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A META-ETHICAL INTERPRETATION OF KARL POPPER'S CRITICAL RATIONALISM: TOWARDS THE EPISTEMOLOGICAL GROUNDINGS OF HUMAN FLOURISHING

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Abstract

This Paper attempts to unveil the ethical inkling of critical rationalism ,which is the logic of knowledge and science in Karl Popper's epistemological edifice. Such endeavour transcends two philosophical positions: First and foremost, the contention that Karl Popper is not an ethicist , given he did not write systematically on ethics and secondly, the exclusive grounding of moral motivation on metaphysics, anthropology, and psychology. To proceed, we will examine the concept of critical rationalism in Karl Popper's epistemology, in order to deduce its moral implications. Thus, after getting across the basic articulations of Popper's critical rationalism, we establish our contention that the moral innuendos of critical rationalism constitute evidence that morality can also be based on epistemology. As a result, we can logically proceed from epistemological attitudes and virtues to infer moral values. This paper is then another challenge for ethicists, philosophers of the mind, and psychologists to rethink the question of the relationship between the will (nerve-centre of morality) and the intellect (faculty of understanding or knowing).

Keywords: rationalism, critical rationalism, epistemology, moral, human flourishing.

INTRODUCTION

The question of the epistemological grounding of morality is a corollary of the age-old debate on the relationship between the intellect and the will in the context of human action and the practical debate on the motives and motivations of morality. In Socrates' intellectualism, the equation of virtue to knowledge is not an argument for the epistemological basis of morality. He uses knowledge not as a ratiocinative content but as moral awareness. In the modern period of the history of Philosophy, Descartes suspension of understanding (The intellect, knowledge) and the construction of provisionary moral in the sceptical moment of his method, is illustrative of the dissociation of epistemology from the context of moral motivation. To the question of the foundation of the moral impulse or motivation, epistemology has been sidelined by foundations like anthropology, metaphysics, and psychology. The Kantian deontology and the divine command ethical framework base the moral impulse on metaphysics while consequentialist frameworks like hedonism, epicureanism, stoicism, pragmatism, eudemonism and all forms of moral relativism ground morality on anthropology and psychology. Thus, little or no attention has been given to the epistemological motivation of morality. Karl Popper's critical rationalism is not only the logic of human knowledge but also the rationality of science. Thus, making a meta-ethical interpretation of Popper's critical rationalism is tantamount to setting the pace for a thesis of the epistemological motivations of morality. It is hoped that by realising this herculean objective, we will contribute in enriching Karl Popper's philosophy of human act and action for some commentators of

Popper have attempted to exclude him from major debates on moral philosophy. This is the case with Noretta Koertge who asserts that, "Most of Popper's ethical counsel lies in scattered remarks and the occasional paragraph"[1]

Our intellectual commitment in this paper is an overcoming of Popper's moral realism, that is, the defence of the autonomy and objectivity of morality from natural and social sciences. This autonomy is evident in his critical dualism of facts and decisions. Ethical norms to Popper are normative and man-made while laws of social and natural sciences have factual bearings and are descriptive[2]. Although Popper concludes this debate by asserting that we cannot derive moral decisions from facts, our contention here is that Popper's critical rationalism has epistemological virtues and values that can conveniently enhance human moral flourishing.

I. The Primacy of Critical Rationalism Over Irrationalism and Comprehensive Rationalism

Karl Popper distinguishes between the narrow and the broad definitions of rationalism. The parochial connotation consists in understanding rationalism in contradistinction to empiricism. The question of the most pertinent source of knowledge is the nexus of gnoseology[3] and it is animated by empiricism and rationalism. Empiricists like John Locke, David Hume, and George Berkeley assert that experience constitutes the most reliable source of knowledge. This thesis is also implicit in the inductivism of Francis Bacon and in the epistemological positivism of Auguste Comte. The continental rationalists like Rene Descartes, Leibniz, and Spinoza avow that reason, as a faculty of judgment, is the most germane source of knowledge. To Popper, understanding rationalism as the antithesis of empiricism amounts to intellectualism. Such usage is pure for it "extols intelligence above observation and experiment."[4] Rationalism as used by Popper does not then have the same connotation as used by continental rationalists.

The broad delineation of rationalism to Popper, "includes empiricism as well as intellectualism"[5] and when rationality is used in the context of philosophy of science, it designates the logic of science. That is, it refers to how theories are constructed and justified or tested. That is why Rudolf Carnap holds that, the word rationalism in the modern sense is used in contradistinction to irrationalism.[6] Popper's use of rationalism is not only restricted to the logic of science, but it also refers to the logic of life. At this level, it is the attitude that man adopts towards life as the latter to him is all about problem-solving.

Popper corroborates Carnap's definition of rationalism by reiterating,"I use the word rationalism in order to indicate, roughly an attitude that seeks to solve as many problems as possible by appeal to reason, i.e., to clear thought and experience, rather than by an appeal to emotions and passions."[7] The appeal to emotions and passions to solve the most salient problems of life is an attitude of irrationalism. Irrationalism is grounded on the assumption that human nature is either not rational or it is partly irrational. According to irrationalism, when rationalist choose to use reason, they do so out of the love for reason. Such love to them is emotional and thus irrational. The irrationalists thus insist that, "emotions and passions rather than reason are the mainsprings of human action."[8]

Comprehensive or uncritical rationalism to Popper is the attitude which consists in rejecting theories, ideas, and opinions because they "cannot be defended by means of argument or experience."[9] As a

[1] Noretta Koertge , "The Moral Underpinnings of Popper's Philosophy ", in ZUZANA PARUSNIKOVÁ and ROBERT S. COHEN edition of (Alan Musgrave, auth), *Rethinking Popper*, Springer, Netherlands, 2009, p. 329.
[2] Karl Popper, *The Open Society and its Enemies*, vol.1, The Spell of Plato, London, Routlegde, 1943, p. 56.
[3] Gnoseology understood as the study of theories of knowledge is narrow while epistemology is broad for it goes beyond knowledge to investigate on science, as an operational form of knowledge.
[4] Karl Popper, *The Open Society and its Enemies, The High Tide of Prophesy: Hegel, Marx and the after Math*, Vol. II, London, Routledge, 1947, p. 212.
[5] *Idem*.
[6] Rudolf Carnap, *The Logical Structure of the World and Pseudoproblems in Philosophy* (1926), Chicago, Open Court, 2003, p. 298.
[7] Karl Popper, *The Open Society and its Society*, Vol. 2, p. 212.
[8] *Ibid.*, p. 220.
[9] *Ibid*., p. 217.

result, comprehensive rationalism considers that which does not correspond to the dictates of reason and experience as irrational. Comprehensive rationalism is then a form of authoritarianism. It posits sacrosanct criteria of epistemological legitimation thereby excluding the possibility of criticism. Such dogmatic rationalism to Popper, is expounded by philosophers like Francis Bacon, John Locke and Rene Descartes. To Francis Bacon, it is possible to attain absolute certainty in science through the formation of notion and appropriate axioms. He asserts that,"true induction is certainly an appropriate way to banish idols and get rid of them."[10] John Locke in the same authoritative way affirms that, "all ideas are from sensation and reflection."[11] In the similar tone, Descartes formulates the four rules: evidence, analysis, synthesis and enumeration and peremptorily affirms that the "four (rules) would be sufficient for my purposes, provided that I took a firm and unshakeable decision never to depart from them."[12] The proponents of this dogmatic or comprehensive rationalism all defend the truth-manifest theory. This theory holds that there is an absolute truth with corresponding infallible methods of its revelation. However, Popper points out ,"the theory that the truth is manifest not only breeds fanatics possessed by the conviction that all those who do not see the manifest truth must be possessed by the devil but it may also lead though perhaps less directly than does a pessimistic epistemology, to authoritarianism."[13] Reason to Popper is neither a faculty as claimed by Plato and Descartes nor does it reside in an infallible instrument or method. Reason is simply an attitude. This is the "scientific attitude, the belief that in the search for truth, we need co-operation, and that, with the help of argument, we can attain something like objectivity."[14] Critical rationalism is thus rendered possible by humility and inter-subjective criticism. Popper expresses in the following terms:

The rationalist approach might be described as follows: Perhaps I am wrong and you are right; anyway we can both hope that after our discussion we will both see things more clearly than before, just so long as we remember that our drawing closer to the truth is more important than the question of who is right.[15]

The cognitive aspect of critical discussion consists in elimination of errors on one hand and the approximation to truth on the other hand.

II. Epistemological Presuppositions and Orientations of Critical Rationalism

The psychological condition for critical rationalism is fallibilism. It is considered as the psychological condition because it defines the state of the mind of the knowing subject. Moreover, fallibilism is the psychological corollary of conjectural conception of knowledge which Popper develops to solve the problem of induction. The methodological grounding of fallibilism is what can be referred to as the Popperian Copernican revolution.[16] Karl Popper, conveys his Copernican revolution in the following terms:

The question about the sources of our knowledge can be replaced in a similar way. It has always been asked in the spirit of: what are the best sources of knowledge – the most reliable ones, those which will not lead us into error, and those to which we can and must run, in case of doubt, as the last court of appeal? I propose to assume, instead, that no such ideal sources exist – no more than ideal rulers – and that all 'sources' are liable to lead us into error at times. And I propose to replace, therefore, the

[10] Francis Bacon, *The New Organon* (1620) ed. Jardine and Michael Silverthone, Cambridge, Cambridge University Press, 2000, p. 41.
[11] John Locke, *An Essay Concerning Human Understanding*, (1692), Pennsylvania, Pennsylvania State University Press, 1999, p. 87.
[12] Rene Descartes, *Discourse on the Method of correctly conducting one's reason and seeking truth in the sciences* (1637), trans. Ian Macha, USA, Oxford University Press, 2006, p. 17.
[13] Karl Popper, *Conjectures and Refutations, The Growth of Scientific Knowledge*, 3rd edition, London, Routledge and Kegan Paul, 1969, p. 8.
[14] Karl Popper, *The Open Society and its Enemies*, Vol. 2, p. 213.
[15] Karl Popper, *All life is Problem-Solving*, London, Routledge, 1994, pp. 84-85.
[16] The Copernican Revolution that took place in the 16th Century was a shift from geocentrism (earth-centred astronomy) to heliocentrism (Sun-centred astronomy). Kant in the 18th century the Polish astronomer Nicolaus Copernicus, to describe his own paradigm shift from object-based knowledge (realism) to subject-based knowledge (idealism). We apply it here to also qualify the epistemological revolution of Popper above.

question of the sources of our knowledge by entirely different question: How can we hope to detect and eliminate error.[17]

Karl Popper's methodological revolution then consists in a rupture from the quest to establish absolute certainty to the identification and elimination of errors. This revolution is a logical consequence of the conjectural view of knowledge. From Conrad Lawrence theory of imprinting, Karl Popper infers the existence of innate mechanisms that dispose man's perception of his environment. These innate schemas are anticipations and expectations. Charles Darwin's evolutionism, specifically his mechanisms of natural selection and principle of the adaptation to the natural environment influenced Popper to establish the view that knowledge grows through the process of trial and error-elimination. Knowledge then proceeds from problems to problems as Popper affirms:

For practical problems arise because something has gone wrong, because of some of unexpected events. But this means that the organism, whether man or amoeba, has previously adjusted itself to its environment, by evolving from some expectations or some other structure (say, an organ). Yet, such an adjustment is the preconscious form of developing a theory and since any practical problem arises relative to some adjustment of this kind, practical problems are, essentially imbued with theories.[18]

Contrary to inductivism, Popper argues that there is no pure observation or experience. For if one is asked to observe here and now, he will obviously ask, 'what should I observe?' Consequently, "In order to observe, we must have in mind a definite question which ought to be able to decide by observation."[19] Critical rationalism at the psychological level is manifested when our expectations are betrayed by experience leading to the search for tentative solutions. At the epistemological level, Popper circumscribes the trial and error-elimination at four levels: "(1) the old problem, (2) the formation of tentative theories, (3) attempts at elimination through critical discussion; including experimental testing, (4) the new problems that arise from the critical discussion of our theories."[20] The first problems are pre-scientific and are revealed by the mismatch between our expectations and experience. The second problems emanate from the involvement of current scientific theories into difficulties through testing. Thus, at the psychological or individual level, new problems are identified while at the epistemological or scientific level, there is the emergence of old problems. This follows that, whether at the psychological or scientific level, knowledge is conjectural and the truth is tentative. Fallibilism then disposes all humans for, "it is part of human condition that we err, that we make mistakes and are short of being perfect. We may fail while perceiving but also while communicating, arguing, reasoning, criticising."[21]

Secondly, the growth of knowledge is the biological motivation of critical rationalism. David Miller refers to this biological motivation as the sceptical moment of Popper's critical rationalism. He asserts that, "good reasons do not exist; it is impossible to furnish a good reason in favour of any thesis or action whatever."[22] This is also the non-justificationist thesis of Popper's rationalism of science, which should not be narrowed into sceptical prisms as Miller affirms for such scepticism is biological motivated by the quest for the growth of knowledge. It is worth reiterating that with Popper, "the central problem in philosophy of science is that of the growth of knowledge and the paradigm of the growth of the latter is scientific progress. He sees commitment to ensure the growth of knowledge as the moral responsibility of every researcher in science."[23] Knowledge to Popper is biological and progress is inevitable due to the fallibility of man and the erroneous nature of scientific knowledge. Popper questions that, "in particular, is there a danger that the advancement of science will come to an end

[17] Karl Popper, *Conjectures and Refutations*, p. 25.
[18] Karl Popper, *Unended Quest, An Evolutionary Autobiography*, (2nd ed., London, Routledge, 1992, p. 153.
[19] Karl Popper, *Objective knowledge: An Evolutionary approach*, Oxford, Clarendon Press, 1972, p. 259.
[20] Karl Popper, *All life is problem-solving*, p. 3.
[21] Zusanna Parusniková and Robert S. Cohan, *Rethinking Popper*,p. 72.
[22] David Miller, *Critical Rationalism, A restatement and Defence*, Chicago, Open Court, 1994, p. 55.
[23] Dzelajei S. Basilis and Nelson Shang, "The opposition between realism and non-justificationism in Karl Popper's rationality of science: In search of the conditions for the growth of knowledge", in *Central Asian Journal of literature, Philosophy and Culture*, Asian studies, Vol. 3, N°5, 2022, pp. 55-67, p. 68.

because science has completed its tasks?"[24] This is the question that most enlightenment proponents answer affirmatively. However, Popper finds the end of scientific progress or the attainment of the ultimate goals of science as an impossibility due to, "the infinity of our ignorance."[25]

There is no fixed pattern for science and the attainment of absolute certain knowledge is impossible. Progress in science is revolutionary and not cumulative. The history of science accords reason to Popper for Einstein's theory replaced Newton's by solving problems that challenged the Newtonian system. Thus, "science, as it appears in this logical sketch, is a phenomenon to be understood as perpetually growing. It is essentially dynamic, never something finished; there is no point at which it reaches its goal once and for all."[26] The constructive aspect of fallibilism then is the resolution of problems. As a new theory replaces the old one, problems are solved leading to the growth of knowledge. To Popper, "our knowledge is vast […] our ignorance is boundless and overwhelming."[27] In a critical discussion , it is not he who wins, and it is not the search for a common consensus that matters but the acquisition of knowledge. This growth of knowledge consists in knowing why 'I may be wrong' and understanding why 'you may be right' and vice versa.

Thirdly, the argumentative function of language is the logical condition of critical rationalism. In his early writings such as, *The Logic of Scientific Discovery*, Karl Popper exhibits a strong aversion for language. This was in a bit to distance himself from the linguistic reductionism of logical positivism. The logical positivists as represented by the Vienna Circle and early Wittgenstein, reduced philosophical problems to the problems of language. They did not only posit meaning as the scientific character of a theory, but they also proceeded to the naturalisation of philosophy and the attempt to completely eliminate metaphysics from science. In the preface to the 1959 edition of *The Logic of Scientific Discovery*, Popper asserts:

Language analysts believe that there are no genuine philosophical problems, or that the problems of philosophy, if any are problems of linguistic usage, or of the meaning of words. I, however, believe that there is at least one philosophical problem in which all thinking men are interested. It is the problem of cosmology.[28]

The cosmological problem is pivotal both in philosophy and science. Science studies the universe with the aim of solving problems and enhancing the growth of knowledge. Thus, rational reconstruction of Carnap and Neurath, which aims at constructing a universal language for science cannot permit the growth of knowledge. Karl Popper's interest in language was influenced by Karl Bühler's tri-functional theory of language. In 1918, Karl Bühler developed the three moment of what he refers to as the organon model of language. According to him, "What human language does is threefold: Profession, triggering and representation."[29] The three moments include; the things represented, the sender who professes his inner thoughts and the receiver whose reaction is triggered. In 1934, he then proceeded to develop the three semantic functions of language. He expresses this revolution in the following terms:

Today I prefer the terms expressions, appeal, and representation, because among language theorists 'expression' is increasingly taking on the precise meaning demanded here, and because the Latin word 'appelare' (English: appeal, German: more or less 'ansprechen') is apt for the second; as everyone knows today there is sex appeal and in addition to that speech appeal seems to me to be just as palpable a fact.[30]

Expression and appeal are the lower functions which man shares with animals. Popper illustrates this by pointing out that, 'a bird may be ready to fly away, and may express this by exhibiting certain

[24] Karl Popper, *All life is problem-solving*, p. 3.
[25] *Idem*.
[26] *Ibid.*, p. 15.
[27] Karl Popper, *The myth of Framework, In defence of science and Rationality*, London, Routledge, 1944, p. 100.
[28] Karl Popper, *The Logic of Scientific Discovery*, (1934), London, Routledge, 1954, p. xviii.
[29] Karl Bühler, *Theory of language, Representational Function of language*, (1934), Trans. Donald Fraser Goodwin, Amsterdam - Philadelphia, John Bengamins Publishing Company, 2011, p. 2.
[30] *Ibid.*, p. 53.

symptoms. These may then release or trigger a certain response or reaction in a second bird, and as a consequence, it too may get ready to fly away.[31] The first function, that is, expression, can occur without appeal, however, appeal is always a response to a stimulus arising from the expressive instance of communication. Besides these lower functions that are zoologic, Popper states two higher functions that are exclusively human and crucial, "for the evolution of reasoning and rationality."[32] These higher functions are the descriptive and the argumentative. The Descriptive function permits the construction of scientific theories since description to him is also "the description of conjectural state of affairs, which we formulate in form of theories or hypotheses."[33] The argumentative function is the highest and the most recent product of evolution. It subsumes the descriptive function for, "arguments, as a rule, are for or against some proposition or descriptive statement."[34] Thus, it is possible to describe without arguing, but we cannot argue without describing. The argumentative function of language is the logical condition of critical rationalism for it ensures inter-subjective criticism. Secondly, it is used to evaluate the correspondence theory of the truth. Truth as correspondence to facts is established using description, but the evaluation of the degree of correspondence is enhanced by the argumentative function of language. Thirdly, the argumentative function of language warrants the transition from world two to world three. The third world is that of objective knowledge and rational discussion. Popper asserts that the argumentative function makes language to be an 'organom of criticism' and as such, the autonomous world of the higher functions of language becomes the world of science. This amounts to saying that the argumentative function of language is the logic of critical rationalism.

Fourthly, falsification is the epistemic orientation of critical rationalism. Falsification as the principle of the scientific theoryhood and the criterion of the demarcation between science and non-science, is the scientific orientation of critical rationality. Contrary to verificationism defended by logical positivism, Karl Popper proposes falsification as the criterion of scientificity He however differentiates between falsification and falsifiability in the following terms:

We must clearly distinguish between falsifiability and falsification. We have introduced falsifiability solely as a criterion for empirical character of a system of statements. As to falsification, special rules must be introduced which will determine under which conditions a system is to be regarded as falsified.[35]

This follows that falsification is applied in the context of experiment. It is therefore a technique of testing the already developed theories. On the other hand, falsifiability is simply a principle of determining the scientific status of a theory.

Falsification from above is the method of testing theories while falsifiability is the principle of differentiating between science and metaphysics. Falsification to Popper is the negative way of carrying out crucial experiments. Science to him is a hypothetico-deductive system which comprises statements. A theory is falsifiable if it incorporates two distinct classes of basic statements, notably those that prohibit the theory and those that defend it. Popper thus posits:

A theory is to be called "empirical" or "falsifiable" if it divides the class of all possible statements unambiguously into the following two non-empty sub-classes. First, the class of all those basic statements with which it is inconsistent. (Or with which it rules out or prohibits): we call this, the class of potential falsifiers of the theory, and secondly, the class of those basic statements which it does not contradict (or which it permits).[36]

Every scientific theory must make bold predictions from a definite initial condition. The initial conditions describe the theory, while potential falsifiers contradict the theory. For instance, the hypothetical statement, "all swans are white" can have as potential falsifier, "a swan was found in town

[31] Karl Popper, *Objective knowledge: An Evolutionary Approach*, p. 233.
[32] *Ibid*., p. 236.
[33] *Idem.*
[34] *Idem.*
[35] Karl Popper, *The Logic of Scientific Discovery*, p. 31.
[36] *Ibid*., pp. 65-66.

X at time t, and it was not white". This potential falsifier becomes an actual falsifier, if a swan, that is not white is actually observed. This is a deductive testing of a theory through the method of *modus tollens*. Popper opts for this deductive method because it enhances method as it shows the transmission of truth from premises to their conclusions. In addition, "a deductive inference is valid if and only if no counter example exists."[37] For instance, in the inference, all men are mortal; Socrates is a man; therefore, Socrates is mortal will be false if, all men are mortal but Socrates is a man and is not mortal. Scientific theories are thus caused explanations where in, the initial condition is the cause and the prediction is the effect.

Applying critical rationalism via falsification in testing scientific theories, Karl Popper differentiates between falsifiable and unfalsifiable theories. Unfalsifiable are not only non-scientific but pseudo-scientific. A pseudo-science is a non-scientific theory which claims to have a scientific status. Popper here identifies Marx's theory of history, Sigmund Freud's theory of psychoanalysis, and Alfred Adler's individual psychology as pseudoscientific. Even though these theories make recourse to experience, they were not different from mythical systems like astrology. The proponents of these theories resort to conformability instead of falsification, in the context of experimentation. The scientificity of a theory resides in its ability to, "forbid certain things to happen. The more a theory forbids, the better it is."[38] Moreover, when these theories encounter counter examples to their predictions, the proponent use conventionalist stratagem to immunise a theory against falsification. The conventionalist stratagem is a form of justification and a plausible archetype of comprehensive rationalism. For instance, Karl Marx made a series of predictions that were never materialised. He predicted:

Declining rather rising wages for working class and declining rate of profit for capitalists. He predicted that attempts by capitalists' nations to mollify the vicissitudes of the business cycles would be unaffected. And of course, he predicted socialists' revolutions on the most advanced capitalists' nations."[39]

Popper commends Marx's ability to make predictions but criticises Marx's disregard of critical rationalism. This is because Marx's prediction that economic revolution was to harbinger a social revolution, but this was not the case for the revolution was essentially political and took place in an economically benighted country at the time. That is, it was Russia and not England that experienced the revolution that Karl Marx predicted. Consequently, if Marx overtly declared that the Russian revolution was the falsification of his theory, he would have been an exquisite exponent of critical rationalism.

Karl Popper considers Albert Einstein as a good example of a critical rationalist and applauds Einstein's theory of relativity as an outstanding example of a falsifiable and scientific method. In 1905, Einstein developed the theory of special relativity and in 1915, he proceeded to formulate general relativity of motion. This was contrary to Newton's theory of absolute motion. What attracted Popper to Einstein's theory was not only the bold predictions of that superseded those of Newton, but Einstein's submission of his theory to future falsification when he asserted that, "if the red shift of special lines due to the gravitational potential should not exist then the general theory of relativity will be untenable."[40] These bold predictions were confirmed in 1919 in an eclipse of the sun by Arthur Erdington. During this eclipse, Erdington observed the distant star, closer to the sun and radiating light to the earth as if they were shifted away from the sun and also from one another. Popper then insists:

Here was an attitude utterly different from the dogmatic attitude of Marx, Freud, Adler and even more so that of their followers. Einstein was looking for crucial experiments whose agreement with his predictions would by no means establish his theory; while a disagreement, as he was the first to stress, would show his theory to be untenable.[41]

[37] Karl Popper, *Unended Quest*, p. 166.
[38] Karl Popper, *Conjectures and Refutations*, p. 36.
[39] William A. Gortou, *Karl Popper and Social Sciences*, New York, Albany State University Press, 2006, p. 84.
[40] Albert Einstein, quoted by Popper in, *Unended Quest*, p. 39.
[41] Idem.

If a theory is not subjected to refutation or crucial experiment and if the proponents do not consider counter examples, then is it not scientific. There are thus two key moments of applying critical rationalism in the context of experiment notably: the predictive instance and the instance of falsification. Popper then comes to a conclusion that, "the scientific attitude was the critical attitude, which could refute the theory tested."[42]

III. Critical Rationalism as the Basis of Human Flourishing

a) Critical rationalism as a pre-condition of freedom and tolerance

Tolerance is a key moral virtue that is also transversal in the different social sciences. Marjoka Van Doon refers to it as a "flawed virtue", "because it concerns acceptance of the difference between others and ourselves, that we would rather fight, ignore, or overcome"[43] it is worthy of every ethical reflection which aims at defining conditions possible for pacific coexistent. When we talk of tolerance in moral philosophy, we are tacitly conveying practical concerns such as, "freedom of speech, freedom of religion, sexual morality, drugs policy, euthanasia, the emancipation of marginalised groups, the right of cultural minorities, state neutrality and public reason."[44] Simply put, tolerance is recognising and respecting that which the other hold as a value, even though I do not validate it. To Cees Marie, it means "that one refrains from interfering with some one's convictions or practices, although one finds them objectional."[45] Barl Engelen and Thomas Nys situate the discussion of tolerance at two levels; the descriptive and the normative. The normative level answer the question, should we tolerate? And the descriptive level reflects on the question: can we tolerate?[46] In answering the normative question of tolerance, philosophers have either used metaphysics, politics, or ethics to give points why man should be tolerant. To John Locke for instance, God created all men as rational beings and as a result, no one's opinion is inviolable. He thus gives the metaphysical answer to the normative question of tolerance.

The main thrust of our argument here is that Popper's critical rationalism conceptually predates the practice of tolerance. This is developed, in that Popper refers to as the social theory of reason. Reiterating the main thesis of critical rationalism, in order to set the pace for the discussion of the epistemological motivation of moral tolerance, Popper restates, "when I speak of reason or rationalism, all I mean is the conviction that we learn through criticism our mistakes and errors, especially through criticism by others, and eventually also self-criticism."[47] Human fallibilism and the argumentative role of language obliges man to tolerate so as to communicate, understand each other so as to grow in terms of knowledge. Popper defines the social theory of reason in the following terms: "In speaking of a social theory of reason (or scientific method), I mean more precisely that the theory is an interpersonal one."[48] Critical discussion is not only a "give and take" but it is a moral responsibility of each and everyone. In prelude to every social discussion, the disputants should be epistemologically motivated by the drive to learn from his errors. It is in this way that we can realise, "the rational unity of man."[49] Popper differentiates between two attitudes in every dialogical discussion: convincing and persuading. While persuasion makes recourse to irrational proofs to justify claims,the art of convincing consists in appeal to critical discussion. The attempt to persuade is not always right because of human fallibilism. In tolerating the views of others, we do not only realise unity, but we inevitably set the basis for collective human freedom. Unlike Spinoza who asserts that freedom is ontological and an inalienable right, Popper does not agree with the thesis given that freedom can only be disciplined using tolerance in critical discussion. That is why he asserts, "Without a free exchange of ideas, there can be no true freedom."[50] If

[42] *Idem*.
[43] Marjoka Van Doon, "The nature of Tolerance and Social circumstances in which it emerges" in *current sociological review*, SAGE, 2014, pp. 1-23, p. 1.
[44] Cees Marie, *Tolerance: Experiments with freedom*, Springer, Netherlands, 2018, p. 1.
[45] *Ibid*., p. 4.
[46] Bart Engelen and Thomas Nys, "Tolerance: A virtue? Towards a broad and descriptive definition of tolerance", in *Philosophy In the Contemporary World*, Vol. 15,No. 1, 2008, pp. 44-54, p. 45.
[47] Karl Popper, *All life is problem-solving*, p. 84.
[48] *Idem*.
[49] *Ibid*., p. 86.
[50] *Idem*.

we adopt Spinoza's view of freedom as an inalienable right, that will be tantamount to justificationism and authoritarianism. To avoid this logical impasse, Popper stipulates that, no one should be the measure of reason for, "to find out whether our ideas are sound, we need other people to try them on. Critical discussion is the basis of free thought for each individual."[51] Popper however identifies the paradox of tolerance, which is raised in the question: should we tolerate the intolerant? The first reason Popper constructs for the non-toleration of the intolerant is that, such attitude will lead to the demise of tolerance. Intolerance is authoritative and violent, and cannot be acceptable attitudes for the realisation of, "tolerance (…) that is closely allied with other virtues such as modesty, generosity, and hospitality."[52] The first attitude to be adopted towards the intolerant is argumentation. However, if they outrightly refuse to inculcate critical discussion and tolerance, then their intolerance should be incriminated among other grave crimes of the society. He thus concludes:

We should therefore claim in the name of tolerance, the right not to tolerate the intolerant. We should claim that any movement preaching intolerance places itself outside the law and we should consider incitement to intolerance and persecution as criminal exactly as we consider incitement to murder or kidnaping; or as we should consider incitement to the rival of slave-trade.[53]

The above implies that the social institutions should be those that ensure freedom of thought, critical discussion, and tolerance. We shall examine this under the political implication of critical rationalism.

b) Critical Rationalism as antidote to Violence

Our claim here is that violence as a vice arises from the epistemological vice of irrationality, while peace as a moral virtue is a logical consequence of the epistemological virtue of rationality. Popper situates the genealogy of violence in the dialogical context. He states that, "when two men disagree, they do so either because their opinions differ, or because their opinions differ or both."[54] When such disagreement on opinion or interest arises, they can be managed either using arguments or violence or both. When we resort to argument to resolve the conflict, we end up convincing each other of who is wrong and who is right for the objective is to learn from each other. Thus, critical rationalism demands humility, that is, the awareness of our fallibility and the consciousness that making mistakes is a disposition of all humans. Popper thus asserts that, "critical rationalistic attitude presupposes a certain amount of intellectual humility"[55] similar to the Socratic irony. However, when one exhibits pride in critical discussion that is the claim to the absolutism of the truth and knowledge as it is the case with religious extremism, it will unavoidably lead to violence. That is, "only if we give up our authoritarian attitude in the realm of opinion, only if we establish the attitude of give and take, readiness to learn from other people, can we hope to control violence inspired by piety and duty."[56]

Violence is a moral sequel of the human inexorable demeanour of resorting to irrationalism in the context of justifying beliefs and actions. Popper's view is of course contentious for an irrationalist may point out that not every emotion is destructive. That there are constructive emotions like love, however, that does not suffice to warrant the penchant for emotions as a legitimate attitude of human coexistence. This is because when constructive emotions, fail to justify our beliefs and attitudes, the only alternative to employ are destructive emotions, one of which is violence. Another source of conflict in the human society is inequality in its multiple dimensions. When we turn to irrationalism, viz emotions such as love leads to the attitude of partiality. This is because "we cannot feel the same emotions towards everybody."[57] Emotions create the social attitude of preference, in which we irresistibly "divide men into those who are near us, and those who are far from us."[58] This division proceeds to social conflictual

[51] *Ibid*., pp. 86-87.
[52] Andrew Fiala, *Tolerance and Ethical Life*, continuum, New York, 2005, p 1.
[53] Karl Popper, *The open society and its Enemies*, Vol. 1, p. 226.
[54] Karl Popper, *Conjectures and Refutations*, pp. 355-356.
[55] *Ibid*., p. 256.
[56] *Ibid*., pp. 356-357.
[57] Karl Popper, *The Open Society and its Enemies*, Vol. 1, p. 222.
[58] *Idem.*

classes such as, "friend and foe"[59], into family, tribe, country, religion and race, on the basis of emotions. Popper thus deplores the emotive attitude of dividing mankind into, "friend and foe: into those who belong to our tribe, to our emotional community, and those who stand outside it; into believers and unbeliever; into compatriots and aliens; into class comrades and class enemies; into leaders and led."[60] The weakness of constructive emotions to secure equality and peace is an extenuation to rethink the role of consequentialist moral frameworks in enhancing social coexistence. This is because those frameworks such as hedonism, eudemonism, utilitarianism, egoism and Epicureanism use emotions like happiness, and pleasure to develop moral justifications of human acts. Instead of teaching emotions that are deemed constructive, people should be taught on how to be rational. Even though there are irrationalist positive attitudes like love and respect humanity, but the viability of such emotions is not a guarantee, for the abuse of constructive emotions ineluctably leads to destructive emotions: such as violence. Thus, Popper asserts: "I do not overlook the fact that there are irrationalists who love mankind and that not every irrationalism produces criminality(...), he who teaches that not reason but love should rules, opens the way for those who rule by hate"[61] Popper encapsulate this using the "harmless test case." Let us consider a case of conflict of love, where Tome Likes theatre while Dick loves dancing. Out of love, Tom wants to go for dancing while Dick thinks going to the theatre will be beneficial to Tom. To Popper, "This conflict cannot be settled by love; rather, the greater the love, the stronger love will be conflict."[62] Confronted with this clash of the poles of love, one will resort either to emotion of violence or to reason, impartiality or "reasonable compromise." It can then be inferred with Popper that, "no emotion, not even love, can replace the rule of institutions controlled by reason."[63] When we employ love to impose our interest on others, the result is conflict and violence. We may be socially obliged to help others in difficulties but, we cannot determine their happiness. Love should then be a matter of privacy and not a value to be institutionalised in public management.

Critical rationalism is socially instructive. No one is more rational than the other, since reason is an attitude and not a faculty. We owe our reason then to the other for it is our critical discussion with them, which reveals our mistakes. Our opinions are not always superior to those of others. What is instructive then is the fact that we learn from our mistakes, when we are criticised. Consequently, we should "take others and their arguments seriously."[64] Everyone has the right to his opinion as well as the right to be heard. This thus leads to the, "necessity of social institutions to protect freedom of criticism, freedom of thought, and thus freedom of men."[65] This poses the question: what social institutions and which form of socialism can ensure the practice of critical rationalism? This is answered in the next articulation on critical rationalism and liberal democracy.

c) Critical Rationalism as the basis of Liberal Democracy

There is a closed-grained dialectics between critical rationalism and social organisation. Just as well as critical rationalism should determine the status and quality of social organisation, the former also creates a conducive atmosphere for the development and promotion of critical rationalism. Popper emphasises on this as he posits that, "Reason, like science grows by way of mutual criticism, the only reasonable way of planning, its growth is to develop those institutions that safeguard the freedom of criticism, that is to say, freedom of thought."[66] It seems contradictory that Karl Popper who is against historicism and collectivist appropriation of reasoning is answering the question of the best form of political rule. However, Popper thinks that the state is a necessary evil. Unlike zoologic contractionist anthropology in which man is the wolf of the other, Popper holds that man is angelic and gentle. This never the less does not exclude the possibility of natural differences between humans. As a result, the state is necessary for the protection of the rights of all humans. But, what type of government, given the former is the political

[59] *Idem.*
[60] *Idem.*
[61] *Ibid*., p. 223.
[62] *Idem.*
[63] *Idem.*
[64] *Ibid*., p. 225.
[65] *Idem.*
[66] Karl Popper, *The Open Society and its Enemies*, Vol. 1, p. 214.

component of the state? Popper has a predilection for democracy as opposed to tyranny. He differentiates between democracy and tyranny on the basis of the populace propensity to carry out a pacific change of government. He thus declares that, "the difference between democracy and tyranny is that under democracy the government can be got rid of without bloodshed; under tyranny it cannot."[67] The ensuing question is, how will the crowd decide when Popper holds that anything we make recourse to take decision other than reason is irrational? To this question, Popper positions himself against the democratic principle of "majority rules". To Popper, majoritarianism is not the key element of democracy for everyone is fallible and the majority can err. To him, we are democrats, "not because the majority is always right, but because democratic traditions are the least evil ones we know."[68] Popper is motivated positively and negatively to defend liberal democracy. Democracy is the only political organisation that creates conditions possible for an open society. Democracy then promotes the values of an open society such as individualism, tolerance, critical discussion, and equality of humans. On the negative motivation, liberal democracy can help to curb the ills of radical socialism and capitalism. Politics was never a central issue, however, his rejection of Marxism in 1919 and the repercussions of Hitler's rise to power and the right and left wings movement in the 1920s and 1930s ignited the zeal to reflect on forms of political organisation.

Popper is not interested in the justificationist question of the foundation political regimes. Instead, he focused on the teleological question of the purpose of political regimes. He puts them in the following terms:

It is therefore wrong to put stress (…) on the question: "who should rule? The people (proletariat) or even the best? (the good) or (evil) capitalists? The majority? The party of the left, the party of the right? Or the party of the centre? All these questions are wrongly posed. For it does not matter who rule if it is possible to get rid of the government without bloodshed.[69]

It is not the nature of democracy that pleases Popper, but the ability of democracy to promote the values of freedom and tolerance. With freedom and tolerance, it is possible for the government to peacefully change the government through elections. Of course, the powers of the government should be checked with a constitution, however, the latter should be the legal fruits of free of constructive and rational discussion. To guard against political absolutism that is the corollary of the abuse of democratic governments, Popper insists that, "constitutions should not be changed rightly, but, it is good to discuss them critically, if only so that we remain aware of their importance."[70]

Popper differentiates between representational democracy and democracy of proportionality. Representational as practised in Great Britain creates the possibility for a leader to ignore his party and fight for the aspiration of his people. He cites the example of Winston Churchill who changed his party twice because he was motivated by the need to provide for his people. On the contrary, democracy of proportionality is "not people's government but party government – that is, party leaders government."[71] Multipartism is a threat to unity and the efficiency of the exercise of power. As a result, "the more parties there are, the more difficult it is to form government."[72] A dual-party democratic state is thus preferable. Given that the criterion for political legitimacy is the ability to change government without bloodshed, Popper thinks that the fewer the political party the easier it is to change regime and the more political parties, the complicated it is to replace the government. The two party state also ensures the critical mind and permits members to make critique of their parties and as such, "parties from time to time forced to learn from their mistakes."[73] With the two party-democracy, the government advances arguments, policies and decisions, and the opposition plays the role of the critical class. In as much as the state has a duty to promote freedom, there is need for the censorship of public opinions, the

[67] Karl Popper, *Conjectures and Refutations,* p. 351.
[68] *Idem.*
[69] Karl Popper, *All Life is Problem-Solving,* p. 94.
[70] *Idem.*
[71] *Ibid.,* p. 95.
[72] *Idem.*
[73] *Ibid.,* p. 97.

institutionalised and the non-institutional ones. This is also because of the paradox of freedom, which illustrates the situation where out of freedom, people may infringe on the freedom of the others.

CONCLUSION

It was a question of making a meta-ethical of interpretation of Karl Popper's critical rationalism and deducing the implicit epistemological values and virtues that can set the bases for moral human flourishing. That is, can we proceed from epistemology to justify ethics on one hand and promote social cohesion and the moral development of man, on the other hand? From our examination above, it can be inferred that critical rationalism is articulated on the following tenets; the psychological condition of fallibilism, the biological motivation of the growth of knowledge, the argumentative function of language is the logical condition while falsification is the epistemological orientation of critical rationalism. Questioning the role of critical realism in enhancing the moral welfare of man, we inferred that living- together, pacific socialisation and human flourishing are only possible if the relationship between humans is characterised by dialogue, intersubjective criticism, and tolerance. Such tolerance is grounded at the same time on the acceptance of human fallibilism and the readiness to learn from each other. Authoritarianism thus gives way for autonomy for each and everyone has the right to express their views. This social theory of reason is a conceptual panacea to violence, conflict, and disunity. Popper's critical rationalism does not only sets the moral bases for man's relationship with the other, but it also defines conditions for a liberal democracy that can protect the social application of critical rationalism.

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