PAUL FAYERABEND'S "ANYTHING GOES" EPISTEMOLOGY ITS RELEVANCE IN KNOWLEDGE DEVELOPMENT

Nazar Husain Hadi Pranata Wibawa
Institut Agama Islam Negeri (IAIN) Sultan Amai Gorontalo
Jl. Sultan Amay, Pone, Kec. Limboto Bar, Gorontalo 96181
E-mail: nazarhusain80@gmail.com

Abstract: This article seeks to demonstrate the applicability of Paul Feyerabend's "anything goes" epistemology to the development of knowledge. This study is a literature review. Data were collected through data inventory, then analyzed and interpreted. The results of the study show that "all methodologies have limitations, and the only 'rule' that can survive is 'anything goes'". The main idea of anything goes is, first, the recommendation proposed by Feyerabend related to the discourse of anything goes, only remains as a negative freeing recommendation because it requires a certain scientific situation that is considered to restrict scientists; and is often understood simply as advocating the absence of laws, methodologies, and rules in science. Second, it actually limits the movement of scientists because it requires participation only in practices that are undefined and cannot be defined. Third, it is only a consequence of the first and second premises. In other words, anything goes, both externally and internally, contains two dimensions of freedom at once. The differences in position must be clarified to avoid confusion about the status of freedom contained in anything goes.

Keywords: epistemology; Paul Feyerabend; "Anything Goes;" Knowledge development; relevance relevance

Abstrak: Artikel ini ingin menunjukkan anyting goes Paul Fayerabend relevansinya dalam pengembangan pengatahuan. Penelitian ini merupakan studi pustaka. Data dikumpulkan melalui inventarisasi data, kemudian dianalisis dan diinterpretasikan. Hasil penelitian menunjukkan "seluruh metodologi memiliki keterbatasan-keterbatasan dan satu-satunya 'aturan' yang dapat bertahan ialah 'anything goes'. Gagasan utama anything goes Pertama, Rekomendasi yang digagas oleh Fayerabend berkaitan dengan wacana anything goes, hanya tinggal sebagai rekomendasi yang membebaskan secara negatif karena mensyaratkan situasi keilmuan tertentu yang dianggap mengekang ilmuwan; dan seringkali dipahami sekedar mengampanyekan ketiadaan hukum, metodologi maupun aturan dalam ilmu. Kedua, justru membatasi gerak ilmuwan karena mensyaratkan partisipasi hanya dalam praktik yang tak ditentukan dan tidak dapat ditentukan.Ketiga, hanya menjadi konsekuensi dari premis pertama dan kedua, Dengan kata lain anything goes, secara eksternal dan internal, mengandung dua dimensi kebebasan sekaligus. Perbedaan posisi tersebut harus dipertegas agar tidak menimbulkan kerancuan mengenai status kebebasan yang dikandung oleh anything goes.

Kata kunci: epistemology; Paul Feyerabend; "Anything Goes;" Pengembangan pengetahuan; relevansi relevansi

Introduction

This paper discusses the epistemology of Paul Fayerabend; he is one of the figures which offers to gain knowledge. He explained that knowledge acquisition should not be limited and closed but by using universal theory.[1] Paul Fayerabend's views will be compared and analyzed by Kenneth T. Gallagher's epistemology in the book Epistemology of the Philosophy of Knowledge by P. Hardono Hadi. Over the last thirty years, Paul Feyerabend has developed a distinctive and influential approach to problems in the philosophy of science.[2]

Fayerabend's thoughts put forward many thoughts which are very opposing and relatively new in the dynamics of the development of the philosophy of science.[3] According to Fayerabend,

[1] Ernest Sosa, "Summary Ofreflective Knowledge," *Philosophical Papers*, vol. 40, no. 3 (2011), pp. 285–285, https://doi.org/10.1080/05568641.2011.634240.

[2] Paul Feyerabend, *Problems of Empiricism,* (New York: Cambridge University Press, 1965).

[3] John Preston, "Paul Feyerabend," August 26, 1997,

science in its development can only be explained or regulated by some regulations or the applicable legal system.[4] Such efforts will be in vain and not following the facts. According to Fayerabend, the development of science is due to the process of individual creativity; the only principle that does not hinder the process of knowledge is that it offers "anything goes."[5] Fayerabend tries to break down the notion that there is an order in knowledge dynamics.[6] Which then orders in the dynamics of science are to be realized in law and system.[7] Things like this can be understood when considering the complexity of acquiring knowledge.[8] Therefore, it is impossible to rely on various scientific developments on any one methodology or law of development.

Fayerabend strongly opposes the method with solid arguments.[9] According to him, scientists should be open when conducting research and deciding, even if existing methods guide them. He must be free.[10] In the process of scientific activity must try to be "anarchistic."[11]

The epistemological crisis concerning the development of scientific methodology will inevitably lead to a broader problem as its question status, namely the knowledge crisis of Western society where science is developing very fertile.[12] What is meant by a knowledge crisis here is not a reduction in knowledge because today, knowledge is increasing both qualitatively and quantitatively. This crisis is more related to the narrowing of knowledge due to specific methodological reductions accompanied by the fragmentation and instrumentalization of knowledge.[13] A "crisis," according to F. Budi Hardiman, occurs when the transition from the old state to the new state is uncertain. For example, the old way of thinking has been abandoned. However, the new way of thinking has not been fully integrated into human beings with all their dimensions, producing deep anxiety and anxiety due to the incomplete weltanschauung being formed. The crisis of knowledge that has occurred since the first half of this century is the result of the development of the history of thought that has occurred since the process of modernization occurred in the West, which undermined the social value system in the Middle Ages, through the Renaissance and culminated in the Aufklarung era and finally met its limits since the beginning of this century.[14]

Freedom is often interpreted as exclusive but is often categorized positively and negatively.[15] Both are very influential on anything goes, which has an external and internal side.[16] The externality of anything relates positively to the meaning of freedom[17], while the internality of anything goes is negatively related to the meaning of freedom. Thus, from the perspective of anything goes, science can increase individual freedom. However, both are in a unique situation to remind the meaning of knowledge, which has two faces, and the nature of individual freedom, which is divided into positive and negative.

https://plato.stanford.edu/Entries/feyerabend/.

[4] Paul Feyerabend, *Against method*, 3rd ed, (London; New York: Verso, 1993).

[5] Paul Feyerabend, John Preston, and Paul Feyerabend, *Knowledge, Science, and Relativism: 1960-1980*, Philosophical Papers, (New York: Cambridge University Press, 1999).

[6] P. K. Feyerabend, "Philosophical Papers," *Critica*, vol. 16, no. 46 (1984), pp. 71–77.

[7] "Review: Professor Bohm's Philosophy of Nature on JSTOR," accessed June 19, 2023, https://www.jstor.org/stable/685921.

[8] d-Body Problem on JSTOR," accessed June 19, 2023, https://www.jstor.org/stable/20123984.

[9] Preston, "Paul Feyerabend."

[10] Paul Feyerabend, *Three Dialogues on Knowledge* , (Blackwell, 1991).

[11] "On the 'Meaning' of Scientific Terms on JSTOR," accessed June 19, 2023, https://www.jstor.org/stable/2023300.

[12] "Realism and the Historicity of Knowledge on JSTOR," accessed June 19, 2023, https://www.jstor.org/stable/2026649.

[13] F. Budi Hardiman, *Melampaui Positivisme dan Modernitas*, (Yogyakarta: Kanisius, 2003), p. 50.

[14] Hardiman, 51.

[15] "On the Historical Origins of the Contemporary Notion of Incommensurability: Paul Feyerabend's Assault on Conceptual Conservativism - ScienceDirect," accessed June 19, 2023, https://www.sciencedirect.com/science/article/abs/pii/S0039368105000208.

[16] Feyerabend, Preston, and Feyerabend, *Knowledge, Science, and Relativism.*

[17] Helene Sorgner, "Challenging Expertise: Paul Feyerabend vs. Harry Collins & Robert Evans on Democracy, Public Participation and Scientific Authority: Paul Feyerabend vs. Harry Collins & Robert Evans on Scientific Authority and Public Participation," *Studies in History and Philosophy of Science Part A*, Special Issue: Reappraising Feyerabend, vol. 57 (June 1, 2016), pp. 114–20, https://doi.org/10.1016/j.shpsa.2015.11.006.

Anything cannot be understood loosely because its existence in scientific discourse presupposes fascist situations and conditions.[18] Science fascism is not the same as science crisis, as proposed by Kuhn. However, scientific fascism resembles one of the three types of Kuhnian scientific crises, not necessarily the other way around. Some parties who think that science fascism is the same as or at least resembles science in normal circumstances (normal science) seem to have missed reading that science crises have three types of "downstream." Scientific fascism shares feature with two of these three downstream types, and it should be emphasized that the other way around is not the case.

Biography of Paul Fayerabend

Paul Karl Fayerabend was born into a middle-class family in Vienna, Austria, on January 13, 1924.[19] His father was a civil servant, and his mother a tailor. World War II made life in Vienna so difficult that Fayerabend was confined to the house until the age of six.[20] His childhood and neighbors were utterly cut off from the outside world. Occasionally he went out, but only to go to the cinema.

Fayerabend ran away from home at age five because his space was limited. When he first entered school at six, he struggled socializing with friends. Fayerabend, in his autobiography, states, "I do not know how other people live and what they do." For him, the world is full of strange and inexplicable things.[21]

While sitting on the bench at the Realgymnasium, Fayerabend was known as Vorzugsschüler, a nickname given to students whose grades were above average, even at 16 years old. Fayerabend's knowledge of Physics and Mathematics has surpassed that of her teacher. However, this achievement did not necessarily encourage her to enter the academic world of Physics and Philosophy immediately. It was precisely her schoolteacher, Oswald Thomas, who stimulated Fayerabend's interest in Physics and Astronomy. His debut was when he read a philosophical text and had to read a novel to be staged by a drama group at school. Fayerabend also has a considerable interest in music. Regarding his wide range of interests and talents, Fayerabend said: "My life's journey is straightforward: theoretical astronomy all day long, especially in perturbation theory; then vocal rehearsals and teaching, opera in the afternoons; and astronomical observations at night. The only obstacle that remains is war.[22]"

World War II forced him to enter Arbeitsdienst and attend his primary education in Pirmasens, Germany. At this time, Fayerabend preferred to stay in Germany to avoid fighting, but after that, he asked to be sent to the battlefield because he was bored with cleaning the barracks. During the war, he was shot in the left side of the spine, so he was impotent for life since he was 21 years old. More or less, these things will interfere with his personal life. In 1946, he received a scholarship to study music in Weimar. Here, he joined the Cultural Association for the Democratic Reform of Germany. A year later, he returned to Vienna to study History and Sociology. Not long after, his interest turned again to Physics.

Fayerabend's academic career is getting brighter. In 1949, he managed to become chairman of the Kraft Circle, a circle of philosophy studies taught by Viktor Kraft, a member of the Vienna Circle and the supervisor of the Fayerabend dissertation project in Philosophy on basic statements. The group concentrates on efforts to solve philosophical problems non-metaphysically concerning scientific discoveries. Ludwig Wittgenstein once lectured at the Kraft Circle, so Fayerabend became interested in his ideas. Even later, Fayerabend admitted that Wittgenstein's Philosophical methods much inspired him.

In 1951 Fayerabend applied for a scholarship to the British Council to study under Wittgenstein at Cambridge University but failed because

[18] Horst Treiblmaier, "The Philosopher's Corner: Paul Feyerabend and the Art of Epistemological Anarchy - A Discussion of the Basic Tenets of Against Method and an Assessment of Their Potential Usefulness for the Information Systems Field," *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, vol. 49, no. 2 (Mei, 2018), pp. 93–101, https://doi.org/10.1145/3229335.3229342.

[19] Sorgner, "Challenging Expertise."

[20] "On the Historical Origins of the Contemporary Notion of Incommensurability: Paul Feyerabend's Assault on Conceptual Conservativism - ScienceDirect."

[21] Qusthan Abqary, *Melawan Fasisme Ilmu* (Jakarta: Kelindan, 2009), p. 17.

[22] Abqary, p. 18.

Wittgenstein died before Fayerabend arrived in England. A year later, Popper replaced Wittgenstein to become a supervisor at the London School of Economics (LSE). At LSE, Fayerabend studied Quantum theory and Wittgenstein's thought.

Fayerabend returned to Vienna in 1953 rather than work as Popper's assistant. Even though Popper had already sought an additional scholarship for Fayerabend to work as his assistant. Popper's offer was taken up by Joseph Agassi, a friend of Fayerabend, who later accused Fayerabend of plagiarizing Popper's ideas. For the first time, in 1955, Fayerabend taught full-time at the University of Bristol, England. A year later, he married his second wife, Mary O'Neill. Married-divorced personal life, more or less, will undoubtedly affect a person's emotional maturity. It is clear that Fayerabend, despite being married four times, did not learn from past marriages. Fayerabend became a visiting lecturer at the University of California, Berkeley, three years later. Here, the initial framework of his philosophical thought begins to be built. On February 11, 1994, he died at 70 due to brain cancer.[23]

Sources and Nature of Science

Based on the historical development of the Philosophy of Science, Paul Karl Fayerabend is a figure of a scientist whose primary concern is constructing a Philosophy of Science. He has sued a lot about truth claims and the reliability of a particular method, school, or system.[24] Fayerabend argues that the scientific method is not the only measure of truth, including knowledge developed in the modern era, but only one of the various ways to find the truth.

Two fundamental issues are critical of Fayerabend in his epistemological anarchism project, namely: Criticism of the idea of the establishment (against method), Criticism of scientific activities, and the function of the position of science in society (against science).[25]

First, Fayerabend asks a question what is a method for? How does it work? The answer given by Fayerabend is that science is now more popular than it used to be by simply collecting facts and theories, which eventually get stuck in gathering facts that are so tight. There are several arguments offered by Fayerabend when criticizing the approach to science, which is too logical and too strict. The first argument is not the time to show the lack of findings of scientists. Second, the extent to which facts support the sophistication of the theory of relativism. Things like this can be realized; the involvement between theory and fact is always maintained no matter what happens. According to Fayerabend, the success of a theory refers to a more comprehensive theory. For example, it analyzes a Newtonian theory using the general theory of relativism. That is when analyzing a theory must be compared with other theories.

Second, suppose the sequence of a theory leads to new predictions. In that case, it will reduce and absorb the fact that eventually, it is found that methodology tells scientists whether to maintain or leave a research program. Every theory in its journey is bound to experience errors. History and methodology, when combined into a single unit, according to Fayerabend, will experience very significant progress.[26]

Kenneth T. Gallagher argues at the end of his book Science which exemplified Galileo's mechanics of nature, is accepted uncritically with the general category. In order to gain complete knowledge of nature, one has to wrestle with nature for the benefit of humans.[27] Atomic theory as the center of scientific activity has yet to be completed in its debate about the reality of atoms[28].

The two figures share the same view that science is not the only one that can claim to get the truth; many theories are needed to make it possible to get the truth. Science itself has weaknesses. Kenneth T. Gallagher mentions that

[23] Abqary, p. 18.

[24] Paul K. Feyerabend, "From Incompetent Professionalism to Professionalized Incompetence—The Rise of a New Breed of Intellectuals," *Philosophy of the Social Sciences*, vol. 8, no. 1 (March 1, 1978), pp. 37–53, https://doi.org/10.1177/004839317800800103.

[25] "Review: [Untitled] on JSTOR," accessed June 19, 2023, https://www.jstor.org/stable/686526.

[26] Feyerabend, Preston, and Feyerabend, *Knowledge, Science, and Relativism*, pp. 158–59.

[27] P. Hardono Hadi and Kenneth T Gallagher, *Epistemologi, filsafat pengetahuan*, (Yogyakarta: Penerbit Kanisius, 1994), p. 171.

[28] Hadi and Gallagher, p. 172.

scientists' debate on atoms and space shows that science also has deficiencies in obtaining objective reality. Fayerabend argued that science is no longer as popular as it used to be; explanations are so strict in scientific objects that it has brought back the experience of the dark ages in philosophy, where knowledge could no longer refute religious dogmas.

Ways of Acquiring Knowledge

According to Fayerabend, science is closer to mythical tradition than philosophy.[29] Myth is one of the thought forms created by humans and not necessarily the best. The position of myth is superior only to one side after siding with a particular ideology or accepting it and studying its advantages and limitations.[30]

According to Fayerabend, a new hypothesis or theory does not have to fulfill all the elements of the old theory because this will only cause the old theory to be defended rather than looking for the correct theory.[31] Maintaining old theories will narrow thinking, so they cannot open new theoretical fields and natural science to subjectivity, sentiment, or prejudice. Just as the Quantum theory was initially opposed even by Einstein, "God does not play dice" because the implications of this theory will cause uncertainties that significantly interfere with thinking.

New theories will always emerge with great difficulty and be challenged by incriminating facts from old theories, even though this new theory is a scientific revolution that is very important and necessary for advancing science. Fayerabend says that being restrained by the prevailing modern scientific theories is the same as being restrained by the dogmatic teachings of medieval Europe. In this respect, modern scientific scientists have the same role as the cardinals of the ancient Church, who determined right and wrong.

The anti-method, the hallmark of Fayerabend's thought, is the result of Criticism of scientists who recognize the existence of a method that is classified as standard and applies universally and even think that the method can be valid for all time and can overcome various research facts. For him, things like this are inappropriate with objective reality.

The offer given by Fayerabend as a substitute for the method has two main principles: the principle of breeding and the principle of whatever is okay.[32] The principle of development means that we work within various systems of thought of life forms and institutional frameworks. However, instead, we should place the pluralism of a theory and methodology, systems of thought, and forms of life within an institutional framework. Moreover, the principle of freedom is okay (anything goes), which means freeing all forms of a journey as it is without being bound by a system. According to Fayerabend, all methods have limited functions because they cannot be universally applied.[33]

According to Gallagher, the first principles are three principles, namely the first principle of identity, what is there, what is not there is not there. Secondly, whatever adequate reasons exist have adequate reasons for their existence. Lastly, the principle of causality or efficient causation, whatever starts to exist, demands the existence of an efficient cause.[34] Explanation of the principle of identity that there is a radical difference between existence and non-existence. If you do not know this first principle, you will not be able to know anything. The identity of the Javanese as we know it maintains harmony, can adapt to other cultures, is friendly, and maintains harmony; that is its identity. Likewise, the principles of identity follow their objective reality.

The principle of adequate reasons cannot be doubted and can be deeply accepted; this principle requires the thought that the order of existence

[29] Paul K. Feyerabend, "Realism and Instrumentalism: Comments on the Logic of Factual Support," in *Critical Approaches to Science and Philosophy*, (Routledge, 1999).

[30] Feyerabend, Preston, and Feyerabend, *Knowledge, Science, and Relativism*, p. 259.

[31] Paul Feyerabend, "Putnam on Incommensurability," *The British Journal for the Philosophy of Science,* vol. 38, no. 1 (1987), pp. 75–81.

[32] "Knowledge and the Role of Theories - Paul K. Feyerabend, 1988," accessed June 19, 2023, https://journals.sagepub.com/doi/abs/10.1177/004839318801800201?journalCode=posa.

[33] T.W Prasetya, *Hakikat Pengetahuan Dan Cara Kerja Ilmu-Ilmu*, (Jakarta: Gramedia, 1993), p. 57.

[34] Hadi and Gallagher, *Epistemologi, filsafat pengetahuan*, p. 95.

must be understood, and there is a particular understanding in which this principle can be used for every action.[35] Explanation of adequate reasons can be applied in obtaining objective reality. This second principle can be sufficient to reduce the first principle. The third principle of efficient causation leads directly to the causation principle, which can be seen as a further explanation.

The two figures, Fayerabend and Gallagher, began to discover reality with their respective principles, which had their characteristics. The foundation of the initial principles leads to finding objective reality. Both start to get the object's reality by setting the understanding of positivism or science by departing from one theory that will limit theoretical pluralism's meaning.

Testing the Truth of Knowledge

If our understanding of a theory can be maintained and is better than the old theory that has existed so far, then the new theory will replace the position of the old theory. Thomas Kuhn called it a "paradigm shift." When there is no proper methodology for advancing the scientific tradition, Fayerabend calls it "anarchist epistemology."[36] Fayerabend said "anything goes" is a hypothesis that can be used even more extremely; he said that it could not be accepted rationally, very different from existing theories or experimental results. An approach like this can have progressive developments when testing the truth of knowledge, not just relying on inductive processes as applies to everyday science. According to Fayerabend, a hypothesis does not have to meet the criteria of all the old elements because things like this will cause the old theory to be maintained rather than looking for the correct theory.[37]

Science has always been at the forefront against all forms of authority and superstition. The position of this knowledge will improve intellectual quality. The function of science is to provide a radical and critical understanding of society. Human liberation from every ideological pressure helps people to have enlightened insight into a thought. A truth without any reciprocity will give rise to a veiled tyranny. This kind of truth must be subverted. According to Fayerabend, every falsehood will help us overthrow every tyrannical form.[38]

In such a wide society, the position of scientists has the same respect as bishops. For example, some European societies avoid clashes between scientific ideas and Christian teachings. If a clash like this happens, science will have an actual value, while Christian teachings are wrong. Fayerabend said that almost nowadays, no one is killed to join the scientific field.[39]

The criterion of "truth," according to Fayerabend, is a good and neutral word.[40] Loyalty to truth in everyday life makes it easier for a person to accept the truth of an ideology that, according to Fayerabend, is dogmatic.[41] According to him, this kind of action will not take place. In human life, many are guided by various kinds of ideas. One of them is the truth. Fayerabend's Criticism of modern science lies in the absence of the process of freedom of thought in humans.[42] The reason is that when scientists have found a truth and followed it, they say there are better things than their findings.[43]

---

[35] "Reason in History: Paul Feyerabend's Autobiography: Inquiry: vol. 39, no 1," 1, accessed June 19, 2023, https://www.tandfonline.com/doi/abs/10.1080/00201749608602411?journalCode=sinq20.

[36] "Farewell to Reason - Paul Feyerabend - Google Buku," accessed June 19, 2023, https://books.google.co.id/books?hl=id&lr=&id=-YppG0dT03AC&oi=fnd&pg=PR5&dq=philosophy+paul+feyerabend&ots=N7soCyhA5A&sig=BEfMDVpO-F_McFkxA9VEqKl1bw8&redir_esc=y#v=onepage&q=philosophy%20paul%20feyerabend&f=false.

[37] David Munchin, "Is Theology a Science?: The Nature of the Scientific Enterprise in the Scientific Theology of Thomas Forsyth Torrance and the Anarchic Epistemology of Paul Feyerabend," in *Is Theology a Science?* (Brill, 2011), https://brill.com/display/title/18313.

[38] Feyerabend, Preston, and Feyerabend, *Knowledge, Science, and Relativism*, p. 161.

[39] Feyerabend, Preston, and Feyerabend, p. 162.

[40] Gonzalo Munévar, "Historical Antecedents to the Philosophy of Paul Feyerabend," *Studies in History and Philosophy of Science Part A*, Special Issue: Reappraising Feyerabend, vol. 57 (June 1, 2016), pp. 9–16, https://doi.org/10.1016/j.shpsa.2015.11.002.

[41] Paul K. Feyerabend, "Philosophy of Science 2001," in *Methodology, Metaphysics and the History of Science: In Memory of Benjamin Nelson*, ed. Robert S. Cohen and Marx W. Wartofsky, Boston Studies in the Philosophy of Science (Dordrecht: Springer Netherlands, 1984), pp. 137–47, https://doi.org/10.1007/978-94-009-6331-3_4.

[42] Paul K. Feyerabend, "Dialectical Materialism and the Quantum Theory," *Slavic Review*, vol. 25, no. 3 (September 1966), pp. 414–17, https://doi.org/10.2307/2492853.

[43] Feyerabend, Preston, and Feyerabend, *Knowledge, Science, and Relativism*, p. 163.

Gallagher is more fundamental in discussing the criteria of truth, on the existential truth of the meeting of mind and evidence by knowing, seeing, and hearing into spatial relations. Explanation of wishful thinking truth objects (thinking based on desire without any basis in reality). The desire to get the reality of the truth as it is by not wanting the reality with what we want. If that happens, then, of course, it does not deserve to be called knowledge.[44]

Strukture of *Logis "Anything Goes"*

According to Fayerabend, all methodologies, even the most obvious ones, have limitations[45] "and" all methodologies have limitations, and the only 'rule' that survives is 'anything goes.[46] The first principle can be accepted without presupposing complex considerations, while the second requires further investigation. The weakness in Fayerabend's opinion is that he needs to explain why everything goes against the only principle that can survive in various situations and conditions.

Even though anything goes presupposes epistemological anarchism, which is not a scientific situation and condition, it also presupposes certain situations and conditions. Unfortunately, in Against Method (AM), Fayerabend does not explore much of the principle of anything goes. It was recorded only seven times that Fayerabend wrote anything goes in AM; this may be because AM is more focused on campaigning against cliches in methodology. then "it will become clear that there is only one principle that can survive in various circumstances and at all levels of development of human life, namely the principle: anything goes." This principle is not independent because its existence is closely related to epistemological anarchism. For Fayerabend, "anarchism helps to obtain development in any environment one chooses."[47] It is as if the reader is being asked to understand why Fayerabend does not explain; the author's critical analysis is that he rejects positivism as it is by giving an illustration that the dark ages should not be repeated, the expression of thoughts is packaged in terms of anything goes. In line with Gallagher[48], objective reality can be found with various kinds of intersubjective knowledge; aesthetic experience can also be used in obtaining the objective reality of truth.

Fayerabend's alignment with anarchism is not without purpose. Fayerabend states, My goal is not to replace one general rule with another: moreover, to convince the reader that "all methodologies, even the most obvious ones, have limitations." For him, an epistemological anarchist is like an "agent" in disguise under the pretext of supporting Reason, but his true goal is to destroy the authority of Reason itself."[49]

"Anything Goes" and Individual Freedom in Science

There are several arguments applied by Fayerabend related to anything goes and individual freedom in knowledge. First, in the author's opinion, it is a significant effort to free scientists to fight and campaign for all forms of standardization. Readings made by Fayerabend that when standardization becomes, a process of social power will result in and curb creativity in the scientific community. Maximum actualization of the scientist will not produce maximum results if standardization is not criticized, then the scientist will not get maximum results. The recommendation initiated by Fayerabend related to the discourse of anything goes only remains negatively liberating because it requires a specific scientific situation that is considered to constrain scientists. It is often understood as simply campaigning for the absence of law, methodology, or rules in science.

Second, it limits the movement of scientists because it requires participation only in unspecified practices that cannot be determined. In other words, scientists are only free to conduct research with unspecified and unspecified practices because defined and determinable practices usually produce the authentic knowledge obtained. This premise

[44] Hadi and Gallagher, *Epistemologi, filsafat pengetahuan*, pp. 146–47.

[45] Feyerabend, *Against Method*,p. p. 32.

[46] Feyerabend, p. 162.

[47] Feyerabend, p. 32.

[48] Paul K. Feyerabend, "Mach's Theory of Research and Its Relation to Einstein," *Studies in History and Philosophy of Science Part A* 15, no. 1 (March 1, 1984), pp. 1–22, https://doi.org/10.1016/0039-3681(84)90027-X.

[49] Feyerabend, *Against Method*, p. 37.

is negatively liberating because scientists can only carry out certain practices. However, this is done to achieve positive freedom as part of an effort to liberate science from fascism and chauvinism.[50]

Third, it only becomes a consequence of the first and second premises. In other words, anything goes, externally and internally, simultaneously containing two dimensions of freedom. This difference in position must be clarified so as not to confuse the status of freedom contained by anything goes. The anything-goes method must mention communication as a critical field in contemporary scholarship. When scientists experience problems with disseminating ideas or discoveries, anarchistic principles such as anything goes cannot be used as a panacea, especially when the world of communication and information has been massively institutionalized through the mass media.[51]

Specifically regarding myths, what Fayerabend means refers to several things, including First, "a complex explanatory system containing various supporting hypotheses designed to deal with some exceptional cases, so that it can quickly receive a high level of confirmation through observation bases.[52] Second, things that have no connection at all and only exist solely because of the efforts of the community who believe in them, such as priests. According to Fayerabend, Lakatos perceives that Intellect does not directly guide scientists to act in scientific practice.[53]

Science Fascism According to Fayarbend

Fayerabend did not describe specifically or through a general formulation what he meant about scientific fascism, except about anything that goes as a good recommendation for developing science in such situations and conditions. Fayerabend only gave a concrete example of scientific fascism, namely the response of scientists, universities, and hospitals in the United States to integrate herbal medicine, acupuncture, and several other types of traditional Chinese medicine into several relevant institutions in the country alternatively, when astrology and voodoo were refused to be included in the education system in the United States for African-Americans and other local citizens to choose and study them formally and legally.

So in this sense, Fayerabend's identified scientific fascism is more complex because it involves anything as medicine and an alternative method for those situations and conditions. In contrast, Kuhn only identified the crisis of science without specifying (not prescriptive) what scientists should do in such situations and conditions. Kuhn only describes what scientists have done in their respective eras when facing or being in crises and scientific conditions; the science crisis has three different categories, as previously mentioned.

To a certain extent, science fascism resembles (similar but not the same) the mode crisis, but not vice versa; the science crisis as a whole does not necessarily resemble scientific fascism, especially when looking at the three crisis modes described by Kuhn because all of these modes do not resemble fascism. Knowledge. The inaccuracy in comparing science fascism with the science crisis in a reciprocal or two-way manner is also caused by what happened after the two scientific situations and conditions. Science fascism has been treated with anything goes, in Fayerabend's opinion, and once again, it needs to be emphasized that this is prescriptive; there should be equality between forms of knowledge in the legal and formal education system within the framework of the state.

Efforts to provide fair or equal access to various forms of knowledge in the education system are similar to the idea that education (as a product or process) must involve culture (as a product or process). However, this idea does not necessarily agree with providing equal or fair access to different forms of knowledge in the education system, which may be due to reasons that are not very convincing or at least blind and deaf to the history of the development of science.

Questions that compare science fascism with a science crisis or vice versa, to a certain extent, can be called misguided and misleading, especially when one does not examine science fascism and science crises more precisely and deeply because

[50] Abqary, *Melawan Fasisme Ilmu*, p. 98.

[51] Abqary, p. 99.

[52] Feyerabend, *Against Method*, p. 44.

[53] Feyerabend, p. 45.

the ideas of Fayerabend and Kuhn have different intentions.

Suppose Fayerabend, through his prescriptive argument, longs for magic, voodoo, and astrology to be accessed or taught in the education system. In that case, each student is free to choose the mode of knowledge he or she will adhere to and study. With his descriptive argument, Kuhn indirectly admits not providing access to various modes of knowledge to enter the education system because his historical description still presupposes knowledge as the only mode of knowledge that exists and, after the crisis, has three different excesses.

Conclusion

Knowledge development has a long history from mythological, philosophical, or scientific traditions; these three have their claims in obtaining the reality of truth. In its history, philosophy has felt superior to mythology, while science has felt that it can obtain objective reality more than the ways of philosophy. Fayerabend and Gallagher claim that philosophy must also be considered in obtaining the reality of truth, not only science.

The struggle to obtain objective reality in such a way has no end in developing epistemology. The reality in human life must all have a good place in mythology, philosophy, and science. People all over the world still believe in mythology in their daily lives. Philosophy of life cannot be replaced with tools invented by science. A philosopher is tasked with discovering the nature of humanity as a whole, not partial. To get the true purpose of life can be found by philosophizing. Likewise, science is also necessary for supporting humans in achieving life goals; modern tools help in daily life. Using sophisticated communication tools as sophisticated as scientific results makes it easier for humans to communicate quickly and maintain harmony among humans to discover human nature as a social human being.

References

Abqary, Qusthan, *Melawan Fasisme Ilmu*, Jakarta: Kelindan, 2009.

"Farewell to Reason - Paul Feyerabend - Google Buku," accessed June 19, 2023. https://books.google.co.id/books?hl=id&lr=&id=-YppG0dT03AC&oi=fnd&pg=PR5&dq=philosophy+paul+feyerabend&ots=N7soCyhA5A&sig=BEfMDVpO-F_McFkxA9VEqKl1bw8&redir_esc=y#v=onepage&q=philosophy%20paul%20feyerabend&f=false.

Feyerabend, P. K, "Philosophical Papers," *Critica*, vol. 16, no. 46, 1984.

Feyerabend, Paul, *Against Method*, 3rd ed. London; New York: Verso, 1993.

———, *Problems of Empiricism*, New York: Cambridge University Press, 1965.

———, "Putnam on Incommensurability," *The British Journal for the Philosophy of Science*,vol. 38, no. 1, 1987.

———, *Three Dialogues on Knowledge*, Blackwell, 1991.

Feyerabend, Paul K, "Dialectical Materialism and the Quantum Theory, " *Slavic Review*, vol. 25, no. 3, September 1966. https://doi.org/10.2307/2492853.

———, From Incompetent Professionalism to Professionalized Incompetence—The Rise of a New Breed of Intellectuals," *Philosophy of the Social Sciences*, vol. 8, no. 1, March 1, 1978. https://doi.org/10.1177/004839317800800103.

———. "Mach's Theory of Research and Its Relation to Einstein," *Studies in History and Philosophy of Science Part* A, vol. 15, no. 1, March 1, 1984. https://doi.org/10.1016/0039-3681(84)90027-X.

———. "Philosophy of Science 2001." In *Methodology, Metaphysics and the History of Science: In Memory of Benjamin Nelson*, edited by Robert S. Cohen and Marx W. Wartofsky, 137–47, Boston Studies in the Philosophy of Science. Dordrecht: Springer Netherlands, 1984. https://doi.org/10.1007/978-94-009-6331-3_4.

———, "Realism and Instrumentalism: Comments on the Logic of Factual Support," In *Critical Approaches to Science and Philosophy*, Routledge, 1999.

Feyerabend, Paul, John Preston, and Paul Feyerabend. *Knowledge, Science, and Relativism: 1960-1980*. Philosophical Papers, v. 3. New York: Cambridge University Press, 1999.

Hadi, P. Hardono, and Kenneth T Gallagher. *Epistemologi, filsafat pengetahuan*. Yogyakarta: Penerbit Kanisius, 1994.

Hardiman, F. Budi. *Melampaui Positivisme dan Modernitas*, Yogyakarta: Kanisius, 2003.

"Knowledge and the Role of Theories - Paul K. Feyerabend, 1988," accessed June 19, 2023. https://journals.sagepub.com/doi/abs/10.1177/00483931880180020l?journalCode=posa.

"Materialism and the Mind-Body Problem on JSTOR," accessed June 19, 2023. https://www.jstor.org/stable/20123984.

Munchin, David, "Is Theology a Science?: The Nature of the Scientific Enterprise in the Scientific Theology of Thomas Forsyth Torrance and the Anarchic Epistemology of Paul Feyerabend," In *Is Theology a Science?* Brill, 2011. https://brill.com/display/title/18313.

Munévar, Gonzalo. "Historical Antecedents to the Philosophy of Paul Feyerabend," *Studies in History and Philosophy of Science Part A*, Special Issue: Reappraising Feyerabend, vol. 57, June 1, 2016. https://doi.org/10.1016/j.shpsa.2015.11.002.

"On the Historical Origins of the Contemporary Notion of Incommensurability: Paul Feyerabend's Assault on Conceptual Conservativism - ScienceDirect," accessed June 19, 2023. https://www.sciencedirect.com/science/article/abs/pii/S0039368105000208.

"On the 'Meaning' of Scientific Terms on JSTOR," accessed June 19, 2023. https://www.jstor.org/stable/2023300.

Prasetya, T.W, *Hakikat Pengetahuan Dan Cara Kerja Ilmu-Ilmu*. Jakarta: Gramedia, 1993.

Preston, John. "Paul Feyerabend," August 26, 1997. https://plato.stanford.edu/Entries/feyerabend/.

"Realism and the Historicity of Knowledge on JSTOR," accessed June 19, 2023. https://www.jstor.org/stable/2026649.

"Reason in History: Paul Feyerabend's Autobiography: Inquiry: vol 39, mo 1," accessed June 19, 2023. https://www.tandfonline.com/doi/abs/10.1080/00201749608602411?journalCode=sinq20.

"Review: Professor Bohm's Philosophy of Nature on JSTOR," accessed June 19, 2023. https://www.jstor.org/stable/685921.

"Review: [Untitled] on JSTOR," accessed June 19, 2023. https://www.jstor.org/stable/686526.

Sorgner, Helene, "Challenging Expertise: Paul Feyerabend vs. Harry Collins & Robert Evans on Democracy, Public Participation and Scientific Authority: Paul Feyerabend vs. Harry Collins & Robert Evans on Scientific Authority and Public Participation, " *Studies in History and Philosophy of Science Part A*, Special Issue: Reappraising Feyerabend, vol. 57, June 1, 2016. https://doi.org/10.1016/j.shpsa.2015.11.006.

Sosa, Ernest, "Summary Ofreflective Knowledge," *Philosophical Papers*, vol. 40, no. 3, 2011. https://doi.org/10.1080/05568641.2011.634240.

Treiblmaier, Horst, "The Philosopher's Corner: Paul Feyerabend and the Art of Epistemological Anarchy - A Discussion of the Basic Tenets of Against Method and an Assessment of Their Potential Usefulness for the Information Systems Field," *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, vol. 49, no. 2, Mei 2018. https://doi.org/10.1145/3229335.3229342.