

## Professor Lidenbrock as a Reflection of Empiricism in Jules Verne's *Journey to the Centre of the Earth*

Edo Tri Fitriyanto

[edotrifitriyanto@gmail.com](mailto:edotrifitriyanto@gmail.com)

English Letters Department, Universitas Sanata Dharma, INDONESIA

### Abstract

*Jules Verne's Journey to the Centre of the Earth (1864), one of the author's notable novels, is claimed for its philosophical issues. This close critical analysis attempts to examine the concept of empiricism integrated in the literary text within the moral and philosophical approaches. It focuses on the identification of Professor Lidenbrock's character depictions and the examination of Professor Lidenbrock from the concept of empiricism. This study is a library research design, applying Murphy's theory of characterisation in fiction and Locke's conception of empiricism. The results show that Professor Lidenbrock is generally depicted as a curious, analytic, observant, and explorative figure, which illustrates basic empirical progressions in scientific discoveries. In line with Professor Lidenbrock's depictions, this character reflects the idea of empiricism, which believes that sensory experience is the main source of human knowledge. This philosophical idea is illustrated in his quest for knowledge, which is grounded in direct interaction with the external world through the sensory experience. Professor Lidenbrock depicts the quest for knowledge as an intellectual activity that serves as a justification for the truth. It highlights the fundamental narrative of the character's morality, revealing how intellectual virtue establishes the essence of humans in understanding the scientific reality of the universe.*

**Keywords:** character; empiricism; knowledge; morality

---

### Article information

Received:  
December 19,  
2025

Revised:  
March 23,  
2026

Accepted:  
April 20,  
2026

### Introduction

Science fiction critically explores various essential issues related to human and scientific knowledge. According to Seed (2011), science fiction (SF) is ordinarily associated with the evolution of technology, with one of the most common themes in the examination of humans' relation to their material creations, depicted as

a celebration of scientific progress or as fears of human displacement. Science fiction has widely discussed about the field of applied science, as the rapid advance of technological innovation affects the structure of society and the nature of human behaviour (Seed, 2011). Science fiction significantly contributes to examining scientific developments within a broader social context (Rees and Morus, 2019). It serves to articulate

essential themes related to the limitations of human knowledge, in which the narrative raises conceptual questions concerning human essence and the mysteries of the universe.

According to Smyth (2000), the study of science fiction grants a special tribute to Jules Verne as one of the founders of the genre. In addition to his special acclaim, it is widely believed that one of Jules Verne's novels, *Journey to the Centre of the Earth*, is considered a major literary work, which first to appear in the series *Voyages Extraordinaires* (Butcher, 1998). Evans (2005) highlights the 1871 English translation of the novel, which received significant modifications that construct the deeper meaning of the narrative. The novel's narrative incorporates several themes that represent issues within science fiction frameworks. According to Breyer and Butcher (2003), Jules Verne's *Journey to the Centre of the Earth* integrates the ideological, scientific, and philosophical issues of the mid-nineteenth century, in which the central questions about the Earth's interior and human prehistory became controversial. Within its context, Jules Verne's *Journey to the Centre of the Earth* confronts inherent problems regarding the quest for meaning in the scientific worldview.

In Jules Verne's *Journey to the Centre of the Earth*, a detailed depiction of a philosophical thematic concern is reflected from empiricism, which explores the nature of human knowledge that contributes to the novel's thematic depth. A concept of empiricism by John Locke (1975) accepts that all knowledge begins with experience. Locke describes the human mind as a blank slate (*tabula rasa*), illustrated as an empty sheet of paper filled with experiences. Locke (1975) argues that the human mind is filled with ideas only when humans experience the external world through their senses. Locke's empirical conception treats ideas as the materials of knowledge, which are processed by the human mind into various notions that construct human understanding. For this reason, John Locke's philosophical idea on human knowledge built the narrative of the novel as a medium for reflecting philosophical exploration concerning human limitations.

As Higonet (2005) outlines in "Jules Verne's 'Vingt mille lieues sous les mers': An American Classic for All Ages", the depictions of

scientific exploration in Jules Verne's science fiction are presented with critical perspectives. The critical perspectives on Jules Verne's works could serve as the groundwork for a particular approach. Therefore, recent studies have applied different approaches to *Journey to the Centre of the Earth* to several issues.

Research from Debus (2006) examines the scientific aspects in the literary text. This study focuses on how Jules Verne used scientific elements such as geology and palaeontology to create an imaginative work based on true science. By examining the scientific elements in the novel, Debus (2006) argues that the geological and paleontological depiction in the novel gives a credible scientific explanation that makes the story scientifically make sense. Moreover, Ruddick (2007) discusses the revision of the novel in the context of the "fossil man" controversy in the 19<sup>th</sup>-century. It highlights that the 1867 revised edition added two new chapters in response to the scientific debates of the century, particularly regarding the age and existence of prehistoric humans. This focus can be viewed through Delisle's (2012) epistemological framework regarding the development of paleoanthropology from its empirical foundation. As Goodrum (2014) explains, this term is used to mark a new scientific discipline that studies prehistoric humans through a paleontological approach.

Despite previous research aimed at the scientific aspects, some studies propose the theoretical analysis from literary aspects. A study by Harkness (2012) implements a comparative analysis of Jules Verne's *Voyage au Centre de la Terre*, which is *Journey to the Centre of the Earth* in the English version, with a novel entitled *Voyage Dans le Cristal* written by George Sand. Harkness (2012) highlights the aspects of the theme, literary elements such as characters, plot, and content from both novels, *Journey to the Centre of the Earth* and *Voyage Dans le Cristal*. This comparative study aims to consider the role that George Sand's *Voyage Dans le Cristal* contributes to the development of Jules Verne's text.

An eco-critical review by Dhanu (2021) examines the ecosystem depicted in *Journey to the Centre of the Earth*. This research focuses on the analysis of the ecosystem presented in the

text through an eco-critical perspective, which sees the relation between literature and environment. It highlights how Jules Verne depicted the environmental world and the reflections of humans' relationship with nature. Additionally, the author tries to correlate literature with some environmental ethics, like ecocentrism and anthropocentrism. This analysis argues that the text can be examined through an ecocritical approach, highlighting the broad depictions of ecosystems and the environmental awareness constructed in the novel's narrative.

Research by Pasqualetto (2022) utilizes real scientific research processes reflected in some aspects of *Journey to the Centre of the Earth*, such as character and plot. Pasqualetto (2022) agrees that the journey of the characters in the story reflects the concept of the real scientific research process, in which the story of the novel was written as essential depictions of scientific research progression. This research found that the narrative of *Journey to the Centre of the Earth* provides several lessons reflected within the characters' dynamic. These lessons are identified as essential aspects in relation to the development of the real-world scientific research process.

To address the gap between different criticisms from previous research, this study proposes a close critical analysis of Professor Lidenbrock as a central character in *Journey to the Centre of the Earth*. This study aims to identify the depictions of Professor Lidenbrock and to examine the concept of empiricism reflected through this character. By examining the narrative of the literary text from a philosophical framework, this study focuses on Professor Lidenbrock's quest for knowledge, which serves as a reflection of empiricism. Furthermore, this study offers a comprehensive depiction of how empiricism is represented in science fiction, as it is essential to examine the epistemological foundation of science in literature. This study also provides an overview of how Jules Verne depicted a philosophical theme in his literary work.

The significance of this study is grounded in Jules Verne's works, which are dominated by scientific accuracy. Slusser (2005) agrees that the scientific visuals in Verne's works are

depicted as a duality of science and fantasy. Additionally, a deep reading of Verne's works could provide philosophical reflections for understanding the long-term social evolution (DeCanio, 1994). Therefore, the works of Jules Verne can be examined as a form of texts that combine philosophy, science, and imagination.

## Methodology

This study is a library research-based. According to George (2008), library research involves the process of identifying and locating sources that provide factual or personal information and expert opinion relevant to research questions. Library research focuses on collecting information and data from various sources of documents (George, 2008). The data for this study were collected in the form of dialogues from the novel as the primary source. The edition of the novel used in this study was the Oxford World's Classics edition of *Journey to the Centre of the Earth*, published in 2008 by Oxford University Press Inc., New York, United States. The secondary sources of this study were scholarly books and journal articles, which provided relevant information and references regarding experts' opinions to support the data analysis.

This study implemented the theory of characterisation by Murphy (1972) to identify the depictions of Professor Lidenbrock. Murphy proposed that characterisation in fiction can be seen in several ways: personal description, character as seen by another, speech, past life, conversation of others, reaction, direct comment, thoughts, and mannerisms. Furthermore, John Locke's (1975) conception of empiricism was utilised to examine the principle of the philosophy as reflected through this character.

To build a research framework from literary approaches, this study implemented the moral and philosophical approaches. According to Guerin et al. (2005), the moral and philosophical approaches see the issues in literary work from moral and philosophical perspectives.

"The basic position of such critics is that the larger function of literature is to teach morality and to probe philosophical issues.

They would interpret literature within a context of the philosophical thought of a period or group” (Guerin et al, 2005, p. 77).

These approaches emphasize the moral and philosophical issues raised by the literary works. Some critics who employ the moral and philosophical approaches seek to state what is thought in literary works (Guerin et al, 2005). These approaches were applied in this study as a framework to examine the philosophical theme reflected through the character in the literary text.

## Results and Discussion

### *Depictions of Professor Lidenbrock*

Within the narrative of *Journey to the Centre of the Earth*, Professor Lidenbrock illustrates the fundamental characteristics of Jules Verne’s scientists. According to Unwin (2005) in “Jules Verne: Negotiating Change in the Nineteenth Century”, figures in Jules Verne’s works are typically from scientific areas who are obsessed with their discipline. Unwin (2005) states that “Verne’s scientists, on the other hand, deal with specific and well-documented topical problems, all to do with science and exploration, and to that extent they are men of their century” (pp. 8-9). These figures are always depicted as experts in their field, who use every possible way to seek solutions and resolve their problems (Unwin, 2005). In addition, Evans (1996) explains that scientists in Jules Verne’s works often apply practical scientific knowledge, which serves as the resolution to intense situations in the stories. Professor Lidenbrock, therefore, reflects this characteristic as a scientist presented with concrete problems in science, morality, and exploration.

At the beginning of the story, Jules Verne presents the character Professor Lidenbrock as a mineralogist and geologist who deeply believes in scientific methods. This early description of Professor Lidenbrock depicts the central role of Jules Verne’s protagonist as a scientific expert in his field: “he combined the geologist’s talent with the mineralogist’s eye” (Verne, 2008, p. 5). Professor Lidenbrock’s role as a geologist and mineralogist serves as the basis for several depictions of his response

to a particular topical problem, highlighting his application of practical scientific knowledge to resolve complications.

Following Professor Lidenbrock’s role as Verne’s scientist in *Journey to the Centre of the Earth*, the depictions of Professor Lidenbrock emphasize an intellectual approach which relies on observation and experiment. Within the character depictions, Professor Lidenbrock hold his perspective on science, revealing how he gives scientific responses toward objects and phenomena of the external world, which form the basis of Professor Lidenbrock’s empirical experiences.

Several character depictions of Professor Lidenbrock are highlighted concerning his role as Jules Verne’s scientist. The depictions of Professor Lidenbrock are seen through his speech. Theoretically, it applies a systematic comprehension where the readers can understand a character from what the character says through their dialogues and conversations with other characters (Murphy, 1972). The following are depictions of Professor Lidenbrock highlighted:

#### *Curious*

Curiosity serves as a motivation that drives humans to engage in scientific activities. Sarukkai (2009) explains that the practice of science is based on the intrinsic motivation within human beings. In this context, curiosity is viewed as an inherent characteristic that serves as the inner force behind scientific activities.

“The professor examined the series of characters for a few moments. Then he said, lifting up his glasses: “They’re runes-the forms are absolutely identical to those in Snorre Turleson’s manuscript. But what can it all mean?” (Verne, 2008, p. 10).

Professor Lidenbrock is driven by curiosity to implement any possible scientific approach to the problems he encounters. Professor Lidenbrock’s curious characteristic, on the other hand, illustrates the inherent quality that forces humans into scientific activities. It depicts human curiosity that drives the human intellectual process.

### *Analytical*

Professor Lidenbrock's handling of Arne Saknussemm's mysterious letters requires him to implement a systematic method, which highlights his analytical characteristics. Therefore, Professor Lidenbrock's analytical characteristics allow him to examine the mysterious letters systematically and apply a comprehensive set of steps to find solutions.

'Let's see,' he said. 'In order to mix up the letters of a sentence, it seems to me that the first idea to come into one's mind ought to be to write the words vertically instead of horizontally.'

'Clever...' I thought.

'We must see what it produces. Axel, write any sentence at all on this scrap of paper; but, instead of writing the letters one after the other, put them in vertical columns made up of groups of fives or sixes.' (Verne, 2008, p. 15)

The above dialogue shows Professor Lidenbrock's analytical manner in examining the letters of the manuscript methodically. His analytical characteristic represents a scientific attitude in implementing practical knowledge as a possible approach to interpret a certain object. This depiction also highlights Professor Lidenbrock's analytical skill as his response in resolving complications.

### *Observant*

Professor Lidenbrock depicts a tendency to rely on direct observation to examine a certain event. This tendency highlights his observant approach to scientific phenomena he encounters before drawing conclusions or justifying his hypotheses.

'Are you certain?'

'Absolutely. Have a look at the barometer.'

The mercury, after rising in the instrument as we descended, had indeed stopped at 30 inches.

'You see. The pressure is still only 1 atmosphere, and I am looking forward for the manometer to replace the barometer.' (Verne, 2008, p. 90)

Professor Lidenbrock reveals his observant characteristic by paying attention to the details of a particular natural object or situation. In other words, Professor Lidenbrock uses his observation as the groundwork for his argument. Therefore, Professor Lidenbrock does not accept speculation directly but rather relies on direct observations to obtain concrete knowledge.

### *Explorative*

The desire to explore the external world directly is clearly depicted by Professor Lidenbrock, thereby emphasizing his exploratory nature. This characteristic is most evident in Professor Lidenbrock's will to follow Arne Saknussemm's message, which tells them to go to the centre of the earth.

"In any case we shall see for ourselves and, like Arne Saknussemm, discover where we stand on this important question." (Verne, 2008, p. 32)

He also stated, "That is what we are going to find out" This shows a tendency to investigate and verify information from the external world to acquire new knowledge through direct field exploration. It reflects an intellectual attitude that treats exploration and real-world interaction as concrete methods for acquiring empirical understanding.

These depictions illustrate empirical progression in scientific discovery, exploring how humans understand the external world through scientific approaches. The more effective scientific way of thinking leads to the belief that the approach is the only valid way to understand reality (Levin, 2006). Moreover, Harpold (2005) agrees that Jules Verne's characters often find solutions to impossible circumstances. It is depicted within Professor Lidenbrock's ability to overcome challenges through scientific methods.

### ***Professor Lidenbrock as a Reflection of Empiricism***

John Locke's (1975) conception of empiricism posits that all knowledge comes

from the sensory experience. In his *An Essay Concerning Human Understanding*, Locke (1975) argues that the mind starts as a blank slate, as it has no innate ideas built into it. Therefore, the formation of ideas in the mind depends upon experience of the external objects (Locke, 1975).

This conception is reflected in Professor Lidenbrock's empirical attitude in acquiring knowledge, as seen in his depictions. Professor Lidenbrock's depictions show how external knowledge is perceived through empirical approaches. Within curious, analytical, observant, and explorative characteristics, he demonstrates that the quest for knowledge is an active process which involves direct interaction with the external world.

Moreover, Professor Lidenbrock also embodies Locke's empirical conception of the mind. Professor Lidenbrock's critical examination of the letters and several objects illustrates the concept of the mind as a blank slate filled with ideas from experience towards the external world.

The following are principles of empiricism reflected through Professor Lidenbrock:

### *Tabula Rasa*

'Why? Why? How should I know? Galileo did he not act in this way for Saturn? In any case, we shall soon see. I shall have the secret of this document, and will neither eat nor sleep until I have discovered it.'

'Uh-oh,' I thought.

'Nor will you, Axel!'

'My God, I thought to myself. 'What luck I ate for two!' (Verne, 2008, p. 13)

Duschinsky (2012) asserts that Locke's conception on tabula rasa aimed to address the mind in a state where no prior knowledge has been acquired. In this context, tabula rasa shows the worldview that humans are not born with innate knowledge or morality, which is thereafter to be filled through the intellectual process. Locke also argues that tabula rasa is not a reflection of the formlessness of cognition, but rather a state that requires proper guidance to form a representation of true moral principles

(Duschinsky, 2012). It exposes the foundations of the human mind and raises the questions of the written natural law within human essence.

Professor Lidenbrock illustrates this view through his moral prepositions, exposing the blank slate of the human mind. The concept of tabula rasa as a blank slate is depicted through Professor Lidenbrock's questions, "*Why? Why? How should I know?*", which illustrate his nihilistic understanding towards a particular idea. As he states, "*I shall have the secret of this document*", this statement serves as Professor Lidenbrock's guidance in applying his intellectual approach to fill his nihilistic mind with a particular idea of the external objects.

In addition, Locke (1975) posits that all ideas come from sensation and reflection, which are discussed in the following:

### *Sensation*

Locke's concept of sensation refers to the process by which ideas are perceived through the interaction of the senses with external objects (Locke, 1975). Locke argues that all knowledge derives from experience and that complex experiences are composed of the simplest sensations (Schuler, 2014).

'Let's have a proper look at it,' he said, again picking up the sheet on which I had written. 'This is a series of 132 letters, presented in apparent disorder. There are words where the consonants are encountered on their own, like the first one, "mm.rnlls"; others in contrast where the vowels are abundant, for example the fifth word, "unteief", or the second-but-last one, "oseibo....' (Verne, 2008, p. 14)

In this process, Professor Lidenbrock does not treat the letters of the manuscript as an abstract object but rather as a concrete one to be examined through the senses. Professor Lidenbrock examines the word patterns, the strange shapes of letters, and the manuscript's visual structure through his vision. Therefore, the examination towards the letters shows how Professor Lidenbrock builds the ground of knowledge through sensation.

## *Reflection*

Locke's conception of reflection refers to the internal perception of the operations of the mind (Locke, 1975). Locke describes this as the mind that interprets, processes, and gives meaning to what the senses have perceived. It involves the mental activities such as thinking, doubting, believing, reasoning, and willing. It suggests that knowledge is not only from what is perceived through the senses but also from the ability to process those experiences into understanding.

As Professor Lidenbrock examines the letters in the manuscript, his understanding process depicts the dynamic operation of Locke's reflection. This conception is marked in his responses toward the external world objects, which represent his operations of the mind through the process and interpretation of the meaning of what his senses perceive.

The following are the forms of reflection reflected by Professor Lidenbrock:

### *Thinking*

"Now the arrangement is clearly not deliberate. It is given mathematically by the unknown formula governing the succession of the letters. It seems certain to me that the original sentence must have been written normally, then jumbled up following a rule we have yet to discover. The person who got access to the key of the cipher would be able to read it fluently: but what is this key? Axel, do you have the key?" (Verne, 2008, p. 14)

In this examination, he engages in the process of thinking, as he actively analyses the random alignment of the letters and considers the possibility of the hidden meaning beyond those letters. It demonstrates that Professor Lidenbrock strives to construct a particular meaning through his intellectual process.

### *Doubting*

This attitude appears when Professor Lidenbrock doubts the geologists' theories of internal heat. This represents the general view

of sceptical belief, which tends to question or doubt claims, as it must be based on evidence.

'And the reason?" asked my uncle in a singularly mocking tone.

Because all the scientific theories demonstrate that such an undertaking is impossible!

'All the theories say that?' replied the professor, putting on a good-natured appearance. 'Oh the nasty theories, They're going get terribly in our way, the poor theories!' (Verne, 2008, p. 30)

He began to question the validity of the scientific theories and emphasizes the possibility that the theories could not be taken directly. In one case, Professor Lidenbrock does not view theories as the main source of truth, but rather views them as something that must be examined through direct experience. His doubt towards scientific theories serves as a fundamental process, deepening his inquiry by encouraging the mind to a more in-depth exploration.

### *Believing*

Progressively, the empirical process in examining the manuscript comes to believe, as Professor Lidenbrock's conviction suggests that Arne Saknussemm's letters in the runic manuscript indicate a certain discovery. It is evident in the excerpt below:

"When I think that there is perhaps here the explanation or indication of a great discovery!" (Verne, 2008, p. 12)

Professor Lidenbrock's belief in the message hidden in the manuscript sustains his persistence, which enables him to overcome confusion and move towards discovery. This belief serves as his intellectual commitment that encourages Professor Lidenbrock's reasoning process.

### *Reasoning*

At this stage, Professor Lidenbrock applies systematic reasoning, in which his process becomes increasingly complex and structured. He implements various possible interpretations, rearranges the letters, and

tests specific patterns to perceive a coherent meaning.

'Let's see,' he said. 'In order to mix up the letters of a sentence, it seems to me that the first idea to come into one's mind ought to be to write the words vertically instead of horizontally.'

'Clever...' I thought.

'We must see what it produces. Axel, write any sentence at all on this scrap of paper; but, instead of writing the letters one after the other, put them in vertical columns made up of groups of fives or sixes.'

(Verne, 2008, p. 15)

In this reasoning process, analysis is exploratory, with each attempt opening new possibilities for interpretation and meaning. Professor Lidenbrock illustrates reasoning as a dynamic process that connects and develops ideas continuously until they form a coherent systematic meaning.

### *Willing*

Professor Lidenbrock expresses the capacity to choose and direct his actions through his will to end his journey, which appears as intellectual freedom. His will serves as an approach in making a decision and guiding actions under uncertain conditions.

'What, you don't want to...?'

'... give up the expedition, at a moment when all the signs show it can succeed? Never!'

'So we must prepare to die?'

'No, Axel, no! Go if you want. I do not wish your death! Hans will go with you. Leave me alone!'

'On your own?'

'Leave me, I tell you! I began this journey: I will carry it out to the bitter end, or else not come back at all. Off you go, Axel. Go!'

(Verne, 2008, pp. 105-106)

According to Lännström (2007), Locke argues that every individual is aware of their own thoughts or feelings, which became the groundwork of self-awareness. The cognitive and emotional abilities cause Professor Lidenbrock to act with full awareness. It can be seen in the dialogue that shows Professor Lidenbrock's will to continue his exploration

under any circumstances, as he consciously chose to explore the underground passage to perceive a concrete experience.

These empirical progressions correspond to Fumerton's (2017) claim that individuals require more experience to understand complex concepts. Moreover, the concept of empiricism reflected by Professor Lidenbrock serves as the foundation for his justification.

### *Justification*

With the development of Professor Lidenbrock's empirical approach, the search for knowledge is no longer an intellectual activity but has become an active justification of the truths. This justification emphasises the sufficient reasons or grounds for human belief to be considered accurate. It corresponds to intellectual virtue, which requires valid reasons to form beliefs (Audi, 2011). The sensory experience that Professor Lidenbrock perceives through interactions with the world serves as the groundwork of his scientific claims.

'Do you see all that steam, Axel? Well, it proves that we have nothing to fear from the fury of the volcano!'

'I don't believe it!'

'Listen carefully. When an eruption is on the way, the steam increases considerably; but then disappears completely when the phenomenon is actually happening, for the expanding gas no longer has the required pressure, and heads for the craters instead of escaping through the cracks of the globe. If therefore this steam stays in its normal state, if its force does not increase, if you add to such an observation that the wind and the rain are not replaced by a heavy, calm atmosphere, you can safely say that there will not be an immediate eruption.'

(Verne, 2008, pp. 74-75)

The above excerpt shows Professor Lidenbrock's claim about the impossibility of a volcanic eruption through direct observation. This claim is also supported by his belief in science, as seen in his dialogue: *"Enough. When science has spoken, one can only remain silent thereafter!"* Professor Lidenbrock perceives his conviction not through speculation, but

from the belief that he has a solid foundation based on evidence and observation. It illustrates that humans can perceive a deep understanding towards the complex concept of the external world by relying on experience as the groundwork for justifying knowledge. Therefore, Professor Lidenbrock's justification through the empirical approaches illustrated his role as an empiricist, who claims that all concepts and knowledge are grounded on experience (Vanzo, 2016).

Within his empirical depictions, Professor Lidenbrock presents Locke's concept of consciousness, which is defined as a form of internal reflection where individuals are aware of their thoughts (Garret, 2003). On the other hand, Professor Lidenbrock can be understood through actions and norms, which shows a connection with Lolordo's (2010) examination of the "moral man" in Locke's epistemology. It constructs virtue that enables a human being to act wisely (Hasselberger, 2017). This underlines Professor Lidenbrock who is built on the values of science, depicting his essence in viewing universal facts.

## Conclusion

Professor Lidenbrock serves in dual roles, as he embodies a fictional figure of the author and a concrete reflection of the philosophical principle of empiricism, which holds that knowledge is constructed through direct experience and interaction with the external world. This conception is reflected in his character depictions as a curious, analytical, observant, and explorative figure, as these characteristics drive him to continually investigate the external world empirically. Professor Lidenbrock demonstrates that ideas must be formed through the process of sensation and reflection to fill the blank slate of the human mind. In addition, the empirical approaches that he implements also serve as the basis for the justification of knowledge.

Within the concept of empiricism reflected through Professor Lidenbrock, Jules Verne illustrates the philosophical theme through experiences, speech, and intellectual progression of his character. The character's search for knowledge serves as a scientific attitude which emphasizes the connection between experience and truth. Additionally,

Professor Lidenbrock, who serves as a reflection of empiricism in *Journey to the Centre of the Earth*, depicts how philosophical themes in science fiction literary text are presented through scientific progression and exploration, revealing fundamental morality about knowledge and the essence of humans in understanding the universe's reality.

This study is limited to the close critical analysis of the character Professor Lidenbrock in *Journey to the Centre of the Earth* from the perspective of empiricism. Future study could examine the character of Professor Lidenbrock from philosophical perspectives beyond empiricism. The examination of the character from other philosophical perspectives could provide a deeper understanding of Professor Lidenbrock's role as a central character in the work of Jules Verne.

## References

- Audi, R. (2011). The Ethics of Belief and the Morality of Action: Intellectual Responsibility and Rational Disagreement. *Philosophy*, 86(335), 5–29. Retrieved from <http://www.jstor.org/stable/23014767>
- Breyer, J., & Butcher, W. (2003). NOTHING NEW UNDER THE EARTH: THE GEOLOGY OF JULES VERNE'S JOURNEY TO THE CENTRE OF THE EARTH. *Earth Sciences History*, 32(1), 5–17. Retrieved from <http://www.jstor.org/stable/4241318>
- Butcher, W. (1998). Long-Lost Manuscript: The True Antecedents of Professor Lidenbrock, His Nephew Axel and Their Glorious Adventure Underground. *The Modern Language Review*, 93(4), 961–971. Retrieved from <https://www.jstor.org/stable/3736269>
- Debus, A. (2006). Re-Framing the Science in Jules Verne's "Journey to the Center of the Earth." *Science Fiction Studies*, 33(3), 405–420. Retrieved from <https://www.jstor.org/stable/4241461>
- DeCanio, S. J. (1994). THE FUTURE THROUGH YESTERDAY: LONG-TERM FORECASTING IN THE NOVELS OF H. G. WELLS AND

- JULES VERNE. *The Centennial Review*, 38(1), 75–93. Retrieved from <http://www.jstor.org/stable/23739681>
- Delisle, R. G. (2012). The Disciplinary and Epistemological Structure of Paleoanthropology: One Hundred and Fifty Years of Development. *History and Philosophy of the Life Sciences*, 34(1/2), 283–329. Retrieved from <http://www.jstor.org/stable/43831776>
- Dhanu, K. (2021). Exploring the Ecocentric World- An Analyse of Jules Verne's Journey to the Centre of the Earth. *Journal of Xi'an Shiyou University, Natural Science Edition*, 17(04), 38–46. Retrieved from <https://www.xisdjxsu.asia/viewarticle.php?aid=287>
- Duschinsky, R. (2012). "Tabula Rasa" and Human Nature. *Philosophy*, 87(342), 509–529. Retrieved from <http://www.jstor.org/stable/41682980>
- Evans, A. B. (1996). Literary Intertexts in Jules Verne's "Voyages Extraordinaires." *Science Fiction Studies*, 23(2), 171–187. Retrieved from <http://www.jstor.org/stable/4240502>
- Evans, A. B. (2005). Jules Verne's English Translations. *Science Fiction Studies*, 32(1), 80–104. Retrieved from <http://www.jstor.org/stable/4241322>
- Fumerton, R. (2017). Epistemology and Science: Some Metaphilosophical Reflections. *Philosophical Topics*, 45(1), 1–16. Retrieved from <https://www.jstor.org/stable/26529422>
- Garrett, D. (2003). Locke on Personal Identity, Consciousness, and "Fatal Errors." *Philosophical Topics*, 31(1/2), 95–125. Retrieved from <http://www.jstor.org/stable/43154410>
- George, M. W. (2008). Introduction to research as inquiry. In *The elements of library research*. Princeton University Press.
- Goodrum, M. R. (2014). Crafting a New Science: Defining Paleoanthropology and Its Relationship to Prehistoric Archaeology, 1860–1890. *Isis*, 105(4), 706–733. <https://doi.org/10.1086/679420>
- Guerin, W. L., Labor, E., Morgan, L., Reesman, J. C., & Willingham, J. R. (2005). *A handbook of critical approaches to literature*. Oxford University Press.
- Harkness, N. (2012). Textes fossiles': The Metatextual Geology of Verne's Voyage au centre de la Terre. *The Modern Language Review*, 107(4), 1047–1063. Retrieved from <https://www.jstor.org/stable/10.5699/modelangrevi.107.4.1047>
- Harpold, T. (2005). Verne's Cartographies. *Science Fiction Studies*, 32(1), 18–42. Retrieved from <http://www.jstor.org/stable/4241319>
- Hasselberger, W. (2017). Knowing More than We Can Tell: Virtue, Perception, and Practical Skill. *Social Theory and Practice*, 43(4), 775–803. Retrieved from <http://www.jstor.org/stable/26405306>
- Higonnet, M. R. (2005). Jules Verne's "Vingt mille lieues sous les mers": An American Classic for All Ages. *L'Esprit Créateur*, 45(4), 34–47. Retrieved from <http://www.jstor.org/stable/26289073>
- Lännström, A. (2007). Locke's Account of Personal Identity: Memory as Fallible Evidence. *History of Philosophy Quarterly*, 24(1), 39–56. Retrieved from <http://www.jstor.org/stable/27745077>
- Levin, Y. (2006). The Moral Challenge of Modern Science. *The New Atlantis*, (14), 32–46. Retrieved from <http://www.jstor.org/stable/43152282>
- Locke, J. (1975). *An essay concerning human understanding* (P. H. Nidditch, Ed.). Clarendon Press.
- Lolordo, A. (2010). Person, Substance, Mode and "the moral Man" in Locke's Philosophy. *Canadian Journal of Philosophy*, 40(4), 643–667. Retrieved from <http://www.jstor.org/stable/41302112>
- Murphy, M. J. (1972). *Understanding unseens: An introduction to English poetry and the English novel for overseas students*. George Allen and Unwin.
- Pasqualetto, O. (2022). What Can We Learn About the Scientific Research Process from Jules Verne? Lessons From Journey to the center of the Earth. *Revista Pesquisa Qualitativa*, 10(25), 450–463. <https://doi.org/10.33361/RPQ.2022.v.10.n.25.551>
- Rees, A., & Morus, I. R. (2019). Presenting Futures Past: Science Fiction and the History of Science. *Osiris*, 34, 1–15.

- Retrieved from  
<https://www.jstor.org/stable/26860899>
- Ruddick, N. (2007). Jules Verne and the Fossil Man Controversy: An Addendum to Allen A. Debus. *Science Fiction Studies*, 34(1), 156–158. Retrieved from  
<http://www.jstor.org/stable/4241510>
- Sarukkai, S. (2009). Science and the ethics of curiosity. *Current Science*, 97(6), 756–767. Retrieved from  
<http://www.jstor.org/stable/24112112>
- Schuler, J. A. (2014). EMPIRICISM WITHOUT THE DOGMAS: HEGEL'S CRITIQUE OF LOCKE'S SIMPLE IDEAS. *History of Philosophy Quarterly*, 31(4), 347–368. Retrieved from  
<http://www.jstor.org/stable/43488108>
- Seed, D. (2011). Introduction. In *Science fiction: A very short introduction*. Oxford University Press.
- Slusser, G. (2005). Why They Kill Jules Verne: SF and Cartesian Culture. *Science Fiction Studies*, 32(1), 61–79. Retrieved from  
<http://www.jstor.org/stable/4241321>
- Smyth, E. J. (2000). Verne, SF, and Modernity: An Introduction. In *JULES VERNE: Narratives of modernity*. Liverpool University Press.
- Unwin, T. (2005). Jules Verne: Negotiating Change in the Nineteenth Century. *Science Fiction Studies*, 32(1), 5–17. Retrieved from  
<http://www.jstor.org/stable/4241318>
- Vanzo, A. (2016). Empiricism and Rationalism in Nineteenth-Century Histories of Philosophy. *Journal of the History of Ideas*, 77(2), 253–282. Retrieved from  
<https://www.jstor.org/stable/jhistoryideas.77.2.253>
- Verne, J. (2008). *Journey to the centre of the Earth*. Oxford University Press.