The Combination of Critical Rationality and the Theory of Democracy in Karl Popper's Political Thought

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Abstract

Popper, by proposing the theory of falsifiability as a prerequisite for the scientific nature of theories and hypotheses and by rejecting inductive method as the conventional scientific methodology up to that time, presented a new criterion for distinguishing science from pseudo-science, which sparked much agreement and disagreement. Inspired by the Socratic dialectical method, he affirmed the uncertainty and conjectural nature of theories and beliefs, and by equating reason with criticism, he considered the only method of approaching truth to be through continuous dialogue while observing the principles of liberty, tolerance, and fallibility in a free environment guaranteed by the democratic state he envisioned. The democracy Popper had in mind, contrary to the prevailing interpretation, did not mean rule by the people or rule by the majority but rather stemmed from critical rationality and its foundations such as falsifiability and fallibility, which had a negative rather than a positive character. Popper, through a negative interpretation of how democracy functioned in ancient Greece, particularly during the Periclean era, first regarded the age-old question of "Who should rule?" as fundamentally mistaken and defined the correct interpretation of democracy as the ability to remove or dismiss an undesirable government without bloodshed. He redefined the punishment of exile in ancient Greece as a method of preventing tyranny and despotism stemming from popularity, thereby presenting evidence of the negative and deterrent aspect of democracy. In this study, the researcher, based on a descriptive-analytical method, attempts to show the close relationship between the theory of critical rationality and Popper's theory of democracy based on the main question and hypothesis.

Keywords: Democracy, Critical Rationality, Falsifiability, Fallibility, Epistemology

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Introduction

Karl Raimund Popper (1902–1994), by criticizing the problem of induction and proposing the problem of demarcation, created a stir in epistemological debates in the first half of the twentieth century. He, by utilizing Hume's skepticism regarding the illogical and psychological nature of the inductive method as the dominant methodology in empirical sciences, attempted to demonstrate that scientific theories are not formed through the inductive method but rather through problems and prior conjectural theories formed consciously. He went further to deny the external existence of the inductive method in the formation of scientific theory. Popper considered knowledge arising from the scientific method, contrary to the views of logical positivists and empiricists, to be conjectural, non-dogmatic, and fallible. Through proposing the problem of demarcation and relying on his theory of falsifiability, he distinguished science from pseudo-science not based on verifiability but on the falsifiability of theories. In other words, he believed that the more a theory has informative propositions and predictive power, the more content it has, and the more it is open to falsification—and vice versa, theories that offer no path to potential falsification in the future are non-scientific (though not meaningless or nonsensical as claimed by logical positivists). Popper claimed that all human knowledge is conjectural and uncertain, and fallibility is an inseparable part of human epistemology. Therefore, our theories might be refuted or reinforced by future efforts. Popper even went further and, in criticizing Kant, opposed the certainty of innate knowledge (space, time, etc.)—though he stated that besides this issue, he agreed with the rest of Kant's epistemological theories.

Popper, opposing empiricists such as Bacon and some logical positivists who believed in knowledge arising from data accumulation, and influenced by Darwin's theory of evolution, proposed the theory of evolutionary epistemology. In this framework, conjecture and error play a central role after eliminating theories that do not correspond to reality. Popper emphasized that unlike animals, viruses, or amoebae that perish with wrong hypotheses, humans, through criticism of their theories, are protected from this danger and do not perish with the refutation of their ideas. Popper introduced this methodological approach from the natural sciences into political theory and applied falsifiability or the negative perspective to his theories in the field of politics, especially his theory of democracy. In fact, Popper viewed society as an experimental laboratory and social theories as scientific theories. Continuing with this approach, and regarding the main question of political philosophers—"Who should rule?"—as fruitless, he believed based on his negative methodological approach that we must seek a form of governance in which people can eliminate the ruling class and bring a new government to power based on a new theory, without resorting to violence. Governments are judged by the people, and election day is not the day of legitimizing a new government but a day of holding the previous one accountable. In his theory of democracy, while applying his falsifiability theory, he also, in Kantian fashion, considers ethical elements. Popper believed that the elimination of violence is the primary factor in adopting a critical approach to politics. With the removal of violence, there exists the possibility of dialogue, criticism, and elimination of undesirable theories, and people have the

freedom to continuously present their theories and be practically responsible for their decisions. Popper viewed democracy as the only method allowing for the free expression of opinions without eliminating the critic, and his defense of political liberty as the foundation of free criticism made him a staunch liberal democrat. However, Popper never believed in rule by the people in its common historical sense. He saw democracy as merely a way to say "no" to an existing government without violence, and elections as a means to reject or confirm an existing government and as a passage toward a new government based on a new theory. The democratic state Popper envisioned is a realist, problem-solving government that adopts a negative view toward concrete problems such as poverty and unemployment, where moral dimensions are visibly considered. He saw individualism, autonomy, and responsibility as essential to the structure of democracy and, contrary to many neoliberals, believed in state intervention in favor of the underprivileged and accepted aspects of paternalistic governance. Based on his belief in the objectivity of problems and opposition to relativism and utopian subjectivism, he suggested that democratic states should focus not on subjective and non-objective matters such as happiness or welfare—which stem from utopian and historicist ideas in serious conflict with freedom and choice—but rather on eliminating objective and experience-based problems like poverty, unemployment, inflation, etc., which Popper referred to as "negative utilitarianism." He saw the main function of a democratic state as guaranteeing the freedom of its citizens. A freedom which, if left unchecked, becomes the greatest threat to itself—what Popper called the "paradox of freedom." To establish and strengthen democracy,

Popper considered certain prerequisites necessary, such as the expansion of maritime trade and commerce, the growth of the book market and reading culture, the printing industry, and the advancement of empirical sciences.

Research Background

Rahbar Mahmoudzadeh, in the book *Analysis of Action in the Logic of Situations* (2018), in a completely new authored work in the field of Popper's methodology, examines action analysis in the logic of situations and claims that this type of methodology is uniquely his and is considered by him as an alternative to other inefficient methods in the philosophy of social sciences.

Jalaeipour, in the article *Consequences of Revolution from Popper's Perspective* (2011), explains Popper's theory of social engineering and contrasts it with totalitarian and revolutionary social engineering. Referring to Popper's opposition to any fundamental and rapid social change that could pave the way for seemingly benevolent dictators, the author concludes that revolutions, contrary to the ideal societies depicted by revolutionary ideologies, result in authoritarian governments and the disappearance of freedom.

Zibakalam, in the article *Rationality in Popper's Philosophy* (2011), seeks to extract and reconstruct the components of Popperian rationality and show that it is not entirely possible to escape from the positivist, justificatory approach and provide a wholly negative and critical epistemology. Ultimately, the author, by presenting various arguments regarding the weaknesses of falsificationist epistemology,

concludes that Popper could not avoid dogmatic and justificatory stances.

Sajjadi, in his article titled *Popper's Scientific Methodology and Value Judgment* (2011), conducts a genealogy of the term "value" in the history of thought, then, by defining falsifiability of propositions from Popper's perspective, considers it as a criterion for distinguishing science from pseudo-science and metaphysics and positions Popper's methodology in opposition to inductivists and logical positivists.

Amir Masoud Shahramnia and Jalal Hajizadeh, in the article *Explaining the Foundations of Democracy in Karl Popper's Philosophical Thought* (2010), examine the relationship between Popper's philosophical and epistemological foundations and his theory of democracy. They attempt to demonstrate the logical consistency between Popper's scientific-philosophical foundations and the principles and teachings derived from them with his democratic model.

Reza Sadeghi, in the article *Popper's Criticisms and the Problems of Falsifiability* (2010), tries to show that the theory of falsifiability is unable to provide a correct description of the role of observation in science and its relationship with theory.

Dr. Rouhollah Nouri, in his article *Application of Democratic Theory in Karl Popper's Political Thought* (2009), states that democracy, as a philosophy or ideology, corresponds to maximalist democracy. The author considers Popper's theory of democracy more compatible than other common theories of the state with the minimalist and pluralist state theories.

Jahangir Bagheri Ilakhchi and Mahnaz Nazelian, in the article *Democracy, Justice, and Peace in Popper's Critical Rationalism* (2009), use Popper's liberal and critical perspective on democracy to explain the categories of democracy, justice, and peace, and believe that Popper's perspective on peace and justice—and beyond that, democracy—is very close to the approach of international institutions and organizations that promote human rights.

Dr. Reza Davari Ardakani, in his book *A Critical Course in Karl Popper's Philosophy* (2008), believes that Popper refrained from engaging in deep subjects. He also, while referring to Popper's innovations in rejecting induction, prioritizing theory over observation, and the theory of falsifiability, simultaneously affirms and refutes his ideas, and does not consider Popper deserving of the title philosopher just on account of these few innovations. He asserts that accepting or rejecting historicism has no impact on the strengthening or stabilization of democracy.

Jeremy Shearmur, in his book *The Political Thought of Karl Popper*, translated by Ezzatollah Fooladvand (2007), briefly refers to the axes of criticism against Popper and the ambiguities in Popper's political philosophy. Among them is the author's belief that Popper became less positivist and more realistic about science in old age.

Jahangir Bagheri, in the article *Rationality in Popper's Political Philosophy* (2005), begins with Popper's definition of the concept of theory and briefly examines key concepts in Popper's political thought such as the growth of human knowledge, science and pseudo-science, the myth of the framework, the source of

knowledge, evolutionary rationality, the pressure of civilization, and the closed society. He then presents the principles of liberal rationalism from Popper's point of view.

Hossein Hersij, in the article *Comparison of Held's Models of Democracy in Contrast with Popper's Views* (2003), by presenting David Held's various models of democracy, evaluates and reviews them with attention to Karl Popper's theory of democracy.

Homayoun Katouzian, in the article *Karl Popper and Poverty* (1999), elaborates on Popper's relentless attack on historicism, which even includes the theories of John Stuart Mill, the economist-philosopher and Popper's fellow liberal. The author believes that the core thesis of "The Poverty of Historicism", in Popper's view, stems from the significant influence of this theory on both the theoretical and practical spheres of politics. He asserts that Popper found two key flaws in historicism: first, that the comprehensive and exclusive method of the natural sciences is entirely empirical; second, that historicists perceive social and natural phenomena as predetermined and deterministic.

Theoretical Framework

In this study, the main hypothesis is that the two principal components constituting the theory of critical rationalism—namely, the principle of falsifiability and the principle of fallibility—play a central role in the formation of Popper's theory of negative democracy. In other words, negative democracy is a generalization of critical rationalism within the open society as envisioned by Popper. The main research question is whether Popper's theory of democracy is fully aligned with his theory of critical rationalism and the principles of falsifiability and fallibility or not. Therefore, based on the descriptive-analytical approach—which includes collecting and evaluating information, identifying relationships between components, and subsequently determining the logical connection among them—first, Popper's general outlook on the concept of democracy will be explained. In the next step, after elaborating on the theory of critical rationalism and its main constituent elements such as falsifiability and fallibility, the relationship of these elements with Popper's theory of democracy will be examined, and their direct impact on the functioning of this theory will be clarified.

1- Popper's General Outlook on Democracy

In the article *"What is the Belief in the West?"*, Popper declared that in his view there are only two types of governments: first, a government under which the governed are allowed to rid themselves of the rulers without bloodshed, and second, a government under which the governed are not granted such a possibility, and the change of government is only possible through bloodshed. The former is called democracy, and the latter is tyranny and dictatorship (Popper, 2017, p. 148). With a strong opposition rooted in his epistemological theory to any kind of source of authority in human knowledge, he attempted to show that the question of origin or source is an illogical question, whose practical result in politics leads to the question: *"Who should rule?"* On this matter, Popper says:

"About fifty years ago I made up my mind to bury this question forever because it is a false problem that leads to fake and ultimately foolish solutions regarding moral necessities. From an ethical point of view, it is a profoundly immoral approach for someone to consider their political opponents as morally evil or wicked. This leads to hatred, which is always bad, and to an approach that instead of participating in limiting power, emphasizes reinforcing it." (Popper, 2019, p. 117)

Popper believes that those who consider Plato's question regarding *who should rule* to be fundamental have already accepted two assumptions:

1. Political power is inherently uncontrollable.

2. Political power is inherently entitled to rule.

Popper refers to these two assumptions as the *theory of sovereignty* (Popper, 2017, p. 304). In rejecting these assumptions, he argues, first, that political power is never absolute and unbridled by a single individual, and that such an individual always requires forces loyal to him (Popper, 2017, p. 305). Regarding the rejection of the second assumption, he points to the historical experience of the fallibility of rulers and that in order to establish institutions for overseeing rulers, the only assumption we need is that governments are not always good and wise (Popper, 2017, p. 306).

Expressing regret over the acceptance of Plato's question *who should rule* as the criterion for distinguishing types of governments throughout history, Popper says:

"It is strange that the great opponents of Plato's theory of government, instead of rejecting his theory as inadequate and ineffective, fundamentally accept the way he posed the question. In my view, the fundamental and essential question is: *To what extent should government power exist?...* Or more precisely: *How should political institutions be constructed so that even inept and untrustworthy rulers cannot cause damage to society?*" (Popper, 2017, p. 147)

Or by adding an ethical aspect to his proposal, he says:

"I propose that we replace Plato's question *who should rule?* with an entirely different question: *Are there forms of government that are morally reprehensible? And are there forms of government that allow us to rid ourselves of an evil, or even an incapable or harmful, government?*" (Popper, 2019, p. 117)

Or in another of his authored works, he emphasizes that the question *who should rule?* must be replaced with the question: *How should political institutions be organized so that the harmful actions of bad or incompetent leaders are minimized as much as possible?* (Popper, 2022, p. 74)

Regarding the definition of the concept of democracy, Popper fundamentally does not believe in defining concepts, and secondly, he does not accept the literal and conventional interpretation of democracy as "rule of the people."

Popper says that if asked what the essence of democracy is, naturally the answer would be "rule of the nation," but such a thing does not exist at all, and that answer is merely verbal (Popper, 2017, p. 17). Voting or the will of the majority is only a

method by which decisions are implemented without bloodshed, and the restriction of freedoms is minimized (Popper, 2017, p. 149).

In response to a journalist in *The Lesson of This Century* about the contradictions of democracy, Popper says:

"The literal translation of democracy as *rule of the people* diverts us from the fundamental issue in democracy, which is to avoid dictatorship, lack of freedom, and a government that is not ruled by law." (Popper, 2019, p. 88)

He even considers instilling the meaning of *majority rule* in the public mind as democracy to have adverse consequences, saying:

"There is a danger in teaching people or children that they live in a system governed by the masses, while this is neither true nor can be true. If people realize this, not only will they become dissatisfied, but they will feel deceived. This could negatively impact their judgment about the world and political matters and may even push them toward terrorism." (Popper, 2019, p. 121)

Popper identifies the true form and content of democracy in the era of Pericles and ancient Greece, and says:

"In Athens, democracy was an attempt to prevent the rise of dictators, tyrants, and bullies. That was the essence of democracy. Therefore, democracy is not the rule of the people but the control and oversight of rulers by the people. The most fundamental aspect of democracy is that one can vote *against* someone rather than *for* someone... From the beginning, the subject of democracy lay in finding a way to prevent anyone from becoming too powerful, and that remains the issue and challenge

of democracy today as well." (Popper, 2017, pp. 64–65)

Emphasizing the negative and preventive aspect of his theory of democracy, he considers the strongest point about changing a government to be this *negative power*, i.e., the threat of dismissal, and regards the *positive power* of appointing a government or a prime minister as relatively insignificant in comparison. Popper considers paying attention to the affirmative and appointive aspect of democracy to be a fundamental mistake and says:

"Unfortunately, most people don't think this way, and giving too much importance to new appointments is not without danger, because appointing a government may be interpreted as the issuance of a license by the voters and legitimization in the name of the people through the general will. In our view, in democracy, minorities must have such rights and freedoms that no majority can ever eliminate them." (Popper, 2019, p. 120)

He praises the positive impact of the negative view of democracy on government performance as follows:

"Any government that can be removed from power has a strong incentive to act in a way that attracts people to it. If a government knows it is not easily dismissible, this motivation will be lost." (Popper, 2017, p. 124)

Given his attachment to the process of direct democracy in Athens, Popper emphasizes the possibility of public judgment and, citing a quote from Pericles, says:

"Even if only a few of us are capable of formulating a policy or implementing it, all of us

are capable of judging it." (Popper, 2019, p. 120)

To realize this possibility of judgment and public criticism, Popper prescribes an agenda for democratic governments and defines the task of these governments (democracy) as the protection of individuals from all forms of government—except for one exception, which is the government of legitimate sovereignty, the government of law (Popper, 2019, p. 119). Popper believes that there must be a strong state to guarantee democracy and freedom, and by committing to equality among individuals and preserving their rights, grants liberty and tolerance to citizens who are in turn willing to grant such liberty and tolerance to others. Continuing the enumeration of the responsibilities of a democratic government, he says:

"The task of the legislator is to make possible the maximum freedom of each citizen alongside the maximum freedom of every other citizen. In other words, unfortunately, freedom must always be limited by law—that is, by order. This limitation through order is the necessary balancing factor for freedom." (Popper, 2019, p. 190)

This concern of Popper regarding the delimitation of the boundaries of freedom creates some theoretical distance between him and other neoliberal thinkers. Referring to the paradox of freedom and the paradox of democracy—which Plato had come close to discovering—he demonstrates through an example that any theory of sovereignty is paradoxical. Popper believes that even the wisest person may conclude that sovereignty should be granted to the majority. Or even a government of law may, through legislation, desire that the will of a single individual be obeyed (Popper,

2017, p. 308). Therefore, Popper refers to the true meaning of democracy—the possibility of dismissing a government without violence—as the best function of democracy.

Popper, in order to realize the possibility of public judgment and criticism, prescribes an agenda for the democratic state and states that the duty of these governments (democracy) is to protect individuals against all forms of government, and in this regard, he considers only one exception, which is the government of legitimate sovereignty, the government of law. (Popper, 2019, p. 119)

Popper's view is that there must be a powerful state to guarantee democracy and freedom, and by adhering to the equality of individuals and preserving their rights, to provide freedom and tolerance to citizens who, in return, are willing to recognize this freedom and tolerance for others. He continues by listing the duties of a democratic government:

"The task of the legislator is to make the greatest possible freedom of every citizen compatible with the greatest possible freedom of every other citizen. In other words, unfortunately, freedom must always be limited by law, that is, by means of order. This limitation by means of order is the balancing factor necessary for freedom." (Popper, 2019, p. 190)

This concern of Popper regarding delineating the limits of freedom theoretically distances him somewhat from other neoliberal thinkers. Referring to the paradox of freedom and the paradox of democracy—which Plato had approached the discovery of—he demonstrates with an example that every theory of governance is paradoxical. Popper believes that, for instance, even the wisest individual might

conclude that sovereignty should be entrusted to the majority. Or even a government of law might, by enacting legislation, wish to follow the will of a single person. (Popper, 2017, p. 308) Therefore, Popper refers to the true meaning of democracy and the possibility of removing the government without violence as democracy's best function.

Popper places special emphasis on the responsibility of rulers in a democratic government and says in this regard:

"The sense of responsibility and also the accountability of those who hold power and exercise it is the most important element and the essence of the democratic system. The issue is exactly this responsibility. In the sense that we should be responsive to objections... and if the responses are not sufficiently convincing, we should resign. Therefore, the issue is not to lead the nations, but to stand before the people in question and answer and be accountable for our actions." (Popper, 2017, p. 66)

Popper, drawing on Kant's ethical foundations, considers moral standards such as freedom and responsibility alone to be sufficient for choosing democracy as the superior form of government, and says:

"Even if it becomes clear that dictatorships are more successful economically, we must still remain democrats. We must not and are not allowed to trade our freedoms for nothing. We know that democracy is more successful— and precisely because it is a humane system. Democracy is more successful because human initiative and creativity are naturally very closely related to freedom." (Popper, 2017, p. 67)

Popper believes that we call ourselves democrats because we consider dictatorship or tyranny to be morally evil—something not only intolerable, but morally intolerable. Because it is accountable to no authority. (Popper, 2019, p. 118) I prefer a poor life in a democracy to a wealthy and affluent life in a despotic system. Because freedom is better than slavery. (Popper, 2019, p. 121)

Popper, even in his pursuit of realizing the principle of accountability, describes the party system as horrifying due to its damage to this principle, and believes that the meaning of this system is that those currently in parliament are primarily affiliated with their party, and only secondarily use their mind and thinking on behalf of the people they are supposed to represent. *"I think we should return to a condition where each representative says: I am the representative of the people and do not belong to any party."* (Popper, 2019, p. 78)

With all the above details, Popper, by equating the realm of scientific criticism with political criticism, declares his commitment to democracy and chooses democracy as the superior model of governance in Western societies:

"Our Western society has chosen democracy as a social system that can be changed— through words and, in places—even if only occasionally—through rational arguments, by rational criticism, that is, objective criticism... just like the considerations typically used in science... Therefore, I declare my support for science and democracy." (Popper, 2019, p. 191)

Popper, who has long opposed teleological and directive thinking toward abstract goals, considers a good political model to be a democracy that does not assign itself the task of

establishing a kind of cultural leadership and whose main goal is to achieve peace—in which people are culturally free and are not directed from above. (Popper, 2019, p. 79)

Nevertheless, he inevitably declares that every government possesses one or more paternalistic aspects, because the primary duty of a government is to acknowledge our right to life and liberty and, if necessary, to help us defend life and liberty as our own rights. This duty is, in itself, paternalistic. Citizens seek help from someone stronger than themselves. (Popper, 2019, p. 126)

Popper considers the inevitable paternalistic aspects of government to include: guaranteeing people's freedom and lives, national defense (foreign policy), the rights of minors, and state bureaucracy (small dictatorships). (Popper, 2017, p. 121)

Ultimately, Popper outlines the foundational principles of democratic systems in his book *Conjectures and Refutations*:

1. Government is a necessary evil whose task is to prevent crime and the oppression of the weak by the strong. But since government, due to the power it holds, is susceptible to misuse and error, its power should not be increased excessively.

2. The second principle pertains to the difference between authoritarian and democratic governments. In a democratic government, in case of wrongdoing, the government can be changed without bloodshed to prevent further damage.

3. Democracy is a framework within which one can take steps and act, but it has nothing to give in itself; it is up to us to enrich our lives by using the opportunities that democracy provides.

4. Although democracy is fallible, compared to other forms of government, it has a lesser history of malevolence.

5. Liberalism believes in evolution, not revolution (unless confronted with a despotic regime).

6. Emphasis on preserving the traditions that form the moral system of societies, i.e., in every society, there are moral values that are almost equivalent to the legal system and accepted by the people. Destroying these values is extremely dangerous, because with their destruction, the foundation of the legislative system and the rule of law becomes unstable, and demeaning the traditional system leads to the weakening and annihilation of all values.

7. No utopia can be built from scratch; in democratic societies, traditions are necessary for addressing tangible problems based on abstract laws. (Popper, 2016, p. 50)

2. Critical Rationality and Popper's Theory of Democracy

What Popper refers to as *critical rationalism* is completely different from the seemingly similar concepts that were previously used under titles such as Descartes' rationalism and

Bacon's empiricism. Popper traces the origin of his understanding of rationalism to ancient Greece, especially Socrates, and calls his distinct interpretation—based on repeated questions and answers until the subject becomes clearer and both parties become aware of potential errors in the discussion—*critical rationalism*. Socrates' insight into human ignorance, with the slogan *"I know that I know almost nothing, and even that with difficulty,"* is of the utmost importance for Popper. (Popper, 2019, p. 102)

He agrees with Socrates' view that certain knowledge does not exist, and opposes Plato and Aristotle, who considered knowledge to be certain through dialectical or demonstrative methods. Referring to the verses of Xenophanes, Democritus, and Socrates regarding the uncertainty of knowledge, Popper acknowledges three points that, in his view, are the moral principles effective in the theory of critical rationality:

1. The principle of fallibility (I may be wrong and you may be right)

2. The principle of rational discussion (the effort to provide impartial reasoning for or against a theory)

3. The principle of approaching truth (we can always get closer to the truth through a discussion that avoids personal attacks)

From Popper's perspective, criticism is synonymous with rationality, and the function of reason is criticism. In this view, it is only through reasoning that one can show the falsity of something, and argument has only the power of refutation. In contrast to this view, non-critical rationalism believes that reason

has positive power, and through reasoning, truth can be established. (Popper, 2016, p. 12)

A rational approach means being ready to accept that I may be wrong and you may be right, but through a joint effort, we can both get closer to the truth. (Popper, 2019, p. 101) Popper considers the three characteristics of a person to be: the ability to assess through criticism, compassion, and awareness of one's fallibility. (Popper, 2019, p. 58) He views life as a process of problem-solving. The general method of solving problems—from amoeba to Einstein—is the method of trial and error. Popper considers critical rationalism to be the general method of learning. (Popper, 2016, p. 18) He believes:

"Every rational person, including the rationalist, knows that reason plays a very modest role in human life, and this role is critical thinking and discussion... The person who is ready to learn from others is a rational person." (Popper, 2017, p. 122)

Popper presented a methodology for the natural sciences that significantly diverged from the methodology advocated by logical positivists and empiricists. In this methodology, the element of criticism is prominently highlighted. He believes that research in science begins with a problem, hypothesis, or expectation—which are entirely conjectural and uncertain. A problem arises when an expectation turns out to be incorrect. This situation then leads to experimental moves, to efforts aimed at replacing the mistaken expectation with a new one. (Popper, 2017, p. 9)

Thus, proposals or solutions are tested experimentally in the form of various hypotheses, and in the third stage, using deductive inference, incorrect hypotheses are eliminated, or

in other words, the preference of hypotheses over each other is determined. In the fourth stage, a new theory is formed. (Magee, 1980, p. 73) Of course, the new theory itself eventually becomes a new problem, and according to Popper, this model is dynamic and cyclical. (Popper, 2017, p. 23)

Regarding the preference of hypotheses, Popper considers three conditions:

1. The new hypothesis must explain everything the previous hypothesis failed to explain.

2. It must avoid at least some of the errors of the previous hypothesis.

3. It must, as far as possible, explain things the old hypothesis could neither explain nor predict. (Popper, 2019, p. 111)

The second theory that holds a special place in Popper's epistemology is the *Theory of Three Worlds*, which has a direct impact on his political philosophy:

*   **World One**: The world of physical objects like stones, stars, plants, animals, etc.

*   **World Two**: The subjective or psychological world—the world of feelings, pain and pleasure, thoughts, decisions, perceptions, and observations.

*   **World Three**: The world of hypotheses, theories, and the mental products of humans like languages, religious myths, stories, songs, and symphonies. (Popper, 2019, p. 30)

The products of the third world are objective and real and influence the first and second worlds. A distinguishing feature of third-world objects is that they can relate to one another logically—for example, being deducible from or logically equivalent to each other. (Popper, 2019, p. 47)

Also, the third world is an objective and independent world that will continue to exist and grow as long as there are unsolved problems. (Popper, 2019, p. 203)

Now, considering the research question and hypothesis—and knowing that Popper sees democracy as the best battleground for achieving rational changes based on critical rationality—we will proceed to examine two key components of critical rationality that have a significant and tangible impact on Popper's theory of democracy.

1-2-   Falsifiability

The most important theory in the fundamental realization of rationality is the principle of falsifiability. Unlike positivists and empiricists, he did not accept the inductive method based on repeated observations as the scientific method and, instead of that, placed the falsifiability of theories and hypotheses as the basis of the scientific method. Positivists called anything that could not be grasped by experience and perception meaningless or nonsensical. Popper, by presenting the theory of falsifiability, offered a criterion for distinguishing science from pseudoscience and strongly opposed the dichotomy of meaningful propositions versus meaningless or nonsensical and truthful ones. Popper says in this regard:

"I have called the problem of distinguishing scientific-empirical theories from other theories the problem of demarcation. Therefore, a theory is part of empirical knowledge if and only if it is exposed to possible experiences and thus, in principle, can be falsified with the help of experience. I have named the criterion of demarcation falsifiability. (Popper, 2017, p. 25)."

Popper did not regard the falsifiability of propositions as meaning that they are true and justified. From Popper's point of view, science is not the sum of true propositions, but rather the collection of propositions that can potentially be true or false. If they are false, their falsity can be shown by a contradictory experience; but if they are true, they can be assumed for the time being as a hypothesis to be true, for which there is no way to prove it (Popper, 2016, p. 25). In Popper's words, we can never justify the belief in the truth of any theory, although we can justify the preference of one theory over another (Popper, 2017, p. 1330). By placing the idea of truth at the center of critical discussions, he considered the reason for discussion to be the elimination of false theories (Popper, 2017, p. 28). In correspondence with the theory of falsifiability, Popper also presented his theory of democracy with a negative and preventive content. He believed that the most fundamental aspect of democracy is that a person can vote against someone, not for someone (Popper, 2017, p. 64). Popper considered the realm of politics and the exercise of governance as a kind of laboratory in which the theories of parties, citizens, or elites are like scientific hypotheses that can provide the possibility of falsifying or refuting the theory or opinions of the ruling party or the established government. His view of oppositions was also as a source for greater knowledge and greater possibility of falsifying the theory of the established government. Popper expressed his belief in democracy as the only form of governance that is compatible with political opposition and, consequently, with political freedom (Popper, 2022, p. 148).

Popper, regarding the negative aspect of democracy, says:

"The strongest point in connection with the change of a government is precisely this negative power of the threat of dismissal. The positive power of appointing a government or a prime minister is less important compared to this negative power. (Popper, 2019, p. 120)"

He even considered the institutions constituting democracy—which he believed all political actions should be carried out through them—to possess a negative or preventive aspect, which must be vigilant about the expansion of the scope of government power. Referring to a concept called activism in epistemology, Popper believed that we must actively and critically monitor the consequences of political initiatives [new theories]. The falsifiability of our theories, and even the possibility of our reaching objectivity and truth, depends on actively choosing and adhering to some methodological and strategic constraints and some methods in accordance with our natural inclination (Shearmur, 2013:114).

He believed that democracies are not the rule of the people but are, above all, institutions equipped to protect themselves from the danger of dictatorship. They do not allow dictatorship and the concentration of power to grow but strive to limit the power of government (Shearmur, 2013:119). Popper's belief in a negative or preventive view was manifested in his belief in two-party systems and his

criticism of proportional democracy accompanied by the presence of multiple parties. While accepting the criticisms about the incompatibility of the two-party system with the pluralistic spirit of his earlier opinions, he admitted:

"Evidence shows that in countries with a two-party system, the readiness for self-criticism after an electoral defeat is far greater than in countries where the system of seats proportional to votes is in place. In a two-party system, contrary to what might seem at first, the probability of flexibility of the parties is greater. In fact, Popper considered that in a two-party system, the possibility of explicit and unconditional falsification—by not voting for one of the parties that had the responsibility of implementing and exercising policies— is greater than in other party systems. In a two-party system, it is clear who is responsible, and also the objectively criticizable theory— namely, the theories to which the ruling party is committed—is clearly exposed to public and intersubjective judgment."

Popper, by adopting a negative and preventive approach, opposed utility-based approaches that prescribe subjective and non-objective matters such as happiness or well-being, and declared that instead of the slogan "maximize happiness," one should use the expression "the least amount of avoidable suffering for all" or "minimize pain and suffering" (Popper, 2017, p. 226).

2-2- Fallibility (Error-Proneness)

Fallibility or error-proneness is an important central concept in Popper's epistemological framework. By relying on this principle, he draws a line through any kind of certain or dogmatic knowledge, and envisions for everyone the possibility that they might be mistaken. Aside from the important effect of human fallibility in Popper's theory of the scientific method, in applying this immediate part of human knowledge in political theories such as the theory of democracy, the acceptance of this principle in a way plays a profound role in the formation and dynamism of the open society. When the principle of rejecting dogmatism and fallibility is disseminated, grows, and develops in intersubjective knowledge, all members of society see that they have the possibility that their influence in political or social decision-making processes will be real and objective. Every member of society can be a source of knowledge, theory issuance, judgment, and verdict, which, as Popper famously said, just like an individual ruling can invalidate a general ruling. Popper believed that all human knowledge is fallible, meaning our knowledge is only conjectural in nature. There is no certainty that we have attained the truth (Popper, 2017, p. 25). Popper had a strong interest, arising from his belief in fallibility and partly from expediency, in reforming society (Shearmur, 2013, p. 39).

Popper considered the learning process to be inherently accompanied by trial and error, and says:

"I am in the strongest opposition to all epistemologists since 'John Locke,' and even in the highest degree of opposition to Kant, in supporting this dictum: that all knowledge in its content is a priori in terms of its genesis. For all knowledge is hypothetical or conjectural, because it is our hypothesis. Only the elimination of hypotheses is considered a posteriori…. In other words, we learn only through trial and error…. All we learn from the world

is that some of our attempts are mistaken. (The Open Society of Popper's Life, 2017: 63)."

Popper also regarded science, based on its human nature, as fallible, and believed that in reality, everyone can be mistaken, and there is no universal criterion for truth that protects us from error. But from this fact, it cannot be concluded that the choice between different theories is arbitrary, that reason has no role in it, that learning and approaching truth is beyond our ability, and that increasing knowledge is impossible (Popper, 2017, p. 1281).

Popper, regarding the effect of the concept of fallibility on the dynamism of society and the prevention of stagnation and inertia—which are characteristics of closed and totalitarian societies—says:

"My epistemological theory is completely revolutionary, because it overturns everything our ancestors have said until now. We are active. We constantly test things and continually operate by the method of trial and error. (Popper, 2017, p. 71)."

Popper also emphasized that the principle of human fallibility affirms the existence of truth or correctness. He says:

"By fallibility I mean this belief or acceptance of the reality that everyone can be mistaken, and that seeking certainty is wrong, but this does not imply that seeking truth is wrong. On the contrary, error itself necessarily indicates that there is such a thing as correctness… Thus, it is possible to learn from our mistakes… We must seek to find our own errors, or in other words, we must aim to criticize our own theories. The only means to discover our errors is criticism and examination. (Popper, 2017, p. 1281)."

Popper considered one of the characteristics of authoritarian and non-democratic governments to be their disregard for the principle of fallibility and for learning from mistakes. Bryan Magee, in his book titled *Popper*, says:

"Authoritarian systems also forbid the critical examination of the practical information of their own policies, and in this respect condemn themselves to continuing mistakes even after harmful results have emerged. Those who are more dogmatic perish with their false theories, or at best become stagnant and frozen. (Magee, 1980, p. 100)."

By introducing the principle of fallibility in his epistemological framework, Popper incorporated two other concepts that are dependent on this principle into his ideas. First, the moral principle of tolerance, which is the logical result of belief in error. In this way, when the possibility of error is a universal reality, dogmatism and absolutism practically lose any logical foundation, and it is here that tolerance plays its role. Second, the method of implementation and advancement of programs by the government in a democratic society is in a step-by-step form, which Popper called *piecemeal social engineering*. Piecemeal social engineering means that, considering the principle of human fallibility, the unpredictability of the results of decisions, and the universal possibility of judgment about decisions, any exercise of governance and program implementation should be presented in a specific and measurable framework, and its results should be examined by the public. If these results, in intersubjective agreement, match the objective reality desired by the people—which generally has a moral aspect or includes avoidable problems such as poverty, unemployment, and inflation—they will be accepted as a

temporarily true theory; otherwise, they should be reviewed or eliminated.

Popper, citing Burke's quote—

"I have never seen a plan that has not been improved by the ideas of those who, in terms of understanding, were far below the person who pioneered it." (Shearmur, 2013, p. 144)

—emphasizes the principle of public judgment in the implementation of the process of piecemeal engineering as a democratic method. Of course, this possibility of public and non-elitist judgment in Popper's theory of democracy also has a moral aspect. In this regard, Popper says:

"I agree with Kant and believe that all morality should be based on the principle that no one should regard himself as more valuable than another. (Shearmur, 2013, p. 129)."

Popper, in explaining that rational politics becomes possible through piecemeal engineering, believes: "Rationalism is closely connected with the desire for practical social engineering, that is, of course, piecemeal engineering in the humanitarian sense, or the demand for the rationalization of society and planning for freedom and for its control by reason—that is, not by the authority of science and the quasi-rational Platonic authority, but by a Socratic kind of reason that is aware of its own limits" (Shearmur, 2013, p. 144).

One of the reasons for Popper's insistence on the implementation of democratic policymaking through piecemeal engineering was his serious opposition to utopian and historicist perspectives. According to his own statement, he was morally opposed to teleology and idealism and believed that belief in such perspectives completely tramples on the principles of freedom and responsibility and is contrary to the principle of tolerance. Popper says in this regard:
"Every action we take has unintended consequences that may be contrary to our plans. The more comprehensive this action is, the greater its unintended consequences will be. A teleological and goal-oriented government will necessarily be despotic; because first, it must be able to neutralize the opposition of others, and second, compel them to serve only within the framework of the intended goal, even if they do not believe in it" (Magee, 1980, p. 140).

From Popper's point of view, history has no meaning; rather, we must try, through piecemeal social engineering, to imprint our moral concerns onto the raw and shapeless social material. This work, in the sense described, is a democratic task. Its piecemeal nature is not due to fearfulness or timidity but arises from Popper's insistence on our fallibility, and from this thought he concludes that we cannot be certain that any particular action will definitely succeed. Popper is not afraid of bold and vigorous experiments, provided that they have an experimental spirit (Shearmur, 2013, p. 39).

The importance of piecemeal social engineering in Popper's view is so great that it even led to differences of opinion with a like-minded thinker, namely Hayek. The critical difference between Popper and Hayek is that although both use almost similar epistemological reasons to defend liberal positions, in Popper's views the fallibility of scientific knowledge is central, whereas what occupies Hayek is not

scientific knowledge but the lessons that can be drawn in politics from the social division of knowledge. The axis of Popper's political vision is the creation of a moral agenda through politics and by means of trial and error, that is, gradual social engineering (Shearmur, 2013, p. 45).

Thus, Popper believes that democracy, by considering piecemeal social engineering, gives the rulers the least opportunity for making mistakes, unlike other methods. One of Popper's concerns was that the discussion of public judgment against the policies implemented by the government, in the form of critical pluralism, might allow relativists—whose intellectual source is a shapeless form of tolerance—to ultimately lead to the domination of violence and the threat to democracy (Popper, 2019, p. 219). Therefore, in order to distinguish relativism from critical pluralism, he considered the existence of the idea of truth important.

Popper, through the principle of tolerance, refers to the principle of equality as one of the accepted foundations of democracy: *"If I hope to learn from you… in that case, I must not only tolerate you, but also recognize you as a potential equal"* (Popper, 2019, p. 231).

Conclusion:

To correctly understand Popper's political views and theories, one must fully study and examine the components that constitute his epistemological system. Upon entering the field of epistemology, Popper, by writing The Logic of Scientific Discovery, clearly demonstrated his definition of the scientific method and how science works. He drew a firm line

against the method claimed by logical positivists, empiricists, and even Cartesian rationalists. With the help of Hume's skepticism on the problem of induction—and the fact that induction has no rational basis but is rather a psychological process—he went further, declaring the existence of induction in the scientific method to be fundamentally unreal, and showed that science and the scientific problem begin with conjectural hypotheses and not from observation.

Continuing, and emphasizing Kant's theory, he declared that human beings do not derive their theories from nature, but rather project them onto nature, like light shining upon it. These theories are, first, conjectural and uncertain, and second, falsifiable, with no path to their definitive proof. Popper's theory of critical rationalism blended the theory of the scientific method with criticism, and equated reason with criticism. From Popper's point of view, theories must be objectively formulated and placed under public scrutiny for testing and refutation. In general, for Popper, the potential for falsification is the condition for the scientific nature of propositions.

Popper brought this same negative and preventive outlook, in the form of the theory of democracy, into his political philosophy. It is clear that, just as Popper, in order to provide conditions for the examination of a theory's falsifiability, demands its formulation in logical form along with its empirical testability, for the presentation of practical or theoretical theories in the field of politics and the implementation of programs by the government, he also calls for the creation of an environment in which a citizen has the best possible conditions to express criticism— a citizen who knows that both his own opinion

and that of the government are fallible; a citizen who knows that there is no absolute and dogmatic truth, but that every kind of theory must be brought into the public sphere for free criticism, so that, based on the principle of tolerance and responsibility, and with due regard for the limits of others' freedoms, the process of criticism may dynamically take shape in the framework of the method that Popper calls approaching the truth.

Popper seeks the political system that can provide these conditions only in democracy—and not in democracy as commonly defined as the rule of the majority of the people. He considered this definition fundamentally mistaken and a misunderstanding, stemming from an epistemology with authoritarian sources of knowledge, which, since Plato, by asking the question "Who should rule?" has diverted the course of democracy. Based on his negative outlook, which stems from his theory of falsifiability, he believed that the main question in democracy is how a government can be removed or dismissed without bloodshed.

He regarded the essential aim of Athenian democracy in the time of Pericles as precisely this negative aspect of democracy, and interpreted the law of exile from Athens in this sense—that it prevented tyranny and despotism arising from personal popularity. Popper saw the implementation of policy through democracies as possible via institutions, and envisioned the long-term execution of any policy also through institutions—institutions that guarantee the real spirit of democracy in its negative aspect and prevent the excessive concentration of government power.

By putting forward his theory of piecemeal social engineering—based on combining the theories of falsifiability and fallibility, with an ethical component founded on the principle of tolerance and the political freedom of citizens—Popper called for the implementation of any policy in limited and controlled dimensions, so that its unpredictable results could be carefully examined and criticized by public judgment. Popper considered this process democratic and based on critical rationalism.

Of course, Popper was strongly opposed to teleological and, as he called them, utopian ideas—in which dogmatism and determinism, along with historicism, were central—and in general considered the execution of large-scale, holistic, and hasty plans in a society, aimed at guiding it toward an abstract goal such as happiness and welfare, to be fundamentally mistaken. Therefore, he regarded piecemeal social engineering as the main tool for implementing policy or programs in a democracy.

The connection between the constituent concepts of critical rationalism and Popper's theory of democracy is so deep that he did not settle for the general concept of democracy, but entered more precisely into the realm of the functioning of parties, giving preference to the two-party system over the multi-party system or proportional democracy. He viewed the actions and results obtained in a two-party system as more controllable experiments in the laboratory of democratic societies. In this way, first, everyone knows directly the theory-maker and executor—that is, the party in power—thus satisfying one of Popper's moral concerns, namely, responsibility. Second, on election day, everyone, by voting for the opposition party or re-electing the ruling party, either falsifies the theory of the ruling political party or strengthens it.

Here it becomes clear that, in appearance, falsifiability was more important to Popper than pluralism arising from the presence of various parties. Yet Popper admitted that, first, the presence of various parties as representatives of diversity in thought, race, or religion stems from that same mistaken view of democracy as the rule of the majority; and second, when there are two parties, other smaller parties, in an exercise of tolerance, try to moderate their views on main points of agreement and unite in the form of a single party.

In the end, he recommended that democracy can always, due to tendencies arising from the pressures of civilization or the fear of accepting responsibility—similar to concepts such as freedom or tolerance—become spurious and turn into its opposite. For example, the majority may vote to establish despotism. Therefore, Popper considered the presence of institutions that safeguard democracy essential and important for the continuation of democracy, because he believed that without democratic oversight, there is absolutely no reason to think that any government would refrain from using its political and economic power for undemocratic ends.

Regarding tolerance, Popper had the same concern as he did with freedom and democracy, which can also have spurious forms, and believed it had been less attended to. By this he meant that unlimited tolerance will necessarily lead to the destruction of tolerance. If we extend the scope of tolerance and leniency without limit to the intolerant, we will have destroyed not only the tolerant, but also tolerance itself. Therefore, in order to preserve the spirit of democracy, he regarded tolerance as having an upper limit, and not being an absolute matter, and considered it the duty of the democratic state to maintain this balance.

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