

On the Metaphysics of Rationalism and the Distinction between Ideas and Qualities

Abstract

The rationalists believe that truth is a sufficient condition of thinking itself. This is an action of inference that suggests ideas are contingent on logical conceptions represented by other minds and the qualities of objects. In this view, mind is an interpreter of sensory data that contains observable effects. Consequently, there are demonstrative modes of action in ideas that exist as beings in themselves. There are intentional structures that provide reasons about why ideas are not of the same nature as beliefs because of interpreted representations. Induction is a mode of inference that shows reasons why innate awareness is dependent on the knowledge of logical relations. Thus, the mind has perceivable structures that cause the association of ideas to be part of future and unknown possibilities of justified beliefs.

Descartes' Analysis of the Senses:

According to Descartes, the senses are not imaginary, but are true and exist. He says, “I cannot doubt that I am sitting here next to the fire, wearing my winter dressing gown, holding this sheet of my paper in my hands, and the like. On what grounds could one deny that these hands and this entire body are mine?” (179, Meditation One, Concerning those things that can be called into Doubt).¹ Thus, Descartes’ supposes that he is dreaming, and there are particular functions that are not true, which are opening the eyes, moving the head, and extending the hands. He supposes that we have no such hands or any such body at all.² He goes on to say that it is possible that the objective contents of reality are painted images

¹ The *operations of the body* that include the eyes and hands are evidence that he is awake and not asleep. Yet, since there are similar thoughts in dreams, it is possible that these ideas are false since there are no definitive signs by which to distinguish being aware from being asleep (180-181).

² This approach to argument splits the mechanisms of the world with the processes of mind to say that God exists or everything else is uncertain. Descartes chooses the first option and attributes human action with limits and God with infinity.

only produced in the likeness of true things. He says, ““For sirens and satyrs are represented by bizarre forms but cannot be assigned to them utterly new natures. They fuse together the members of various animals, or they make something new that has never been seen before, which are fictitious and false”” (182). This means that corporeal nature has a certain form, extension, that can be shown by the actions of the body and senses. The representation of sense data must be generated from human nature itself, which leads to Descartes’ theory that there are three kinds of ideas that he names adventitious (*adventitiae*), innate (*innatae*), and factitious (*factae*) (179, [7.], [10.], [11.]).

An adventitious idea is explained as the common idea of the sun because it is yellow, bright and round as it is perceived through the senses. In general, these are ““derived from things existing outside me.””³ Innate ideas come from human nature (*qua thinking thing*) (VII 38; CMII 26). Factitious ideas are made by him, whose origins are in contents of other ideas, such as the idea of Pegasus.⁴ Hence, Descartes’ theory of ideas describes mind as an innate observer that conceives of truths and falsehoods because of consciousness itself, not from God’s power, essence, and will. When the mind is awake, it separates the meaning of truth versus falsehood in order to know how the world must exist even if Descartes is dreaming about the order of reality.

Thus, ideas must be rational or imaginary, and it is up to natural reason to admit that they are rational. On the other hand, there are certain other things that are more simple, universal, and true (20.) This includes knowledge of physics, astronomy, and medicine because they are dependent on the consideration of composite things. Arithmetic and geometry treat of simple and general things. Descartes is indifferent to these areas of thought

³ There are also simple ideas of colors, sounds, heat, cold, and the moon.

⁴ Descartes thinks that ideas must be considered true based on physical representations that are dependent on certain compositions of things. He does not argue about the unity of idea with object since mind presents an objective reality of ideas. This means that a suitable definition of ‘nature’ must point to something ‘real’ and ‘conscious’.

because they do or do not in fact exist. They are certain and indubitable since $2 + 3 = 5$ and a square has four sides when dreaming or awake. Hence, truth is a conscious fact that is shown by the various representations of ideas.

On the Mind-Body Relation to Experience:

The rationalists believe that truths match the perceivable relations of various ideas.⁵ Biological and religious truths appear to pose a contradiction between the logic of truth and relations because there is no solid boundary between where the source of existence is if it is not in the present. Descartes explained there was an awareness of things external to the mind that he said were the heavens, Earth, air, colors, shapes, sounds, and deceptions of dreams (Descartes, Meditation One). This observation came from his belief about the existence of the heavens from the presumption that there were certain qualities on the Earth. This assumption could not be empirically tested because he supposed that science itself could not determine the variables that make up how human beings make decisions. Instead, Descartes argued that he was not concerned about universal arguments that had nothing to do with an appeal to the natural reason. Furthermore, Descartes investigated the contents of his mind to meet some of the conditions for mental actions, namely, affirmations, denials, willing, and believing, that he could observe being performed in daily experience.

Thus, appealing to dreams was metaphysically significant because there was a valid objective consciousness that any percipient could experience and communicate with other minds. However, Descartes' method of doubt did not satisfy Ockham's Razor, a scientific principle that explains the simplest concepts should be used in a theory of science. That is to say, any concept is a sign, not a phenomenon. This is a problem in rationalism that suggests ideas can be put into a natural classification of arguments such as in the syllogism that shows

⁵ In this view, our knowledge is considered as being separate from experience because it is dependent on mind because the mind remembers, reproduces, sleeps, eats, and drinks, which can be called its innate faculties since there are no real alternatives that justify the possibility of non-existence.

perfect, formal induction (Peirce, 284, Collected Papers, Volume II, Elements of Logic, Chap. 2, On the Natural Classification of Arguments).

Any M is II' P',
Any S is M;
Any S is II' P;

Also, in the syllogism, II' P' denotes the conjunction of all the characters of M. If the conclusion and first premise are true, the second premise is true by definition so that we have the demonstrative form of argument (Peirce, 509, Collected Papers, Volume II, Elements of Logic).

Any M is II' P,
Any S is II' P;
Any S is M.

Descartes does not think the mind was an interpreter of its experience, but as a cogito that experienced the world in a broad sense having to do with feelings and the cessation of doubt. He was correct because thought is something that we are aware of and when doubt is gone, there is an establishment in our nature of a rule of action, which is a habit (Peirce).

Rationalists understand truth through pure reason, an innate faculty that conceals a priori truths and reveals them through insight (Kant, 1781, Critique of Pure Reason).⁶ It is clear that Kant's a priori concept focuses on the actual properties of things to show mind produces concepts about its objects of thought, from the objects themselves. This relation between idea and object is the foundation of Plato's forms, which represent interpretations. Thus, forms resemble qualities because there are functions of ideas attributed to reasons that intend to show how being is part of reflection. Objects exist independently from the mind, so

⁶ The purpose of a priori ideas signifies the utility of an object based on the mind's representation of it so that the contents of mind are always separate from the world.

they are subject to critique in the contexts of theories and their rules, hypotheses, conjectures, and conclusions.⁷

On the Empirical View of How Concepts Come from Objects:

Plato and Locke describe the existences of the qualities on the awareness of the ideas and powers produced from objects. Locke examines ideas based on the truth and falsehoods of the propositions, which contain contents that distinguish ideas from words. This is the metaphysical sense of truth because there is a secret reference to our ideas that are looked upon as the standards of that truth, which are mental propositions. Locke believes that no ideas are false since they are products of perception. Qualities imply the ideas of true or false refer to anything extraneous. Locke asserts the senses cause the qualities to come into being in the mind, namely, primary and secondary qualities.

A primary quality refers to the idea that is the object of perception. Locke says, “‘Whatsoever the mind perceives in itself, or is the immediate object of perception, thought or understanding, that I call *idea*; and the power to produce any idea in in our mind, I call quality of the of the subject wherein the power is.’” (Locke, Essay Ch. 8, Some Further Considerations Concerning Our Simple Ideas of Sensation, 82, 8.). A snowball is a thing that has the power to produce the idea of white, cold, and round. Its powers are called qualities because they are sensations or perceptions in our understandings.⁸ These are primary qualities of body, which are observed to produce these simple ideas.

The secondary qualities are not in the objects themselves but are powers to produce various sensations in us by their primary qualities, that is, by the bulk, figure, texture, and

⁷ Quine’s regimented theory was an idealization of a total theory of the world. The answers about science must come from this totality of understanding the world through a first-order logic with identity. This theory covers physical objects, sets, and also predicates. If words are not logical, they are strictly scientific and are excluded from the study of metaphysics.

⁸ Qualities are ideas of things in themselves that are produced by objects. In bodies, they are inseparable no matter what state they are in. For example, a grain of wheat can be divided into two parts, and still has solidity, extension, figure, motion, rest, and number even if it is reduced to its atomic parts.

motion of their insensible parts, as colors, sounds, and tastes. These are produced by the operation of insensible particles on our senses (Essay, Ch. 8, Some Further Considerations Concerning Our Simple Ideas of Sensation, 82, 10). Locke gives another example about the primary qualities of fire. It has power to produce a new color or consistency in wax or clay and the idea of warmth or burning, which is not felt by the bulk, texture, and motion of its insensible parts. Moreover, bodies produce ideas in us by impulse, which is the only way to conceive how bodies operate. Motion is the evidence of how the senses relay signals to the nerves, or animal spirits, to the brain and body. Thus, there is nothing in objects themselves that show there are secondary qualities because of the variety of sensations that are produced in our minds. Consequently, Locke thinks that God relates such ideas to motions that have no uniformity and makes pain part of motion even if there is no resemblance of ideas. Error is an action that comes from the misrepresentation of attributes of the sensible qualities since they are nothing in the objects themselves except for powers to produce various sensations (Essay, Ch. 8, 83, 11., 12., 13.)

The ideas that are produced from the primary qualities of bodies are resemblances of them, and their patterns exist in the bodies themselves. However, the ideas produced in us by these secondary qualities have no resemblance at all. The action of denomination makes the identities of the objects attributed to their powers insofar as the mind's reference is directed towards the sensation of other things (Essay, Ch. 8, 84, 14., 15.). Even if something is not real, the idea of it is not false because it has a name that is the same thing by mouth or when it is written on paper. This is the supposition of conformity that is either true or false so that ideas come to be denominated (Essay, Ch. 32, Of True and False Ideas, 310.).⁹ Therefore, the mind refers to the real constitution and essence of anything, where properties depend, and so

⁹ No ideas are false because of the perceptions and appearances that relate to their existences. Since the mind supposes ideas that conform with other minds, there are common names that intend and judge its ideas of justice, temperance, and religion. This means that any idea it has in itself is to be conformable to some real existence such as the truth of a man and the falsehood of a centaur.

all of our ideas of substances are false (Locke). Instead, the mind abstracts the idea, gives a name to it, and puts in the storehouse of memory, which can be called its essence.

The analysis of the qualities is the subject for debate between why ideas exist as they do in terms of how the objects stand on a ground, and why there are different mental relations if all the powers produced by the objects are the same for all minds. If a solution can be made concerning our faculties, it will be necessary to critique how human perception is a scientific phenomenon that can be analyzed in experiments. In addition to this, there must be research in evolutionary biology that is directed towards understand how traits can be measured and what insight looks like in the form of data in order for the mind itself to be represented as a certain interpreter. If there are ways to show what ideas exist as in an objective reality, there will be connections into the resemblances between human nature, consciousness, and the natural world itself. This occurs through a knowledge of inference, in the modes of deduction and induction.

On Deduction:

A deduction is known as a demonstrative argument, and states that the conclusion will follow from the premises. If words are represented by symbols, there are sufficient ways to show how ideas are related because of interpretations that cause the truths of syllogisms. Thus, logic is the practice of order in language so that there is correspondence between theory and coherence. A logic that does not prove the reality of ideas is a contradiction since thought is dependent on the structure of language. If this weren't true, then there would be no way of understanding what is said, whether in dialectic or understanding what contradictions mean.

For instance, in the general form of the Barbara syllogism, it is clear that the name, 'Socrates', sufficiently represents a true description, 'Greek', and to say that this is false is merely an error because of the fact that Socrates was a Greek man. It is also clear that he is

mortal since all other men are mortal, which we know by the relation that it is impossible to be an immortal man. Hence, we have a set of premises that are necessarily true, that S is M. M is P. S is P. 'All' must include 'Socrates' and 'mortal' implies 'Greek' 'man.'

The conclusion applies the rule to the case and states the result: Socrates is mortal. All deduction is of this character; it is merely the application of general rules to particular cases. Sometimes this is not very evident, as in the following; All quadrangles are figures, but no triangle is a quadrangle; Therefore, some figures are not triangles. But the reasoning is this: Rule: Every quadrangle is other than a triangle. Case: Some figures are quadrangles. Result: Some figures are not triangles.¹⁰

These two sorts of objects, what we are immediately conscious of and what we are aremediately conscious of, are found in all consciousness (11). In second intentional logic, there are logical conceptions of simple relations that certain symbols represent.¹¹ These relational patterns are the results of deduction and show that it is necessary to adopt a scientific realism to understand the theory of consequences in terms of 'idea', 'quality', 'relation', and 'representation'.

On the Suppositio Communis and Grounds of Validity of Logic:

The suppositio communis was developed by Albert of Saxony, who contributed to the scientific revolution, a movement that expanded on the analysis of language based on terms and how terms reference. A quality has reference to a ground. A relation is a reference to a correlate. A representation is a reference to a correlate. These are three intermediate conceptions that may be termed accidents and are part of the category called substance (Peirce, On a New List of Categories, 16). The purpose of substance in philosophy varies

¹⁰ Inductive or synthetic reasoning, being something more than the mere application of a general rule to a particular case, can never be reduced to this form. (Peirce, Chance and Logic, 132).

¹¹ These are impossibility (O), coexistence (I), identity (T), and otherness (C) (Peirce, 56, 81., 339). The relation of inference (q), is given by Kant in the Appendix to the Transcendental Dialectic, Kritik der reinen Vernunft (A651ff, B679ff).

widely depending on the function of parts, but for our purposes, we will focus on the word, ‘resemblance’ to explain how human nature is part of how we make our ideas and reason.

The Species’ Problem: Cluster Concepts:

Ideas are resemblances of species but there are no empirical differences that can draw lines between evolution and philosophy (Pigliucci, 2003). Language is a human construct that must refer to a species (Wittgenstein). Problems with species’ concepts concern semantics and not enough empirical data. Therefore, philosophers use Wittgenstein’s idea of “family resemblance” or cluster concepts to explain that species connects to both kinds of concepts. The purpose of this is to link philosophy with biology, which has been argued for by Mishler, Donoghue, Kicher, and Dupré, who all explain that it depends on the goals of the researcher. Thus, ‘teleology’ and ‘function’ appear to be interconnected concepts whose principles cannot exclude certain propositions from logic and other truths about belief.

For Wittgenstein, family resemblance or cluster concepts solve the species problem. Pigliucci explains that there must be data to prove that either mind has biological structures which promote phylogenetic relationships, genetic continuity or similarity, and ecological similarities, or semantics cause association of concepts. These traits are not independent because of the future possibilities that can’t be determined (Pigliucci, The controversy: the biological side). According to Kant, the idea of ‘species’ is a supposition that falsely leads into thinking that there is even a self that experiences the universe and a cause of the cosmos, which is God. Although there is no a priori knowledge that such things are true, there is an awareness of experience that justifies mind and knowledge of nature.

Therefore, thought must be produced from the qualities since they are concrete items that establish ideas as individual ‘beings’ that co-exist with other minds. Human language is

the foundation of reason and gives a series of infinite possibilities of propositions that contain arbitrary but logical definitions, attributes, and substances.¹²

For Peirce, reasoning from definition is also known as formal hypothesis. It applies to one half of all possible propositions because every proposition has its contradictory (Peirce, 510, 2.509, Collected Papers, Volume II, Elements of Logic). Also, every true particular proposition has a true universal proposition. For every true negative proposition there is a true affirmative proposition. This idea follows from the fact that the universal affirmative is the type of all propositions so that all possible propositions are either of the forms, S' is M, and M is P, one half are true [2.509]. These innate truths about language show belief is a separate process that is unrelated to the logic of science and ideas.

While ideas have logical consistencies, beliefs have inconsistent variations. C.S. Peirce describes the essence of belief as the establishment of a habit that distinguishes different beliefs by the different modes of action to which they give rise. Beliefs must differ in this respect in order for them to settle the same rules of action. On the other hand, an idea is a being in itself that has no variation but has many kinds of functions. This means that there are differences between beliefs and ideas that have to do with their natures, although consciousness produces both as concrete or abstract. It is evident that belief is abstract while idea is concrete. Consequently, imaginary distinctions are drawn between beliefs that differ only in their mode of expression, which has contradictions and suppositions.

Modal Rationalism:

According to Anand Vaidya, actual facts describe the objects of existence, while facts about modality refer to possibility and necessity. Modal facts say how things could or must be. For example, even if a hockey team has twenty players on it, there could have been thirty, but not zero. The first is actual, the second possible, and the third impossible. From modal

¹² Names are the logical figures that suggest 'essence' since they do not have changing substances or modes.

premises, reason is seen to be a faculty that evaluates the validity of perceptions and alternatives. Reason is part of human psychology and influences us to make and evaluate judgments about what is possible and necessary, such as when we imagine alternative possibilities and change how things could be. Humans judge that things could be different than they actually are, while other things could not have been (Vaidya, 2015).¹³

Kallfelz uses a meta-inductive strategy to link the constructivism of rationalism with realism by explaining that how we come to know is from thought experiments and models to metaphysical possibility. The degree of explanatory coherence and predictive accuracy of any given theory is in direct measure to its truth. Theories have unobservable features that involve how words are represented or correspond to propositions and states of affairs. Chalmers' bases modal rationalism on two-dimensional (2D) semantics, which explain that the world is depicted by epistemic possibilities that are diagonal and have primary intension. This shows that there is epistemic dependence on meaning (Nimtz, 2005, 10) (Kallfelz, 2010, Models and Their Modality).

Hacking (1982) and Giere's (1985, 1988) positions are different when explaining the ontological characteristics of the basic units of description. Hacking says it is experiment that is associated with protocols of construction and design, while Giere explains that it is the model with its design and interpretation protocols. Kuhn (1962, 1973) gives five values for theory-choice to account for realism, which are accuracy, consistency, broad explanatory scope, simplicity, and fecundity (1998, 132). The ability to produce an abundance of ideas makes a priori justification rationally cogent since knowledge can be justified by direct observation of ideas.¹⁴

¹³ Ordinary modal judgments are propositions such as, "Even though I am a teacher, I could have been a musician." Second, "It is necessary that $2 + 2 = 4$ ". Third, "Blue cannot prescind red for that would be impossible."

¹⁴ This is a non-skeptical positive epistemology that does not regard rational as being capable of a radical nature. In this respect, empiricism cannot give insights to a priori arguments because it only appeals to the experiences of observations.

On the Distinction between Abstract and Concrete Object:

In a 1965 book, *Aspects of Scientific Explanation and other Essays in the Philosophy of Science*, Hempel discusses his ideas about explanation, confirmation, concept formation, criteria of meaningfulness, and scientific theories (Friedman, 1999, 375). Hempel describes probabilistic (statistical) explanation as having the form of an argument from premises to conclusion but it is not a deductive argument (Nozick, 1994, 651). This suggests that objects cannot be identified (i.e. referenced to a correlate, physical or mental), unless there are words that describe what the word 'sensible' means in terms of 'relation', 'quality', or 'property.'

Frege's distinction between abstract and concrete objects explains that "An object is abstract if and only if it is both non-mental and non-sensible." In this way, objects are not on grounds to be annihilated because of perception (Rosen, 2001). Lewis (1986a) describes that abstract objects lack certain features different from concrete objects.¹⁵ This suggests that space is not a linear substance since it does not contain fixed properties that cause universal human actions. That is to say, objects can both be and not be mental representations, which is a view developed by the Greek philosopher, Parmenides.

In addition to semantics, there are problems with abstract mathematical ideas such as the imaginary number, i , since they cannot cause conceptions that connect experience with mind or body since they do not exist in space or time. Nonetheless, there are abstract objects such as chess that seem to contain substances because they cause similar actions, namely, playing a game with agreed rules. This seems to show that abstract knowledge differs from other ideas such as the history represented by the object itself, namely, that chess was imported from India to Persia in the seventh century. Thus, chess must be considered as an abstract object since it affects minds according to internal properties of objects. This shows that abstract ideas are generated from internal representations of the mind, which is an a

¹⁵ In the non-spatiality criterion, negation means that abstract objects are not affected by causes.

priori criterion for how ideas exist. Science explains that there are direct relations with the mind and body since animal existence is contingent on other properties of nature that cause family cohesion patterns (Templeton, 1989), ecological adaptations (Van Valen, 1976), and genetic constitutions (Simpson, 1943). Competition is the result of evolutionary processes and forces that motivate behaviors to suit the conditions of the environment. To identify phylogenetic characteristics that stand out among species, it is necessary to examine the consequences of actions and how they influence participation between separate groups.

The non-spatiotemporality criterion explains that objects of the understanding exist independent from space-time. Other than abstract objects, the objects of matter must pass through a series of becoming, since their utilities are finite and determined by other minds. However, for time to affect both kinds of ideas, there are necessary conditions that show all abstract ideas also are in motion by the definite causes of material things. For example, chess is a game that contains rules which are different from conditions and are not known to the observer. Through action, the abilities to understand the game of chess become better because of knowledge of the strategies that make the observer win against its opponent. This process of learning suggests that “chess” is an abstract “item” that occupies space-time because of its observable effects.

Lewis (1986a) explains there are impure sets that exist where and when members do. Perhaps an impure set means a series of abstract ideas that are not necessarily contingent on the intention of the action but are the result of the effect. For example, I know where to move a knight because of a past experience that this worked well in an earlier game. Perhaps I meant to move another kind of piece, but the knight was effective. You moved because of another tactic of mine, which was to draw your attention to a different piece, so I caught you, and believe it was the knight that took the bishop, but really it was the deception of the other piece that moved the bishop next to the knight.

What are some reasons why concrete ideas are different from abstract ideas? There are various reasons that point to the reality of how our ideas work. Even if there is a belief in the intention and future possibility, it is verifiable that the outcome was sufficient now. These are the roots of science that give answers about why things happen as they do in daily life.

In philosophy, inference is the result of the observation of effects, in a logical order, that create understanding in the mind. This view of unity begins with Aristotle's logic and science, which explained that there are processes of the world that are known according to the relations of its parts. In general, science is the objective region of space-time that absorbs human opinion, truths, norms, and customs that demonstrate the concrete differences of ideas about sensible things. The abstract associations that form are the results of philosophy and lead to better effects of objects unto the mind. Thus, meaning is not a suitable scientific term (Quine, 1981, 185) because 'thought', 'belief', 'experience', and 'necessity' are actions that are not always justified by data. In order to make philosophy a reliable source for science, there must be ordinary abstract concepts that can be critiqued by beliefs.

This notion of co-existence in relation of the mind to objects was introduced in the philosophy of Nagarjuna, a Buddhist philosopher that set up a new logical system arguing about truths that were certain because of perception because all conceptions were led into contradictions. This theory of dependent origination emphasized the necessity of ideas by the existence of the senses (Madhyamika). Thus, the mind was viewed as a separate self that was independent from the body. This is contrary to Descartes, who argued that the mind and body shared a union that was not part of a formal logic. Instead, the rationalists say that the mind conceives the relations of the world as being part of a rationally ordered whole of logical necessity. This belief of the function and place of mind brings us to consider the nature of signs and how they express the existences and relations of objects in terms of percipients, interpretations, and concepts.

This is a useful theoretical counterargument because it explains that signs are the foundations for understanding truths about experience as it is contingent to the mind and body, instead of explaining ideas as the justifications for a priori arguments. That is to say, perhaps signs are the roots of identities with phenomena. From this perspective, rational means to understand propositional knowledge.¹⁶

Peirces' Theory of Signs:

In *Grounds and Validity of the Laws of Logic*, Peirce explains that generally a first sign denotes everything denoted by a second and that this second sign denotes everything denoted by the third. The deduction of the general form of syllogism consists only of an explanation of the *suppositio communis*. (Peirce, *Grounds of Validity of the Laws of Logic*). For example, an expression of the form “Every M is P” means that P follows from M, thus if S is M, that S is P. This is a good inference. Peirce asks, how do we come to make any judgment that “Every M is P?”

Real things are of both a cognitive and significative nature so that the real is that which signifies something real. Consequently, predicating anything of anything real is to predicate it of the subject (the real) is itself predicated; for to predicate one thing of another is to state the former is a sign of the latter. These ideas show the validity of the formula, S is M; M is P: [Ergo,] S is P. They hold good whatever S and P may be, provided that they be such that any middle term between them can be found. That P should be a negative term, therefore, or that S should be a particular term, would not interfere at all with the validity of this formula. Hence, the following formulæ are also valid.

Hence, the superiority of reason fits into the pragmatic paradigm of science because it points out that ideas can be divided in the same kinds of ways that signs exist and can be

¹⁶ Rational knowledge is produced from ideas, which have powers to identify and denote the qualities of objects and things in themselves.

divided. According to Peirce, a sign has two objects, which are its object as it is represented and its object in itself. It has also three interpretants, its interpretant as represented or meant to be understood, its interpretant as it is produced, and its interpretant in itself. Signs can be divided in own material nature, as to their relations, objects, and relation to interpretants. Sign, in itself, is either of the nature of an appearance, as a qualisign, or, an individual object or event, as a sinsign (the syllable sin being the first sillable [sic] of semel, simul, singular, etc.); or thirdly, it is of the nature of a general type, that is, a legisign. A 'word' depends on the article being used, such as 'the', which counts as one 'word', and 'an' is a second 'word'. Thus, a 'word' is a legisign. But, if it is in reference to something, such as a number of words on a page in a book, the word is a sinsign. A legisign has a definite identity but has many different appearances. The qualisign has no identity but is the quality of an appearance, that is, great similarity.

Hence, signs share relations with dynamic objects, which he terms icons, indices, and symbols (1867). An icon is a sign that is determined by an object according to its own internal nature. It is a qualisign that is represented by music or what the musician intends to show the audience. A sinsign is an individual diagram such as a curve of the distribution of errors. An index is determined by its dynamic object in a real relation to it, such as a proper name, or legisign. For example, a symptom of a disease is a legisign because it has a general type of a definite character. The event in a particular case is a sinsign. A symbol is a sign that is determined only because it will be interpreted. It depends on a convention, habit, or natural disposition of the interpretant, or the field of its interpretant. Any symbol is necessarily a legisign.

Engaging in God Arguments:

Yet, there are properties of the world that can be reduced to those metaphysical parts which are observed by other minds and explained by the principles of beauty and goodness, which Leibniz proposes in his *Monadology*. The reality of nature exists through truths about beauty and goodness and appeal to no logic because God is the author of the world (Leibniz, Discourse on Metaphysics and The Monadology, Metaphysics, I. Concerning the divine perfection and that God does everything in the most desirable way) ¹⁷. According to Leibniz, perfection does not involve numbers or figures since the sum of all the numbers, and greatest of all figures imply contradictions. But the greatest knowledge and omnipotence contain no impossibility so that these truths imply that power and knowledge admit of perfection, relate to God, and have no limits.

Leibniz also thinks that the principles of goodness and beauty are not arbitrary but should be attributed to works of God and the nature of things, or the ideas we have about them. This is a different view than saying that formal reason is the cause of perfection since it is an anthropological expression that is distinct from God's abilities to reflect on his creation and regard it as good as the Holy Scriptures describe. Thus, by reflecting on the works, it is clear that the beauty of the universe and goodness that we attribute to the works of God are chimeras of human beings who think of God in human terms. If we say that things are not good due to a standard of goodness, then we reduce God's love to an act of his will that misses the point of why we praise him for what he has done since it would be a contradiction to do the opposite. Thus, arbitrary decisions cannot replace the reasonableness of how to deal with justice and power. Leibniz attributes the eternal truths of metaphysics and geometry to these previous ideas and confirms that they follow from God's understanding, not his will or

¹⁷ The conception of God that has the meaning is expressed in words: God is an absolutely perfect being.

essence (47, 48, II. Against those who hold that there is in the works of God no goodness, or that the principles of goodness and beauty are arbitrary).

Leibniz holds that God has made the world perfect to the highest degree and could not have done any better.¹⁸ This means that there is no such thing as comparative perfection since there are many possible imperfections to God's creations. Unlike Descartes, Leibniz believes that error is not knowing that the harmony of the universe is associated with hidden reasons for God's conduct. Because we are ignorant, then we think that many things could have been done better. Also, error is caused by the imagination that nothing can be so perfect so there must have been something more perfect.¹⁹ If God can choose between A and B, and takes A without any reason, then it is not praiseworthy because all praise must be found on reason, which *ex hypothesi* is not present here (49-52, III. Against those who think that God might have made things better than he has.)

The agreement of theories occurs because there are arguments that are analyzed and cause engagement between different beliefs. Govier (1999a, p. 47) explains that the act of arguing involves an implicit acknowledgement of the possibility of disagreement about the question at hand. Cohen says, "The act of engaging in argument puts the disputants into a personal relationship of approximate parity. There are three parts to this: the personhood of argument-mates, a personal relationship between them, and the parity of the disputants. All of these can be called into question when one of the arguers is God." (Cohen, *Arguing with God*).

Cohen uses the relationship with Moses to describe how the coherency of argument is met with cogent replies to create the structure of the argument. Moses argued with God and offered reasons why he should not be the one chosen to lead the people out of Egypt since the

¹⁸ This assertion is a rule that applies to the consequences of the individual's actions and instructs us to satisfy our potential by not acting with less perfection.

¹⁹ This position does not act in accordance with the sovereign reason for God's willing decisions. In other words, there must be reasons why God does things even if they seem impossible.

Israelites wouldn't believe that God sent him, and Pharaoh wouldn't listen since he was not eloquent (Exodus 3, 10-4, 7). The process of this kind of argument with God begins when one person gives a thesis that is a command, usually an assertion (i.e. speech act).

Next, an objection is raised by the second person or party that is met with a reply by the first. A second objection is raised and countered, and a third objection meets the same conditions. Finally, there is agreement because one side wins. Sometimes, God has the stronger argument, which is seen in Moses' objection, since God is not defeated. Thus, God is the better arguer because God can answer every objection to Moses' ideas. That is, there is no arguing with God (Cohen).

Quine's Naturalism for Identifying Ideas and Qualities:

The goal of philosophy might be to create an a priori metaphysics system that shows there are traits of reality that are independent from scientific ideas. Theory contains words which effect the applications of natural objects relative to conditions. According to common sense, the utilities of observable sensations caused by different objects are distinguished as being unnatural (i.e. inanimate) and are recognized by certain effects. It seems that the end-
'value' of experiments is how the subject identifies the purpose of the use of object. Thus, the intentions that are put into scientific systems are responsible for the results that scientists obtain. What 'theory' means and what its 'effects' are makes scientific evidence justifiable in terms of the function of words.

How we find out what methods and techniques show that reality is justified by an appeal to common sense is explained by Quine in terms of naturalism. Quine thinks naturalism is understood according to the notion of science. Science holds truths that are dependent on philosophy because of conceptual schemes that stem from psychology (1981, 21). In Peirces' opinion, 'the long run' is a destination of that scientific truth which explains

that truth will be known to the person whose principles and experiments lead opinion to their idea of the truth.

Ideas are generated from reason itself, which is an innate faculty that produces truths that the mind is aware of because of demonstrative and observable effects. The qualities are objective representations of data whose existences are contained in objects themselves. As such, the word quality carries with it the assumption that their modes are separate from their independence. Consequently, the unity of quality and mode must be determined by the idea that there are future and unknown justified beliefs that are generated from logical variations.

Ideas come from the grounds of language resemblance and awareness of necessity, which is a universal condition for the unity of conception and perception. Hence, Spinoza developed rationalism by explaining that one substance, God, necessarily exists because of the principle of sufficient reason and causation, which states that something must exist for a reason. If it doesn't exist for any reason, then it cannot be explained. The same principle applies to non-existence. Causes are necessary and sufficient reasons to explain all possible substances. Thus, an object's causes explain that object's existence because facts about the nature of causation are facts themselves by the principle of sufficient reason, which requires an explanation on both the causal relation and the order of it. The principle of sufficient reason applies to facts about existence and relations between objects and is the next step in explaining how ideas are distinct from qualities.

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