea of God was universal there would have been no atheism. To him, the proof of God’s existence from the notion of universal assent is just based on the fact that majority of the people in the world affirm that against minority. The presence of atheists to him reduces the notion of universal consent to that of great majority. Locke affirms that when men found some general principles that could not be doubted once understood they term them innate and the lazy who cannot search to clarify their doubts accept it and as such those who are the masters and teachers term it the principles. In this light, he wanted to pave the way for the reliable source of knowledge and to make this his view explicit, Simon Critchley assert in the perspective of Locke that:

The ambition of the philosopher should be that of an under-laborer in clearing the ground a little, and removing some of the rubbish that lies in the way of knowledge. For Locke and the empiricist tradition that he inspires, the philosopher is no longer a Platonic king or a Cartesian master of nature, but is more of a janitor in the palace of the sciences, clearing
away rubbish and tidying up. He claims that human knowledge consists in nothing but what passes in a man’s mind, what he calls ideas. These ideas are not, as Descartes thought, innate, but have their source in either sensation or reflection.

John Locke after rejecting innate ideas which to him, is like an obstacle to knowledge, wanted to establish a fundamental theory of human ideas which will serve as a true source of knowledge void of all metaphysical system. All ideas to Locke therefore come from experience which could either be the experience of sensation and reflection since the human mind as supposed by him is like; white paper void of all characters without any ideas. This phrase expresses Locke’s conception of the mind as a tabular rasa which designates the original state of the mind which from birth contains no idea. All the materials of knowledge to Locke come from experience which is the ultimate foundation and limit of all our knowledge.

Following the above view, one of the fundamental key concepts raised by Locke is the notion of the human mind as tabular rasa which expresses the mental transparency. This notion of tabular rasa as used by Locke metaphorically designates the original state of the mind at birth. He also uses the term experience which is being elaborated in order to respond to the question of the origin, values, and limits of our knowledge. Experience is that which depends on our observation and by observation Locke means either external or internal observation. That is observation of the object which affects our senses and on the other hand the observation of the mind by itself. Hence, it is on observation that all our ideas are being assured. Locke used of experience tied to that of Roger Bacon who equally thinks that; it is necessary to prove everything from experience for mathematical knowledge to him for example reaches conclusions in accordance with universal experience about figures and numbers, which indeed apply to all sciences and to this experience, because no science can be known without mathematics. Still based on the notion of experience as the base of knowledge, George Berkeley equally thinks that:

It is evident to anyone who takes a Survey of the Objects of Human Knowledge, that they are either Ideas actually imprinted on the Senses… By Sight I have the Ideas of Light and Colors’ with their several Degrees and Variations. By Touch I perceive, for Example, Hard and Soft, Heat and Cold, Motion and Resistance, and of all these more and less either as to Quantity or Degree. Smelling furnishes me with Odors; the Palate with Tastes and Hearing conveys Sounds to the Mind in all their variety of Tone and Composition.

The above citation tries to justify the fact that human knowledge can only be gotten through the senses for instance like our five senses. John Locke supported the above views of Berkeley and argued that our minds are from birth a blank slate and all of the conceptions we have originate from experience. His first step in establishing this is to attack the view that there are foundational innate ideas that we are born with as earlier suggested by Descartes. For Locke, there are countless simple perceptions that flood into our minds through sensation and reflection; in fact so many that we don’t even have names for most of them. To make this point explicit, Locke held that; simple ideas are the materials of all our knowledge [which] are being suggested and furnished to the mind only through the above mentioned two ways which are sensation and reflection. But as we store these raw simple notions in our memories, our minds mechanically shuffle them around and create new ones which he calls complex ideas.

There are three specific mental processes that form complex ideas. First, some are the result of simply combining together more simple ideas. For example, one can get a complex idea of an apple by assembling the simple ideas of roundness, redness, sweetness, and moistness. Second, some complex ideas involve relations that we get from comparing two things, such as the notions of larger and smaller, that one get when comparing two apples of different sizes. Third, there are complex ideas that result from the mental process of abstraction, such as when one arrive at the abstract notion of roundness by looking at an apple and stripping away all of its attributes except for its being round. As the mind then draws out complex ideas from simple ones, the complex ideas will be of two types that is, ideas of substances and ideas of modes. Ideas of substances are those of individual objects such as rocks, trees, houses, animals, people and God. Ideas of modes are attributes of those objects that cannot exist independently of them, such as an apple’s attributes of being round and moist. Complex ideas are actually Framed by the mind using simple ideas as materials. The mind combines two or more simple ideas in to a complex idea. According to Locke, simply ideas are also conveyed in to the mind by more senses than one, others through reflection only, which others are gotten through both sensation and reflection. The most comprehensive of all our senses is sight. This is because it conveys in to the mind different kinds of ideas. Another faculty of the mind which makes a further progress towards knowledge is retention or better still the keeping of those simple ideas which are being derived from sensation and reflection which is known as contemplation and another way of retention is through the memory which is the power to receive again in our minds those ideas which after imprinting had disappeared. Perception is the first step and degree towards knowledge and the inlet of all the materials of knowledge. This can be seen where he affirms that; perception is the first operation of all our intellectual faculties. In the same line with Locke, Berkeley remarked too that; to be is to be perceived; esse est percipi.
It is in the fourth book of An Essay that Locke defines clearly what knowledge is in general. To John Locke, knowledge is the perception of the agreement or disagreement of two ideas as seen where he affirm that; knowledge seems to me to be nothing but the perception of the connection and agreement, or disagreement and repugnancy, of any of our ideas as seen in the first chapter of the book. This therefore implies that where this perception is possible, there is knowledge and where it is not, knowledge is impossible. Agreement and disagreement mentioned in this definition consist in four sorts that is identity or diversity for instance that white is white, or that white is not black corresponds to identity and diversity, relation, co-existence or necessary connection and real existence. To expatiate well on this point, John Locke put in place an assertion according to which:

Within these four sorts of agreement or disagreement is, I suppose, contained all the knowledge we have, or are capable of. For all the inquiries we can make concerning any of our ideas, all that we can know or affirm concerning any of them, is that it is, or is not, the same with some other; that it does or does not always coexist with some other idea in the same subject; that it has this or that relation with some other idea; or that it has a real existence outside the mind. Thus blue is not yellow is of identity. Two triangles upon equal bases between two parallels are equal is of relation. "Iron is susceptible of magnetic impressions is of coexistence. God is, is of real existence.

Knowledge, as well as assent, is subject to ‘degrees’: there are degrees, not only of probability, but of ‘evidence’. The first degree of knowledge is intuitive knowledge, in which the mind perceives the truth, as the eye doth light, only by being directed toward it. Intuition ‘leaves no room for hesitation, doubt, or examination. This is the most certain degree of knowledge; here the mind perceives the truth of a statement immediately, at first sight of the ideas together, by bare intuition, without the intervention of any other ideas. In this light, Locke affirms that:

The difference clearness of our knowledge seems to me to lie in the difference ways of perceptions the mind has of the agreement or disagreement of any of it ideas. For if we will reflect on our own way of thinking we shall find that sometimes the mind perceives the agreement or disagreement of two ideas immediately by themselves without the intervention of any other; and this, I think, we may call intuitive knowledge.

This then implies for instance that, the mind perceives that white is not black, that circle is not a triangle. It does so without the intervention of any other idea. Locke again asserts that; it is on this intuition that depend all the certainty and evidence of all our knowledge.

The second degree of knowledge is demonstrative knowledge, where the truth is perceived by the aid of one or a chain of intermediate ideas and also where the mind goes through several steps in order to reach a conclusion. Doubt or mistake is possible at any point in the sequence with respect to connections not currently in view. It contrasts with demonstrative, where reasoning is required that is the relationship is perceived through a series of intuitively evident steps. Demonstrative knowledge is a little less certain, since it depends on memory. This is why Locke thinks that; ...there must be a progression by steps and degrees before the mind can in this way arrive at certainty, and come to perceive the agreement or repugnance between two ideas that need proofs and the use of reason to show it. Demonstration to Locke is not clear to weak eyes. Intuition and demonstration provide us with all our knowledge of general truths.

In addition to the two types of knowledge, Locke adds the third degree of knowledge which is sensitive knowledge of the existence or co-existence of qualities in external things. Locke then asserts that; So that, I think, we may add to the two former sort of knowledge, [which concerns] the existence of external objects, by that perception and consciousness we have of the actual entrance of ideas from them, and allow this three degrees of knowledge that is intuitive, demonstrative and sensitive, in each of which there are difference degrees and ways of evidence and certainty. Locke’s first introduction of this category seems tentative, even an afterthought, as if it is called knowledge only by courtesy. In order to fit his main definition of knowledge it has to be interpreted as the perception of the agreement of ideas of sensible qualities with the idea of existence, an analysis Locke unsurprisingly declines to develop. Yet ‘sensitive knowledge of existence’ does straightforwardly satisfy his other definition of knowledge that is, what is known in sensitive knowledge. Epicurean claim that sensory knowledge is the most evident of all, it was widely assumed that knowledge in the full sense comprises only knowledge of necessary first principles, demonstrated science, and perhaps reflexive knowledge. Locke wanted both to concede to orthodoxy that the evidence and certainty of our sensory knowledge is not as high as that of intuition and demonstration, and to insist that, nevertheless, ‘sensitive knowledge of existence’ does give a degree of immediate certainty and ‘deserves the name of knowledge or human ideas.

Like Platonists and Cartesians, Locke drew a strong distinction between knowledge and belief also called opinion. The distinction is being seen in Book four of the Essay, universal knowledge or science does not have special objects, whether a transcendent intelligible world in the mind of God or innate intellectual ideas. Its difference from general belief lies in
the way in which ideas are related in the mind. In universal knowledge, the connection and agreement, or disagreement and repugnancy' of ideas is perceived, whereas in belief it is presumed on the basis of something extraneous to the thing I believe. Similarly in the case of 'sensitive knowledge' of particular existence, what we ourselves perceive we know to be so, but what we infer, or accept on testimony, we merely believe.

Generally, note should be taken that, Locke develops his epistemological theory in An Essay concerning Human Understanding. He begins by attacking the notion that we are born with innate ideas and develops a theory that argues that all of our knowledge is founded on or derived from experience and that we can establish certainty about the external world’s existence through these means. Ideas are understood as whatever the mind perceives in it they are the immediate objects of all perception, thought, or understanding. According to Locke our ideas result from our experiences of either sensation or reflection. The ideas of sensation are our ideas of sensible qualities: cold, heat, red, soft, etc. The ideas of reflection are perceptions of the operations of our own mind: reasoning, willing, doubting, believing, etc. Sensation and reflection are the foundations from which “experience furnishes our understanding” and all ideas and knowledge can be derived from these faculties of the mind. This was his immediate retaliation to Rene Descartes modern rationalist philosopher whose theory of knowledge is rooted on rational basis.

3. The quest for a unifying factor between Descartes and Locke's epistemology

3.1. Descartes and Locke: The Pillars of Modern Epistemology

On the modern plan, controversies of the base of human knowledge which had prolonged the context of epistemological crisis were been championed by two great thinkers which are Rene Descartes and John Locke. They are being considered in this regard as major pillars of modern epistemology. Descartes on his part sought to establish a new foundation for a new science which is independent of untrustworthy of sense experience rooted on metaphysics. This is the reason why during the modernity metaphysics became the new foundation of knowledge's. According to him, due to his Christian heritage, innate ideas like the idea of substance, causality and geometry, were being imprinted on the human soul by God from birth in which human being are able to discover the part to true and certain knowledge of others features of God created world. Descartes philosophy in most cases has an accord with that of Plato notably in the aspect of their belief in the preeminent of mathematical knowledge thereby providing an apriori foundation for science and rejects the senses. Descartes says at the beginning of the third meditation that; “I will now shut my eyes, blocked my ears, cut up all my senses.” This shows that sensible knowledge is deceptive to him as seen where he again stated that; ”...my understanding of what a thing is, what truth is, and what thought is, derives purely from my own nature, which means that, it is innate.” He stood firm to fight against Christian dogmatism.

René Descartes, often considered as the father of modern philosophy, attempted to break with the philosophical traditions puts in place by past philosophers as well as those of his day and start philosophy afresh that is to lay a new foundation of philosophy. He started by rejecting the Aristotelian philosophy which was empirical, the authority of tradition and the authority of the senses, he built a philosophical system that included a method of inquiry, a metaphysics, a mechanistic physics and biology, and an account of human psychology intended to ground an ethics. This justify his main affirmation in his principles of philosophy that;

Thus, all Philosophy is like a tree, of which Metaphysics is the root, Physics the trunk, and all the other sciences the branches that grow out of this trunk, which are reduced to three principal, namely, Medicine, Mechanics, and Ethics. By the science of Morals, I understand the highest and most perfect which, presupposing an entire knowledge of the other sciences is the last degree of wisdom.

Metaphorically, Descartes conceive human wisdom as a tree known as the tree of wisdom. The roots of this tree as already seen constitute metaphysics which form the foundations of human knowledge and from where it derives its nourishment. The trunk is constituted of physics and there are three branches which are medicine, mechanics and morals, under which all other knowledge concerning of humankind can be subsumed. Metaphysics to Descartes then contain the first principle of knowledge as well as sciences and this makes metaphysics as a new foundation of knowledge. Descartes developed his philosophical doctrine known as rationalism. Rationalism from the Latin ratio, ‘reason’ implies that logical thinking is the right method for acquiring knowledge of ultimate reality, with the connotation that the senses provide only a limited or distorted perspective on what is. Rationalists frequently argue that, apriori metaphysical knowledge is possible because some concepts are innate. Knowledge, for Descartes, begins in metaphysics, and metaphysics begins with the self and from the self we arrive at God, and from God we arrive at the full knowledge of mind and body. Knowledge to Descartes is based on reason and not on the senses and this is the reason why he was against the sensible knowledge for he considered it as false opinions. Biju Koonathan outlined that;
The rationalists maintain that there are certain fundamental principles of reality, which are innate and recognized as true by reason or intuition. Intuition is immediate apprehension by reason. All other truths are deduced from them.

With the help of mathematical method we must reject the vague and obscure light of the senses, and select the simple, clear, self-evident, and innate ideas of reason, and deduce other truths from them [...], and not from the senses.

Descartes was convinced that everyone has a natural light allowing for discerning truth thereby relying on his inborn natural faculty to establish what truth is and not on deceptive sense experience. He doubted the testimony of the senses, since they frequently deceive us as well as the existence of the body which he equally considered it uncertain. However, Descartes admitted one thing which is certain that is, "I think, and the fact that I think means that I exist"; whence one of the most celebrated philosophical statements came known as; cogito ergo sum.

Descartes philosophy begins with an objective; to identify the foundations of genuine scientific knowledge, which to him is constructed based on innate principles. He thus advances a method of doubt, where he doubts everything that can be doubted, in order to arrive at the indubitable starting point of knowledge which to him was the cogito. John Locke an English philosopher of modernity was born in a well-to-do family in 1632 in Wrington a small village in southwestern England. He was among the most famous philosophers and political theorists of the 17th century often regarded as the founder of British Empiricism. The context of John Locke was characterized by political unrest which prompted him to involve in political groupings that were in opposition to the royal policies at the time.

Note should be taken that, An essay concerning human understanding written by John Locke which first appeared in 1690, is one of the most important works in the history of philosophy which is chiefly centered on fundamental issues such as epistemology, metaphysics, philosophy of the mind as well as language. Locke in this work sets out to offer an analysis of the human mind and its acquisition of knowledge thereby offering an empiricists theory according to which our ideas are being acquired through our experiences of the world. Given these concerns we can readily understand the overall structure of an essay concerning human understanding which is being divided in to four main parts. The publication of Locke’s essay aroused a wide spread attention from the moment of its first publication. One of the main reasons was the fact that the book received an excellent degree of publicity in the leading intellectual journals of his period. An abridge version prepared by Locke himself actually appeared in 1688a year before the full text was published in an internationally recognized journal of his time known as «le bibliotheque universel» and many contemporary philosophers including Leibniz became acquainted with Locke’s essay. Locke’s views on epistemology spread widely through this work through the emphasis he laid on experience as the foundation of human knowledge.

Locke’s main intention behind attacking the theory of innatism was to clear the path in order to establish his empiricism, the doctrine that holds that the mind is comparable to a white paper at the time of birth. It derives all the materials of reason and knowledge from experience. In the ‘Epistle to the reader’, Locke claimed himself to be an under-labourer, engaged in...Clearing Ground a little, and removing some of the Rubbish, that lies in the way to Knowledge....The theory of innatism was, no doubt, an obstacle in his way of his main empiricist thesis. Furthermore, many Englishmen also advocated innatism. Among them was Edward Stillingfleet, the Bishop of Worcester, who was Locke’s most celebrated adversary. In England, we find that the doctrine of innate knowledge was held, in one form or another, to be necessary for religion and especially for morality from the early years of the century right through to the end and into the beginning of the following century. The innate hypothesis was a cornerstone of the major Philosophical and theological systems of Locke’s day. We can say that it was against this widespread opinion, and not against any particular opinion that Locke directed his polemic. Locke himself said that he was attacking ‘an established opinion among some men. In so doing, he then emerges in the eyes of many as one among the major pillars of modern epistemology together with Rene Descartes.

3.2. United in the Restoration of Man’s Autonomy

The Holy Scriptures is a symbol of authority to all the churches throughout the world and the Catholic Church in particular. This is because the bible is considered as the revealed words of God. In the Middle Age period, the Catholic Church was considered as the master and possessor of truth in every domain of human life. It is for this reason that the seekers of wisdom needed to work hand in hand with the Catholic Church in the quest for true wisdom. St Augustine and St Thomas Aquinas are the outstanding middle age thinkers who raised the authority of the church to higher heights in their political doctrines. To Augustine, true justice is found in the Catholic Church because it represents God’s city on earth. Therefore, the state should seek the truth in Catholic Church. In his political philosophy, he identified two cities, that is, the city of God, identified with the church and the city of Babylon. Justice is identified with the former and injustice is identified with the latter. Therefore, the city of Babylon has to seek for justice in the city of God because it is only with justice that the society can survive. That is why Copleston in History of Philosophy question “…without justice, what are kingdoms but great bands of robbers?” Copleston further explain that to Augustine, a man may be a Christian
and belong to the church, but if the principle of his conduct is self-love and not the love of God then he belong spiritually and morally to the kingdom of Babylon and if a church official is governed in his conscience by God’s love and if he has justice, and charity then he belong, spiritually and morally to the city of Jerusalem. It is for this reason that he reiterates: “We see now a citizen of Jerusalem, a citizen of the kingdom of heaven, holding some office upon earth, as for example, wearing purple, serving as magistrates, as aedile, as proconsul, as emperor directing the earthly republic, but he has his heart above if he is a Christian, if he is the faithful.” In the same line, Aquinas holds that since the church has supreme authority and supernatural powers, the state should be subordinated or takes orders from the church. To him, what can lead man to his final destination is only Christ; therefore, kings must be subjected to priest.

The power of the Catholic Church was challenged by the rise of modern science; power had to change hands. This period witnessed the diminising authority of the church and the increasing authority of science. Otherwise it marked the liberation of reason from the chains of the Medieval Period. According Russell in his Western Philosophical Thought, the state increasingly replaced the church as the governmental authority that controls culture. The kings were replaced by democrats and tyrants. Also, the rejection of the ecclesiastical domination saw the growth of science with the discoveries of Copernicus, Galileo, Kepler and others. The church fought a lose battle against the discovery of this new knowledge.

Descartes the father of modern philosophy is one of the thinkers that overshadow the liberation of man as he seized knowledge from the church and gave it back man; from authoritarianism to individualism. It is at this level that we can talk of autonomy. Before the beginning of the modern period, philosophy was in the hands of the church, precisely Catholic Church as earlier stated. This organization was considered as the representation of divine truth on earth thus, the possessor of truth in general. Human beings were not free to exercise their free gift of nature. Here, we can say in the words of Edmund Husserl that reason was being bracketed. It was a “taboo” to oppose the authority of the church because according to Augustine, the Catholic Church represented the city of God on earth. This implies that since God is the Supreme Being, He is omniscience: He knows everything. In this era, there was no freedom of thought and expression. For example, as quoted in the introduction of the Discourse on Method of Descartes by Ian:

Pope Paul IV expanded these, and in 1554 ordered the congregation to draw up a list of books which could be deemed to offend faith and morals. This result in the first index of forbidden books...therefore in order that this opinion may not spread any further to the prejudice of catholic truth, the congregation has decided that the books by Nicholas Copernicus (On the Revolution of Spheres) and Diego Zuniga (On Fob) be suspended until corrected; and that the book of Carmelite Father Paolo Fascarini be completely prohibited and condemned; that of all text books which teach the same be like wise prohibited...

Here one can see that in this period, any teaching that goes contrarily to the doctrine of the Catholic Church was considered as a heresy or a sin. The coming of the modern period in general and Descartes in particular marked a turning point in this conception.

Despite this pressure by the church to end this challenge, the growth of science continued. Due to this, the church authorities banned the sale of Galileo’s book and he was called for questioning and finally imprisoned. Science despite these huddles continued growing because it source is reason and this reason is not particular like the church’s authority, it is an open spirit. Finally, the emancipation of the scientific spirit led to the growth of individualism. To Russell, discipline, intellectual, moral, and political was associated in the minds of the Renaissance. It is precisely this aspect of individualism that Descartes will develop his philosophical project.

John Locke, one of our focuses here contributed in this restoration in his perspective of the foundation of knowledge and in the rejection of the foundation on religious beliefs on innate ideas. In his theory of knowledge which he developed under the doctrine of empiricism, he concurs that knowledge is the product of man. Empiricism is a doctrine which holds that knowledge comes from experience2. The founders of this doctrine were John Locke, David Hume and George Berkeley. According to them, knowledge is restricted to ideas. This doctrine stands in contrast to rationalism. They hold that there is nothing in the intellect that has not passed through the senses. This statement contrast Descartes view of innate ideas. The Empiricists rejected the view that the human mind contains certain “innate principles.” According to them all knowledge comes from the senses. Although this Empiricist view is not generally acceptable, they have a different approach toward knowledge acquisition. According to Locke, without sensation there will be no reflection. Moreover, Locke advocates that without the combination of simple and complex ideas, we cannot have an idea about something. Simple ideas come from the senses passively. They are impressions which things make in our minds. Simple ideas are like raw materials out of which our knowledge is made. Complex ideas are those that the mind produces by its own activity using simple ideas as its raw material. By relating simple and complex ideas, an idea is formed in the mind
by means of abstraction. Here, we can note that knowledge in its entirety is the product of man and not the product of divinity as it was the case in the medieval period.

Like many of his English contemporaries who advocated innate ideas in the context of religion which among them was Edward Stillingfleet, the Bishop of Worcester, who was Locke's most celebrated adversary, John Locke was deeply interested in matters of religion. Keenly aware of the theological controversies of the day, he developed and defended views of his own that were influential on matters of religion of the next generation. Although knowledge of God is vital for human life and practical conduct, on Locke's view, it cannot be grounded legitimately on the supposedly universal possession of an innate idea. Although he claimed to demonstrate the existence of God as the only reasonable explanation for the emergence of thought based on the material world, Locke warned against an excessive reliance upon non-rational considerations in the defense of particular religious doctrine. He rather relies on sensation to proof the existence of God than on innate knowledge which to him does not exist. He thinks that human beings are capable of proving the existence of God without making reference to inborn knowledge. This proofs that man is the founder of all knowledge's, thus the restoration of his right and his autonomy.

4. Conclusion

Finally, it was our main aim to carry out a global analysis of the diversity and unity that exist between the epistemological ideas of Rene Descartes and John Locke. In an attempt to tackle this question, we have shown that, Rene Descartes and John Locke are the fathers of modern philosophy and the major proponents of rationalism and empiricism respectively. Rationalism and empiricism are two opposing theories of knowledge that have been animating philosophy from the ancient Greek period to our time. Ancient Greek because it is popularly known that philosophy was founded in Greek by the pre-Socratics. We have equally shown that the theories of knowledge of Descartes and Locke are not as an end in itself but as a means to demonstrate their differences. These differences will be demonstrated at the level of the exposition of Locke's theory of knowledge which will be in opposition to Descartes' foundation and content and this is what marks their particularities. Controversies in regard to the base of human knowledge which had prolonged the context of epistemological crisis were been championed by two great thinkers which are Rene Descartes and John Locke. They are being considered in this regard as major pillars of modern epistemology. a lose battle against the discovery of this new knowledge. Descartes the father of modern philosophy is one of the thinkers that overshadow the liberation of man as he seized philosophy from the church and gave it back man; from authoritarianism to individualism. It is at this level that we can talk of autonomy. Note should be taken that, An essay concerning human understanding written by John Locke which first appeared in 1690, is one of the most important works in the history of philosophy which is chiefly centered on fundamental issues such as epistemology, metaphysics, philosophy of the mind as well as language. Hence beyond the diverse conceptions of Descartes and Locke, there remains a unifying factor that overcomes their differentiation.

Compliance with ethical standards

Acknowledgments

The authors wish to thank first and famous their master and father ROGER MONDOUÉ (Professor of University) for his great assistance and encouragement throughout their research career at the University of Dschang. We will forever remain grateful to his services and availability. We equally recognize the services of Fabrice KINYUY YUVEN for his enormous effort of editing this work at his level

Disclosure of conflict of interest

This is to attest that I JUMBAM Gideon a holder of PhD in philosophy and NGONG Valentine KERNYUY a PhD student in philosophy at the University of Dschang are the’ authors of this work with which there is no clash of interest among them.

References


