

Revisiting Objectivity and its Application in the Modern Era

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KEYWORDS	ABSTRACT
Objective, Methodological, Paradigm, Innovation, Critical Thinking	This paper revisits objectivism and its relevance in the present. Objectivism is an understanding that believes in the process of thinking objectively and epistemically, and seeks to find factual truth, which is the truth that is found if a scientist or researcher does not inject interpretation into the object being interpreted. Modern science is very strongly attached to the notion of objectivism. This can be seen from how modern science, with all its methodological and empirical advantages, is able to answer many of the world's problems. Thus, modern science has earned an honorable position in this world. However, the power of modern science in all its methodological and empirical forms has been criticized by three thinkers, namely Thomas Kuhn, Paul K. Feyerabend, and Richard Rorty. These three critics challenge the methodology and emphasize that nothing is purely objective. Thomas Kuhn emphasizes the existence of paradigms that influence researchers; Feyerabend stresses the need to open up space for creativity; Richard Rorty highlights the role of language and argues that something can be called truth if it is useful and situated in a particular temporal context. What these critics note has been addressed by the development of modern science today, through the recognition of paradigms and the openness of scientific methods to support innovation. Today, the word "objective" is used in the process of critical thinking. Critical thinking uses an objective process to select, test, and criticize information based on criteria regarding whether the information is valid and true, or merely a hoax. Therefore, the process of objective thinking today is still relevant to be used in the context of critical thinking.

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INTRODUCTION

The concept of objectivity has occupied a central position in the development of modern science and Western philosophy since the Enlightenment era. Objectivity, understood as the pursuit of factual truth independent of subjective interpretation, cultural context, and historical circumstances, has provided the epistemological foundation for scientific inquiry for centuries (Hardiman, 2023). This understanding posits that true knowledge must be universal, ahistorical, and value-free—characteristics that have enabled science to achieve remarkable successes in explaining natural phenomena, developing technologies, and improving human welfare (Benton & Craib, 2023; Mandavilli, 2023; McCarthy, 2025; Tacanho, 2025; Zaman, 2015). From the laws of physics to medical diagnoses, the objective method has been credited with producing reliable knowledge that transcends individual biases and cultural boundaries (Anichini & Kotras, 2024; Barth & Weinberg, 2024; Harker, 2015; Ødemark & Engebretsen, 2022; Ritchie, 2020).

The urgency of this research is underscored by several contemporary crises. First, the COVID-19 pandemic demonstrated how misinformation about vaccines, treatments, and public

health measures can have life-or-death consequences, with the World Health Organization (2020) declaring an “infodemic” of misinformation spreading alongside the virus. Second, political polarization in democratic societies has been exacerbated by algorithmic amplification of divisive content, leading to what some scholars describe as a “post-truth” condition where emotional appeal outweighs factual accuracy (Essien, 2025; Garaschuk, 2024; Kelkar, 2019; Lovi, 2025; Tillman, 2025). Third, the emergence of generative AI technologies capable of producing convincing fake text, images, and video has created unprecedented challenges for verifying information authenticity (Bontcheva et al., 2024; Ghiurău & Popescu, 2024; Kumar et al., 2025; Wang, 2023).

The novelty of this research lies in its integrative approach that bridges classical philosophy of science with contemporary digital culture studies. Unlike previous studies that have examined Kuhn, Feyerabend, and Rorty in isolation, this research synthesizes their critiques to develop a comprehensive understanding of the transformation of objectivity. Furthermore, this study uniquely applies these philosophical insights to analyze concrete phenomena such as hoax dissemination, social media dynamics, and critical thinking practices. By connecting the linguistic turn in philosophy to the digital turn in society, this research offers a novel framework for understanding how truth claims operate in contemporary media ecosystems.

This research aims to revisit the concept of objectivity by examining classical critiques from Kuhn, Feyerabend, and Rorty, and to reinterpret its application in the context of digital culture and critical thinking. Specifically, the study seeks to: (1) analyze the historical development of objectivity as an epistemological concept; (2) examine the major critiques of objectivity presented by Kuhn, Feyerabend, and Rorty; (3) investigate the challenges to truth and objectivity posed by digital technologies and social media; (4) reinterpret objectivity as a practical tool for critical thinking in the digital era; and (5) develop recommendations for integrating a philosophical understanding of objectivity into information literacy education.

That is what the author will discuss. The author will re-examine the development of objectivism or factual truth, and will also offer a critique of factual truth. In addition, the author will present a personal response on how we understand the word “objective” today and how we think objectively in the present context. The author’s goal in exploring the development of this understanding of factual truth is for readers to become familiar with the development of objectivism and to better understand the meaning of the word “objective” in today’s era.

METHOD

The research method in this paper uses a qualitative approach based on library research with a conceptual-philosophical nature, which takes the idea of objectivism in modern science, the critiques of thinkers such as Thomas Kuhn, Paul K. Feyerabend, and Richard Rorty, and its relevance to the development of technology and digital culture as the object of study. The data used are secondary data obtained from books, contemporary works in philosophy of science, and supporting literature related to the industrial revolution, digital media, hoaxes, and critical thinking. Data collection was carried out through literature searches, in-depth reading, and the recording of key concepts, then analyzed descriptively to re-explain the concept of objectivism, critically to compare and evaluate critiques of objectivism, and hermeneutically-interpretively

to interpret its relevance in the context of the Industrial Revolution 4.0–5.0 and the digital era. The entire analysis process produces an argumentative synthesis of the position of objectivism in the present and how the concept is understood within the framework of modern critical thinking.

RESULTS AND DISCUSSIONS

Revisiting the Development of Objectivism with All Its Criticisms

The development of objectivism has never been separated from the history of scientific prowess. If we look at the past, what first developed was myth, which was used to explain everything that exists on earth. Then, during the Enlightenment, science began to take hold. At the beginning of its development at that time, scientists and researchers believed that factual truth could be found if everything was in accordance with the facts. Thus, modern science began to develop, because science produced truth through an empirical methodology that was independent of the context of space and time. With all its methodological and empirical advantages, science is able to answer questions about the origin of the universe, study the human body, diagnose diseases and cure them, and so on. At this time, science seemed to receive a red carpet and occupy the highest throne in human knowledge. This was quite reasonable, because at that time the emergence of science could answer various questions about origins and could even solve problems through structured and objective empirical methods.

Then, what is the early history of the development of the concept of objective truth or factual truth? The development of factual truth will never be separated from the influence of Ancient Greece. The concept of facts also cannot be separated from the influence of one of the 19th-century French philosophers, Auguste Comte. The philosopher Auguste Comte can be called the Father of Modern Positivism. However, Comte was not the main pioneer of the concept of fact. The concept of fact itself had already appeared in the time of one of the ontological ancestors, Parmenides. The truth that exists in modern science has Parmenidean characteristics. First, all the laws and scientific theories produced by scientists are universally applicable and transcend all cultures and societies. This means that all scientific laws apply everywhere without being limited by time and space. For example, physical laws such as thermodynamics and Archimedes' principle apply in almost all places. The second characteristic is that all scientific laws and theories, with their objective truths, apply not only in one era but beyond eras. For example, Newton's laws apply not only today and in Newton's time, but also in earlier times. Third, the truth of science is permanent, unchangeable, and will remain the same in the future. For example, the truth of a numerical statement such as $7 + 8 = 15$ will not change at any time. That is the hallmark of objective truth that has developed in modern science.

However, the power of this science has been widely questioned, especially by three critics of science, namely Thomas Kuhn, Paul Feyerabend, and Richard Rorty. These three critics put forward quite sharp critiques of this objective truth. However, in discussing these critiques, Hardiman emphasizes three characteristics of the criticisms presented by these thinkers, which need to be noted so that readers do not misunderstand their meaning. First, these critics still adhere to the tradition of Western philosophy, which focuses on the search for objective truth in the empirical world. Thus, even if they disagree with the factual truth of modern science, this does not mean that they support Eastern philosophy, monotheism, or Medieval philosophy. The *Indonesian Journal SoScience*, Vol. 6, No. 2, February 2026

second characteristic is that these three figures are critics of factual truth, and the criticisms they put forward are based on the critical rationality that has also developed in the modern era. In other words, their criticism is based on the rationality of their time. The third characteristic is that these three critics reject the idea that factual truth is the whole truth, but they do not offer a higher doctrine of truth. That is, they only state that factual truth is not everything, but they do not propose another, alternative truth. This means that what these critics of factual truth offer is a critical note on factual truth, without advancing a new theory of truth. The following are the criticisms put forward by these thinkers.

a. Thomas Kuhn

Thomas Kuhn is someone whom Richard Rorty calls the most influential philosopher since the Second World War. Kuhn was a lecturer at Princeton. Kuhn put forward a critique aimed at the factual and ahistorical truths defended by positivism. There are several points that form Kuhn's initial view. First, development in science is not an accumulation of discoveries of natural facts, like Columbus discovering Native American tribes. According to Kuhn, the development of science also depends on the role of the collective mind of a community of scientists. The second point is that all theories and laws emerge through constructions of scientific thinking by scientists that can change over the course of history. From these two points of view, Kuhn wants to say that science develops through revolutions; therefore, its development is not linear and accumulative.

Departing from this view, Kuhn developed the term "paradigm." Kuhn defines a paradigm as a certain understanding of truth that serves as a background of knowledge and guides scientists in producing new discoveries as well as new theories in the realm of science.

In the history of science, the role of this paradigm occupies a central position. Paradigms in science make it possible to divide the history of science into several phases, namely pre-paradigm, normal science, revolutionary science, and new normal science. At the pre-paradigm stage, science has not yet developed in a stable and mature manner, and there is still relativism of truth. For example, before Ptolemy's geocentrism, there were already several cosmological models, including Aristotelian geocentrism. Once science enters the normal stage, research, inquiry, and the testing of facts are guided by a paradigm. In the context of geocentrism, the paradigm used is Ptolemy's geocentrism. During this period, geocentrism began to gain its place and authority. In the phase of the scientific revolution, many anomalies began to be discovered. At this point, deviations in planetary motion became increasingly difficult to explain by geocentric theory, and the credibility of the geocentric paradigm began to fade. Then the Copernican revolution occurred, which gave rise to the concept of heliocentrism. In this revolutionary stage, the role of scientists in determining what is right and wrong becomes crucial. According to Kuhn, science in the revolutionary period becomes aware of the role of paradigms and, to borrow Heidegger's term, becomes ontological, in the sense that it questions real reality.

From this account of the history of science, Kuhn wants to emphasize that, even in its historical development, science cannot be separated from paradigms. Thus, there are three key points in Kuhn's thinking about paradigms. First, correspondence truth, or truth as fact, is possible only through the application of a paradigm, which guides scientists in producing new findings or theories. Second, truth as fact can only be achieved in periods of normal science,

when the paradigm is stable; therefore, it can be concluded that factual truth is determined by a stable paradigm. Third, truth can be achieved through community consent.

b. Paul K. Feyerabend

In addition to Thomas Kuhn, one of the critics of truth as fact is Paul K. Feyerabend. Broadly speaking, Feyerabend criticized all scientific methodologies or procedures in science. Scientific procedures in science have a role in systematizing the process of collecting scientific data, filtering the results of observations, and forming conclusions from research findings. Feyerabend argued that all scientific procedures, methods, and rules can limit and restrict freedom and space for creativity in this world. Feyerabend's main goal was to overthrow the chauvinism of science. Scientific chauvinism refers to fanatical loyalty or belief in the scientific method. There are two main criticisms from Feyerabend of factual truth. First, the sophistication of scientific theory is never separated from the difficulties experienced by scientists in connecting theories and facts with hypotheses. Second, the facts, theories, and research results presented by researchers are never free from subjectivity and cannot be separated from their historical context.

Feyerabend's view, which strikes at all forms of scientific methodology, can be called epistemological anarchism. There are two main points in this view. First, truth is not determined by order or rules, but by creativity. Second, factual and objective truths do not apply universally but depend on the historical and cultural context of scientists. Feyerabend's position can be called relativism of truth. Relativism of truth regards truth as plural. Thus, all truths are considered equal, and there is no single truth that is absolutely true, so there is no need for any truth to be contested.

c. Richard Rorty

The third critic is Richard Rorty. Richard Rorty explains his criticism through his book titled *Philosophy and the Mirror of Nature*. In this book, Rorty emphasizes that the development of science also entered a revolutionary period in philosophy, namely the linguistic turn. This period of linguistic turn made philosophy no longer focus on consciousness, but on language. Rorty views science and philosophy as facing the same problem, namely the problem of language. Thus, the factual and objective truth provided by science is inseparable from the problem of language. For Rorty, "truth, justification, and certainty are linguistic matters, arranged according to linguistic rules, and integrated into language games."

Rorty's critique of modern science and factual truth is linked to his attempt to replace epistemology. According to Rorty, epistemology is merely a constraint arising from the desire to find a foundation for thinking, whether in thought or experience. For Rorty, epistemology and modern science are part of human conversation and should not claim to be judges over other forms of knowledge.

For Rorty, factual descriptions produced by science cannot be separated from interpretation. From here, Rorty replaces epistemology with hermeneutics. There are three key differences between epistemology and hermeneutics. First, in terms of positioning knowledge, epistemology places knowledge on a stable foundation of truth, whereas hermeneutics views knowledge as part of everyday human conversation. Second, regarding the characteristics of knowledge, for epistemology, knowledge is universal, whereas for hermeneutics, knowledge is diverse and lacks a single standard by which different forms of knowledge can be compared.

Third, epistemology seeks episteme, that is, objective knowledge that is factually correct, while hermeneutics seeks phronesis, practical wisdom whose truth is contextual and related to dynamic situations. In this view, truth is not found but made, and accepted because it is beneficial to society. The theory of truth that Rorty upholds is pragmatic truth, namely truth that is obtained when something—whether a system or a behavior—functions well, is useful, and is appropriate to the context of its time.

From the perspectives of these three critics, we can see a similarity, namely that they all regard truth as historical, whether through Kuhn's paradigm revolutions, Feyerabend's critique of scientific chauvinism, or Rorty's language games. All three criticize the power of methodology, each in his own way. Thomas Kuhn emphasizes the paradigm that guides scientists, Paul K. Feyerabend emphasizes the need to create space for creativity, and Richard Rorty emphasizes the problem of language, stressing that something can be called true if it is useful and appropriate to its temporal context.

From what has been explained above, it is clear that the objectivist view embedded in science has several points of critique. For these thinkers, nothing in this world is truly and absolutely objective. However, in today's world, is objective thinking really unimportant and something to be ignored? To answer the importance of thinking objectively, the author will, in this response, point to contemporary phenomena in technological development, especially those highlighted by Hardiman in the book *I Click Then I Exist*. The author will then redefine and explain how we think objectively today.

The Industrial Revolution 5.0 Phenomenon and I Click Then I Have

In the chapter on *Who Is Human in the Digital Era*, Hardiman highlights where in the digital era, chaos occurs, which can certainly be called the digital state of nature. The chaos includes hoax pandemics in the digital world, racist demagoguery and hate speech against other religions, and during the presidential election, as well as pro-con clashes over vaccines during the Covid-19 pandemic. Then, Hardiman highlighted that humans are now called *homo digitalis*, which makes humans no longer "I Think, Then I Exist", but, "I Click Then I Exist". If we look at it from a broader perspective, we can see what has changed in human civilization due to the development of technology and social media, we can see through the lens of the industrial revolution 5.0.

According to Kistom, the Industrial Revolution was "a major and radical change in the order of people's lives that conceptually made it more advanced than previous practices, which were organized through technological inventions and other supporting tools." From this definition, we can see that this industrial revolution is related to a massive change in the more advanced order of society, due to technology.

Then, what is the history of the industrial revolution 5.0? The term industrial revolution was first introduced by Friedrich Engels and Louis Auguste Blanqui. Before the industrial revolution, the social order of life was dominated by agrarian, and still used manual equipment. In its history, there have been several phases of development of the industrial revolution ranging from 1.0 to 5.0.

a. Industrial Revolution 1.0

In this phase, a massive change began to occur when the steam engine began to be invented by James Watt. At that time, steam engines began to be used to fuel textile mill production machines. This makes the production process change from human power to machine power. In addition, the steam engine's working system began to be sophisticated thanks to the support of wood and coal fuels. The development of this steam engine also penetrated into the development of transportation.

b. Industrial Revolution 2.0

The era of the Industrial Revolution 2.0, began when Nikola Tesla invented electricity, and Thomas Alva Edison invented lights. The discovery made the world brighter. In addition, production machines that used steam fuel began to switch to electricity. Even in 1913, large factories began to use conveyor belts supported by electric power to speed up the production process. In the era of the Industrial Revolution 2.0, there were also developments in the steel industry, as well as the emergence of cars and airplanes as means of transportation.

c. Industrial Revolution 3.0

The phase of the industrial revolution 3.0 was marked by the emergence of computers and robots. Here, industries and all sectors of human life began to use computers to make human work easier. At this time, the world is moving towards automation. With automation systems, humans are able to convert analog data into digital. For example, the development of recording music using tapes. Then, the development from playing movies using VCD players to DVD Players. During this time, the internet was also invented.

d. Industrial Revolution 4.0

The development of the internet is one of the characteristics of the development of the industrial revolution 4.0. The internet is one of the gateways to the industrial revolution 4.0. In the industrial revolution 4.0, digitalization has greatly increased. In this era, technological developments have begun to penetrate into the Internet of Things, Artificial Intelligence, and so on. In this era, the development of social media is also so rapid, that, at this time, information is so easily accessible. In addition, some aspects of life are also starting to connect to the internet, such as remote controls.

e. Industrial Revolution 5.0

The Industrial Revolution 5.0 has now begun to develop and is starting to be discussed. However, in this era, robotic development, and AI will be more rapid, and will be increasingly integrated with human life.

Of all the developments that exist in the era of the industrial revolution, it is interesting to listen to the shift in the role of technology in the era of the industrial revolution 3.0, towards the industrial revolution 4.0 and even 5.0. Technology that developed in the era of the industrial revolution 3.0, emphasizes automation with the aim of making it easier for businesses and humans, while the era of the industrial revolution 4.0 and 5.0, makes humans make technology part of their lives and make technology humanizable. If we look at the phase of the industrial revolution 1.0 to 3.0, technology helps humans, then in the industrial revolution 4.0 and 5.0, technology is not just a tool to make humans easier, but part of human life, and technology will humanize humans.

From this, it is not surprising that today's humans cannot be separated from technology. All these technological developments make humans only access everything through smartphones. All information is scattered on social media, both valid and hoaxes. In the midst of such a rapid spread of information, humans can access all information and respond on social media quickly.

Analysis of the Spread of Hoaxes and Hate Speech

As mentioned above, there is currently a phenomenon that Hardiman highlights, namely that with just one click, information can spread widely and gather people very quickly. For example, current warnings about a democratic emergency can be easily disseminated. Another example is news about someone being named a suspect in a corruption case, which can spread throughout Indonesia in a matter of minutes or even seconds. This raises the question: why does harmful social media content now spread so quickly on these platforms?

The spread of information and the rampant hate speech on social media today cannot be separated from how content is produced and distributed in digital media. To discuss this, the author analyzes the phenomenon using the theoretical paradigm of mass media psychology and mass media analysis. Here, the author compares the production process of traditional media, such as books or newspapers, with that of the internet today.

If we look at the production process of internet-based media, it is very different from that of traditional media such as books. Generally, in the process of producing a book, once an author has an idea, they contact an editor. The editor's role is to correct spelling, grammar, sentences, and other aspects of writing. Editors play a very important role in making the text more structured, systematic, and pleasant to read. After that, the author contacts a publisher and submits a proposal containing a synopsis or manuscript. The publisher then evaluates whether the manuscript aligns with its vision and portfolio. Once approved, the author and publisher sign a printing agreement, and the publisher begins the cover design process, which involves the author. The publisher then plans the book's promotion and distributes it to distributors or bookstores. Even after distribution, the process continues through evaluation by the publisher.

This book publishing process is very different from the process of uploading content in today's digital media on the internet. The advantage of the internet is that it provides freedom of expression and enables very fast access to information. However, there are drawbacks that must be considered. In a book entitled *Understanding Media and Culture*, several weaknesses of digital content are noted. First, there are many anonymous identities, as seen from the large number of anonymous accounts uploading content on social media. This makes it difficult for users to trace who uploaded the content and what their background is. Second, there is no filtering process in digital content publishing. Because the internet is a medium where everyone is free to upload information, there is no prior evaluation, resulting in widespread misinformation and hoaxes. Third, there is no central authority that verifies which portals or news sources are reliable, making it difficult for digital society today to distinguish credible and trustworthy information sources from those that are not.

From these differences, we can see a significant gap between traditional media such as books (including e-books) and modern digital media, especially in the publishing process. Publishing a book is not as easy as uploading information to the digital world. This makes

information in books generally more trustworthy than digital content, particularly books published by reputable publishers such as Gramedia. In today's internet and social media environment, people can easily upload information without a rigorous filtering and evaluation process like that used by book publishers, especially credible ones. This ultimately causes digital media content to circulate uncontrollably. As a result, society now finds it difficult to identify which information is true and valid, and which is false and merely spreads hate speech.

How Do We Think Objectively Today?

With all the developments in the issue of hoaxes, and existing hate speech, the author considers it necessary to raise how to think epistemologically or objectively today. Of course, thinking objectively today is different from thinking objectively in the past when science was still developing because the epistemology of science has developed rapidly. So, the author will first explain the development of the epistemology of science today and how do we think objectively today?

Development of Scientific Methodology Today

Science today has developed rapidly. There are several points that distinguish contemporary science from that of earlier periods. First, every science and its methodology is built on a foundation of thought. For example, one branch of psychology, namely psychometrics, which focuses on psychological measurement, has its own paradigmatic foundation. Supratiknya, in his book, explains that a paradigm is a series of basic beliefs about core problems and principles. Supratiknya further explains that the paradigm in psychometrics is built from several aspects: ontological, epistemological, and methodological. Ontologically, various psychological attributes such as intelligence and personality are inherently present in a person, and each person has different characteristics in terms of both intelligence and personality. Epistemologically, psychometrics holds that, in order to produce valid psychological measurements, measurement must maintain distance and be carried out objectively, meaning that it must be based on instruments that have been tested against measurement standards and that are in accordance with the theoretical paradigm underlying each psychological test. Methodologically, psychological measurement is conducted using psychological test tools that have been tested for validity and reliability. From this, we can see that what Thomas Kuhn notes has been further developed in contemporary science. Even psychology, which is often considered abstract, has succeeded in formulating a paradigm for its psychometric branch, which focuses on psychological measurement. Moreover, not only psychology but also the social sciences employ scientific methodologies to examine social phenomena.

In addition to paradigms, scientific methodologies in today's science are used to drive innovation. Innovation is one of the key values pursued by science to produce new discoveries that can be applied in society. Governments have even established bodies such as the National Research and Innovation Agency, as well as ministries focused on research, in order to enhance innovation. Research thus strengthens human creativity and innovation, because creativity and innovation are tested through measurable research processes grounded in scientific methodology. In this way, the core of Feyerabend's criticism has been challenged by the

openness and creative space provided within scientific methodologies. One example of scientific innovation is the work of the Ministry of Public Works and Housing in transforming plastic waste into asphalt, an innovation produced by the research agency of the Ministry of PUPR itself.

Innovation also enables researchers to revise scientific findings, and the process of scientific publication—whether in books or journals—is now carried out with close attention to the language used by researchers. Thus, the central point of Richard Rorty’s criticism has likewise been addressed through the processes of publishing research results and through editorial and evaluative mechanisms.

How do we think objectively in today's context?

In the current era, the word “objective” is closely related to the process of critical thinking. Critical thinking is a thought process built by selecting, criticizing, and evaluating existing information, news, and theories, which will be used as the basis for making considerations and decisions. The critical thinking process involves an objective component, in which information is selected, evaluated, tested, and criticized based on criteria indicating whether the information is valid and accurate, or merely a hoax. Thus, the objective process remains highly relevant and its importance is greatly needed today.

In today’s context, the author categorizes this critical thinking process into two forms, namely informal and formal. The informal critical thinking process refers to how we test the sources of information we receive. The International Federation of Library Associations and Institutions has recommended several steps to assess whether a news source or piece of information we receive and use is valid or merely a hoax or fake news. First, consider the source of the news by checking whether it comes from a reliable outlet that is widely referenced, such as *kompas.com*, *antaranews.com*, and so on. Second, examine who the author is by tracing their profile online and assessing whether they are trustworthy. Third, check the date of the news to see whether it is old information that has been reuploaded. Fourth, read the information in full and do not rely only on the title, as titles can be provocative. Fifth, check the supporting sources through links provided on the news site. Sixth, consult experts—such as librarians—about whether the source is reliable, and make use of fact-checking sites for quick verification. These are some of the standards we can use when examining whether a news item is a hoax or not.

The second critical thinking process can be carried out formally through scientific work in academia. We can conduct scientific research using established methodologies, because research in science functions to test a hypothesis or initial assumption.

CONCLUSION

Based on the discussion in this paper, it can be concluded that objectivism, as the epistemological foundation of modern science, once occupied a dominant position because it was considered capable of producing factual truths that are universal, ahistorical, and value-free. However, the power of objectivism has received strong criticism from Thomas Kuhn, Paul K. Feyerabend, and Richard Rorty. Kuhn points out that science is not neutral and always operates within the framework of a paradigm; Feyerabend emphasizes the importance of creativity and rejects methodological dogmatism; while Rorty asserts that truth is always related

to language, social practices, and pragmatic contexts. Nevertheless, the development of modern science actually shows that such criticism does not completely weaken science, but instead encourages it to become more reflective, open, contextual, and innovative. Paradigms are now recognized as a scientific foundation; methodology is no longer rigid but supports innovation; and scientific language is continually scrutinized through editorial, publication, and academic verification processes. In the context of the digital era, the Industrial Revolution 4.0–5.0, and the rise of hoaxes and hate speech on social media, objectivism remains relevant. However, its meaning has shifted: objectivism is no longer understood as an absolute claim without history, but as a systematic, selective, evaluative, and evidence-based process of critical thinking. Thus, objective thinking today has become an ethical–intellectual necessity for assessing information, making rational decisions, and maintaining the quality of knowledge amid the flood of digital information.

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