The Ethics Of Rationalism & Empiricism - Irfan Ajvazi

Chapter 1
The Ethics of Rationalism

Rationalism is also contrasted with the idea that faith and revelation too are valid sources of knowledge and verification.

If you use the methods of the above three doctrines – namely of rationalism, empiricism and faith (revelation) – to assess the validity of the same doctrines for all practical purposes, we can see that all of them have their place in life as lived by us every day.

The problem is when the adherents of each of these doctrines claim that only that particular doctrine is valid to the exclusion of all others.

In the march of human progress in all spheres of human endeavor such as science, technology, art and the efforts for peace-building and social cohesion among other things, we badly need reason, experience and faith.

In the laboratories of science, experiments are conducted, the processes as well as their results are observed and inferences are made. In such cases, both observation using the senses and logical reasoning are crucial.

In order to achieve social or national integration among disparate groups in the society or country for instance, we need to have faith not only in the goodness of our fellow beings, but also in the religious values of truth, justice and sympathy. The rationalists adopt a one-sided view of the world: they ignore a good share of the profound complexities of the wealth of human life. Their approach is effectively reductive, as they cast doubt on knowledge that is not derived by logical thinking.

The rationalists who preceded Kant (mainly Descartes, Spinoza, and Leibniz) believed, in one way or another, that the world, or some aspect of it, was irreducibly mental. The British empiricists, on the other hand (mainly Locke and Hume), put more emphasis on our experience of the world and on the impressions and ideas we get from that experience.

The rationalists, you could say, start from the \"inside,\" the empiricists from the \"outside.\" This is too simple a way to state the difference, though, because ideas are generally thought to be mental, so there's a mental component to empiricism. Likewise, the rationalists don't wish to deny the reality of the world we live in, at some level. It's the same world for you as it is for me; we just have different, limited perspectives on it.

Descartes was a dualist (saying that both the mental and the physical are real). Spinoza was a parallelist (both the mental and the physical are real, and they track each other in a pre-established harmony, with God atop the whole scene). Leibniz was perhaps the most aggressive rationalist of the bunch. He thought that the most fundamental components of the world, \"monads,\" are mental entities.

But none of Kant's predecessors, whether rationalist or empiricist, was concerned with (or even aware of) Kant's skeptical problem, which took Hume's empiricism as a

starting point. Kant said that Hume had awakened him from his \"dogmatic [that is, rationalist] slumber.\" Hume had raised questions about things the rationalists took for granted, such as our knowledge that event A causes event B.

Kant bought a lot of what Hume had to say, as far as it went. (The difference between Hume and Kant is probably less than is commonly thought.) But Kant was struck by a new skeptical problem about the origins of our experience: we can't simply say we are experiencing the world as it really is in and of itself, because all our experience involves our senses and our cognitive abilities. These are faculties we're born with, and we can never take a step back and, so to speak, view the world without them. Our knowledge of the world is mediated by these faculties. Kant's big inference from this fact is that the world we think we know must just be the world as seen (as heard, as smelled, as tasted, as felt) and as processed through our cognitive apparatus. Apart from this cluster of in-between steps, we can't make claims about what the world is like ultimately. When it comes to the world of \"things in themselves\" (the noumenal world), if we're being honest we have to admit that we're totally ignorant. It's often said that Kant unified or synthesized rationalism and empiricism, but in what way? I'd put it like this: We have objective knowledge of the world of the senses (the phenomenal world), but it is objective only within the context of the senses and the kinds of thinking and cognition we happen to be capable of.

The phenomenal world is more or less what Hume argues for as the only world, because Hume doesn't have Kant's skeptical problem. But behind or beneath the phenomenal world is the ultimately-real, or noumenal, world not represented through our senses. We can only think about that world in an empty, speculative way. We can't infer what it might be like, since we're trapped in our phenomenal world of sense and cognition.

What has happened to the rationalist side of the picture?

First, Kant integrates human rationality as a still-essential aspect of the phenomenal world that we cognize and reason about. We do think. Questions about the \"mental\" as opposed to the \"physical\" still have all their philosophical allure. But second, Kant debunks the transcendent claims of rationalism by showing that ultimate reality can't be purely mental, nor can it be accessible to reason alone; if it were, we could have knowledge about the noumenal world.

Like other thinkers of the time, Descartes was attracted to the notion of a scientific method of investigation, which when followed would enable him to make new discoveries and push the boundaries of knowledge. Thus he devised his own method, the starting point of which is to eliminate all former opinions and establish knowledge afresh only on solid foundations. According to Descartes, the knowledge that we typically attain through education and life experience is an unsystematic mixture of truths and falsehoods, and it is often impossible for us to easily distinguish between the two. It is similar to the disorganization and poor layout that we see in old cities as they slowly expand from small villages to large urban areas, randomly adding one neighborhood after another. If we wanted to add order to such a jumbled city, it would be impossible to do so by renovating one house at a time, and the only remedy is to demolish the entire city and start again. Similarly, while I might try to improve my database of knowledge by inspecting one fact at a time, this

also will not work, and the only trustworthy procedure is for me to sweep aside my entire set of beliefs and start again. Just as the most organized cities are planned by a single architect from ground up, so too should I do the same when reestablishing my database of knowledge.

Thus, Descartes says, we should being by clearing away our old and disordered schemes of knowledge. After that, we should follow four specific rules of inquiry that will enable us to methodically build a coherent system. Rule 1 is to accept only indubitable, clear and distinct ideas. He describes here his own experience when applying this rule:

The first of these was to accept nothing as true which I did not clearly recognize to be so; that is to say, carefully to avoid precipitation and prejudice in judgments, and to accept in them nothing more than what was presented to my mind so clearly and distinctly that I could have no occasion to doubt it. [Discourse on the Method] His point is that the foundation of his knowledge should be only facts that he knows with certainty and which he can recognize as such because of the clarity and distinctness that they display. Rule 2 is that, when trying to solve problems, he would \"divide up each of the difficulties which I examined into as many parts as possible, and as seemed requisite in order that it might be resolved in the best manner possible\" (ibid). Once the problem is broken down into smaller units, he proceeds with rule three that he should begin with the simplest objects, and work to the harder and more complex ones. Finally, Rule 4 is to review: \"to make enumerations so complete and reviews so general that I should be certain of having omitted nothing\" (ibid).

Descartes recognized that if he actually began by rejecting all of his previous views, he would be temporarily entering a no man's land in which he could believe or trust nothing until his final system of knowledge was well underway. During that time, though, how should he behave? Should he become an atheist, a drug peddler, or bank robber? To address this concern he established a provisional code of morals that he would follow, which would hopefully keep in on the right track until he completed his system of knowledge. First, he would obey the laws of his country and adhere to his faith in God. Second, he would be consistent in following positions, even if they seemed doubtful. Third, just as the Stoics recommended, he would focus on changing his desires rather than attempting to change the world around him. Finally, he would choose the best occupation he could, which he determined to be that of a philosopher.

Systematic Doubt

Once establishing his method of investigation, Descartes proceeds to build a system of knowledge that he can trust with absolute certainty. The first step is for him to clear away the unreliable clutter of his previous belief system. To that end he uses a systematic doubting process that would plow away any previous belief he held that was the slightest bit questionable. He writes,

It is now some years since I detected how many were the false beliefs that I had from my earliest youth admitted as true, and how doubtful was everything I had since constructed on this basis. And from that time I was convinced that I must once for all seriously undertake to rid myself of all the opinions which I had formerly accepted,

and commence to build anew from the foundation, if I wanted to establish any firm and permanent structure in the sciences. [Meditation 1]

The type of doubt that Descartes describes here is not a common sense doubt, but instead an exaggerated systematic doubt. For example, common sense tells me that I should doubt reports that creatures have visited earth from other planets, or that a house is haunted, or that some people can see into the future. Descartes, though, wants to move well beyond this kind of doubt and question things that are even commonsensical. My common sense tells me that the ball in front of me is red, but what if I'm colorblind? It's unlikely, but as long as there is some reason to doubt it, I should. Thus, his rule of thumb at this stage is that if it can be doubted, it should be doubted. The point of this exaggerated doubt is that, once we clear away everything that's the slightest bit questionable, we'll only be left with truths that are certain. As he casts his doubtful eye on questionable beliefs from his past, he realizes that it would be impossible to inspect each of them one at a time; there are just too many. Rather, it is more efficient to submit to inspection the underlying foundation of the bulk of his beliefs. He writes,

Now for this object it is not necessary that I should show that all of these are false — I will perhaps never arrive at this end. But inasmuch as reason already persuades me that I ought no less carefully to withhold my assent from matters which are not entirely certain and indubitable than from those which appear to me evidently to be false, if I am able to find in each one some reason to doubt, this will suffice to justify my rejecting the whole. And for that end it will not be requisite that I should examine each in particular, which would be an endless undertaking; for owing to the fact that the destruction of the foundations of necessity brings with it the downfall of the rest of the edifice, I will only in the first place attack those principles upon which all my former opinions rested. [Ibid]

What is the underlying foundation of most of his beliefs? It is the senses: \"all that up to the present time I have accepted as most true and certain I have learned either from the senses or through the senses\" (ibid). Drawing on the arguments of ancient Greek skeptical philosophers, Descartes gives three arguments for why we might doubt the senses. First, we regularly experience sensory illusions, such as when things at a distance appear much smaller than they really are. While this is a problem, Descartes argues that it is not a very big obstacle, since we can get used to sensory illusions and trust our senses for more important things. Second, the reliability of my senses is undermined when I consider the possibility of whether or not I'm dreaming. I look at the ball in front of me and my senses tell me that it exists. But, if I'm dreaming, then this experience is completely unreliable. It doesn't make any difference if it really feels to me like I'm awake, since many times I've had dreams in which I was convinced I was actually awake. Descartes agrees that this too goes a long way in undermining the reliability of our senses, but not completely. For example, it allows me to doubt whether the ball in front of me actually exists, but it does not entitle me to doubt whether the three-dimensional world itself actually exists. To have even a dream-like perception of a round ball, according to Descartes, there must at least be a three-dimensional world which is the source of my dreams about three-dimensional shapes.

Chapter 2 Karl Popper and Rationalism

This passage clearly shows that Popper understands rationalism not as the almightiness of reason, but as one's realization of the limit of reason. However, there arises questions; How has such a rationalist realized the limit of his own rationalism? How we should understand this limit?

Popper asserts that a rationalist has noticed the limit of rationalism by envisaging the self-defeating character of the comprehensive rationalism. In order to make more understandable his assertion, we must firstly get to the point of his argument of the comprehensive rationalism depicted by him. According to him, this type of rationalism claims to satisfy the requirement: A rationalist is \"not prepared to accept anything that cannot be defended by means of argument or experience\" (230). But just on this point Popper raises a question: Can this rationalism itself be supported or defended \"by means of argument or experience\"?

He puts in a question the validity of self-application of the principle of the comprehensive rationalism.

Popper asserts that the comprehensive rationalism couldn't be defended by argument. It is impossible to justify it by its own requirement. I will try to explain Popper's conclusion below.

When confronted with the problem of self-application of the comprehensive rationalism, we cannot certainly accept the argument which supports it unless we have already accepted it. Only if we have beforehand accepted its requirement, we can accept the argument supporting it. Therefore it is undeniably meaningless to argue for an adoption of the comprehensive rationalism in the presence of those who have already accepted its principle.

On the other hand, if one has not already accepted its requirement, then one cannot accept any arguments or those of a certain kind. Therefore it is useless to present arguments. Those who do not admit any value of argument in general, will not pay any attention to the argument as such, even worse to those of the comprehensive rationalism.

The comprehensive rationalists cannot defend themselves against the irrationalists who despise arguments. Since the requirement of the comprehensive rationalists is inconsistent in its self-application, it prohibits them to accept their own rationalism precisely according to their own principle.

Hence the comprehensive rationalists are compelled to discard their own rationalism by the force of arguments. This is very paradoxical and defeats the comprehensive rationalism completely.

Where can we find the causes of this paradoxical situation? Popper points that the comprehensive rationalist presupposes an extraordinary assumption. That is to say, the comprehensive rationalist requires that no assumption should be accepted without argument.

This requirement amounts to the presupposition that we should argue without any assumption, and also to the presupposition that we can proceed on this way and lead to significant results. Simply speaking, this requirement is itself very audacious and indeed colossal. But can we argue without any assumption?

It is obvious that we always presuppose the language, logic and what not. The requirement of the comprehensive rationalism is in fact a kind of contradictio in adjecto. Without saying, the argument itself is not anything other than the logical deduction from some assumptions. If we attempt to prove these assumptions, we cannot fail to introduce new assumptions containing the previous assumptions as their consequences, insofar as we try to evade the logical circulation. Otherwise it will inevitably lead to an infinite regression.

How can we solve this difficulty? Surely the comprehensive rationalism cannot settle it. Popper has already concluded, as we have seen, that it is impossible to justify the comprehensive rationalism according to its own requirement. Therefore he asserted: Whoever adopts the rationalist attitude does so because he has adopted, consciously or unconsciously, some proposal, or decision, or belief, or behavior; an adoption which may be called 'irrational'. Whether this adoption is tentative or leads to a settled habit, we may describe it as an irrational faith in reason. (231) Popper plainly admits that rationalism is based upon faith in reason and that this faith is in its turn irrational because it has no reason any more. He cannot deny a fact that rationalism cannot blow away its own irrational element. In other words, rationalism cannot be comprehensive. Popper thought that the comprehensive rationalism overlooked this important point. As a consequence, as soon as the irrationalists point out the limit of the comprehensive rationality by making use of argument, the comprehensive rationalism gets defeated by its own chosen weapon, argument.

Popper understands the rationality in terms of our intellectual attitude. Our rationality (or reasonableness) is neither a faculty nor an intellectual gift. It is not something given to an individual, according to him. It is rather a social attitude that we have acquired from our intellectual intercourse with others. A rationalist tries to solve as many problems as possible not by an appeal to emotions or passions or violence, but by an appeal to argument and experience. Popper does not use \"rationalism\" as a traditional philosophical term in the sense of continental intellectualism opposing to British empiricism.

Popper thinks that we are free to choose either the critical rationalism or the irrationalism. In addition to this, he considers this choice as a moral us to adopt the critical rationalism and to reject the irrationalism. His argument was simple. He compared in details the consequences resulting from an adoption of irrationalism with the ones resulting from an adoption of critical rationalism, and showed many evils of the irrationalism and equally many merits of critical rationalism. On the ground of these comparisons he recommended us to adopt critical rationalism.

Now let's remember Popper's \"minimum concession to irrationalism.\" What does it look alike in our newly acquired perspective of nonjustificationism? We can retrospectively envisage that the impossibility of the justification of the critical rationalism led Popper to his concession. However, after the justificationism has been completely abandoned, how does our problem situation look alike? We can say safely, Popper's concession is unnecessary because the justificationism is only an illusion and every statement is criticizable. Our choice does not lie in the

alternative between the comprehensive rationalism and the critical rationalism, but in the alternative between the justificationism and the nonjustificationism. In Popper's original argument these two kinds of choice were mixed and interfused. However, we should not forget a fact that Popper rightly apprehended the rationality as the critical attitude.

Also I think it is my duty to remind you of a fact that Popper does not base his falsificationism upon an uncriticizable adoption of basic statements in his Logik der Forschung (The Logic of Scientific Discovery). In his falsificationism theories and basic statements are in principle mutually criticizable, so there is no fixed and immovable foundation to support a justificationistic tendency. To support my assertion I may quote a passage from The Logic of Scientific Discovery. Every test of a theory, whether resulting in its corroboration or falsification, must stop at some basic statement or other which we decide to accept. If we do not come to any decision, and do not accept some basic statement or other, then the test will have led nowhere. But considered from a logical point of view, the situation is never such that it compels us to stop at this particular basic statement rather than at that, or else give up the test altogether. For any basic statement can again in its turn be subjected to tests, using as a touchstone any of the basic statements which can be deduced from it with the help of some theory, either the one under test, or another. This procedure has no natural end. Thus if the test is to lead us anywhere, nothing remains but to stop at some point or other and say that we are satisfied, for the time being. (Popper 1959 104)

However, in the perspective of the nonjustificational critical rationalism it is an illusionary reductionistic way of thinking itself that is irrational and should be accused of. If we remember that the one and only rationality is the upward rationality, we can safely say that it is indeed rational to point out the errors and to criticize the upper authorities in question. Of course the reason on which citizens or common people rely in their acts of criticizing the consequences that a regulation brought about is itself neither ultimate nor exempt from criticism. Therefore there are a lot of possibilities that the criticizing citizens are themselves erroneous. There is no privileged final reason (scaffolding) anywhere. It is simply rational to eliminate the errors and evils directly. It is the upward rationality that truly activates our political sphere.

When we comprehend Popper's critical rationalism from the viewpoint of nonjustificationism, it is plain that it greatly facilitates not only our civil and political activities but also our scientific activities of which I could not speak at all. In my opinion the nonjustificational critical rationalism embodies one of the most important and basic values in our civilization which has been historically cultivated in the West.

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Chapter 3.

Knowledge, Rationalism, Empiricism and the Kantian Synthesis

Opposed to empiricism is rationalism, the view that reason is the primary source of knowledge. Rationalists promote mathematical or logical knowledge as paradigm examples. Such knowledge can be grasped, they claim, through reason alone, without involving the senses directly. They argue that knowledge accessed through reasoning is eternal (i.e., it exists unchanged throughout the past, present, and future). For instance, two plus three remains five. Rationalists are impressed by the certainty and clarity of knowledge that reasoning provides, and they argue that this method should be applied to gaining knowledge of the world also.

RATIONALISM'S EMPHASIS ON A PRIORI KNOWLEDGE

Portrait of René Descartes by Frans Hals via Wikimedia Commons. This work is in the public domain.

French philosopher René Descartes (1596–1650) and German philosopher Gottfried Wilhelm Leibniz (1646–1716), two important rationalist thinkers, support the existence of innate ideas and their realization through reason. They argue that the truths revealed by such ideas are eternal, necessary, and universal.

For Descartes, there are different modes through which we acquire knowledge: some ideas are innate, some are externally sourced, and others are constructed by us. Descartes gives the example of the idea of God as innate in us, as well as the idea of one's own existence ([1641] 1985, Third Meditation). According to Descartes, innate ideas like truths of geometry and laws of logic are known through reason independently of experience, because experience gives us only particular instances from which the mind discovers the universal ideas contained in them. Therefore, they are a priori. Descartes's innate ideas have been compared to the stored information in a book. The ideas are in us, though not always present to the mind. Once we start reading the book, the contents reveal themselves to us, just as reasoning reveals our innate ideas to us. In other words, it is only through careful \"reading\" (thinking) that we come to understand which ideas are innate and which come to us from elsewhere.

Knowledge that is independent of (or prior to) observation and experience is called a priori(Latin for \"from the former\"). Rationalists maintain that reason is the basis of a priori knowledge. But where do we ultimately get the ideas on which reason is based, if not from observation or experience? Rationalists tend to favor innatism, the belief that we are born with certain ideas already in our minds. That is, they are \"innate\" in us. Potential examples include mathematical or logical principles, moral sense, and

the concept of God.

Leibniz calls innate ideas \"principles.\" Like Descartes, Leibniz maintains that principles are accessed by reason. The universal nature of mathematical truths, for example, is not revealed by the senses. It is the faculty of reason that acquires universal truths from individual instances. Leibniz argues that a collection of instances based on the senses cannot lead us to necessary truths. At the same time, it is also clear that we can grasp many necessary truths, such as mathematics. Therefore, the mind is the source, which means these truths are there innately. However, innate ideas are not full-fledged thoughts for Leibniz: he holds that our minds are structured so that certain ideas or principles will occur to us once prompted by the senses, although they are not derived from the senses. Ideas and truths are innate in us initially as dispositions or tendenciesrather than as actual conscious thoughts ([1705] 2017, Preface).

OPPOSING A PRIORI KNOWLEDGE BY REJECTING INNATE IDEAS

The empiricist claim that all our knowledge comes from experience is in stark contrast to the concept of innate ideas. For empiricists, all knowledge is a posteriori, meaning acquired through or after experience. John Locke (1632–1704), a British empiricist philosopher, adopts two approaches to question innate ideas as the basis of a priori knowledge. Firstly, he shows that innate ideas are based on dubious claims; secondly, along with Scottish empiricist David Hume (1711–1776), Locke shows how empiricism is able to offer a better theory of knowledge through the a posteriori.

Locke starts by questioning the \"universal nature\" of innate ideas. He opposes the claim that innate ideas are present in all of us by noting that sufficiently young children, and adults without the requisite education, lack a concept of God or knowledge of logical or mathematical principles. Therefore, it is baseless to say that innate ideas are universal. It is through experience and observation that we acquire such ideas. That is, they are a posteriori([1690] 2017, Book I). Here Leibniz defends the innatist view from Locke's objection by showing how children and those without the requisite education are capable of employing logical

children and those without the requisite education are capable of employing logical and mathematical principles in their everyday lives without understanding what they are or being able to articulate them in words ([1705] 2017, Book I). A child, to use an example of my own, knows without any confusion that she cannot be sitting in both parents' laps at the same time. Similarly, those without formal mathematical training could still know that two adjacent triangular cornfields separated by a fence on their longest side can make a square cornfield by removing the fence that divides them. Evidently, as Leibniz argues, general principles of logic and mathematics are innate. But this does not mean that all innate ideas are universally held. It is possible that we all have innate ideas yet some of us are unaware of them.

Locke's reply is that the realization of ideas or capacities in the right circumstances

is applicable to all ideas—not just those which are purportedly innate ([1690] 2017, Book I). He challenges innatists to produce a criterion to distinguish innate from non-innate ideas. Leibniz responds with such a criterion: innate ideas are necessary (they must be true, cannot be false), whereas non-innate ideas are merely contingent (possibly true, possibly false). We can distinguish truths that are necessary (and therefore eternal on Leibniz's view) from contingent truths dependent on varying matters of fact ([1705] 2017, Preface).

EMPIRICISM'S EMPHASIS ON A POSTERIORI KNOWLEDGE

Locke claims to show how the mind, which is like a tabula rasa at birth, acquires knowledge. For empiricists, experience alone furnishes our mind with simple ideas, which are the basic elements of knowledge. Once shown that all ideas can come from experience, it would be redundant to additionally posit innate ideas. So, does a posteriori knowledge lead us to reject a priori knowledge? Let us find out. For Locke, knowledge based on experience is easy to understand. He asks us to suppose that we have innate ideas of colors and that we can also see colors with our eyes. In this case, since we don't need to rely upon both, we go with our senses, because it is easier and simpler to understand knowledge derived from sense experience than from knowledge derived from some source of which we are unaware ([1690] 2017, Book I, Chapter ii, Para. 1). Here Locke applies the principle of Ockham's razor, which suggests that as far as possible we should adopt simple explanations rather than complicated ones. [2] Simple explanations have the advantage of being less prone to error and more friendly to testing than complicated ones that do not add explanatory value.

The next question is whether a posterioriknowledge alone gives us adequate knowledge of the world. Let us take an instance of experiencing and thereby knowing a flower, such as a rose. As we experience the rose, its particular color, texture, and fragrance are the ideas through which we become aware of the object. But when we are not experiencing or sensing the rose, we can still think about it. We can also recognize it the next time we see the flower and retain the belief that it is sweet smelling, beautiful to look at, and soft to the touch. This shows that, in addition to sensing, the ability to form concepts about the objects we encounter is crucial for knowing the world. Experience also makes it possible for us to imagine what we have not directly experienced, such as a mermaid ([1690] 2017, Book III, Chapter iii, Para. 19). Such imaginings are made possible because we have directly experienced different parts of this imagined object separately. Conjoining these experiences in the mind in an ordered manner yields the imagined object ([1690] 2017, Book II, Chapter iii, Para. 5). Had we not experienced and thereby formed the concepts of a fish and a woman separately before, we would not be able to imagine a mermaid at present.

In contrast to Descartes, even the idea of God falls under the a posteriori for Hume. Since none of us has experienced God directly, Hume argues, there is no impression of God available to us from which to form the corresponding idea. In Hume's view, our imagination forms this idea by lavishly extending our experience of the good

qualities possessed by people around us ([1748] 2017, Sections 1 & 11). Given that even the idea of God can be derived from sense impressions, this lends further support to the empiricist claim that all our ideas are a posteriori. Therefore, according to Hume, the rationalist claims for the existence of innate ideas and a priori knowledge are mistaken.

PERCEPTS-CONCEPTS COMBINATION

The immediacy and direct nature of sensations, impressions, and perceptions make them certain.[3] Let us briefly unpack this idea. Consider whether we can ever be wrong about our sensations. It is commonly thought that while we can be wrong about what the world is like, we cannot be wrong about the fact that we are having particular sensations. Even if you are dreaming this very second, and there is no actual book before your eyes, you cannot deny that you are having certain sensations resembling a white page and black font in the shape of words. Therefore, our sensations are certain and we cannot doubt that they exist. However, it is possible that sometimes we are unsure how to characterize a particular sensation. For instance, you may see a flashy car and be unsure whether the color is metallic green or gray. So, you might get into confusion in describing your sensation, but that does not affect the certainty and indubitability of the sensation itself, of what is here and now for you.

German philosopher Immanuel Kant (1724–1804) argues that for our perceptions to make sense to us, they should be received into concepts that exist within our minds. These structures of understanding allow our minds to process the impressions that we experience. Unless the manifold raw sensations we receive from experience are classified into different categories of understanding, we cannot make sense of them.

Immanuel Kant by Johann Gottlieb Becker via Wikimedia Commons. This work is in the public domain.

For instance, the mind should have the ability to recognize whether two sensations are similar or different, to say the least. Without this ability, we cannot make sense of experience. Or consider that we also perceive that objects are in space and time, stand in cause-effect relations, and belong to the categories of unity-plurality, assertion-negation, particular-universal, and the like. Here again, we are incapable of understanding any experience that is not processed through these categories. Kant argues, therefore, that space, time, causation, quantity, quality, and the like are represented to us in innate structures or concepts that our minds are fitted with prior to experience.

According to Kant, these categories are transcendental in the sense that they bridge the gap between mind and world. They are hidden structures, bridges, or concepts that occupy the otherwise blank slate and mold our way of thinking and experiencing the world. Of course, these concepts also require inputs, or percepts (the immediate objects of awareness delivered directly to us in perceptual experience through the senses). As Kant's view is famously expressed, \"Percepts without concepts are blind and concepts without percepts are empty\" ([1781] 1998, 209).

So far, we have seen through various stages that rationalism and empiricism are incomplete. Kant's transcendental idealism (as his view is called) strikes a balance, reconciling the two accounts. He combines sensory input and inborn concepts into a unified account of how we understand the world. Before we conclude the chapter with the final step in Kant's approach, let us return to Descartes and Hume once again, the two philosophers who most influenced Kant.

SYNTHETIC A PRIORI KNOWLEDGE

Descartes thinks that reason alone can provide certainty to all human knowledge. Intuition and deduction are tools through which the faculty of reason operates. Intuition is the capacity to look inward and comprehend intellectual objects and basic truths. Being a geometrician, Descartes thinks that deduction (the type of reasoning whereby the truth of the conclusion is guaranteedby the truth of the premises) should be used for gaining knowledge of the world, starting with the input of \"clear and distinct\" ideas. [4] Since intuition is dissociated from the evidence of the senses, the truths it unfurls can be known a priori. The result is that substantial knowledge of the world can be acquired a priori ([1701] 1985). According to Hume, there are two ways in which reasoning aims to gain knowledge of the world: through \"relations of ideas\" and through \"matters of fact\" ([1748] 2017, Section 4). Hume thinks that the method of deduction establishes relations between the ideas we have already acquired through experience (e.g., that a mother is a woman parent). These relations of ideasare the kind of truths that we find in logic and mathematics (for instance, the proposition that a circle is round). They are true by definition. Such truths are necessary or certain (their denials lead to contradiction). They are also known a priori, since they do not rely on how the world is. For this reason, relations of ideas and deduction do not yield substantive new knowledge of the world; the knowledge they impart is already understood by us (as the above examples show), even if our understanding is merely implicit within the premises of a deductive argument whose conclusion makes it explicit. Matters of fact, for Hume, are based on observation and experience. Some of them are generalizations arrived at by induction from particular instances. Inductive truths are uncertain. They are at best probable, since they are dependent on how the world is. For instance, we have the experience of heat from fire so far; but we cannot be certain that this will be the case tomorrow also (maybe we will unexpectedly feel some other sensation like cold from fire). We expect that the future will resemble the past, but we cannot be certain about it. [5] Matters of fact provide us with a posteriori truths, which are contingently true (their denials can be conceived without contradiction). Since matters of fact are not true by definition, they add substantive new information to our existing knowledge, unlike relations of ideas ([1748] 2017, Section 4).

A rationalist initially, Kant was influenced by the division in knowledge made by Hume. Only a combination of reason and experience can give us adequate knowledge, according to Kant. He begins by providing an account of relations of ideas, which he terms analytic truths. In sentences that express analytic truths, the predicate term is already \"contained\" in, or is the meaning of, the subject term. For

example, in the sentence, \"a circle is round,\" the predicate \"round\" is contained in the subject, \"circle.\" To take another standard example, in \"a bachelor is an unmarried man,\" the predicate \"unmarried man\" is the meaning of the subject term, \"bachelor.\" We cannot deny such truths without contradiction. They are necessarily true, which means that they're true regardless of how the world is. Since we do no need to examine the world to tell whether they're true, analytic truths are knowable a priori ([1781] 1998, 146, 157). [6]

Kant terms matters of fact synthetic truths: the predicate term is neither contained within nor is the meaning of the subject term. Synthetic truths are not true by definition. As such, it stands to reason that they are based on observation, and therefore must be a posteriori(although, as we will soon see, Kant argues that this is not the case for all synthetic truths). For instance, consider the proposition, \"George the bachelor is a writer.\" We have new information here about a particular person named \"George\" being a bachelor and writer, and experience is required to find this out. Since the opposites of synthetic truths are not contradictory, they are contingent ([1781] 1998, 147, 157). [7]

Kant maintains that only synthetic truths are capable of providing substantive new information about the world. That said, our sense experiences do not passively enter our minds, but do conform to our innate mental structures to facilitate knowledge. Since these structures work independently of experience, they are a priori. These innate a priori structures of our minds—our concepts—are actively engaged in making sense of our experiences ([1781] 1998). They do so by discriminating and organizing the information received in experience. But again, the ability to perform this activity presupposes that the world which furnishes both the information and our concepts is itself structured in a way that enables intelligibility. The particular ways in which the world must be structured—its space-time and cause-effect relations, for example—yield substantive truths about reality. These truths hold not merely because of the meanings of words or the logical forms of sentences. They are synthetic. And since we arrived at this result by way of a priori reflection, Kant argues that we possess \"synthetic a priori\" knowledge of the world—a previously unrecognized category of knowledge, now to be added to the standard categories of synthetic a posteriori and analytic a priori knowledge.

There remains the question of how our concepts discriminate and organize the information received from the senses. These goals are achieved through acts of synthesis. By \"synthesis,\" Kant means \"the act of putting different representations [elements of cognition] together, and grasping what is manifold in them in one cognition\" ([1781] 1998, 77).

Kant explains three types of synthesis: the process starts with \"synthesis of apprehension in perception,\" passes through \"synthesis of reproduction in imagination,\" and ends with \"synthesis of recognition in a concept\" ([1781] 1998, 228–34). For Kant, apprehension in perception involves locating an object in space and time. The synthesis of reproduction in imagination consists in connecting different elements in our minds to form an image. And synthesis of recognition in a concept requires memory of a past experience as well as recognizing its relation to present experience. By recognizing that the past and present experience both refer

to the same object, we form a concept of it. To recognize something as a unified object under a concept is to attach meaning to percepts. This attachment of meaning is what Kant calls apperception (Guyer 1987).

Apperception is the point where the self and the world come together. For Kant, the possibility of apperception requires two kinds of unity. First, the various data received in experience must themselves represent a common subject, allowing the data to be combined and held together. Second, the data must be combined and held together by a unified self or what Kant calls a \"unity of consciousness\" or \"unity of apperception.\" Kant concludes that because of such unity, all of us are equally capable of making sense of the same public object in a uniform manner based on our individual, private experiences. That is, we are in an unspoken agreement regarding the mind-independent world in which we live, facilitated by our subjective experiences but regulated by the innate mental structures given to us by the world. In sum, Kant's theory makes possible shared synthetic knowledge of objective reality. [8] In conclusion, by considering the debate between rationalists and empiricists culminating in Kant's synthesis, this chapter has shed light on the issue of how we achieve substantive knowledge.

Chapter 4. Kant's Knowledge Empiricism and Rationalism

In Kantian terms, a judgment is considered 'analytic' if it is merely explicative, i.e. it does not add any new content to current knowledge. For example, the judgment, \"All bodies are extended\" is analytic in that it tells us nothing more about bodies that is not already apparent (§2.a). On the other hand, 'analytic' judgments are those that do arrive at new ideas and increase the content of preexisting knowledge. For example, the statement, \"All bodies are heavy\" is synthetic because it augments our knowledge of bodies as compared to the previous statement, which tells us nothing new (ibid.). Kant points out that the empiricists preceding him, namely Locke and Hume, overlooked this distinction (§3.296). He further argues that mathematical judgments are of the latter sort and are a priori in nature, or a priori synthetic. That is, mathematical judgments are independent of experience and also derive new knowledge. For instance, when we say that 7+5=12, we are starting from one set of knowledge an ideas in the subject, namely 7, 5 and the idea of a sum. When we solve the problem and get to the predicate of 12, we arrive at a new concept that is derived out of, but distinct from 7, 5 and \"the sum of 7 and 5.\"

The problems of empiricism and rationalism can be derived from their respective fundamental principles that define the faculties through which we can gain knowledge. Empiricism is defined by its emphasis on a posteriori conclusions and knowledge gained from that which is encountered in experience. In contrast, rationalism is defined by its emphasis on reason and the activity of the mind to attain knowledge from sources outside of the immediate scope of experience and sense perception.

The notion of a priori synthetic knowledge seems problematic because one could assume that any synthetic judgments require a synthesis of knowledge from different experiences, as illustrated by the examples with bodies above. However, Kant makes the realization of a priori synthetic knowledge possible with his transcendental idealism, which is developed through and investigation of the necessary conditions for the possibility of pure mathematics, pure natural science and ultimately, pure metaphysics. His investigations into mathematics serve as the best base for understanding the possibility of a priori synthetic knowledg.. In order to justify these judgments as possible, Kant proposes that they necessarily involve transcendental principles of the understanding that are prior to sensory experience and empirical encounters (§2.c.2). This organizes everything that is apparent to us in time and space by the form of our intuition. Kant argues that we have removed empirical variables from the content of our experience and are working purely with objects of reason and the understanding when doing pure mathematics. Thus, we can make judgments independent of experience (a priori) that augment our knowledge (synthetic), such as 7+5=12. Kant goes on to prove that the same thing is possible in pure natural science, but that we reach a priori synthetic conclusions in that sense by considering all possible experiences in the understanding. Since we have not and cannot encounter all possible experiences a posteriori, this again fits with Kant's theory that a priori synthetic judgments are not only possible, but also necessary for the enterprises of mathematics and natural science.

Kant's theory is immensely significant both historically and philosophically in that it bridges the gap between empiricism and rationalism and exposes that they can be understood as components of an equilibrium. That is, our knowledge is gained from empirical encounters and rational operations, and Kant proves that achievements of knowledge are not attained by the purely empirical or purely rational approaches. Rather, he posits the idea that the very nature of the human understanding itself makes experience possible and available to reason. Kant's theory not only provides a theoretical description of how modern achievements such as pure mathematics and natural science are possible, but also took philosophy in a direction that lifted experience itself and its interaction with the understanding as important places to search for the sources and bounds of human knowledge.

Chapter 5. The Radical Rationalism of Rene Descartes

Descartes believed that we could know something about anything without even having to leave our armchair - simply just by thinking. His proof of this claim to rationalism is his apparently self evident claim 'cogito ergo sum' (I think, therefore I am).

Descartes loved maths on the basis that you could come to definite conclusions. He despised philosophy for rarely being able to do this. So he tried to come to definite conclusions in philosophy by using systematic doubt (where you reject all things which may even have the slightest possibility to be false). The role of systematic doubt was to be able to find definitive answers in philosophy, answers which are not

based on empirical evidence but rather are based on rationality and reason alone.

Skepticism is common to both rationalism and empiricism. He is recognized for pursuing doubt at a time when dogma ruled the roost without exception. Honestly, his \"rational\" resolution to doubts should hardly convince anyone. His conclusions are almost entirely incorrect and numerous objections have been raised against them since his time.

The scientific method on the other hand relies on observation.

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We get only theories in science because that is all we need to explain the observation.

Everything else we come up with (rational philosophy, religious \"revelation\", etc.) gives us strong confidence in things that we cannot be truly confident about. And yet, historically, we have managed to harm one another on such grounds. We had simply set a low threshold for truth in the past.

What Descartes is credited with giving, though, is doubt. Skepticism. Question all beliefs. As a rationalist, his barometer of truth was reason. Scientific method relies on observation. I believe the scientific method is a superior measure of truth as it provides a mechanism for one's views (rational or otherwise) to be verified by everyone else. Science works precisely because it can get everyone to agree using a lab, not guns, not politics, not mobs, not manipulation. Where we do not know for sure, we can assign confidence measures instead of taking tall positions. This is what it means in science for something to be objective.

What is rationalism for Descartes?

Descartes didn't know he was s rationalist. Immanuel Kant told us that about him. But Descartes thought in terms of mind and body, and he thought that some knowledge came from the mind, independently of sense experience.

Was Descartes an empiricist?

No, Descartes was not an empiricist. Descartes certainly believed that empirical observation can give us knowledge of the world (he was a scientist after all) but he argued that the justification for that empirical knowledge ultimately rests on purely rational grounds. This thesis is the entire point of his Meditations in which he sets out to find some kernel of knowledge that cannot rationally be doubted. Descartes engages in a process of methodological doubt and comes to the conclusion that he cannot rationally doubt his own existence, hence his famous cogito ergo sumsaying. In the next part of the Meditations, Descartes tries to reconstruct his apparatus of knowledge from that baseline. Whether his project succeeded is another matter, but the main point is that Descartes thinks that ultimately all our knowledge is justified by reason, not experience. This view is what makes him a rationalist as opposed to an empiricist.

One last point: whenever you are reading philosophy, keep in mind that terms like \"rationalist\" and \"empiricist\" are historically constructed categories that are applied in hindsight. While these categories are useful for grouping historical figures, relying solely on these divisions runs the risk of obscuring the intricacy of individual philosopher's works. Descartes is a rationalist, but his rationalism is very different from other contemporary figures labeled as rationalists, such as Malebranche.

Rationalism, on the other hand, is a tool used mostly by the fields of humanities. This includes literature, art, philosophy and so forth. This is because humanities is not based on experimentation, but on contemplation and verbal fluency.

The question is, is rationalism sufficient as a tool of gaining knowledge, more than empiricism, which provides a direct source of information, as the empiricist gets to experience their source of knowledge, rather than think about it? Not only empiricists need less cognitive effort to attain knowledge - they also experience the source of knowledge directly, unlike rationalists, who do so indirectly, and may get various insights which some may be incorrect or partially incorrect, due to lack of direct experience with the subject they venture forth in intellectually.

The defense I have for rationalism is that there are some aspects of existence which cannot be experimented with, not because it is immoral, but because it's impossible, as abstract concepts and ideas cannot be tested nor measured, and thus the only way to understand them is through logical inquisition.

The most cliché example to this is the meaning of life. You can't experiment with meaning, as meaning is purely abstract, and cannot be tested nor experienced in a specific time and place. You can't also sense meaning in any way, and there is no way to measure a hierarchy of \"meaningfulness\" in things and beings, leading this issue to be used as a source of knowledge only indirectly, in the form of rationalism, to extract not correct but possibly-correct insights, with the most logical explanation being the most possible truth.

His project is basically an argument against both schools of thought. He rejects the empiricist claim that all concepts must come from experience and that there are some we can know through reason alone (even though experience is necessary to prompt these concepts, their content does not actually come from experience). On the other hand, he also rejected the claims of the rationalist and argued that there are serious limits to what we can know through reason and, moreover, he also rejected the notion that we could ever know anything beyond the world as we represent it (the noumenal world). So, things like God, the soul, free will etc. were never something we could know about through reason (although he did argue that these three in particular were concepts that reason must presuppose despite not having any justification for them, he also argued that we could not even know whether God was possible or not which is a pretty clear rejection of the rationalist attempts to prove God's existence a priori). So, he was neither empiricist nor rationalist and is a fantastic example of why we (by this I mean philosophers in general, not just you; we all do it) need to be far more careful when making broad distinctions like this because they restrict the way we think about a lot of these issues in pretty serious ways.

Strictly speaking, when we argue about Rationalists and Empiricists, we're referring to a specific phenomenon in philosophical history during the Modern period between Descartes and Kant. Descartes, Leibniz, and Spinoza are the rationalists and Hume, Hobbes, and Berkeley are the empiricists. These six weren't the only ones in those schools but most philosophy educations will go with them as the biggest ones to mention. For the rationalists, knowledge was based upon thought and deriving an understanding of the universe from within thought as a medium, where the empiricists looked to the world and argued that the excesses of thought were extrapolations from the world. In rationalism we can understand something because we have the idea of it, where in empiricism we derive the idea from the thing. Then Kant came along and synthesized them into his work, though many may argue he's more of a rationalist, and then the divide changed into the more contemporary Analytic/Continental divide, which is it's own thing. In that regard, Plato is prior to the discussion of rationalism and empiricism temporally, but that's not entirely fair to your question because as an answer this misses it's spirit.

To the spirit of your question, Plato would more commonly be aligned with rationalist forms of thought. Let's just look at one of Plato's most important images for how he builds his metaphysics: The cave. In the cave, shadows look like real objects and are assumed to be so but they are merely shadows. There is a higher realm that we can access through our understandings. Though in the story there is a physical experience of leaving the cave, that is metaphor for the flight of the mind in understanding the world of forms beyond the world we are in now. Of course, we do get into the issue of whether there is a world behind forms, but that's precisely why the rational faculties must be used. Thought and dialog are valued, Plato doesn't really broker in solipsism, and in the Meno in particular we see the idea that a slave boy can learn math simply through recollection. Compare this to understanding of Descartes coming out of the idea that we can deny everything we know about the world. There is a bottom to this doubt and clearly his ways about this are different than Plato's because it is not something that can be found through the occasion of the teacher as math is taught to the slave boy, but that is not to say that there is nothing of similarity in the two. Both hold that there is something within thought that allows us to understand the world, rather than the idea that in our experience of the world we come to understand it. And, of course, the forms precede our having an idea of them.

Plato is not perfectly a rationalist, though what that would mean depends upon how we define the idea of rationalism and how we read Plato's works, but we can say his metaphysics are closer to a rationalist metaphysics than an empiricist.

Not only did Descartes prove our existence, as explained by Niko, but he also technically introduced subjectivism to the modern world. In a book I recently read, All Things Shining, by writing and talking about his subjective experience, Descartes unwittingly opened a new focus for science: the image of the self. With the help of Kant's later writings, the pair re-identified humans with subjective emotions and as independent beings. Both of their emphases on the self, specifically Descartes' dualism, paved the way for a new approach to the human experience.

Descartes meditations may be some of his best known work, in which he discusses various possibilities about the world including, \"maybe this is all a dream,\" \"maybe I am being manipulated by an evil god,\" and other such questions that are similar to the now popular, \"how do you know you're not in the matrix\" type questions. He reasons from these thought experiments that one cannot trust the senses as a source of knowledge because we can never be certain of the information they give us.

A highly important aspect of this is what Descartes calls the principle of indubitability. That is to say, Descartes espouses a view of knowledge which says, \"You know something if and only if you are absolutely certain of it.\" Since we can't trust our sense (or so Descartes reasoned from his thought experiments), Descartes believed that we really know very little.

One thing he did believe we could know beyond a shadow of a doubt was that we exist. Descartes reasoned, \"If 'I' am dreaming, then 'I' must exist,\" and \"if 'I' am being manipulated by a devious god, then 'I' must exist.\" This is the famous phrase, I think therefore I am.

Today Descartes' idea of knowledge requiring certainty is considered too strict and although many philosophers respect his philosophical career, his works do not hold much ground among epistemologists.

The opposing view, represented by Locke and others, is Empiricism, the assumption that all real knowledge is knowledge of Nature, and therefore you can know nothing of reality by thinking alone... all that thinking can do is draw connections and patterns within the sensory data you receive.

And yet even those seemingly innocent statements I made are debated. The skeptic, David Hume, pointed out that the \"connections and patterns\" we perceive in Nature — which we often label \"cause and effect\" — may not be so real as we perceive. Most \"common sense\" philosophy on the part of most people is probably somewhere between these two extremes. In Anglo-American philosophy in recent times, however, the doctrine of \"physicalism\" has been winning out a majority position among professors of philosophy. This is the doctrine that in ultimate reality, nothing exists but the things physicists study: namely, matter, energy, space, and time. This doctrine is frequently linked to Empiricism, as they are in harmony. But simply being in the majority does not automatically make these philosophers right, by the way. There are plenty of educated people with a different point of view. This whole framework, incidentally, provides a background to understand the importance of Kurt Godel's Undecidability Theorems... if Godel is right about the interpretation of his own work, then Number is not the trivial concept that Empiricists

would suggest it is — and if that's the case, then what is Number? If it is a real, not a trivial (that is, tautological) thing, then it is a objective thing that exists yet lacks physical substance, which frustrates the assumptsion of the physicalists somewhat.

Chapter 8. What is Empiricism?

Epistemological Empiricism (EE) adds to this a claim that our senses are a particularly reliable source of information - indeed the only source of information - about what the world is like. Both of these claims are problematic. It has proved impossible to show that our senses are reliable in the kind of way EE would require. Also, since the statement that our senses are reliable is also a statement about the world (which we and our senses are part of) EE is question-begging. We cannot use our senses to determine whether our senses are reliable. If there were other ways of demonstrating that our senses were reliable, then these ways would also be demonstrating something about the world (that our senses can give us reliable information about it), and so the second claim made by EE would be false.

Empiricism is the idea that knowledge is derived from experience. Although earlier philosophers have considered it note worthy, it was the Scottish philosopher, David Hume, who impressed upon the philosophical community its importance and made it an essential part of the scientific method. It is not in opposition to a priori knowledge such as our recognition of simple natural numbers or their tautological manipulations under coherent non-contradictory rules, which can also be argued to be derived from our experiences or learning.

So when I ask for empirical evidence for the existence of God, I am asking for what shared experiences that anyone can find and observe that supports the idea for the existence of God beyond any scripture, mysticism, visions, or authority.

Empiricism is built around the idea that our senses are the fundamental source of all our knowledge. The idea that there exist within us all innate ideas concerning the fundamental truths of the universe is absurd an needlessly complicated. Common experience is a far more simple and natural explanation for the ideas we all seem to have in common. Empiricism as proposed by Locke became a popular mode of thought in Britain until Hume came along. Hume adeptly pointed out that simply because we perceive something does not mean it is actually there; when we perceive a chair, we do not actually have a chair in our brains, but rather the image of a chair. Thus, Hume decided total skepticism concerning the physical world could be the only solution.

However, regardless of what skeptics like Hume may argue, every living person conforms to the belief that their senses correspond to a physical reality. I can make this claim because every living person is biologically alive; in order to keep oneself biologically alive one must be able to locate food, avoid danger, and seek shelter.

Accomplishing these primal tasks requires comprehensive coordination with one's physical environment. Such synchronization requires knowledge of the physical world, and the only way to acquire such knowledge is by means of the bodily senses. Hence, the bodily senses are necessary to keep any human being alive. It is convenient to phrase this universally accepted absolute belief as a single presumption to which every person conforms: I am able to make empirical inductions about the universe. I term this statement 'the empirical presumption' because, once undertaken, classical empiricism flows quite naturally as a general theory of knowledge. Without it, empiricism can do nothing more than speculate on perceptions that correspond to no real objects. John Locke, the father of classical empiricism, conformed to the empirical presumption, as do we all, without ever stating it explicitly. As such, Locke's work, more so than that of any of his predecessors, gives an extremely accurate and intuitive description of how human beings obtain knowledge.

John Locke, George Berkeley, David Hume on the sense of empiricism which is the knowledge should be always found through experience, but somehow the philosopher that we are discussing is that they have their own method on how they delivered their faith in the context of being empiricism, a different way to seek the truth. Empiricism is a logical drive which answers the question of how we humans know what we know with what we call the 5 senses in our part, for short human knowledge results from our senses and direct experience of thing. John Locke's concept of \"substance\" follows from his distinction between primary and secondary qualities.

Knowledge comes primary from experience and only after from reason. It was the British philosophy against the Rationalism of continental thinkers, such as Descartes, Leibniz, Spinoza.

It's courious how this thesis lead the three great philosophers of Empiricism to different solutions. Locke stated that mind is a tabula rasa that is fullfilled by sensorial experience (like Aristotle said \"nothing is in the ming that is not be before in senses). Berkeley stated that we experience directly ideas (without matter at all) in God's mind. Hume stated that we can know for sure only past (only experienced experience), and in the end, even if I am sure that it will never rain from the ground to the sky, I can't say it will never happen.

Empirical, objective 'reality' is a huge theatre of wounding, suffering and death projected onto the subjective. A theatre where the subjective 'I' has front row seats. Perched here, we suspend disbelief in the truth, which is that we, the sole audience member is not the same as the actors. We don't die or get fatally wounded. But it is a hoot to forget that .. for dramatic effect. There was once a guy who apparently wired-up electric shock devices in his cinema to really give the audience thrills in the exciting bits. Our system is better.

Empiricism is a philosophy about what sorts of things constitute epistemic

justification. If that sounds like a mouthful, what it means is that empiricists believe that the best methods to verify or falsify beliefs are empirical. When you combine your theory of belief with a theory of truth and a method for evaluating the truth of beliefs, you have the basic elements of an epistemology, or theory of knowledge. Now, if you want to \"prove\" your epistemology is correct, or even some element of your epistemology, you need something outside your epistemology to do that. If you use your own epistemology to prove itself, your argument is circular. So that doesn't work. However, if you use something outside your epistemology, it will hardly be considered \"proof\" because, if it is not part of your epistemology, in what way would it be considered knowable?

Hume, one of the great philosophical empiricists, ran into this problem with his own empiricism. Empiricism can't be proven by empiricism alone. Neither can it be proven by logicism, a major failure of the logical empiricists according to its 20th century critics.

The brilliant solution adopted later by philosophers like Quine was a sort of abandonment of \"proof\" for, essentially, desire and pragmatic utility. What is more desirable to believe about belief evaluation methods, ones which have tended to work in a way which have produced favourable results, or ones which haven't? Empirical methods, especially as they've been formalized in the sciences, are reliable and work. They produce technology that we find helpful. Compare those with prephilosophical methods like consulting oracles or arguing from scripture. What results did those provide? Arguably very few which have been beneficial. Even compare them to other sometimes philosophical methods considered more rationalist or intuitionist methods. While a few who are often considered geniuses have been able to reason to some amazingly accurate conclusions from their intuitions alone (consider Einstein for example), we only ever consider their theories \"proved\" when we find empirical evidence for them (eg., the observation of gravitational waves and black holes). Technically speaking, these empirical observations are not \"proof\" as we might say when speaking conversationally, they are good confirmations in an open set of possible confirmations with no knowledge of how many of these we might need, if a number would be enough, in order to \"prove\" the theory.

Chapter 9. Is the rational-empirical form of epistemology superior to the religious form of epistemology?

As for whether a rational epistemology is superior to a religious one, it's impossible to say without a precise context. I mean, as far as living a generally reality-based existence, reason is not so much superior as it is just simply germane. To live in reality presupposes a rational sense of knowing. As for the experience of religion and the theater or fantasies thereof, thinking rationally tends to actually miss the point if this is the aim of it.

However, for the subjective purposes of being human (fundamentally survival and propagation, but more proximally the beneficence of the both the individual and the

greater social condition), rational based approaches are superior. Why? Because faith-based approaches are not necessarily tied to observable outcomes they will be less reliable predictors of future outcomes (which is the purpose of knowledge, not just for humans but for all intelligent systems).

The rational-based approach explicitly ties knowledge to outcomes that can be observed (or inferred from observation), so has much higher probability to provide accurate and precise predictions of future outcomes. The rational approach will also utilize the information from predictions and subsequent outcomes to improve precision and accuracy. Faith based approach may simply disregard such information.

depends on the theory of knowledge that you use to structure your understanding. Do you believe in external reality? Rationality and empirical information (public knowledge) depend on the assumption of an external reality - so if there is a chair people will be able to perceive a chair and agree on its existence. (They may choose to give it different names but that is a linguistic matter). Questions of definition can be examined by reference to the 'chair'. Science is concerned with such matters.

For the rest it depends on your reaction to the 'beetle argument' - I ascribe this to Wittgenstein but have not checked. The scenario is that a group of people each hold a box and without allowing anyone else to see into their box, each opens the their box and says 'There is a beetle in my box'. The question is what is in the boxes? If we say a beetle we are assuming that they are telling the truth and speaking English and neither of these assumptions can be justified. A little thought will show that we have no idea what is in the box. This line of argument can be applied to all reportage of mental events and esoteric knowledge.

Thus we have two sources of information the external world and reportage of other matters. The task is to reconcile these. For me arguments without an external reference accessible to everyone lack validity.

Epistemology is the theory of knowledge, especially the distinction between justified belief and opinion. What is the basis of a justified belief?

Strictly speaking, epistemology is not \"the theory of knowledge,\" but is defined as \"the branch of philosophy concerned with knowledge.\" [1][2] Basically, people have taken it upon themselves to package that which humans are able to do naturally into a discipline for them to institutionalize and teach to the masses in order to control the masses: thinking and learning. The concept of \"a justified belief\" is merely one of the mechanisms of acquiring said control.

In short, no one is by nature or law of man required to justify their belief to anyone else, and no one has the authority to demand justification from anyone else for what they believe. There IS no \"basis\" for a \"justified belief.\" There is no such animal. The only person to whom anyone need justify a belief is the person with the belief. It's nobody else's business—nobody on the entire planet—by what rationale, influence, duress, nonsense, or superstition a given individual believes whatever they believe.

It's only your or my business if and when they act on their beliefs and those actions violate our right to life, liberty, and the pursuit of happiness. In other words, when they come to cause harm to or to steal from us or others.

If a man is attacking one of my loved ones, I couldn't care less by what philosophy he justifies his actions. I will defend my loved one whatever I need to do to him to stop him—even if he dies as a result. I'm not going to stop and ask for his justification. Too many people use philosophy to try to wrest the thinking of others by a lot of theory and terminology. They appeal to rules and models by which they seek to identify flaws in the thinking of others, supposing that all they need to do is cite and maybe describe their rules and models in the hearing of the mental stray and problem solved.

It happens thousands of times every day on Quora. (Maybe millions.) People use the trappings of modern philosophy as rhetorical bludgeons to set the next guy straight. They speak as though the words that come out of their mouths—and their keyboards—are omnipotent.

When are people going to learn? Philosophy is a word game. Hardly anyone uses it to better negotiate reality for themselves, but rather to disqualify the thinking of others. To such a person I say: Mind your own mind and keep your rhetorical hands off mine! I couldn't care less about your \"store-bought\" philosophy.

Chapter 10. How was Bertrand Russell a rationalist?

Rationality is logic + plus facts. Bertrand Russell had a history of disregarding the evidence he didn't like and his work on mathematical logic is evidence that he never understood how logic works.

In his 1905 paper \"On denoting\", he pretends to provide a logical model of the sentence \"The current king of France is bald\", only to declare against the evidence that this sentence does not mean \"The current king of France is bald\" but \"There exists a current king of France and he is bald\". If this was acceptable, then any idiot could arrive at any conclusion he likes and that would be it.

Consider the great work of A.N. Whitehead and Bertrand Russell, Principia Mathematica. (1903). A seminal work on a par with Newton's elucidation of the laws of thermodynamics. We are blessed to have had such pioneers. Without them, and the rare others like them and proceeding them, when they contributed to our basic understanding of Nature through our methods of description and analysis, we would still be in caves. It/he doesn't get any more rathionalist than this type of work. Math reduced to logical functions/reasoning.

\"Logicism is the view that (some or all of) mathematics can be reduced to (formal) logic. It is often explained as a two-part thesis. First, it consists of the claim that all mathematical truths can be translated into logical truths or, in other words, that the vocabulary of mathematics constitutes a proper subset of the vocabulary of logic.

Second, it consists of the claim that all mathematical proofs can be recast as logical proofs or, in other words, that the theorems of mathematics constitute a proper subset of the theorems of logic. As Russell writes, it is the logicist's goal \"to show that all pure mathematics follows from purely logical premises and uses only concepts definable in logical terms\" (1959: 74).\"

Why was Bertrand Russell so critical of Nietzsche? Because Nietzsche fails the game theory.

As a mathematician, Russell was perfectly aware of the game theory, and he clearly saw Nietzschean ethics work best when other people do not follow them. [The same can be said about Randian egoism BTW - it too fails the game theory.] Russell was also deeply Humanist by his personal ethics, and he saw how Nietzsche worshipped heroes, warriors, soldiers and tyrants. Moreover, he criticized Nietsche for making emotional and irrational arguments for his philosophy. Nietzschean philosophy has no place for reason, facts or human compassion. Russell said on Nietzsche: He holds that the happiness of common people is no part of the good per se. All that is good or bad in itself exists only in the superior few; what happens to the rest is of no account.

Russell was deeply and aggressively empiricist. Most British and Anglophone thinkers are empiricist, because empiricism is entrenched in British-derived university systems, but Russell's goal was to preclude rationalist philosophy entirely by binding the language of philosophy to the language of physics and the empirical sciences, through the extrapolation of logic and maths.